

# Utah DOT

General Information	
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<b>Relevant Statute</b>	<p><i>Utah Code: 63G-6a-1402</i>  <i>Utah Admin Rule: R916-3</i>            Broad DB legislation with no limitations – DOT has the authority to use DB and CM/GC as they see fit</p>
<b>DB Program Characteristics</b>	<ul style="list-style-type: none"> <li>• Overall annual construction program is approximately \$600 to \$800 million</li> <li>• DB program started in 1997/1998 (first project was the I-15 reconstruction)</li> <li>• About 3 DB projects annually (doubled during ARRA time)</li> <li>• Approximately 50 total DB projects</li> <li>• Largest projects were \$1 billion (I-15 and I-15 CORE)</li> <li>• Most projects are in the \$30 to \$150 million range</li> </ul>

Agency Culture, Organization and Training	
<b>Dedicated DB Program Staff</b>	<ul style="list-style-type: none"> <li>• Innovative Contracting group               <ul style="list-style-type: none"> <li>- 1 F/T staff in Innovative Contracting Position (Ben Hout)</li> <li>- 1 P/T support for DB</li> <li>- 1 P/T support for CM/GC</li> <li>- Other support pulled in as necessary for the project team</li> </ul> </li> <li>• Central Office provides guidance on the DB process (involved in procurement, selection meetings, concept design); minimal involvement after award, except for lessons learned</li> <li>• UDOT in general is largely decentralized:               <ul style="list-style-type: none"> <li>- Some central presence, but most resources for project execution come from the District level</li> <li>- Central Office is primarily process-oriented</li> </ul> </li> </ul>
<b>Outsourcing</b>	<ul style="list-style-type: none"> <li>• Consultants assist project team</li> <li>• Preliminary design primarily provided by consultants, with UDOT in an oversight role</li> </ul>
<b>DB Project Team Makeup</b>	<ul style="list-style-type: none"> <li>• Region based</li> <li>• Consultant Program Manager is retained for additional resources</li> </ul>
<b>Internal Issues Related to DB Use</b>	<p>Resistance will never be completely eliminated</p> <ul style="list-style-type: none"> <li>• Traditional DBB remains the predominant delivery method, which causes challenges when transitioning to DB</li> <li>• Some groups (e.g., structures and geotech) continue to have issues regarding preferences and loss of control</li> </ul>

<p><b>Industry Issues Related to DB Use</b></p>	<p><i>Industry</i></p> <ul style="list-style-type: none"> <li>• Large pool of experienced DB teams</li> <li>• DOT maintains a good relationship with industry partners <ul style="list-style-type: none"> <li>- Monthly meetings with the AGC</li> <li>- Alternative delivery subcommittee</li> </ul> </li> </ul> <p><i>Other Stakeholders</i></p> <ul style="list-style-type: none"> <li>• Local Government agencies as well as politicians often have strong preferences that lead to prescriptive specifications</li> </ul>
<p><b>Procedural Guidance and Template Documents</b></p>	<ul style="list-style-type: none"> <li>• RFQ/RFP template (to be tailored to project-specific conditions (better than cutting and pasting from past RFPs)</li> <li>• Contracts typically have the following organization: <ul style="list-style-type: none"> <li>- Part 1 – DB Agreement and definitions</li> <li>- Part 2 – General Provisions</li> <li>- Part 3 – Quality</li> <li>- Part 4 – Technical Provisions</li> <li>- Part 5 – Special Provisions</li> <li>- Part 6 – Utility Agreements</li> <li>- Part 7 – Contract Drawings (contractual)</li> <li>- Part 8 – Engineering Data (subsurface utilities, geotech)</li> <li>- Part 9 – Warranty</li> <li>- Reference Documents</li> </ul> </li> </ul>
<p><b>Training</b></p>	<ul style="list-style-type: none"> <li>• Peer-to-peer information exchanges <ul style="list-style-type: none"> <li>- If a project manager, who is not that well-versed in DB processes, is identified for a future project, he/she will be brought on to observe a current DB project</li> <li>- Organized training for project team members on specific roles, with a focus on what past team members would want to convey to future team members (e.g., top 10 design phase tips)</li> <li>- Face-to-face meetings between current DB project teams that are post-award and project teams that are in procurement</li> </ul> </li> <li>• Training sessions on the procurement process are provided once a selection committee has been established</li> </ul>

