



# Assess Engineering Workforce (A08)

**Project Charter**  
Draft 8/17/11

## SECTION 1: Project Summary

<b>Concept Definition</b>	Assess the roles and workload drivers for the Field Engineering role at TxDOT to maximize resource efficiency.		
<b>Program</b>	Transportation Planning	<b>Project Lead(s)</b>	Teresa Lemons and Mike Lehmann
<b>Exec. Sponsor</b>	David Casteel	<b>Sponsor</b>	Mark Marek

## SECTION 2: Vision Alignment

<b>Problem</b>	The metrics for estimating needed engineering resources for 4 year work plans are not well-defined. Engineering services are provided both internally and externally and vary by project volume and funding levels.		
<b>Goal</b>	Complete an in-depth study into the anticipated workload and develop a staffing model for the work to be performed by engineering resources.	<b>Measurable Benefit Target</b>	TBD
<b>Scope</b>	<b>Includes:</b> - Evaluate common industry metrics for engineering work performed by work type. - Ensure compliance with legal requirement of 35% outsourced mandate. - Develop a field engineering staffing roadmap through 2014. - Include PE/CE and specialized skills (i.e bridge). - Determine workforce needed by project volume or by available funding: - Report out results and recommendations. - Engineering effort not in Strategy 101	<b>Excludes:</b> - Division Engineering staff except for division staff that are performing design services for a district under a work-sharing agreement. - Non-Engineering workforce - Advanced Planning	
<b>Associated Goals / Visions / Recommendations</b>	<b>Source / ID#</b>	<b>Text</b>	
	Council / 663	Promptly complete the Engineering Workforce Analysis study.	

## SECTION 3: Execution Detail

<b>Related Efforts / Risks</b>					
<b>Tailoring</b>	<b>Tailoring Tier</b>	<b>Org Impact</b>	<b>Project Size</b>	<b>Complexity</b>	<b>Execution Risk Rating</b>
		No	Small	Medium	Low
<b>Forecasted Milestone Schedule</b>	<b>Phase Completion Tollgate</b>	<b>Date</b>	<b>Approach Overview:</b>		
	Concept Definition	11/1/2011	- Input to Staffing Model - Complete Texas State Research (#0-6730 – Determine Cost of Engineers). - Input to Staffing Model - Complete PDP-2012 as an input to the staffing model (CTR). - Staffing Model - Complete CTR Research (#0-6581 – Determine Field Engineering Workforce Required). - Develop a model to estimate field engineering workforce staffing thru YE 2014 (CTR). - Determine breakdown of field engineering skill mix (PE, CE, SPC) (CTR)		
	Concept Validation	11/15/2011			
	Design	1/27/2012			
	Build	6/29/2012			
	Implement	8/31/2012			
<b>Team Members</b>	<b>Name</b>	<b>Role</b>	<b>Name</b>	<b>Role</b>	
	Teresa Lemons	Team Lead	Bobby Littlefield - DE	Team Member	
	Mike Lehmann	Team Lead	Paul Frerich	Team Member	
	Lizette Colbert	Team Member	Vernon Webb	Team Member	
	Michael Bolin	Team Member	Tim Decker	Coach	
	Lanny Wadle - FIN	Team Member			
	Maureen Wakeland - PMO	Team Member			
	Joe Seifert - HRD	Team Member			
Travis Milner	Team Member				

## SECTION 4: Change Management Assessment

<b>Audience</b>	<b>Impact</b>	<b>Stakeholder</b>	<b>Concern(s)</b>
		Employees	current and future workload
		Private sector/consultants	current and future external workload
		TxDOT management	resource planning
		Legislature/other agencies	LAR / needed projects / funding
		citizens/legislature	needs exceed available funds