

Assessment of Prequalification Procedures:

New Mexico DOT Construction Contractor Prequalification Practices Survey

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# ASSESSMENT OF PREQUALIFICATION PRACTICES: New Mexico DOT Construction Contractor Prequalification Practices Survey

by

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# **PREFACE**

The research reported herein describes the practices of other states' construction contractor prequalification practices. The purpose of the work was to inform NMDOT program development discussions. A literature search was performed and a survey administered to collect descriptive data on the topic. A database was built to facilitate storage and retrieval of the data.

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# **ABSTRACT**

In order to ensure top quality construction projects, contracts need to be awarded to the most qualified contractor. At the time of this research, NMDOT projects often went to the lowest, not necessarily the most qualified, bidder. The objective of this project was to survey contractor prequalification practices of other states for use in NMDOT program development discussions. Respondents from 50 state transportation departments were surveyed for descriptions of their contractor prequalification practices. Eighteen states reported that they had contractor prequalification programs, 7 states reported they were developing programs, 24 states reported that they had no programs, and 1 state did not respond. Primary programmatic issues of interest to respondents were objectivity, efficiency, and adequacy of operational resources. Execution of Work - Prosecution and Progress appeared to be the most important contractor performance rating factor. Only a few states had formal methods for measuring and evaluating program impact. A database was built to hold detailed survey responses, states' prequalification documents, and various research resources.

# ACKNOWLEDGMENTS

The researcher would like to acknowledge the individual state departments of transportation for contributing their valuable time to the survey.

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# 1.0 INTRODUCTION

# 1.1 Objective

The objective of the 50 state *NMDOT Construction Contractor Prequalification Practices*Survey was to document other states' construction contractor prequalification practices in order to inform NMDOT program development discussions.

## 1.2 Problem

In order to ensure top quality road construction projects, contracts need to be awarded to the most qualified contractor. At the time of this research, projects were frequently awarded to the lowest, not necessarily the most qualified, bidder. Department need for cost containment, improved quality and improved contractor performance motivated inquiry into prequalification worst and best practices.

# 1.3 Background

The survey was one part of a multi-path exploratory process to understand the quality-based prequalification process and how it might apply to New Mexico. At the time of survey design, the department did not have a systemic or operational understanding of quality-based prequalification – potential programmatic components were only vaguely articulated and it was unclear how a program would meet the department's needs. Consequently, the *NMDOT* Construction Contractor Prequalification Practices Survey was designed to be an exploratory tool. Other paths of the exploratory process included the formation of a prequalification steering committee, formal dialogue with leaders from the contracting community, and the hiring of a private consulting firm.

# 2.0 LITERATURE REVIEW

The most comprehensive report found on the issue of quality-based performance rating is *Quality-Based Performance Rating of Contractors for Prequalification and Bidding Purposes* by R. Edward Minchin Jr. and G. R. Smith (1). The purpose of Minchin's research was to develop a comprehensive, objective, quality-based rating system for highway construction contractors and prepare an implementation guide. Minchin acknowledged that highway construction project owners often treat low-quality construction work no differently than high quality construction work insofar that poor quality work is rarely penalized for and is indirectly rewarded.

Compounding the problem, good contractors become "discouraged about the prospect of continuing to bid for construction work against contractors who consistently submit low bids and produce low-quality products" (1, p.1). Studies previous to Minchin focused primarily on financial factors. Minchin and Smith set out to develop, evaluate, and formalize a quality-based performance rating (QBPR) model that took into account the quality of a contractor's past work.

Minchin first performed a literature search for quality based procedures and factors.

Next, focus groups consisting of contractors and state DOT personnel selected a range of performance evaluation factors. The focus group data was used to produce a survey that was distributed to every DOT Construction Section in the U.S. and to 400 contractors. The outcome of the survey was a rank-order list of factors. An evaluation model was developed from the survey results and field tested. The resultant model, the Quality Based Performance Rating system or QBPR, includes both quality management measures as well as test results for materials and workmanship that are as objective as possible.

A Wisconsin DOT *Transportation Synthesis Report* provided a detailed summary of the Minchin report and can be found in Appendix A (2). Minchin's report was used to inform the

design of Section III, Quality-Based Performance Rating Factors, of the *NMDOT Contractor*Prequalification Practices Survey.

In Quality-Based Pregualification of Contractors by Hancher, Lambert and Maloney, the Kentucky Transportation Center set out to develop a systematic method for evaluating construction contractor quality of work and rewarding quality performance (3). Objectives were to identify indicators of quality, develop methods for measuring indicators, develop a contractor performance evaluation system, develop a data collection and reporting system, and develop a method for integrating the performance evaluation system into the contractor prequalification process. At the time of the research, KyTC (Kentucky Transportation Cabinet) was utilizing an evaluation rating report that 1) did not address the issue of quality work performance, 2) did not weight topics, 3) did not use an explicitly defined rating system, and 4) suffered from an excess of bias and subjectivity. Changes to the Kentucky prequalification process included the design of a more objective and specific evaluation rating report, sharing of performance rating with contractors, contractor rating of DOT performance, and more emphasis on performance when determining maximum capacity, annual performance rating, and annual eligibility rating. The Kentucky report includes the revised contractor's performance report which attempts to narrow the subjectivity of contractor evaluation measurement scales.

AASHTO's 2002 Survey Regarding State DOT Approaches for Dealing with Unsatisfactory Contractor Performance surveyed states' definitions of unsatisfactory prosecution and progress and unacceptable quality, asked about the methods used to deal with unsatisfactory prosecution and progress, and inquired about DOT reporting to bonding companies (4). States' use of performance evaluation data and methods for rewarding performance was also queried.

The NMDOT Research Bureau assumed that best practices for prequalification had changed significantly since the time of the above reviewed research and decided to survey all states for current best and worse prequalification practices.

# 3.0 SURVEY METHODOLOGY

### 3.1 Methods

An open-ended question exploratory survey was developed on the basis of a literature search and intradepartmental queries. Questions were formulated to collect information on issues of interest to NMDOT. An electronic version of the survey was sent to all AASHTO RAC members.

Responses to the survey were received in paper and electronic form. For both respondents and non-respondents, follow up phone calls were made. In many instances, non-responders became responders through phone contact.

Most often, AASHTO RAC members referred researcher to another person for survey response. Occasionally, the lineage of referral became three to four persons long. Telephone conversations with respondents lasted from 15 minutes for states with no prequal programs to 1 hour for states with prequal programs. Some respondents and non-respondents received more than one follow up call. Discussions with the first few respondents resulted in additional questions being added to the survey under question #7, and most, but not all, respondents where asked the additional questions.

Relevant program forms, policies, rules, statutes, and system documents were collected from respondents. Responses and program documents where entered into an MSAccess database and a user interface was added.

Respondents from states that had or were developing prequalification programs were sent a report of their survey responses and asked to make any desired changes. These changes were then made to the survey database.

### 3.2 Limitations

The accuracy of survey responses was limited by the knowledge, perceptions and interpretations of each particular respondent. There was no regular consistency in regard to respondent professional title – respondents were engineers, directors, managers, accountants, and specialists/secretaries/officers. It appeared that semantic and operational understanding of the terms prequalification, quality-based prequalification, and performance-based prequalification differed from one respondent to another. Some respondents understood their organization's operations more comprehensively than others. This variability in understanding might account for the reason that Minchin (1, p. 11) reports that Maine does not have a contractor prequalification program, while Hancher (3, p. 4) and this research reports that it does. For example, because of personnel changes midway through the NMDOT survey process, one state had two respondents with opposing opinions on whether their state had a quality-based prequalification program or not.

Though respondents were asked for details and descriptive examples, most responses were general in nature. During phone conversations, some respondents seemed reticent about providing detailed information regarding the operation or administration of their programs.

Occasionally, a respondent would declare that a response was off the record because of concern with possible consequence. In addition, the depth and complexity of the subject seemed to demand much more time than was available to respondents.

In regard to the coding of performance rating factors from responses provided in Section III Quality-Based Performance Rating Factors of the *NMDOT Contractor Prequalification*Practices Survey, states' responses were fit into four categories for quick comparison: Execution of Work; Contract Compliance, Cooperation and Claims; Quality of Work and Materials, Punchlist; and Safety, Labor, Environmental and Public Impact Requirements. However, responses could have been grouped and categorized in other ways depending on purpose. In addition, factor categories may not be operationally defined or measured in the same way from state to state. For more exact comparisons, view each state's performance rating documents available in the *NMDOT Construction Contractor Prequalification Practices Survey Database*.