<p><b>Selection of Project Delivery Method</b></p>	
<p><b>Drivers for Using DB</b></p>	<ul style="list-style-type: none"> <li>• Innovation</li> <li>• Time savings</li> <li>• Minimizing impacts during construction (e.g., accelerated bridge construction)</li> </ul>
<p><b>Process and Tools</b></p>	<ul style="list-style-type: none"> <li>• DB decision generally made at the concept/scoping level (could be later for CM/GC)</li> <li>• No systematic formal process; general practice is as follows: <ul style="list-style-type: none"> <li>- As project lists are developed, potential innovative delivery projects are identified (pre-filtered) based on how similar projects were delivered in the past</li> <li>- Risk-based delivery method workshop is conducted (scaled to project size - can range from small informal group discussions on risk to a facilitated risk workshop)</li> </ul> </li> <li>• Once a recommendation has been reached, a 1 or 2-page summary is written, outlining the project scope, budget, schedule, risks, etc., and presented to a committee of senior leaders</li> </ul>

<p><b>Key Considerations</b></p>	<p><i>Questions to consider when considering DB and CM/GC</i></p> <ul style="list-style-type: none"> <li>• How well-defined in the project scope?</li> <li>• How valuable is Contractor input during design?</li> <li>• Where is there flexibility in the design?</li> <li>• Where are there fixed elements in the design?</li> <li>• When is funding available?</li> </ul> <p><i>Project Characteristics that are Suitable for DB</i></p> <ul style="list-style-type: none"> <li>• DB typically selected for schedule-driven projects with flexible design options (e.g., type of pavement, bridge, intersection and/or interchange)</li> <li>• In contrast, traditional DBB delivery is used on non-complex, repeatable project types with well-defined scopes, schedules, budgets, drawings, specifications, etc.</li> </ul> <p><i>Project Characteristics that are <u>not</u> Suitable for DB</i></p> <ul style="list-style-type: none"> <li>• Projects having little flexibility in design</li> <li>• Projects with excessive third party risks (e.g., environmental restrictions, utilities, etc.)</li> </ul> <p><i>(Such projects may be more appropriate for CM/GC)</i></p>
<p><b>Entity Making the Delivery Decision</b></p>	<p>Project summary document is presented to committee of senior leaders</p>

<p><b>DB Project Development</b></p>	
<p><b>Project Development Activities</b></p>	<p>Spend time upfront identifying project-specific goals and procurement strategies aligned to these goals (e.g., evaluation criteria):</p> <ol style="list-style-type: none"> <li>1. Project Team conducts risk analysis to identify major factors impacting the project (e.g., geotechnical, utilities, ROW)</li> <li>2. Project Team and Region Leadership define and prioritize project goals (goals are generally based on scope, schedule, budget, and impacts to the public)</li> <li>3. Project Team and Region Leadership identify evaluation criteria and submittal requirements for each scored goal</li> <li>4. Refine goals and evaluation criteria through project development</li> <li>5. Selection Committee approves the prioritized goals and evaluation criteria</li> </ol>
<p><b>Use of Performance Requirements</b></p>	<p>Strive to use performance criteria (the more performance-oriented the requirements, the more value you get out of DB)</p>
<p><b>Lessons Learned</b></p>	<ul style="list-style-type: none"> <li>• Previously had advertised full concept plans as part of the RFP; however, UDOT is now leaning towards just providing concept plans as a reference (i.e., non-contractual) document <ul style="list-style-type: none"> <li>- Found that there had been conflicts between concept plans and performance criteria</li> <li>- Excluding the concept plans has led to more innovation</li> <li>- UDOT reviewers are not getting as hung up on minor deviations from concept</li> </ul> </li> <li>• For DB, need to fix the scope to allow for better pricing</li> <li>• CM/GC is a good fit if you do not have a good handle on the scope</li> </ul>

