Alternative Project Delivery

Idaho Transportation Department
Innovative Contracting Unit

ITDAltContracting@itd.idaho.gov
Outline

- Overview
- Project Selection
- Design-Build Procurement Process
- CMGC Procurement Process
- Department Progress to Date
Authority

- Design-Build: Idaho Code § 40-904
- CMGC: Idaho Code § 40-905
  - 20% limit of annual highway program
  - ~$60 million annually
Relationships with Department

Design-Bid-Build (DBB)
- Owner
  - Designer
  - Contractor

Construction Manager / General Contractor (CMGC)
- Owner
  - Designer
  - CMGC

Design-Build (DB)
- Owner
  - Design-Build Firm
Design-Build

- Project delivery method in which the design and construction services are included in the same contract.
- The major benefit of this contracting method is time savings because the design and construction activities overlap and construction approach can be customized to the contractor.
- Two-step procurement process:
  - Request for Qualifications (RFQ) results in short-list of firms
  - Request for Proposals (RFP) is best-value based upon technical and price components.
Design-Build Methods

- **Best Value**: Price divided by the technical proposal score - awarded to the lowest overall score
- **Fixed Price, Best Design**: Highest technical proposal score
- **Lowest Price, Technically Acceptable**: Lowest price proposal that meets minimum technical and designer qualifications requirements
Construction Manager/General Contractor (CMGC)

- Project delivery method in which the design and construction manager are contracted separately.
- Allows the Department, designer and contractor to be active in the design process
  - Collaboration during design reviews
  - Customization to a single contractor’s techniques, processes, and methods
- First opportunity to bid on construction contract
Risk Assessment and Allocation

- Design-Bid-Build
- CM/GC
- Design-Build

Legend:
- Blue: Contractor Risk
- Red: Department Risk
Contracting Methods

<table>
<thead>
<tr>
<th>Contracting Method</th>
<th>Diagram</th>
</tr>
</thead>
<tbody>
<tr>
<td>Design-Bid-Build</td>
<td><img src="image1" alt="Design-Bid-Build Diagram" /></td>
</tr>
<tr>
<td>CMGC</td>
<td><img src="image2" alt="CMGC Diagram" /></td>
</tr>
<tr>
<td>Design-Build</td>
<td><img src="image3" alt="Design-Build Diagram" /></td>
</tr>
</tbody>
</table>
Project Nomination Criteria

- Complexity / Innovation
- Delivery Schedule
- Level of Design
- Risk Factors
- Agency Factors
- Market Factors
- Third Party Coordination
Where Owner Spends Effort

**Design-Build**
- Define goals
- *RFQ/RFP development*
- *Proposal evaluations*
- DBF design reviews
- Contract administration

**CMGC**
- Define goals
- RFP development
- Proposal evaluations
- *Risk analysis*
- *Innovation analysis*
- Design decisions
- Cost comparisons
- Contract administration
Procurement Requirements

- **Design-Build**: two phase procurement process
  - RFQ for qualifications-based determination
    - Results in a short list of the most qualified firms
  - RFP for technical and price proposals

- **CMGC**: single phase procurement process
  - RFP for qualifications-based and technical/price proposal
Design-Build Roadmap

- Overview of DB
  - Benefits
  - Varying degrees of design
  - CFR’s that tie NEPA into the DB selection process
- Procurement process
  - Request for Qualifications (RFQ)
  - Request for Proposals (RFP)
  - Alternative Technical Concepts (ATC’s)
  - Public price opening
- Stipends
Benefits of Using Design-Build

- Qualification based selection
- Accelerate construction by combining design and construction under a single contract
- Early contractor involvement to enhance constructability
- Promotes innovation in design and construction
- Reduces risk of owner assuming how project will be constructed
  - Reduce errors, change orders, and material overruns
Varying Degrees of Design in Design-Build

Best Value with Qualifications, Technical & Price Emphasis
($^1$Best Value & $^2$Fixed Price-Best Design)

Best Value with Low Bid Emphasis
($^3$Lowest Price-Technically Acceptable)

This is where we want to be.
Code of Federal Regulations

- National Environmental Policy Act (NEPA)
  - Issue RFQ and RFP prior to conclusion of NEPA
  - Proceed with award prior to NEPA
  - Issue NTP to proceed with Preliminary Design prior to NEPA
  - Proceed with Final Design and Construction after NEPA
- DBF may help with analysis to define alternatives
  - DBF cannot make any commitments regarding alternatives
  - NEPA retained under the control of ITD
Phase 1: Request for Qualifications (RFQ)

REQUEST FOR QUALIFICATIONS

IDAHO TRANSPORTATION DEPARTMENT

Project Name
Project No.