### 3.3 Delimitations

The survey was designed to be administered to AASHTO Research Advisory Committee members or their designated respondents. Through a lineage of referrals, sometimes a respondent was surveyed that had not been referred by the AASHTO RAC.

At the time of survey design, the department did not have a clear operational understanding of quality-based prequalification. As a result, it was thought that unscholarly closed-ended questions might result in a narrowing of all potentially useful information.

Consequently, the *NMDOT Construction Contractor Prequalification Practices Survey* was designed to be an open-ended question tool.

These limitations and delimitations still allowed the objective of the survey to be met: to document other states' construction contractor prequalification practices in order to inform NMDOT program development discussions. However, detailed information regarding best and worst practices was less than hoped for.

# 4.0 RESULTS

Eighteen respondents reported that their states had a quality-based construction contractor prequalification program. 24 reported that their states had no program. 7 reported that their states were in the process of developing a program. One state did not respond to the survey or to follow up phone calls.

# 4.1 Relevant Findings by State

The following state practices were relevant to NMDOT program development discussions:

- Colorado DOT is considering assigning each project a priority and a difficulty factor. The priority factor increases the effect of the contractor's performance score depending on the importance of the project. The difficulty factor gives the contractor extra points for unusual circumstances that increase the difficulty of construction. Also, Colorado considers the performance of subcontractors when scoring the work of the prime contractor.
- Georgia DOT uses a weighted average scoring system where the weight changes according to the size of the project. The DOT stresses the need for web-based, automated data management systems and good intradepartmental communication. The contractor can appeal an evaluation and other issues to the Prequalification Committee. The committee consists of the State Construction Engineer, the State Contracts Administrator, the Director of Construction and someone from the Treasury Office.
- Illinois DOT's various prequalification systems have checks and balances in order to find errors, verify information and balance opinions. The DOT stresses the need for automation, including the need to automate their system of checks and balances. Automation may put more responsibility on the contractor to stay on top of the process. The DOT acknowledges that requiring that contractors have long term leases on equipment or own equipment is a barrier to

small business that just want to lease equipment per job. The contractor evaluation form refers back to specifications, rules, contract requirements, and sometimes the contractor's Quality Assurance/Quality Control plan.

- Kentucky DOT specifies definite ways for new contractors to build reputation and ability. The DOT starts all new contractors at 50% of their maximum capacity factor. This allows new contractors to enter bidding and to build reputation and capacity by working on smaller projects. In addition, the Contractor Performance Report can be weighted differently for contractors that have little experience. Kentucky has been reviewing its current project evaluation form for ways to increase objectivity.
- Maine DOT allows project specific prequalification. This allows smaller operations to get into minor rebuild or other minor projects and encourages larger operations that specialize in certain areas (such as marine construction).
- Massachusetts DOT's contractor prequalification laws are strong and have withstood legal challenge. However, this strength can at times restrain the ability of the program to make adaptive change. Massachusetts main lesson learned is that the contractor prequalification program must have both flexibility and strong legislative backing.
- Michigan DOT audits its program yearly. They are a good informational organization. They are working on increasing the quality of and standardizing documentation across all divisions. This is important for "taking action". In contrast to Massachusetts, their administrative rules are law but sometimes can be open to broad interpretation. They have a Contract Evaluation Review Team that takes a close look at all the evaluations.
- Missouri DOT cites subjectivity, a paucity of well-defined objective performance measures, single rater influences, absence of documentation, arbitrary performance levels, and

combined/overlapping work categories as sources of their early problems. Solutions included designing contract required performance measures that were objective, measurable, documented and defensible; redefining performance categories for better specificity; establishing protocols for evaluation report completion; increasing multi-person review of project ratings; and statistically defining performance levels. Currently, Missouri is working at automating many of its program processes because of resource demands.

- Nevada DOT notes that strong mechanisms should be instituted that give the DOT authority to prevent prequalification, revoke prequalification, or suspend contractors that have serious performance problems. Also, a bonded company may look good on paper, but the bonding may not be an accurate representation of financial capability. As a result, Nevada investigates a contractor's relationship to its parent company (if any) and makes sure that the DOT enters into contract with the company actually doing the work.
- Ohio DOT contractor evaluations are confidential. Information cannot be disclosed to unauthorized persons within or external to the DOT, and evaluations of subcontractors cannot be furnished to the prime contractor of the project. Each district is graded quarterly through an Operational Performance index (OPI) of which the contractor evaluation is part. In addition, every 2 years the districts are subject to a Quality Assurance Review (QAR) to assure that districts are impartially rating contractors.
- South Carolina DOT draws seventy percent of the contractors score from results based data because it is based on measurable facts of performance. Results oriented measurements are geared to end of project. The remaining 30% comes from a survey submitted by the Resident Construction Engineers. This survey is given less weight because of its subjective nature.

- Utah DOT attempts to make the program as flexible as possible in order to be responsive to all possible scenarios. The DOT utilizes the comprehensive Project Development Business System (PDBS) which is an integrated information system connected remotely statewide for recording activities within a project. The system provides data to the contractor prequalification program. PDBS has the capability to make automatic calculations and reports.
- Vermont DOT has a rating process that consists primarily of Yes or No questions.

  Realizing that this is not enough, the state is in the process of phasing out subjective measurements. There is a prequalification committee of 7 members (heads of sections) that meets weekly.
- Virginia DOT is looking at letting bonding companies do the contractor's financial ratings, stability ratings, and set the bidding cap. That will give the DOT more time for the performance/quality based evaluation activities. The DOT is trying to replace interim evaluations with once a month evaluations. They are in the process of making their Contractor's Performance Report more objective and are trying to minimize rater inconsistencies. Their goal is to develop a measurement of quality that is fair, objective, and repeatable with consistency between different raters. An important focus is how to substantiate standards and how to measure and document that a standard has been met. Part of that process is to review their Construction Quality Improvement Program in order to distill out the most important indicators that show they are getting good quality. Bonus points may be awarded if a contractor does exceptional work.
- Wyoming DOT is in the process of training resident engineers to think, measure and perform project evaluations in a standardized way. They are looking into how different measurement approaches create different results. The DOT works with contractors to help them

build capacity and ability - the more qualified bids they have, the better. Their main lesson learned is how well the job is done is as important as how fast it is done.

# **4.2 Formal Program Evaluation**

Only a few states had formal methods for measuring and evaluating program impact.

Process evaluation was commonly implemented by way of internal and external audit. No state spoke about applying formal impact evaluation components where intermediate and long term quality/performance outcomes were measured. Formal impact evaluation requires that needs be assessed with precision and that consequent target outcomes be concretized.

## 5.0 CONCLUSIONS

# **5.1 Categories of Response**

The most important quality-based performance-rating factor appears to be prosecution and progress. Primary programmatic issues of interest to respondents were objectivity, documentation, efficiency, and adequacy of resources. A draft of survey response categorization can be found in Appendix C and raw survey responses for states that have or are developing prequalification programs can be found in Appendix D. Resources were not available for a qualitative coding process that would have involved a range of professional perspectives within the NMDOT.

Major context dependent themes that emerged from the researcher's dialogue with respondents were:

- Uniformity vs. flexibility; standardization vs. adaptation; standardization vs. exception
- Independence of opinion vs. evenness of opinion or consensus of opinion
- Objectivity of fact vs. consensus of opinion
- Objective measurement vs. subjective measurement

- Checks and balances vs. individual license and authority
- Making programmatic change is easy vs. making programmatic change is difficult
- Differential treatment of contractors vs. non-differential treatment of contractors
- Public interest vs. private interest (defining the public interest and government role)
- The "hidden" organization vs. the stated organization
- Imagined programmatic impact vs. actual impact

There appears to be several context dependent, situational tensions between the themes of exception and standardization. Independence of opinion and discretional judgment might result in bias in one situation but support adaptivity and flexibility in another situation. Consensus of opinion can represent group bias or objectivity. If programmatic change requires processing through difficult systems of checks and balances, unsound decisions may not take hold and the program may be more effective – or non-effective if the change process is non-adaptive. It is in this thematic environment that programmatic components and processes develop.

# **5.2 Survey Database**

An MSAccess database was built to hold detailed survey responses, states' prequalification documents, and various research resources. The survey database was provided to Trauner Consulting Services, Inc. for use in their development of a contractor prequalification program for New Mexico.

