Recommended Guide for Next Generation of Transportation Design-Build Procurement and Contracting in the State of Georgia

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Introduction

Design Build (DB) is a Project Delivery System under which one entity, the DB Team, is contractually responsible for both design and construction phases of the project. DB offers state DOTs the opportunity to accelerate critical phases of projects and deliver transportation projects more cost-effectively.

Conceptual comparison of Design-Build and traditional Design-Build Project Delivery

Design-Build State Laws for Transportation Projects in 2012 (Copyright of DBIA 2013)

Research Objective

Nevertheless, DB is not appropriate for every transportation project. State DOTs should select DB for projects only if it is expected to produce the best outcomes.

Objectives: This overall objective of this research project is to develop a Transportation Design-Build Guidebook for use by the DOT to improve an efficient use of Design-Build contracting in highway construction programs.

Research Background

Significant Factors Identified in the Literature for DB Selection:

- Project Complexity
- Project Size
- Project Schedule
- Project Risk
- Project Cost
- Project Quality
- Project Innovation
- Project Competency
- Project Experience & Risk

Identification of The Department’s Strategic Objectives and Assess the Institutional Alignment with Design Build Project Delivery System

DB has gained widespread acceptance among several state DOTs.

Key Findings of the State DOT Scanning Process

Major Reasons specified by state DOTs for using Design-Build

- Expense Delivery
- Project Specifications
- Fixed Price
- Multiple Contractors
- Construction Project Delivery
- Manager Technical Competency
- Infrastructure Scope Funds
- Manager Project Risk

Process Improvement Challenges

Implementation and Value of Research

A post-research workshop was held to facilitate adoption of DB contracting in Georgia. The workshop participants were guided through various steps of this systematic approach as described in the DB selection tool.

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This project resulted in development of a best practices guidance to improve efficiency of DB selection and implementation for GDOT highway projects.

A DB selection tool was developed that helps GDOT perform the following:

- Determining suitability of DB for projects
- Assessing whether project risks can be managed if DB is selected for a project
- Evaluating authorized procurement methods and selecting the most appropriate method
- Transparent and consistent DB implementation

References