_____________________________

GENERAL INSTRUCTIONS

_____________________________

REQUEST FOR QUALIFICATIONS

IDAHO TRANSPORTATION DEPARTMENT

Project Name
Project No.

_____________________________

GENERAL INSTRUCTIONS

APPENDIX RFQ-A;
STATEMENT OF QUALIFICATIONS
INSTRUCTIONS

_____________________________
RFQ Information

- Project goals
- Project scope
- Estimated cost
  - Design and construction
- Maximum time allowed for project
  - Design and construction
- Description of the evaluation criteria and process
RFQ Evaluation Criteria

- **Pass/Fail Criteria**
  - Formatting
  - Cover Letter
  - Legal
  - Financial
  - Functional Organizational Chart
RFQ Evaluation Criteria

- Scored Criteria
- Key Personnel
RFQ Evaluation Criteria

- Scored Criteria
  - Major Participant Experience
    - Quality, timely, and effective project delivery methods
  - Past Performance & Safety
    - History of project delivery success
    - Safety record and commitment to safety

Similar scope, size and complexity !!!
RFQ Evaluation Criteria

- **Scored Criteria**
  - Project Understanding and Approach
    - Understanding of the goals and technical aspects
    - Risk identification and mitigation
    - How the proposer will contribute to the success of the project
  - Other appropriate qualification-based selection factors
RFQ Evaluation Process

- Proposers submit Statement of Qualifications (SOQ) in response to the Department’s RFQ advertisement.

- Evaluation Committee
- Selection Committee
- Contracting Officer

- Summary of scores and feedback from evaluators are given to each proposer
- Short-listed proposers advance to phase 2 (RFP)
Phase 2: Request for Proposals (RFP)

REQUEST FOR PROPOSALS

IDAHO TRANSPORTATION DEPARTMENT

Project Name
Project No.

________________________________________

INSTRUCTIONS TO PROPOSERS (ITP)

________________________________________

REQUEST FOR PROPOSALS

IDAHO TRANSPORTATION DEPARTMENT

Project Name
Project No.

________________________________________

INSTRUCTIONS TO PROPOSERS (ITP)

APPENDIX ITP-A:
TECHNICAL & PRICE PROPOSAL
INSTRUCTIONS
RFP Information

- Project goals & scope
- Estimated cost & time (design & construction)
- Deadlines/Milestones
- Base concept information
- Performance and technical requirements (specifications)
- Description of the selection criteria
- Copies of the contract documents
- Reference documents...
Alternative Technical Concepts

- Equal to or better than the base concept
- Submitted during proposal preparation
- Price proposal shall reflect any incorporated ATCs

- Proposals with ATCs are evaluated against the same technical criteria as those without
- Preapproved ATCs incorporated in a proposal become part of the contract upon award
RFP Evaluation Criteria

- Pass/Fail Criteria
  - Formatting
  - Executive Summary
  - Legal
  - Financial
RFP Evaluation Criteria

- **Scored Criteria**
  - Organizational structure
  - Project management
  - Maintenance of traffic

- Project-specific technical and quality factors
  - Design and construction qualifications
  - Innovation*
  - Design and construction quality*
  - Time of completion*

*optional or integrated into other criteria
RFP Evaluation Process

- Technical & price proposal submitted concurrently
  - Price proposal kept confidential until technical proposals have been evaluated, scored and reviewed by higher levels

- Evaluation Committee
- Selection Committee
- Contracting Officer

- Summary of scores and feedback from evaluators are given to each proposer
RFP Evaluation Process

- Price Proposal
  - Form V: Schedule of Values
  - Overall project price and cash flow estimate
DB Evaluation Process

- Adjusted Score
  \[
  \text{Adjusted Score} = \frac{\text{Price Proposal}}{\text{Technical Proposal Score}}
  \]

- Time Component
  - If included, is part of the best value formula
  \[
  \text{Adjusted Score} = \frac{\text{Price Proposal} + (\text{Value Per Day} \times \text{Proposed Contract Time})}{\text{Technical Proposal Score}}
  \]