# **6.0 RECOMMENDATIONS**

Even if informally, most construction contractor prequalification programs practice some kind of on-going self-evaluation and improvement. It is recommended that NMDOT maintain dialogue with these programs to keep current on best practices for program operation and development.

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# APPENDIX A WISCONSIN SYNTHESIS REPORT



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# Contractor Prequalification Quality-Based Rating

Prepared for
Bureau of Highway Construction
Division of Transportation Infrastructure Development

Prepared by
CTC & Associates LLC
WisDOT RD&T Program
October 30, 2002

Transportation Synthesis Reports (TSRs) are brief summaries of currently available information on topics of interest to WisDOT technical staff in highway development, construction and operations. Online and print sources include NCHRP and other TRB programs, AASHTO, the research and practices of other state DOTs, and related academic and industry research.

#### REQUEST FOR REPORT

The Bureau of Highway Construction requires interested bidders to establish proof of their competency and responsibility prior to submitting bids. Firms must complete a Prequalification Statement that includes information on finances, plant and equipment, organization, prior experience and other pertinent information. The quality of a contractor's past performance on WisDOT jobs is currently not a formal part of the prequalification process, although project managers complete an "Overall Rating" of contractors at the end of a project that includes "Quality of Work." The Bureau is interested in exploring ways to make past performance a greater factor in the process. The RD&T Program was asked to look at approaches that other state DOTs have taken to this issue.

#### <u>SUMMARY</u>

A March 2001 report of the National Cooperative Highway Research Program (Project D10-54), Quality-Based Performance Rating of Contractors for Prequalification and Bidding Purposes, provides comprehensive information on this issue.

Key findings of the report are summarized below. The full report is available as Web Document 38 at <a href="http://www4.trb.org/trb/onlinepubs.nsf/web/nchrp\_web\_documents">http://www4.trb.org/trb/onlinepubs.nsf/web/nchrp\_web\_documents</a> on the Web site of the Transportation Research Board.

- Survey responses on existing prequalification systems are documented from 35 states and Ontario; innovative approaches are described in detail.
  - o Wisconsin and five other states surveyed reported using an indexing system to rate contractor performance.
  - o Minnesota uses incentives and disincentives to encourage higher levels of quality tied to measures of such things as ride quality, water-cement ratio, aggregate quality and asphalt mat density.
  - o Missouri, which developed a performance ranking system similar to the model proposed in this report, uses a questionnaire aimed at identifying levels of performance related to quality, contract compliance, prosecution/progress and safety.
  - o Maryland waives the five percent retainage for contractors who score high. (A 2001 legislative initiative—HB 480—was designed to assist smaller companies by amending the state's pre-

qualification process to include past performance, minority information, management plans, and safety and quality control measures. The bill died in March 2002.)

- A model for quality-based qualification of highway contractors is proposed, and results are presented from field-testing the model with four state DOTs (Florida, Pennsylvania, Utah and Kentucky). The model includes a project performance factor from a questionnaire (PPFq) and a project performance factor from data (PPFd). Input from a DOT/contractor team was used to weight the factors for greatest objectivity. The investigators recommend that AASHTO or NCHRP integrate the Quality-Based Performance Rating (QBPR) model into the AASHTO SiteManager software.
- Third-party quality certification systems, such as the International Standards Organization ISO 9000 series of standards, are evaluated for potential application to highway construction.

### **CURRENT STATE DOT PRACTICES**

A table on pages 11-12 of the report summarizes the pre-qualification elements used by each of the 35 states responding to the survey. Many of the performance rating systems currently in place use a questionnaire to measure the key elements of contractor cooperation, schedule and product. Six states, including Wisconsin, are already using an indexing system to rate or rank contractors. The following DOTs were identified as having unique practices for evaluating contractor performance. The summaries below are edited verbatim excerpts from the report.

#### Wisconsin

The Project Manager rates the prime contractor and each subcontractor at the time of contract completion or, if necessary, when a subcontractor's work is completed. The Overall Rating is a function of six factors:

- 1. Quality of work.
- 2. Prosecution and progress.
- 3. Supervision.
- 4. Cooperation/contract compliance.
- 5. Adequacy of work force.
- 6. Adequacy of equipment.

Each of the six factors has a list of between three and eight sub-items to consider, and each factor is rated and multiplied by an 'Importance Factor' to derive a 'rating.' The rating for each factor is summed to generate an 'Overall Rating' from zero to ten. The primary purpose of the rating is to provide input when establishing a contractor's bidding limit. The bidding limit is determined by multiplying a 'Financial Factor' (taken from prequalification documents) by a 'Work Factor' (an evaluation by the DOT as to the quality of the work being performed by the contractor). The generation of the work factor includes referencing the six-factored rating mentioned earlier, but the two are not tied together procedurally. A secondary purpose is to monitor extremes in contractor performance. Contractor bidding limits have both increased and decreased based upon this rating. This state is adamant that prequalification based on any criteria is a waste of time and that post-qualification is an equal waste of time.

#### Minnesota

In an alternate approach to achieving the goal of quality construction, Minnesota bases its entire transportation-building program on a system of incentives and disincentives. Minnesota awards contracts based upon a low bid with a full performance bond and a full payment bond. Incentive clauses are included to reward a contractor for achieving better than specified quality levels or penalize the firm for achieving less than the specified quality levels. Some view incentive payouts as a waste of money since the contractor has, by signing bid forms, agreed to construct according to specifications. Others view incentives as a tool to drive quality higher than is specified. The discussion below describes the evolution of the Minnesota incentive program.

Approximately ten years ago, MinnDOT offered incentives for ride quality, hoping to improve the quality in that area of its construction program. At first, the incentives were only offered for smoother rides on concrete pavement. Later, bituminous paving was added to the incentive/disincentive program. The plan was to test each project with a California Profilograph and reward or penalize contractors according to set criteria. MinnDOT officials were encouraged as they watched contractors purchase new and better equipment to assist them in garnering the incentive money. Ride quality rose dramatically.

Approximately five years ago, the program was extended to include other areas of construction. Concrete was the first area to be added to the program, with compressive strength as the measuring stick. Unfortunately, there was too much disagreement among the parties involved as to how and when to measure the strength. The state decided to change the measure from compressive strength to water/cement (W/C) ratio. This has worked very well, as the statewide average W/C ratio has fallen 17 percent since the program was implemented.

At approximately the same time, aggregate-quality bonuses went into affect. This incentive was offered in order to lower alkali content in the course aggregate and achieve more uniformity in the aggregate size, as gap-grading had been a problem. MinnDOT is very happy with the improvement shown in this area also.

Recently, with the advent of Superpave, attention has again turned to bituminous paving, specifically to achieving higher density in the asphalt mat. To this end, density specifications were used to formulate an incentive program for asphalt density. The results have been extremely encouraging. Knowing MinnDOT's commitment to its incentive program, contractors immediately bought better compaction equipment.

Contractors have become innovative in their pursuit of incentive money. Large rubber-tired traffic rollers were being used as breakdown rollers. This technique has been long debated by bituminous engineers, and long resisted by contractor advocacy groups due to the initial cost involved. Contractors in Minnesota have discovered ways to remedy each of the problems associated with the technique, and have improved statewide asphalt mat density over one percent on average since the implementation of the incentives. One percent is considered a very significant increase.

Minnesota officials warn that, when implementing a program such as theirs, a state must realize that for the first two years or so costs will remain higher because the state is basically buying new equipment for the contractor. After that period, however, bids will start to come down as the contractors, knowing that the incentives are achievable, start adjusting bids accordingly. Thus, contractors who can consistently achieve the higher performance standards could theoretically improve their bidding success.

Data from MinnDOT indicates that, at this point in their experience, three percent is the key figure for their overall program. The DOT pays out approximately three percent over the bid amount on an average contract. The contractors, on the other hand, are submitting bids approximately three percent lower than when the program was first implemented. This seems to indicate that Minnesota is getting better quality for approximately the same price.

#### Missouri

The Missouri Highways and Transportation Commission (MHTC) has been engaged in development of a performance ranking system for highway construction projects. Starting January 1998, a new questionnaire rating system replaced a subjective performance evaluation system that had been in place since 1991. The contractors were participants in the development of the questionnaire system. The MHTC specifications were the guiding format for the evaluation system.

