

TDOT Estimating Process within PDN Stages

		Stage 0	Stage 1 Cost Validation	Line and Grade Package	Functional Design Plans	Plan-in-Hand Plans	Plans, Specification & Estimate Plans/Letting								
BID ITEMS	CONSTRUCTION ITEMS	Concept Report Estimate using template.	Validate Concept Report Estimate. - Scoping information - Statewide averages	Focus on major Items that include 80% of the costs (see below) and considers a realistic inflation % for the year the project will be let.	Estimate all Project Items.	Estimate all Project Items based on inflation, market, etc.	Estimate Final Review and Update based on inflation, market, etc.								
		Concept Report Estimate updated by Roadway Design Lead Engineer through Scoping Process.	Major items quantified and estimated by Discipline - Compiled by Roadway Design Lead Engineer. • Major Removals • Pavement (conservative pavement section assumptions) • Earthwork (excavation, borrow, geotech recommendation [e.g., graded solid rock, geotextiles], rock cuts) • Barrier/Guardrail • Drainage System • Structures (hydraulic and non-hydraulic) • Walls (retaining, sound) • Sign structures • TSMO (ITS, signals, and lighting)	All Items quantified and estimated by Discipline - Compiled by Roadway Design Lead Engineer.	All Items quantified and estimated by Disciplines, Headquarters and 3rd Party - Compiled by Roadway Design Lead Engineer.	Completed by Headquarters Construction.									
			Statewide and Regional Averages for Unit Prices												
	% BASED ITEMS			Recommended Values: <table border="0" style="width: 100%;"> <tr> <td></td> <td style="text-align: center;">Project < \$5 M</td> <td style="text-align: center;">Project > \$5 M</td> </tr> <tr> <td>Mobilization</td> <td style="text-align: center;">8-11% of Construction</td> <td style="text-align: center;">6-8% of Construction</td> </tr> <tr> <td>Traffic Control</td> <td style="text-align: center;">3-5% of Construction</td> <td style="text-align: center;">1-2% of Construction</td> </tr> </table>			Project < \$5 M	Project > \$5 M	Mobilization	8-11% of Construction	6-8% of Construction	Traffic Control	3-5% of Construction	1-2% of Construction	Utilize production based unit price estimate process.
	Project < \$5 M	Project > \$5 M													
Mobilization	8-11% of Construction	6-8% of Construction													
Traffic Control	3-5% of Construction	1-2% of Construction													
CONTINGENCY FOR CONSTRUCTION ITEMS			Add Contingency to Bid Items Total - Recommended Values: • 10% Rural minor pavement preservation without complications. • 15% Urban minor pavement preservation without complications. • 20% New construction, reconstruction, rehabilitation, widening, trails, landscaping, and enhancement. • 10% for construction change orders (on all types of projects). - Adjust per understanding of project Level of Detail (LOD).	Lower Contingency Based on LOD - Recommended Values: • 5% Rural minor pavement preservation without complications. • 8% Urban minor pavement preservation without complications. • 10% New construction, reconstruction, rehabilitation, widening, trails, landscaping, and enhancement. • 10% contingency for construction change orders (on all types of projects).	Lowest Level of Contingency - Recommended Values: • All items should be estimated with limited risk of project changes. • 5% to 10% contingency for construction change orders.										

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NON-BID	OTHER			<ul style="list-style-type: none"> • ROW funded amount • Utilities and Railroad utilize Concept Estimate (OUT1) • Environmental mitigation (streams and wetland design or credits) • Incentives 2% of construction 	<ul style="list-style-type: none"> • ROW funded amount • Utilities and Railroad updated estimate (2RW1/2UT1) • Final environmental mitigation (streams and wetland design or credit costs) • Incentives 2% of construction 	<ul style="list-style-type: none"> • Final ROW costs • Final utility costs • Final incentive costs • Final environmental mitigation (streams and wetland design or credit costs) 		
	PRELIMINARY ENGINEERING			<p>PE Recommendations (as applicable):</p> <p>6% - Rural or Urban Pavement Rehab, and safety projects. 10% - New construction, reconstruction, roadway and bridge rehabilitation, widening, trails, landscaping, and enhancement. 20% - Local Government</p> <p>- Percentage is based on the design complexity vs. construction costs. Adjust the recommendations to fit the anticipated needs of the project. PE costs can range higher than 20% depending on design complexity and the size of the project. Small projects generally have a higher PE % than large projects.</p>		Include actual PE costs	Completed by Headquarters Construction.	
	CONSTRUCTION ENGINEERING			<p>CE Recommended Values:</p> <p>Construction, Reconstruction, Rehabilitation:</p> <p>\$500K - \$1M: 12.0% \$1M - \$5M: 7.5% \$5M - \$15M: 7.0% >\$15M: 6.5%</p> <p>Signals or TSMO only: 13.5%</p>	<p>Spot Improvement, Safety, Enhancements:</p> <p>\$0 - \$500K: 12.0% \$500K - \$5M: 8.5% \$5M - \$15M: 7.5% >\$15M: 6.5%</p> <p>Local Government:16%</p>	Included actual CE costs (as coordinated with Construction) in the estimate	Completed by Headquarters Construction.	
INFLATION FACTOR	5.5% per year until Programmed Construction Year							
Update Project File at each stage of the project.								