Procurement Process	
<b>Delivery Options</b>	<p><i>One-step low bid</i></p> <ul style="list-style-type: none"> <li>• Used on smaller ARRA-type projects</li> <li>• Technical proposals evaluated on a pass/fail basis</li> </ul> <p><i>Two-step best value</i></p> <ul style="list-style-type: none"> <li>• Bulk of program procured using a two-step best value</li> </ul> <p><i>Fixed Price, Maximum Scope</i></p> <ul style="list-style-type: none"> <li>• Used on the I-15 CORE project (fixed price of \$1.725 billion; price allocation was evaluated on a pass/fail basis)</li> </ul> <p><i>CM/GC</i></p> <ul style="list-style-type: none"> <li>• Pure QBS</li> </ul>
<b>Procurement Steps</b>	<p><i>Two-step best value</i></p> <ul style="list-style-type: none"> <li>• LOI (Issuing an RLOI helps attract and gauge interest in the project)</li> <li>• Issue RFQ</li> <li>• Establish shortlist (RFQ will specify the number of firms to be shortlisted; per statute need at least two proposers to continue)</li> <li>• Issue RFP</li> <li>• One-on-one discussions</li> <li>• Selection of apparent best value <ul style="list-style-type: none"> <li>- Analysis Committee (includes technical experts) evaluates each scored goal and identifies strengths, weaknesses and added value</li> <li>- Evaluation Committee (consisting of 3 to 5 members) determines overall technical rating and added value</li> <li>- Process Witness(es) Set #1 observes the Analysis Committee and Evaluation Committee meetings to (1) ensure evaluation and selection process is being followed, (2) watch for and report out on any unfair or biased treatment of proposers, and (3) confirm that “blinding” of proposals is established prior to their presentation to the Selection Committee</li> <li>- Selection Committee (consisting of 3 UDOT senior leaders) reviews blinded technical information provided by the Evaluation Committee along with blinded price proposals to determine the best value</li> <li>- Process Witness(es) Set #2 observes the Selection Committee meeting to ensure the blinding of technical and price proposals is maintained during the process and to watch for and report out on any unfair or biased treatment of proposers</li> <li>- Selection Committee provides a written and blinded justification of the best value selection to the Selection Official for concurrence</li> </ul> </li> </ul> <p><i>CM/GC</i></p> <ul style="list-style-type: none"> <li>• RLOI and RFP steps <ul style="list-style-type: none"> <li>- Pure QBS (previously had a pricing component for pre-construction services and partial items)</li> <li>- Technical is proposal to address the proposer’s approach to pricing</li> </ul> </li> </ul>
<b>Selection Method</b>	<ul style="list-style-type: none"> <li>• 90/10 price/technical weighting (based on this weighting, unlikely to award to a team that is not the low bidder)</li> <li>• Can ask for a BAFO (related to a clarification of technical)</li> <li>• Have also used A+B to convert time to money</li> </ul>