- Time proposed becomes the actual contract time
## Public Price Opening

**Project:** Example Project  
**Project No.:** A000(000)  
**Key No.:** KN-00000  
**Date:** ____________

<table>
<thead>
<tr>
<th>Firm</th>
<th>Tech Prop Score</th>
<th>Contract Time (D, days)</th>
<th>Time Value (TV = D x VPD)</th>
<th>Price Proposal (PP)</th>
<th>Time Adjusted Price (TAP = TV + PP)</th>
<th>Adjusted Score (AS = TAP/S)</th>
<th>Rank</th>
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<tbody>
<tr>
<td>Short-Listed Firm 1</td>
<td>80</td>
<td>250</td>
<td>2,500,000.00</td>
<td>10,000,000.00</td>
<td>12,500,000.00</td>
<td>156,250.00</td>
<td>3</td>
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<tr>
<td>Short-Listed Firm 2</td>
<td>95</td>
<td>245</td>
<td>2,450,000.00</td>
<td>11,500,000.00</td>
<td>13,950,000.00</td>
<td>146,842.11</td>
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<tr>
<td>Short-Listed Firm 3</td>
<td>85</td>
<td>240</td>
<td>2,400,000.00</td>
<td>10,500,000.00</td>
<td>12,900,000.00</td>
<td>151,764.71</td>
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</table>

Value Per Day (VPD) $10,000.00
Stipend (DB only)

- Based upon the estimated project costs
  - Can be increased for complexity if needed

<table>
<thead>
<tr>
<th>Contract Value (CV)</th>
<th>Stipend Base (SB)</th>
<th>Stipend Rate</th>
<th>Stipend Range</th>
<th>Max %</th>
</tr>
</thead>
<tbody>
<tr>
<td>$0 - $5M</td>
<td>0</td>
<td>= CV x 0.3%</td>
<td>0 - 15,000</td>
<td>0.30</td>
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<tr>
<td>$5M - $10M</td>
<td>15,000</td>
<td>= SB + (CV - $5M) x 0.20%</td>
<td>15,000 - 25,000</td>
<td>0.25</td>
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<tr>
<td>$10M - $20M</td>
<td>25,000</td>
<td>= SB + (CV - $10M) x 0.15%</td>
<td>25,000 - 40,000</td>
<td>0.20</td>
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<tr>
<td>$20M - $40M</td>
<td>40,000</td>
<td>= SB + (CV - $20M) x 0.10%</td>
<td>40,000 - 60,000</td>
<td>0.15</td>
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<tr>
<td>&gt; $40M</td>
<td>60,000</td>
<td>= SB + (CV - $40M) x 0.05%</td>
<td>60,000 -</td>
<td></td>
</tr>
</tbody>
</table>

- Short listed, responsive, unsuccessful proposers are eligible
- If accepted, Department owns the work products submitted
Break...?
CMGC Roadmap

- Overview of CMGC
  - Benefits of CMGC
  - Parties Involved

- Procurement process
  - Request for Proposals (RFP)
    - Qualifications, Technical and Cost components
Benefits of Using CMGC

- Innovation and constructability during design through collaboration of CM during design
- Improved constructability
- All parties identify and manage risk
- Agency retains control over design and contractor input
- Fast-tracking of early procurement items and construction phases prior to completed design
Parties Involved

- Department
- Designer
  - In-house
  - Third party – selected through traditional processes by the Department’s Consultant Administration Unit
- CMGC
- Independent services such as ICE
High Level CMGC Process

1. Procurement
   - Qualifications
   - Technical
   - Price

2. Design process with CM services

3. “Bid Ready”

4. Bid Submission

5. Bid Accepted
   - Yes
   - No

6. Construction contract awarded to CM

7. No

8. Explain/Agree?
   - Yes
   - No

   - Alternate delivery of project
Consultant Administration Unit

- Website: [http://itd.idaho.gov/design/cau/cau.htm](http://itd.idaho.gov/design/cau/cau.htm)

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**Consultant Administration Unit**

The Idaho Transportation Department (ITD) uses consultant-engineering services as an integral part in accomplishing the department's goals to provide a safe and efficient transportation system in Idaho. The consultant workforce is considered an extension of the Highway Division performing the same tasks and procedures as ITD personnel.

