



## 0-6803-01-P6

# TRANSITION PLAN

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TxDOT Project 0-6803-01: The Technology Task Force

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#### **Performing Organization:**

Center for Transportation Research The University of Texas at Austin 1616 Guadalupe, Suite 4.202 Austin, Texas 78701

#### **Sponsoring Organization:**

Texas Department of Transportation Research and Technology Implementation Office P.O. Box 5080 Austin, Texas 78763-5080

Performed in cooperation with the Texas Department of Transportation and the Federal Highway Administration.

#### 1. Introduction

With the conclusion of Phase III in August 2015, the Texas Technology Task Force (TTTF) is preparing to transition to its next phase. The Performing Organization has submitted a three-year work plan proposal to the Sponsoring Organization that is currently under review. This three-year work program shall enhance previously completed work by the TTTF and provide necessary supporting research on emerging technologies and their trial programs to form the basis of recommendations to TxDOT regarding the development of programs and initiatives for technology adoption and integration in Texas.

#### 2. Transition Plan

The transition plan outlines four phases that are designed to guide the TTTF in its future efforts of supporting TxDOT: Discover, Define, Demonstrate, and Deliver. The following sections describe each of these phases in greater detail. The full list of proposed deliverables and timeline may be found in Appendix A. A graphic outlining the three-year work plan may be found in Appendix B.

#### 2.1 Discover

During the "Discover" Phase, the Performing Organization will continue to invite subject matter experts to participate in Task Force meetings. These experts will be selected under the guidance of the Task Force and have the opportunity to share detailed information on technology development and applications to transportation. The discussions and presentations will be facilitated in order to encourage open dialogue.

The Performing Organization will also visit U.S. technology pilot programs, attend industry and research conferences, and invite key personnel to participate in Task Force meetings to share their expertise. Lessons learned will be compiled in order to provide TxDOT with valuable insights.

#### 2.2 Define

During the "Define" Phase, the Task Force will work together in order to narrow down and select the most critical technologies from those in the transportation portfolio. The Performing Organization will conduct a competitive analysis, reviewing pilot programs and initiatives of other entities and identifying areas in which TxDOT can differentiate itself as a leader in its class.

In collaboration with the Sponsoring Organization, a short list of viable pilot projects will be developed in order to focus the Task Force's energies. Using the recommended list of pilot projects as a guide, the Task Force will invite state, regional, and local leadership to participate in Task Force meetings. By engaging with community partners and key stakeholders, the Task Force will gather input and feedback required to assist in the prioritization of the pilot programs.

At the conclusion of the "Define" phase, the Performing Organization will recommend a vision and opportunities for strategic programs and initiatives in order to promote the advancement and integration of transportation technologies in Texas. Leveraging Task Force member expertise, the Performing Organization will enhance the Strategic Technology Business Plan (STBP) by

contextualizing technologies within the Texas transportation system. As a supplement to the vision and STBP, the Performing Organization will provide information to form the basis of a communication strategy that may be used to convey TxDOT's vision to key audiences.

#### 2.3 Demonstrate

The Performing Organization will identify areas where TxDOT has a unique and leading advantage for establishing programs or initiatives for emerging technologies. The Task Force will establish a framework to measure the performance of small pilots or trials that are deployed by the Sponsoring Organization. Building upon lessons learned, the Task Force will propose recommendations for the Sponsoring Organization's review regarding the scaling of the small pilots or trials into statewide services.

#### 2.4 Deliver

The Performing Organization will continue to provide guidance to TxDOT regarding the evaluation of emerging technology programs or initiatives. The Task Force will create a framework and assist in the identification of the necessary steps to realize the vision for strategic opportunities in Texas. The Performing Organization will develop another Transition Plan to provide a detailed description of next steps for further research work, Task Force meetings, and recommendations.

### 3. Further Research Work and Next Steps

In order to remain current in the wake of rapid technological advancements, the Performing Organization will conduct further research by building on lessons learned from research in transportation and non-transportation fields. Sources will include private, academic, and nonprofit sectors and draw on the nation's capacity in academia, industry, and elsewhere as needed. Research will continue to expand on modes (e.g., rail, airports, pedestrian, bicycling), technologies (e.g., virtual reality, materials, etc.), pilot programs (successes and failures), policies (federal, state, and local), as well as other social and economic factors influencing consumer behavior.

# **APPENDIX A: Proposed Deliverable Timeline**

<b>Deliverable Description</b>	<b>Due Date</b>	Comments
Technical Memorandum	11/31/2015	Agendas, detailed panel descriptions, and minutes will be attached in appendix
Technical Memorandum	11/31/201	Revisions or additions to the SWOT analysis of identified technologies for Texas adoption will be attached in appendix
Technical Memorandum	7/31/2016	Results from the pilot program competitive analysis
Technical Memorandum	7/31/2016	A list of new Task Force members along with title and contact information will be provided in appendices
Technical Memorandum	7/31/2016	Presentations will be attached in appendix
Technical Memorandum	7/31/2016	Presentations will be attached in appendix
Technical Memorandum	7/31/2016	Will include a summary of activities that lead to Receiving agency press releases or other media content
Technical Memorandum	3/31/2016	Agendas, detailed panel descriptions, and minutes will be attached in appendix
Technical Memorandum	3/31/2017	Agendas, detailed panel descriptions, and minutes will be attached in appendix
Technical Memorandum	3/31/2018	Agendas, detailed panel descriptions, and minutes will be attached in appendix
Research Report	7/31/2016	A full research on activities for FY 2016 will be submitted.
Research report- Enhancements to the Strategic Technology Business Plan	7/31/2017	A full research report on activities for FY 2017 will be submitted and will include a final short list of recommended areas for pilot projects, trials, and/or initiatives to consider in greater detail.
Research report – Transition Plan	7/31/2018	A full research on activities for FY 2018 will be submitted.
Summary of work performed, findings and recommendations	7/31/2017	
Monthly Progress Reports	3 days following the end of each month	

### **APPENDIX B: Proposed Three-Year Work Plan Outline**