<b>Bundling DB Projects</b>	N/A
<b>Use of Alternative Technical Concepts (ATC)</b>	<ul style="list-style-type: none"> <li>• Used to foster innovation</li> <li>• In a 90/10 price environment, many of the ATCs only relate to reducing project cost (which reduces the effectiveness of ATCs in fostering innovation)</li> <li>• ATC evaluation committee used to facilitate consistency in ATC process</li> <li>• Fine line between quick response and committee review</li> </ul>
<b>Stipends</b>	<ul style="list-style-type: none"> <li>• Short-listed firms receive stipend</li> <li>• Usually apply a formula of 0.2% to calculate stipend</li> <li>• If a larger proposal effort is required, UDOT has the flexibility to raise the stipend</li> </ul>
<b>Other Comments</b>	<ul style="list-style-type: none"> <li>• UDOT formalized their selection process (Best Value Design-Build Manual of Selection, May 2014) in response to a protest on the I-15 CORE, which resulted in a \$13 million settlement and an audit <ul style="list-style-type: none"> <li>- Issues noted in the audit included UDOT’s failure to “blind” the proposals (i.e. conceal the identity of the proposers) and provide adequate documentation to sufficiently support the adjectival ratings and scoring</li> </ul> </li> <li>• UDOT has received feedback to improve consistency and transparency of the evaluation process; considering using numerical ratings to evaluate future technical proposals</li> <li>• Probably would not do the one-step low bid process in the same way again <ul style="list-style-type: none"> <li>- No technical proposals were ever deemed non-responsive</li> <li>- Did not feel that reviewing the technical proposals was worth the effort</li> </ul> </li> </ul>

<b>Risk Allocation</b>	
<b>Risk Management Philosophy</b>	Allocate risk to party that is in the best position to effectively manage it
<b>Differing Site Conditions</b>	Risk retained by UDOT
<b>Permitting</b>	<ul style="list-style-type: none"> <li>• DOT provides cleared environmental document</li> <li>• If DB Team’s design impacts permit, they assume the associated cost and schedule consequences</li> </ul>
<b>Utilities</b>	<ul style="list-style-type: none"> <li>• Some risks are transferred (based on relationship of utility with DOT)</li> <li>• Proposers include utility cost in their bid</li> <li>• Score based on reducing utility impacts</li> </ul>
<b>Right-of-Way</b>	If DB Team’s design goes outside the ROW, must assume cost and schedule consequences
<b>Third Parties</b>	Not discussed

<b>DB Contract Administration</b>	
<b>Design Oversight</b>	Not discussed
<b>Construction Oversight and Quality Management</b>	<ul style="list-style-type: none"> <li>• DOT in more of an oversight role rather than approvals every step of the way</li> <li>• Inspection for compliance with specifications, quality, control points (standard list is defined)</li> <li>• Quality management either performed internally by the DOT or through an Independent Quality Firm retained by the DB Team <ul style="list-style-type: none"> <li>- Selection of which option is based on resources and preference</li> <li>- DOT’s internal QA resources may be supplemented by consulting staff</li> </ul> </li> </ul>

<b>Payment</b>	<ul style="list-style-type: none"> <li>• Schedule of values can have some correlation with quantities (total anticipated quantities)</li> <li>• Pay based on 0%, 50%, 90% 100% complete</li> <li>• Large paving project would be broken into 20 day activities (broken into 0%, 50%, 90%, 100%)</li> </ul>
<b>Best Practices and/or Lessons Learned</b>	Project Team needs to recognize that no preferences can come into play on DB – it’s either a requirement or not (if not, will have to pay for it in a change order)

<b>Performance Outcomes</b>	
<b>Tracking of Metrics</b>	<ul style="list-style-type: none"> <li>• No consistent and formal tracking of metrics - keeping performance metrics is very resource intensive (DOT is not there yet)</li> <li>• Recently reviewed changes orders (but no standing database that aggregates all of the data)</li> <li>• Try to collect lessons learned</li> </ul>
<b>Success Factors</b>	<p><i>Primary Success Factors</i></p> <ul style="list-style-type: none"> <li>• Equitable risk allocation</li> <li>• Communication and coordination among all parties</li> <li>• Clarity of scope and criteria (most important)</li> <li>• ATCs (balancing prescription with innovation)</li> <li>• Timely owner reviews/approvals (good indicator of how well DB is working)</li> </ul> <p><i>Secondary Success Factors</i></p> <ul style="list-style-type: none"> <li>• Interaction of the DB Team (past working relationships a benefit but not extremely important)</li> <li>• DB Team qualifications (Utah has a strong industry)</li> <li>• Use of performance specifications (the more performance requirements, the better the value obtained)</li> </ul>