The questionnaire is divided into sections corresponding to specifications. Point values are assigned to each question. Each question is assigned to one of four categories. Not all questions in the questionnaire would be applicable to all projects. Category performance is determined from total points scored on applicable questions. Achievement in each category is weighted according to the predetermined weighting scheme or importance factors as follows: Quality, 30 percent; Prosecution and Progress, 30 percent; Contract Compliance, 20 percent; and Safety, 20 percent. The contractor's overall performance is a weighted average on the basis of each contract's value.

Section	Title	No. Questions by Internal Division		Division	
Contract Compliance	Prosecution/ Progress Quality	Safety			
100		1.0	0		
100	General Provisions	18	8		
200	Earthworks	5		6	1
300	Bases and Aggregate Surfaces	1		10	
400	Flexible Pavements	3		9	
500	Rigid Pavements	2		9	
600	Incidental Construction	2		9	7
700	Structures	3		17	1
800	Roadside Development	4		4	
900	Traffic Control Facilities	2		3	

Contractor performance is then placed into one of five categories: Outstanding, Above Average, Average, Below Average, and Unacceptable. These categories are determined from the annual data reported for all contractors using a Normal Distribution. The plus- and minus-one- standard-deviation range is considered the average range. Between plus one and plus two standard deviations, the contractor would be rated as Above Average. Any score greater than two standard deviations above the mean would rate the contractor's performance as outstanding. Similarly, the below average and unacceptable ratings are determined by the mean-minus-one and minus-two-standard-deviations respectively.

The contractors are rated annually in each of the questionnaire categories and overall. A contractor who has been given an unacceptable rating is placed in a probation category. If the following year's rating is also unacceptable, the contractor is suspended for a period of one year. After suspension the contractor is permitted to bid projects in a probationary status. A contractor in this probationary category who, at the end of the year, is again rated unacceptable is suspended for a period of three years.

The department also recognizes contractors who achieve superior performance ratings. The contractors are divided into four groups. The first three groups are based on contract dollar volume and the last category is specialty contractors or those who perform 85% or more of their work in a single specification area. In 1999 the MHTC evaluated 111 contractors on 334 projects. Two contractors who should have been placed on suspension were given an additional year of probationary status due to changes in the evaluation process. Eleven contractors were placed on probationary status and three were returned to good standing. Top achievers in 1999 for overall and each questionnaire category were recognized with plaques at the Annual Resident Engineer's Luncheon. Having a brass plate displayed in the lobby of the MHTC's support center also recognizes the top overall achiever in each group.

#### Maryland

Although the Construction Section of each district in the state annually rates all contractors who worked in their district in the past year, Maryland does not tie the grade to a bid ceiling or bid limit in any way. The Project Engineer who oversaw the project performs the ratings. All ratings for a particular contractor are tallied and averaged, giving the contractor one grade for the entire state.

The numerical grade is between zero and one, and is a function of nine factors:

- 1. Competence of Personnel.
- 2. Public Relations.
- 3. Quality of Work.
- 4. Overall Administration.
- 5. Cooperation.
- 6. Adherence to Safe Practices.
- 7. Sub-contractors.
- 8. Equipment.
- 9. Contract Time.

Each of the factors has between one and seven sub-items to consider and is rated between one and ten and then multiplied by its weight to derive the numerical grade of between zero and one. A letter grade from A to F is then assigned each contractor based upon the numerical grade.

Each year, every contractor who did work in Maryland gets a Report Card that provides the contractor's numerical grade for that year, the numerical grade for a four-year period, and the state-wide average for each of those time periods. One of the incentives for contractors under this system is a waiver of the normal 5 percent retainage if they maintain an A grade.

If the apparent low bidder on a contract has a current grade of D, then that contractor is summoned to the DOT office, where the contractor's credentials and capacity to perform are challenged. The state has a contractual right at that point to reject submitted bids if they are not satisfied that the contractor can do the job. If the contractor is awarded the contract, then the retainage can be raised as high as 10 percent for the project.

Maryland has not failed to award a contract to a prime contractor based on a grade of D, but retainage has been raised to 10 percent on occasion. Several subcontractors with D grades have also been rejected. Only one contractor has ever received a grade of F, and that contractor was never the apparent low bidder during that period of time. No challenges to the grading system are known.

(Note: The newspaper account summarized here is not from the NCHRP report.) A January 11, 2002, story in the Daily Record (Baltimore) describes a controversy over a "best-value contracting" bill (HB 480) put to the Maryland legislature late in 2001. The bill was designed to assist smaller companies by amending the state's pre-qualification process to include past performance, minority information, management plans, and safety and quality control measures.

Industry lobbyists contended the bill would create a "beauty contest" with too much subjective criteria and that Maryland's existing pre-qualification system was effective in accounting for past performance. The bill died in March with a failure of the House to recommend it to the Senate. HB 480 attempted to quantify the specific proportion of the bid evaluation process that each factor should play. For instance, bid price would account for 70 percent of the weight of evaluation, past performance 13 percent, and so on, with other factors including minority involvement, staff recruiting and training techniques, and so on. The bill, its legislative history, and its backers can be reviewed at <a href="http://mlis.state.md.us/2002rs/billfile/hb0480.htm">http://mlis.state.md.us/2002rs/billfile/hb0480.htm</a>.)

#### Utah

The Utah Department of Transportation is currently developing a new contractor rating system, which will consist primarily of a list of questions to be answered by the UDOT project engineers. Each of the questions, which relate to contractor project performance, can be answered "Yes," "No," or "NA." The concept is to evaluate contractor performance based upon these ratings of basic project activity. Examples of typical questions:

- 1. Did the contractor have the right equipment to perform the work?
- 2. Did the contractor start the work on time?
- 3. Did the contractor respond quickly to the Public's needs?

There are currently 76 questions covering a wide range of performance categories including project management, timely scheduling, reporting and documentation, EEO and DBE compliance, training program compliance, installed work quality, subcontractor supervision, and contract claims. UDOT assigns a weight of one point to each question. The contractor's score would be the total points received for positive answers. The department is also considering applying a Project Difficulty Factor, which would adjust the Contractor's score based upon the relative difficulty of the project. UDOT plans to have the Project Engineer review the evaluation questionnaire with the Contractor several times during the performance of the project, not just at the conclusion. This should improve DOT-Contractor communications and facilitate addressing deficient performance promptly.

The Utah approach removes a measure of subjectivity from the evaluation process. Yes/No answers to basic questions on project activity are used to define the contractor's performance. As with any questionnaire, the questions must first be tested with different personnel to insure consistent interpretation. With refinement, however, the questionnaire approach should contribute to the goal of a fair and consistent contractor evaluation.

Breaking down the performance evaluation into specific items should improve consistency of measurement from project to project. Also, from an organizational management perspective, both the owner and the contractor should benefit from the additional level of detail in the evaluation. Problem areas can be identified for further attention.

#### Virginia

The Virginia Department of Transportation (VDOT) uses a two-factor qualification system that employs the use of a performance questionnaire score in the determination of the contractor's bidding capacity. The C-36 form referenced below is the DOT's questionnaire evaluation of the contractor's end of project performance. The VDOT capacity formula is as follows:

[(CA - CL) + (NA - NL) (0.60)] A = Maximum Capacity

CA = Current Assets

CL = Current Liabilities

NA = Non-current Assets

NL = Non-current Liabilities

A\* = Summation of last 24 months C-36s (\*based on a minimum of five (5) form C-36s) (number of C-36s) x 100/12

The interim project report and final project report are divided into four categories as follows:

- Prosecution of Work
- Project Communication
- Safety
- Environmental

There is room for the reviewer to comment on each category on the back of the scoring sheet. The final report includes a report on previous interim reports filed for the project. The interim reports are given a 70 percent weight factor in the final project evaluation. The District-level evaluation focus is on the same four areas but on more global issues in the contract. The District evaluation is given a 30 percent weight in the final evaluation. The questionnaire is fairly open in terms of specific question weights. Total points are constant, but the reviewer has discretion on point distribution to each question. Bonus points are also possible for contractors who exceed expectations.

The use of two related questionnaires, one for the project level issues and the other for the final evaluation, incorporating District input, is unique. The use of interim reports to track the contractors' project progress provides contractors an opportunity to improve some elements of their performance during execution of the work.

