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Contractor Prequalification **Program**

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A photograph of a suspension bridge at sunset. The bridge spans across a wide body of water. The sky is a mix of blue and orange, with the sun low on the horizon. The bridge's cables and towers are visible against the sky. The word "Purpose" is written in large, bold, black letters across the middle of the image, underlined.

Purpose

- Ensure contractor resources, skills, capabilities
- Minimize risks
- Allocate limited resources
- Incentivise improved quality
- Attain project goals

A photograph of a suspension bridge spanning a large body of water at sunset. The sky is a mix of orange, yellow, and blue. The bridge's cables and towers are visible against the horizon.

History of Contractor Prequalification

- DOTs previously only required proof of contractor license and bonding capabilities.
- DOTs needed a better definition of contractor capability.
 - Ratings usually based on finances, management capabilities, location, equipment, and other factors
 - DOTs can rate contractors on performance



Nationwide Best Practices

- Financial Capability
- Types and Availability of Equipment
- Location of Assets
- Experience of Management
- Company Track Record-History

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Program Key Elements

- Objectivity – fairness
- Confidentiality of records
- Performance based
- Evaluations of contractor and owner
- Interim and final project reviews
- Audited financial statements, experience information
- Appeals process

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Program Approach

- Develop the following:
 - Contractor applications
 - Criteria, evaluation, and rating procedures
 - Program elements
 - Technical work classification
 - Dollar value of work
 - Performance measures
 - Evaluations of Contractor (interim and final)
 - Evaluations of Owner (interim and final)
- Coordinate with industry
- Implement pilot program

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Contractor Application Forms

- Applications include:
 - Prime contractor basic information
 - DBE/WBE/SBE information
 - Company personnel and affiliates
 - Business Type
 - Work Classifications
 - Recent work history
 - Equipment and plants
- Audited annual financial statement

Determining Prequalification Rating

$$MCC = FC \times A \times B \times (C + D)$$

Where:

- MCC = Maximum Contracting Capacity (\$)
 - FC = Financial Capacity (\$) based on a review of audited annual financial statements
 - A = Performance Factor
 - B = DOT Work Experience Factor
 - C = DOT Claim History Factor
 - D = DOT Project Completion Factor
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- Defines the maximum dollar value of contracts that the prime contractor can undertake at one time
 - The type of work the prime contractor will be allowed to perform

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Available Contracting Capacity (ACC)

$$ACC = MCC - VEC$$

Where:

- ACC = Available contracting capacity (\$) on bid letting date
- MCC = Maximum contracting capacity (\$)
- VEC = Unpaid value of work on existing contracts, based on the most recent monthly payments from Site Manager/SHARE(\$)



Financial Capacity (FC)

- Review the audited annual financial statements submitted with the Prime Applications to determine financial capacity.
- Verify the prime contractor's equity:

$$E = A - L$$

E = Equity (\$)

A = Total assets (\$) from the balance sheet

L = Total liabilities (\$) from the balance sheet

Performance Factor (A)

- Contractor Performance

$$AWPR = \frac{(R_1 \times C_1) + (R_2 \times C_2) + (R_3 \times C_3) + (R_4 \times C_4) + (R_5 \times C_5)}{C_{total}}$$

$$A = \frac{(AWPR - 4.5) \times 2.5}{10}$$

- Owner Performance



Contractor Performance

- Quality of Work
- Prosecution and Progress
- Safety (Traffic/Work-site)
- Contract Compliance
- Environmental and Labor Compliance



Owner Performance

- Quality of Contract Documents
- Processes Support, and
- Resources

A photograph of a suspension bridge at sunset. The bridge spans across a body of water, with its towers and cables visible against a sky transitioning from blue to orange. The water is calm, reflecting the light of the setting sun.

Work Experience Factor (B)

- Based on the prime contractor's work experience with the department
 - $B = 1$ for prime contractors applying after a period of suspension or debarment
 - $B = 1.5$ for new contractors and subcontractors applying as prime contractors
 - $B = 2.0$ for prime contractors with experience (not within the last 5 years) as a prime contractor
 - $B = 2.5$ for prime contractors with experience (within the last 5 years) as a prime contractor

Claim Recovery Factor (C)

$$\% = \frac{X}{Y} \times 100$$

Where:

% = Award amount/claim amount, as a percentage

X = Amount (\$) awarded the prime contractor as a result of claims board hearings, arbitration, or litigation

Y = Total amount (\$) of the prime contractor's claim

Project Completion Factor (D)

Where:

W = Project completion ratio

X = Total early completion ratio

Y = Total assessed liquidated damage days

Z = Total contract days

$$W = \frac{X + Z}{Y + Z}$$

If the ratio (W) is the following:

≤ 0.9
 $< 1.0 - > 0.9$
1.0
 $> 1.0 - \leq 1.1$
 > 1.1

D equals:

1.0
1.5
2.0
2.5
3.0

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Interim and Final Evaluations

- Partnering
 - 1) Regularly scheduled meetings
 - 2) Performance issue identification
 - 3) Issue resolution
- Appeal Process
 - 1) After DOT final project performance evaluation of contractor.
 - 2) After DOT rating update of contractor.

A photograph of a suspension bridge at sunset. The bridge spans across a wide body of water, with its towers and cables visible against a sky transitioning from blue to orange. The title 'Implementation Issues' is overlaid on the top half of the image.

Implementation Issues

- Viability – Culture
 - Adds value to project delivery
 - Objectivity – fairness
 - Ease of implementation
- Expectations (Owner, Contractor)
 - Minimize risks
 - Improve quality
 - Ensure contractor capability
- Concerns (Owner, Contractor)
 - Minimize administrative burden
 - Maintain confidentiality of records
 - Ensure objectivity

A photograph of a suspension bridge at sunset. The bridge's cables and deck are visible, stretching across a large body of water. The sky is a mix of blue and orange, indicating the time is either dawn or dusk. The bridge's structure is silhouetted against the bright horizon.

Conclusions

Successful project delivery relies on:

- Contractor capability
- Minimizing risks
- Meeting specified quality
- Attaining project goals



Program Benefits

- **For the DOT**
 - More consistent project delivery
 - Higher project quality
 - Less administrative burden
 - Improved public perception of the DOT
 - Mechanism to monitor the capability of the industry
- **For the Contractor**
 - Mechanism to articulate a competitive advantage
 - Creation of a more level playing field
 - Enhanced partnering opportunities on DOT projects
 - Improvement in DOT contract documents, processes, and resource allocation

A photograph of a suspension bridge, likely the Verrillano Bridge, spanning a large body of water. The sky is a mix of blue and orange, indicating sunset or sunrise. The bridge's cables and deck are visible, with some lights on the deck. The text "The End" is centered in the lower half of the image, underlined.

The End