It is the responsibility of the Consultant Administration Unit (CAU) to provide assurance of compliance by monitoring transactions and procedures relating to consultants performing professional engineering services. All professional services agreements for project development and highway improvements connected to a highway project must be processed through the CAU.

All currently scheduled highway projects are listed on the Idaho Transportation Investment Program (ITIP). [Click here for more information.](http://itd.idaho.gov/design/cau/cau.htm)

Consultants are utilized by selection from the pre-approved list of consultants (Term Agreement), or through individual project solicitation. [Click on these links for: The Term Agreement Solicitation, and the Individual Project Solicitations.](http://itd.idaho.gov/design/cau/cau.htm)
Independent Owner Services

- Independent cost estimates (ICE) and/or validating estimates
- Risk assessment and management
- Constructability reviews and support
- Schedule development and/or analysis
- Contracting and construction phasing strategies
- Market analysis
Two-Phase Contract

- Pre-construction services
- Construction services
  - Opportunity to bid after the plans have been sufficiently developed
  - May include pre-purchase packages or advanced construction packages
Pre-Construction Services

- Construction Manager (CM) Pre-Construction Services
  - Risk assessment and management
  - Life-cycle cost considerations
  - Prepare and maintain innovation log
  - Constructability services
  - Alternative construction options
  - Cost development at intermediate project design milestones
  - Construction subcontracting plan
  - Sequencing/phasing of work
  - Construction schedule
  - Construction bid
Pre-Construction Services

- Pre-Construction Services Compensation

\[(\text{Hourly Rate} + \text{Overhead}) \times \text{Fee} + \text{Direct Expenses}\]

- **Hourly Rate** based on 2080 hours per year if salaried
  - Certified wage rates required to verify rate
  - No overtime

- **Overhead Rate**: Fixed rate of 160%

- **Fee**: Profit margin fixed at 10%

- **Direct Expenses**: Mileage, travel, per diem and project consumables

Cont...
Pre-Construction Services

Example

- Mr. Smith's annual salary: $75,000.00
- Direct Hourly Rate: $75,000.00/2080 = $36.06
- Overhead Rate @ 160%: (1.60 X Direct Hourly Rate) = $57.69
- Total Hourly Labor Rate: $93.75
- Fee @ 10%: (0.1 X Total Labor) = $9.38
- Total Hourly Compensation: $103.13
CMGC Request for Proposals (RFP)
RFP Information

- Project goals & scope
- Estimated cost and timeframes for design/construction
- Deadlines/Milestones
- Key personnel
- Schedule of unit prices for major items and approach to price
- Description of the selection criteria
- Copies of the contract documents
RFP Evaluation Criteria

- Pass/Fail Criteria
  - Formatting
  - Executive Summary
  - Legal
  - Financial
RFP Evaluation Criteria

- **Scored Criteria**
  - Organizational Structure
  - Proposer Experience
  - Past Performance
  - Project Management
    - Collaboration with department and designers
    - Cost and schedule management

Cont...
RFP Evaluation Criteria

• Scored Criteria
  • Project Understanding and Approach
    • Understanding of project goals and technical aspects
    • Risk identification and management
    • Innovative concepts
    • How the proposer will contribute to the success of the project
RFP Evaluation Criteria

- **Scored Criteria**
  - **Pricing Information**
    - Unit prices of major items
    - Approach to price: assumptions and probability of achieving the proposed price
    - Price rated against other proposers

Proposer’s Points = \( \frac{Low\ Bid}{Proposer's\ Bid} \times Points\ Available \)
Interviews

- Optional
- If used, points will be assigned for scoring purposes
CMGC Evaluation Process

- Technical & price proposal submitted concurrently
  - Price proposal score combined with technical score

- Evaluation Committee
- Selection Committee
- Contracting Officer

- Summary of scores and feedback from evaluators are given to each proposer

- Highest overall score is successful proposer
High Level CMGC Process

- Procurement
  1. Qualifications
  2. Technical
  3. Price

- Design process with CM services

- "Bid Ready"

- Bid Submission

- Bid Accepted

- Construction contract awarded to CM

- Explain/Agree?
  - Yes
  - No

- Alternate delivery of project
CMGC Bidding Process

- Optional pre-bid meeting
- Cost estimating independently by the ICE and the CM
- Cost comparison process
- Clarify scope and bidding approach, and re-bid
- Bid up to three times or as allowed by the state
- If an acceptable price cannot be reached, the Department may elect to advertise, bid and award the contract (traditionally) in accordance with section 40-902, Idaho Code
Wrap up and questions...
Tips for a strong response