#### Connecticut

The Connecticut Department of Transportation conducts annual performance ratings of all contractors, including subcontractors, for a calendar year. Interim ratings are used to evaluate a contractor's performance on a project to date and are conducted only when requested by the Offices of Construction or Contracts. The Connecticut questionnaire has five elements as follows:

- · Quality of Work
- Performance of Work
- Adherence to Project Schedule
- Implementation of Federal, State, and Local Policies, Procedures, and Regulations
- Procedural and Administrative

The first category, quality, is a single question with a maximum value of 4 for excellent. Other categories contain 4 or more questions, not all are required responses, and the average is taken for the section. An interpretation key is provided to give the evaluator a guide on each question's response possibilities. The primary use of the information is in determination of responsibility questions. The data collected by the Department is not unlike that of many other performance rating systems. It is not used in direct calculation; rather it is available for decision support. Their process is mentioned here because of the trend data retained from the surveys.

The distribution of ratings from 1993 to the present reveal that in a four-year period many contractors only performed work on a single project. Of the 430 contractors in the database, more than half only had a score for one project. There was no obvious pattern that these one-time contractors performed any better or any worse than 'regular' contractors. Without performing any sophisticated evaluation, the data clearly supports the contention that

good contractors perform consistently well. Poor contractors perform at a relatively consistent poor or below average level.

### **QUALITY-BASED PERFORMANCE RATING (QBPR) MODEL**

**Chapter Three**. The investigators reviewed a wide variety of factors that the literature, the researchers and the focus groups indicated should be in any model used to evaluate a contractor's performance and quality. Approximately 600 surveys were sent to state DOTs, and over 400 surveys were distributed to contractors in the four states participating in the focus groups. Two hundred forty useable surveys were returned.

Respondents were asked to rate eight factors, selected based on suggestions from the Focus Groups in order of importance to overall construction project quality. The results were tabulated for DOT personnel, contractors, and all respondents (see Table 3.2.). Since the overall distribution of the surveys heavily favored the DOTs, a comparison of the rankings was deemed appropriate. The team found it quite interesting that the contractors and DOT personnel generally had similar rankings. The greatest area of disparity was in the area of "Financial Considerations"—the contractors felt that this was the third most important consideration, whereas DOT personnel ranked this lowest. The combined ranking reflects the overwhelming weight of responses by DOT personnel in the survey.

Table 3.2. Quality Factor Rankings

Factor	DOT Ranking	Contractor Ranking	Combined Ranking
Personnel	2	2	2
Project Management/Control Skills	1	1	1
Financial Considerations	8	3	8
Schedule Adherence	7	7	7
Contractor Organization	6	6	6
Experience with this type of work	4	4	4
Plant and Equipment	5	8	5
Final Product	3	5	3

In addition to ranking the alternatives in the survey, additional questions were asked. The first question was: Is it possible to justly rate a contractor's quality of work and tie it to qualification? When all of the respondents are considered, 80% said yes, 12 % said no, and 8% gave some other answer. Of the DOT respondents, 83% said yes, 9% said no, and 8% gave some other answer. Of the contractors, 66% said yes, 28% said no, and 6% gave some other answer.

The second question was: Is it possible to justly rate a contractor's quality of work and factor it into a bid to determine the awardee of a contract? When all respondents are considered, 47% said yes, 37% said no, and 16% gave some other answer. Of the DOT respondents, 50% said yes, 33% said no, and 17% gave some other answer. Of the contractors, 34% said yes, 57% said no, and 9% gave some other answer.

**Chapter Four.** The investigators discuss in detail possible models for including quality in the traditional Design-Bid-Build environment. They propose a combination of periodic evaluations by the field supervisor using an objective questionnaire (project performance factor from a questionnaire - PPFq) and collection of final product test information (project performance factor from data (PPFd). The final model would include both kinds of data in a compatible form, with weighting to account for the relative importance of subfactors.

On pages 75-76 the authors discuss possible application of their QBPR system for both prequalification purposes and as a factor in awarding bids.

**Chapter Five**. The investigators discuss the actual data used from the four focus group states to develop and validate their model. They claim the model is accurate and easy to use.

**Chapter Six**. Extensive discussion of implementation issues.

**Appendices** include results of the literature search, activities of the focus groups, questions for an interim and end of project questionnaire, and charts and graphs of results of using the model in the four test states.

## **EXTERNAL RATINGS AND CERTIFICATIONS**

### **ISO 9000 (International Standards Organization)**

The ISO 9001 Quality Management Standard was reported as being used contractually on infrastructure projects in Europe (roads and metros), Africa (water supply and waste treatment), and the Far East (roads, railways and airports) as a model for project quality systems driven by owners. Documented quality systems are used, audited, and improved by project teams to reduce the cost of meeting the needs of those who finance, will use, and will be affected by the project. Owners intending to prequalify must give the construction industry time to assess and upgrade, as necessary, its quality systems to meet the American National Standard (ANSI/ASQC Q9001 or Q9002). (Broomfield, 1995) Although reported as such, no further evidence could be found that the implementation of ISO was a project qualification requirement or the quality assurance process bid for that particular project.

The ISO system requires that external audits of quality systems are performed prior to certification, and that periodic reassessment is conducted to assure the certification is valid. This would effectively add a third layer of assessment on projects. The contractor, in checking his or her quality and inspection procedures, conducts the first level of quality assessment. The second level of assessment conducted is generally the assurance or inspections conducted by external parties (consultant inspections or DOT inspections) who perform a detailed examination of the product or service provided. The ISO requirement involves the third level assessment by an external examiner on the entire contractor organization for quality.

### **Advantages in ISO Certification**

- Ensures that at one point in time (during the certification audit) the contractor would be maintaining this type of quality management process (the system requires continuous process improvement and measurement).
- Would require all contractors in the industry to evaluate and document their processes and procedures related to every element of their operations. Increased standardization in procedures would likely result.
- Demonstrates the level of control the contractor maintains.
- Likely to reduce rework and some costly installation mistakes.

## **Disadvantages in ISO Certification**

- Relatively high maintenance to manage and operate system.
- Requires significant investment of personnel and time.
- Level of training required.

#### **Unknowns Regarding ISO Certification**

- Would an ISO requirement provide value added to the DOT as well as the contractor?
- Does an ISO certificate provide sufficient evidence of quality performance to be considered mandatory for all contractors?
- What would be the overall effect of some DOTs adopting and others not adopting?
- Would requiring ISO result in reduced competition? Is it appropriate for all contracts?
- Challenges presented by DOT's prescribing how a contractor conducts business internally.
- Would it be reasonable for DOTs to also become ISO compatible with their systems?
- What time frame would be permitted for implementation?

The unknowns posed by the ISO systems are more problematic than any of the disadvantages. These are hard issues to evaluate given the scarcity of information on contractors who have adopted ISO for public construction. The Utah DOT was contacted in regard to their use of ISO 9000 on the Interstate-15 project. They sent the following reply: "Our contractor continues to maintain its certification. They had to do some work to get the original certification, but there have been minor findings on the recertification reviews. To answer your question of effectiveness, I think the measure is somewhat intangible, I'm sure there have been some aids to the project, but there are so many new things happening on the project, it is hard to measure."

# **CONQUAS - Construction Quality Assessment System**

The Construction Industry Development Board (CIDB) of Singapore developed this system of contractor assessment. It was developed as an objective quality measurement system for building construction. It has also been applied to civil construction. Its purpose is to provide an incentive scheme for encouraging contractors to improve the quality of their construction. The incentive process awards contractors by allowing them up to a 5 percent premium on bidding or \$5 million, whichever is lower. Thus, a contractor with a high CONQUAS rating can bid higher than a non-rated contractor and still be awarded the contract.

The CONQUAS system has defined the criteria or tolerances for inspection and determines to what extent a project satisfies those requirements. Rather than performing a complete building inspection, the system is based on obtaining a representative sampling of the building areas. The sample size is determined by the physical size of the structure. As described in the CONQUAS manual, the weight system is "a compromise between the cost proportions of the three components in the various buildings and their aesthetic value." (p. 5) The three basic component areas are structural, architectural, and mechanical—electrical (M&E) work.

#### **Application of CONQUAS**

The score is currently used in the bidding process as a premium for the contractor. The following rules apply:

- Average quality assessment score on past three projects must be above 65.
- A premium of 0.2 percent of the contract size is given for every point above 65.
- The maximum premium is 5 percent of the project bid total or \$5 million, depending on which is lower.

This system of objective measurements allows the award of a contract to someone other than the lowest bidder when the bid is adjusted for the quality premium based on the CONQUAS score. An independent third party conducts the scoring process. One analysis suggests that tendering premiums may be most effective on large projects. An analysis of bids in the referenced material suggested that the difference between the two top bidders was generally smaller on larger projects. Contract size bias, from this perspective, is an important element to consider if the QBPS is used in a similar fashion. (Prasertsintanah, 1996)

The CONQUAS model provides several clear advantages:

- 1. A well-defined measurement scheme that permits measurements among various projects to be compared on an equal basis.
- 2. The independent third party is not involved in the project and views quality and test results without knowledge of interacting factors.
- 3. By modifying the bid amount rather than the prequalification, the contractor is being rewarded for consistently providing above the targeted level of quality. The target level of 65 would represent a project that meets the minimum acceptable level of quality.

Disadvantages of the CONQUAS approach are:

- 1. Does not consider the effectiveness of the contractor's safety or management systems.
- 2. The cost of supporting a third party process must be considered in weighing the total costs. The third party costs are in addition to the increased cost of performance for those situations where contracts would be awarded to someone other than the low bidder based on the premium calculation.

#### **Constructibility Review**

Many owners are requesting that contractors document their quality process along with their results. Quality assurance or quality control process documentation would be valuable in evaluating a contractor for the purpose of bidding eligibility. However, relying on a binder of materials or an external certification to validate quality contractors does not assure that the products delivered will be high quality. Owners should realize that just because a contractor has a quality assurance program and process does not mean that the contractor will deliver more than the specified minimum quality. While for some contractors this alone may be an improvement, this may result in a "dumbed-down" concept for quality. If the specifications represent the minimum acceptable quality, the contractors would be wise to devise systems and processes to deliver that level of quality with great assurance. Thus, before embarking on a mission to improve quality by prequalifying contractors for quality, a DOT must be sure its processes provide specifications and drawings commensurate with the quality of output desired. The DOT must assure that processes and personnel are compatible with the targeted quality level.

To that end, the Florida Department of Transportation has instituted a plan whereby each district has a Bidability/Constructibility Engineer. This engineer is generally one with a construction background (though not always). The engineer has a staff made up of experienced, full-time design and construction personnel who review every set of plans that will be let for bid by that district.

Previously designated DOT personnel had reviewed plans at several project development stages (30 percent design, 60 percent design, and 90 percent design). Additional department personnel occasionally checked projects at the 100 percent stage. This process is still in place. However, now, after this has been accomplished, at the time when the plans would have formerly gone to bid, this new Bidability/Constructibility staff reviews the plans. The number of mistakes caught by this staff after the former process is complete varies from job to job, but is sometimes so high that one of these Bidability/Constructibility Engineers could only classify the number as "scary." It would seem reasonable that after the traditional 30-60-90 percent reviews were completed, there would be only a rare error for this team to find, but this apparently has not been the case. Thus, design review or design performance is an important consideration in the institution of contractor quality performance measurement.

# APPENDIX B: NMDOT CONSTRUCTION CONTRACTOR PREQUALIFICATION PRACTICES SURVEY

Dear AASHTO RAC Member,

This short survey asks you about your state's construction contractor prequalification practices. Often, projects go to the lowest, not necessarily the most qualified, bidder. Quality-based prequalification procedures strive to determine which contractors will be able to produce an acceptable level of quality.

You may forward this survey to your State Construction Engineer. Please provide contact information at the end for possible follow up.

Thank you for your valued response. This information will be utilized in program development discussions at the New Mexico Department of Transportation.

Please e-mail, snail-mail, or fax your completed survey to:

Jon Woodland, Research Management Analyst New Mexico Department of Transportation, Research Bureau 7500-B Pan American Freeway N.E. Albuquerque, New Mexico 87199

Phone: (505) 841-9156 Fax: (505) 841-9158

(Check only one)

E-Mail: Jon.Woodland@nmshtd.state.nm.us

### I. Best Practices

1) Do you have a quality-based construction contractor prequalification program in your organization?

`	• /
	Yes
	No (if you checked No, answer only questions #6, #7, and #8)
	We are in the process of developing one.

- 2) Within your organization, what quality-based prequalification methods are considered "best practices" Why? What practices are least preferred Why? (two part question)
- 3) What have been your organization's most significant challenges in implementing its quality-based prequalification program? How were these challenges overcome? (two part question)
- 4) What resources does your organization require to maintain a quality-based prequalification program? What did you have to do to acquire these resources? (two part question)

## II. Fairness of Evaluation

5) Specifically, how does your prequalification program assure impartial contractor ratings? What are the unsolved problems in this regard? (two part question)

# **III. Quality-Based Performance Rating Factors**

6) What do you think are the five (5) most important quality-based performance-rating factors for contractor prequalification?

# Please provide:

- a) 5 most important quality-based performance factors for contractor prequalification
- b) Method of measurement as quantifiable as possible
- c) Explanatory comments

d) Rank order factor by importance (from 1 – highest importance to 5 – lowest)

<b>A</b> )	B)	C)	D)
FACTOR	QUANTIFIABLE MEASUREMENT METHOD	COMMENTS	RANK ORDER
(Example only) Claims	(Example only) Number of change orders Cost/benefit of change orders	(Example only) How many change orders are beneficial to the department in terms of cost savings? Relates to specification quality, design quality, project management/control skills, and past performance.	(Example only) Put ranking number here

# IV. Additional Comments

7) Do you have any additional comments or recommendations regarding quality-based prequalification programs?

For surveyor: Ask these other questions for phone administration:

How do you evaluate your program?

What legislation do you have that supports your program?

What data collection procedures do you use to collect contractor performance information? Do evaluations rely on the opinion of one individual?

What prevents your organization from implementing certain aspects of a quality-based/performancebased program?

What is your program's underlying philosophy (such as preventing problems, prediction, assurance, and program purpose)?

What is the contractors' response to your program?

What is your appeals process and where does it lie along the continuum of subjectivity/objectivity?

Is contractor performance criterion used in the adjustment of ratings, in non-responsibility determination or for other purposes – How is it used?

Does your state have a process for rewarding above average performance?

What is your main lesson learned?

Any blank rating or evaluation forms available?

# V. Respondent Contact Information

8)	Researchers may	y need to contact v	you for respon	nse clarification.	Please	provide contact	t information.
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8) Researchers may need to contact you for response clarification.	Please provide contact information
Respondent Name:	
Title:	
Organization Name:	
Address:	
Phone number:	
E-mail	

# APPENDIX C: SURVEY RESPONSE CATEGORIZATIONS

### **New Mexico DOT Contractor Prequalification Practices Survey**



### Response Categorizations - Responses from states that have or are in the process of developing programs

Codes	States Responding	Question & Response Aggregation
HEW MERCON LU S 66		2a) Within your organization, what quality-based prequalification methods are considered "best practices" ?
Objective measurement, measures that are accurate indicators, facts that can be measured, criteria referencing, yes/no measurement scale, good documentation and verification, standardized methods	FL, MO, SC, VA, VT	Verification of correct work• Contract requirements that are measurable, objective, documented and criteria referenced• project evaluation measures are contract requirements• Contractor's score comes from results based data based on measurable facts of performance• Measurements refer to road and bridge specifications• Statistical analysis, using standard deviation, identify performance levels• Rating process that consists primarily of Yes or No questions - puts evaluation measurements on more solid ground.•
Policies and procedures referencing, standardized practices	FL, UT, MA	Good procedures, practices based on written policies, procedures and state procurement code• Standardized practices at all levels• Laws are strong and not easily changed.
Collect the right kind of information that indicates capacity and that can predict success	GA, KY	Get detailed inside view of contractor/company, get to know contractors well• Ask the right questions on the contractor application form and verify answers• If they are managing well, they will probably have a good balance sheet.
Multiple subjectivity, verification, oversight, independence of opinion	GA, IL, ME, MA	Field evaluation data signed off on by four different engineers• Checks and balances that verify information and balance opinions• Prequalification Committee is populated with a broad range of subject matter experts who are politically independent.
Multiple measurement points for project evaluation	IL, VA	Interim, monthly or weekly project evaluation.
Impact of contractor performance evaluations	IL	Non-compliance connected to ratings, claims and legal default policies.
Effective communication systems, collaborative norms	IL, MI	Good communication and information transfer across organizational boundaries.