- Follow instructions
- “Similar scope, size and complexity”!
- Do not simply repeat the requirements in the RFQ or RFP, demonstrate how the proposal exceeds the requirements
- Describe in detail how the project will be executed; include potential risks and issues involved, solutions and mitigation efforts, and contingency plans
- Describe how success will be achieved. Don’t leave it up to the evaluators to read between the lines and make assumptions
## 2013 List of DB/CMGC Projects

- Nominated by the districts and bridge section
- Reviewed and approved by Transportation Board
- Federal-aid projects reviewed and concurred on by FHWA

<table>
<thead>
<tr>
<th>PROJECT NAME</th>
<th>KEY NUMBER</th>
<th>Construction Budget ($1,000s)</th>
<th>METHOD</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td></td>
<td>FY13</td>
<td>FY14</td>
</tr>
<tr>
<td>SH-44, Linder Road to Ballentine Lane</td>
<td>13059</td>
<td>D3</td>
<td>10,000</td>
</tr>
<tr>
<td>US-20, Comm. Weight &amp; Safety Compliance Station, Ph3</td>
<td>13573</td>
<td>D6</td>
<td></td>
</tr>
<tr>
<td>SH-55, N Fk Payette Rvr Bridge</td>
<td>13392</td>
<td>D3</td>
<td></td>
</tr>
<tr>
<td>SH-55, Gold Fork Rvr Bridge</td>
<td>13393</td>
<td>D3</td>
<td></td>
</tr>
<tr>
<td>SH-3, St Joe Rvr/St Maries RR Bridges</td>
<td>13383/4</td>
<td>D1</td>
<td></td>
</tr>
<tr>
<td>SH-97, I-90 Overpass (Wolf Lodge)</td>
<td>13362</td>
<td>D1</td>
<td></td>
</tr>
<tr>
<td>SH-32, Badger Creek Bridge</td>
<td>13399</td>
<td>D6</td>
<td></td>
</tr>
<tr>
<td><strong>FISCAL YEAR TOTAL</strong></td>
<td><strong>10,000</strong></td>
<td><strong>0</strong></td>
<td><strong>4,230</strong></td>
</tr>
</tbody>
</table>
Additional Information

- ITD Innovative Contracting Unit
  - Website and Advertisement Announcements:
    - ITD.Idaho.Gov
    - Doing Business With ITD
    - Alternative Contract Procurement Services
  - ITDAItContracting@itd.idaho.gov
  - SharePoint (internal to ITD):
    - Division: Highways, ICU
Innovative Contracting Unit

Website: http://itd.idaho.gov/highways/ICU/default.htm

Welcome to the Innovative Contracting Unit

The Innovative Contracting Unit (ICU) is a central office responsible for the implementation of alternative project delivery methods which fall outside of the conventional design-bid-build method. The ICU is a section in the Division of Highways of the Idaho Transportation Department and works closely with the other department sections to coordinate, train and deliver highway projects through alternative methods. The ICU will be a resource for the Department to facilitate the evaluation and identification of alternate contract delivery candidate projects each year as part of the Idaho Transportation Improvement Program (ITIP), and will also support all six Districts by facilitating the contract procurement process.

Section 40-902, Idaho Code describes the contracting process for Design-Bid-Build (DBB) projects. Section 40-904 and 40-905, Idaho Code allows the Department to use Design-Build (DB) and Construction Manager/General Contractor (CMGC) contracting methods under certain circumstances. 23 CFR 638 describes FHWA’s policies and procedures for utilizing design-build contracting on federal-aid projects.

2013 Alternative Contracting Project List

<table>
<thead>
<tr>
<th>Active Project Solicitations</th>
<th>Past Project Archives</th>
</tr>
</thead>
<tbody>
<tr>
<td>Project Selection</td>
<td>Project Delivery</td>
</tr>
</tbody>
</table>
Innovative Contracting Unit

- SharePoint: [http://itdportal/sites/HW/ICU/SitePages/Home.aspx](http://itdportal/sites/HW/ICU/SitePages/Home.aspx)
Thank you!