Codes	States Responding	Continued Question & Response Aggregation - 2a) Within your organization, what quality-based prequalification methods are considered "best practices"?
Self evaluation	ME	Prequalification Committee meets quarterly to evaluate program.
Building capacity for new, small, and no experience contractors	KY, NC, UT, WY	Pathways that allow entry of new and small business contractors and supports development of capacity• Assist contractor in providing the best application information• Limit contractor according to demonstrate-able performance - keeps contractors from going broke by limiting to what they can do• Professional audits can result in increased capacity rating for contractor• Process and expectations easily understandable by contractor.
Project specific or contractor specific prequalification needs	ME, MO, ME, KY	Allow project specific prequalification in order to meet specialization needs• Evaluation measures or ratings are weighted differently depending on the needs of the project (such as by dollar value, contractor experience, importance of certain task, or other project specific needs); Weights of performance rating factors can vary according to contractor experience and type of work
Equity of treatment	MA, NE	All contractors are treated the same.
Accessibility to appeals and challenges	MA	Prequalification Committee meets once a week and is accessible to contractor challenges.
Ease of administration, automation	NV, MI, NE	Easy to administrate• Utilize comprehensive software.
Authority to utilize project evaluations in contractor ratings and contract compliance	SC, VA, WA	Contractor score may be used to place substandard performers on probation/conditional status, suspend, revoke/unqualify.
Use of financial bonding to save time	VA	Looking at or are already having bonding companies do the contractor's financial and stability ratings and bidding caps - allows for more time to do performance/quality based evaluation activities.

Codes	States Responding	Question & Response Aggregation
NIEW MEDICON		2b) What practices are least preferred?
Non-automation, inefficiency and time to maintain	GA, NE	Non-automated imputing of information, calculating and error checking contractor performance evaluations is extremely time consuming• The system takes time to keep up.
Understaffing	IL, NC	Understaffing.
Subjectivity, measures that are not indicators of quality, inadequate documentation, non-standardized practices	VT, IA, MO, SC, WA, WY	Subjectivity of rating and measurement process• Inadequate documentation to back up measurements• Verbal communication when written documentation is necessary• Subjective inconsistencies in people doing contractor/project rating - inter-rater reliability• Measures that are not good indicators of quality• Non-standardized practices and methods, at all levels, are the least preferred.
Too frequent prequalification cycles or not frequent enough	MI, GA	Requalifying every year is a lot of work - better to do it every two years• Need to requalify every year instead of every two years because things change.
Insufficient authority, insufficient laws, regulations and procedures	NV, IL	We need stronger mechanisms that would allow us to prevent, revoke, or suspend prequalification for contractors that have serious performance problems. While undergoing a department audit for serious performance concerns, a contractor may continue to hold prequalification certification and be active.
Bureaucracy	NJ	Bureaucratic system.
Non-centralized management	NC, GA	Non-centralized prequalification administration, non-centralized information collection and storage• There needs to be communication between Consultant Prequalification Office and the Contractor Prequalification Office.
No pathways for the entry or capacity development of new or small business	WA, MA	Process that unreasonably limits the entry of new or small companies and offers no pathways for entry or capacity building• it can be tricky finding a balance between track record based inclusion, the public interest, and the needs of new or small business development.

С

Codes	States Responding	Question & Response Aggregation
MEN MIDDON		<ul><li>3a) What have been your organization's most significant challenges in implementing its quality-based prequalification program?</li><li>3b) How were these challenges overcome?</li></ul>
Efficiency, automation, time to maintain, time to make changes	FL, GA, MA, NE, MO, MI, WI	a) Efficiency in the application process• Have to hand input, calculate and error check all performance evaluations• Need a database that can do automatic tracking and flagging - need better task automation overall• We are in the process of changing our bidding categories. This means that we will have to reprequalify all our contractors. Somehow, we have to fit this task into this year's work plan• The system has been in place a long time and it does take time to keep it up• The time to complete, process and report the results is substantial• A new budget system is going in• Integration of the process electronically is a challenge.
	FL, IL	b) Come up with new ways of managing the flow• We are trying to automate and streamline our administrative processes as much as possible, such as through software, our website and smaller mailings. We are trying to automate our system of checks and balances as much as we can. This puts more responsibility on the contractor to stay on top of the process. We are updating scheduling methods• An effort to fully automate the processing of results is being initiated.
Understaffing, training	GA, IL, IN, ME, NC, MO, UT, WY, NC	a) Not enough staff, not enough trained staff• The complexity of performance evaluation requires training to assure uniformity and standardization of evaluation activities• At certain times of year, need more staff• Training resident engineers to do project evaluations in a standardized way• Would like to be able to do more work site inspections - need more staff.
	UT	b) Automate as much as possible in terms of information access and management tasks.
Return on investment	GA, MA	a) Certification of contractors who don't necessarily bid on any of our projects. So we expend money on the prequalification process that we never realize a return on in terms of quality in state highway projects.
Administrative and managerial communication	GA	a) Communicating administrative concerns to Engineers and there needs to be communication between Consultant Prequalification Office and the Contractor Prequalification Office

d

Codes	States Responding	Continued Question & Response Aggregation - 3a) What have been your organization's most significant challenges in implementing its quality-based prequalification program?  3b) How were these challenges overcome?
Sufficient analysis capabilities	KY	a) Having the capacity to analyze contractor information well enough to know how to assign contractor in terms of ability, work category and work items.
	KY	b) Limit the risk of financial loss. Negative working capital is the main screening factor that can hold a contractor back. The contractor owns the destiny of his/her company. The contractor needs to make their asset side bigger than their liability side. Have information go through lots of people
Supporting competition and business development while imposing regulation - staying flexible	ME, MA, MI, UT, WA, IL	a) Need a balance - need to be attracting more bidders to help generate competition for lowest bid while reducing the amount of people who can't do the job. A contractor with no experience is a bit tricky to get prequalified. Balance between public interest and economic development can be challenging. Trying to make the program as flexible as possible in order to be able to responsively match all the possible situations a contractor may have - such as a company with no work experience but that wants an "unlimited" category. Some individuals in companies may have a great amount of experience, which is good, but the company itself may not have proven experience or capacity. Getting prequal program buy-in from small or new companies has been a challenge because of the difficulty of getting these folks prequalified according to state statutes. We require that contractors have long term leases on equipment or own equipment. This is a barrier to small business that just want to lease equipment per job.
	IL, UT, WA	b) We are now starting to discuss how small businesses can become prequalified without owning or leasing long term equipment in certain equipment areas. We follow state procurement rules, and policies and procedures. In the above example ("unlimited" category), we used the experience of the company Principal for clarification on what to do. It is important to have all the rules and guidelines in place. They help navigate one through potentially murky situations, but also, it is hard to change the rules. How rules are changed is an important issue. (Small and new) contractors can overcome these challenges by working on our smaller projects and progressively working their way up in terms of experience and capacity.

Codes	States Responding	Continued Question & Response Aggregation - 3a) What have been your organization's most significant challenges in implementing its quality-based prequalification program?  3b) How were these challenges overcome?
Contractor capacity can change overnight	MA	a) A contractor's prequalification happens once a year. However a company's capacity can change within the year.
Difficult to make changes to laws, regulations and procedures - insufficient authority for corrective changes - insufficient laws, regulations and procedures, how to apply project evaluations	MA, MI, IL, NV, NC, OR, WI	a) A contractor can put in a bid protest and things get bogged down administratively. Need laws and regulations to allow capping• Our administrative rules are law but sometimes can be open to broad interpretation• Making program rule changes requires participation in the Joint Committee on Administrative Rules, which is a long involved participatory process• Precluding bidding for poor contractors is a challenge• Would like to see prime contractors utilizing a certain percentage of Disadvantaged Business Enterprise services. Need legislation for that• Challenges with having the authority to take corrective action on poor contractor performance and on evaluation procedures that may interfere with performing accurate evaluations•application of evaluation.
	MA, UT, WI	<b>b)</b> You need to have legislative and statutory backing. The contractors are a large lobby group. Someone could say what right do you have to do contractor prequalification• It is important to have all the rules and guidelines in place. They help navigate one through potentially murky situations, but also, it is hard to change the rules. How rules are changed is an important issue• We are in the developmental stages here (in terms of how to apply evaluations.
Sufficient documentation to take corrective action, timely documentation	MI, MO, OH, NC	a) It is difficult to mass documentation that will allow the department to "take action" • Our rating system requires proper documentation to penalize a contractor's performance • Completing the c-95 (Evaluation of Contractor Performance) in a timely manner • One of our discussions is about how a contractor handles issues of erosion control - this should be part of the project evaluation point system.
	OH, NC	<b>b)</b> Each district is graded quarterly through our Operational Performance Index (OPI)• At this point, in regard to erosion control, we can cite for immediate corrective action. Notice of violations can come from the Department of Environment & Natural Resources.

Codes	States Responding	Continued Question & Response Aggregation - 3a) What have been your organization's most significant challenges in implementing its quality-based prequalification program?  3b) How were these challenges overcome?
Uniformity, standardization and objectivity of evaluation, organizational change	MO, IA, SC, VT, VA, WI, WY	a) The complexity of performance evaluation requires training to assure uniformity and standardization of evaluation activities. Obtaining an objective evaluation rather than subjective has been a challenge. The most significant challenge has been to overcome the contracting community's suspicions of the subjectivity involved in an evaluation. Organizational culture issues - change is difficult and a new thought takes time to be accepted. Certain problem contractors are not very supportive. Developing a measurement of quality that is fair, objective, and repeatable with consistency between different raters, and relatively easy to implement. Getting everyone to agree to it since it is subjective on the quality aspect. Training resident engineers to do project evaluations in a standardized way. We are still in the process of getting people to think and measure in a standardized way.
	IA, VT, VA, WY	b)we have tried to define our rating criteria very formally•by basing the majority of the score on measurable facts of performance• New folks are more proactively supportive of (prequalification). The prequalification process will automatically deal with problem contractors• We are looking to use as many existing measurements as possibleour specifications require weekly work zone safety reviews, environmental reviews, etc. We are looking to use this information more in our prequalification program. We are also working to modify the questions in our Contractor's Performance Report to be more directly related to contract and specification compliance. We are taking the approach that if a contractor works safely, protects the environment, and builds the project in accordance with our standards, specifications and contract documents we should end up with the quality we desire• Through training, meetings, discussions and modeling by example we are getting engineers to do a more standardized evaluation. We are focused on how different measurement approaches create different results.
Work site safety	NC	a) We are experiencing more work site fatalities. Would like see each contractor provide their Workman's Compensation safety index/rating in the prequalification application process. Also, we need to be able to do site safety audits.
Non-centralized management	NC	a) Non-centralized prequalification. Now contractors need to be prequalified in 15 different department wide areas. Need to streamline and have one unit as the repository for all prequalification information so that state units can communicate with each other.

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Codes	States Responding	Question & Response Aggregation	h



### **FTEs**

program?

FL, GA, IL, IA, KY,

ME, MA, MI, MO,

NE, NV, NJ, NC,

VT, VA, WI

One FTE; Enough FTEs• We have 4 full time personnel: Myself, 2 analysts and an office coordinator that inputs data. But we really need 6 personnel: with 4 analysts. We now have to ask our districts to go out and verify things such as equipment. We need more time and resources to support more objective measurements of projects• We have one individual whose primary duties are to prequalify contractor, maintain the contractor performance database and evaluate which contractors should be approved to bid individual projects• We are a two person operation: Branch manager and assistant; We have 1/2 FTE of a Senior Engineering Technician but actually need 3/4 FTE• We have 2 full time FTEs and 2 halftime FTEs, but we need 4 full time FTEs. This need somewhat depends on the skill level I've got in the office• 1/2 FTE for the Departmental Specialist and 1 FTE for an assistant to review the prequalification applications• There are two people who do prequalification tasks part time and then do other duties the other part of the time•

4a) What resources does your organization require to maintain a quality-based prequalification

Need a contract clerk for 1/2 FTE - the other FTEs are hard to estimate because we have integrated the prequalification tasks into our everyday workday tasks• The responsibility for an objective and fair evaluation reaches through all positions within the Construction division through the Chief Engineer. Completion of the project evaluations starts with the project inspectors' grade levels. Processing the results is a central office function. Final approval of disciplinary notices is a Chief Engineer's responsibility• Two auditors, two engineers and one manager - but we do the bid process also, not just prequal• We need enough FTEs• There is a prequalification committee of 7 members (heads of sections) that meet weekly, the program itself requires 1 FTE Administrator who does scheduling of meetings, attending meetings, notifications of decisions and communication with contractors, then 1/4 FTE goes to prequal activities of the Construction Services Engineer, another 1/2 FTE is needed for someone to do data entry and data analysis, in addition, Resident Engineers enter in the project evaluations, which takes time•

Our prequalification office consists of two people who do the actual analysis and prequalification of our contractors and the reports themselves are completed in the field offices by the inspectors and Resident Engineers• We require a partial full time position. However to upgrade the system which we are proposing will take significantly greater resources. A variety of people have integrated pieces of the program into their normal workday•

Codes	States Responding	Continued Question & Response Aggregation - 4a) What resources does your organization require to maintain a quality-based prequalification program?
Software/hardware	GA, IL, KY, ME, MA, MI, MO, NE, NV, NC, OR, SC, UT, VT, VA, WI	Database created in-house is in MSWord and some of the information from the Prequal Program database goes into a state-wide project management database but the two are not connected. Use MSAccess connected to a mainframe Sequel server coded by a specialist. We use software called PQManager. It does time sheets, time lapses, generates letters and certificates, and creates lists. Use Microsoft Excel for prequal management. Developed a tracking spreadsheet that took about 2 hours to develop. Have an email system that can be used for multiperson discussions - use like a chat room. Have an in-house developed database that is somewhat like MSAccess to keep track of applications. Data is taken from the inhouse designed contractor performance evaluation database and calculations are done by hand. We use Lotus Notes for the database function and then use MSExcel for the spreadsheet calculations function. It is labor intensive but it works well. We have a software program called "RUG" and we also use AASHTO Trns*port software. Use WordPerfect for database.
		(We use a) centralized processing unit• We keep everything in MSAccess databases• We have a database to hold the scores of the Contractor's Performance Report• We use SiteManager as our construction management tool and we draw our data from it. The RCEs submit the survey at the completion of the projects via our intranet• Electronic bid system, our Project Development Business System (PDBS) is the integrated system connected remotely state-wide that incorporates anything within a project that can happen. It can do automatic calculations and reports• MSExcel is needed• We use Transp*rt for some tasks.
Trained staff	GA	Well trained people that can hit the ground running.
Special Prequalification Section/Unit	IL, MA, MI, WY	We have a prequalification section/unit; Have a full time prequalification officer
Time	IL, NV	We have between 7 and 12 letting periods per year, handle up to 1200 prequalification applications per year, and manage about 800 ongoing certifications per year - prequal ratings are good for 16 months and then the contractor needs to redo. We need to analyze an application, then double check that application, and verify the information if possible. During times of the year when letting, applications and company 'year ends' overlap, much overtime is required. It doesn't take a lot of time

Codes	States Responding	Continued Question & Response Aggregation - 4a) What resources does your organization require to maintain a quality-based prequalification program?
Planning	ME, MO, SC	It took about six to eight mid-level to executive/senior level people who met about six times for about 3 hours each time to plan the initial program. It took a task force of 12 people meeting for two years on a monthly basis, sometimes for two consecutive days at a time, to come up with the prequal model. But they had to do everything from scratch. We started the process to develop a Contractor Evaluation System in 2002 as a Research and Development Problem. We hired a contractor who provided a system with a 22 multiple choice question survey that leaned toward the subjective. So in 2004, we hired a consultant who developed a way to analyze factual performance data. We combined the two ways into what we feel is a fair system. We launched the system in January 2005.
Proper protocols	NC, OH, UT	Proper protocols• Our field project engineers & inspectors complete the C-95• A prequalification board that meets as needed, established comptroller formula and good rules and procedures.

Codes	States Responding	Question & Response Aggregation
LIEW MEDICON		5a) Specifically, how does your prequalification program assure impartial contractor ratings?
Sufficient feedback to contractor to allow self- correction, access to information, clear communication, discussion	CO, FL, KY, MA, WA	We treat the contractors with courtesy and make sure that they have the information they need to self-correct. For instance, we provide verbal warnings before we take any other action, except on blatant violations• The contractor knows the policies and can see the performance reports• We step contractors through the process and are proactive in checking for their and our understanding (did you mean to say this?). Avoid being arbitrary or capricious. All this is in the public interest• We negotiate whenever needed and regularly dialogue about issues.
Multi-person review and consensus of evaluation, evenness of opinion, balance of opinion, independence of opinion and appeals	GA, IL, IA, KY, ME, MI, MO, NV, NJ, UT, VT, VA, WA, WY	The evaluations begin with project inspectors who enter daily logs of each project. These logs go to the Project Engineer who does the project evaluation. Then this evaluation must be signed by the Area Engineer, the District Construction Engineer, and the State Construction Engineer. Any of these people can recommend changes to the contractor's evaluation. We furnish a copy of the evaluations to the contractor so they can object to their evaluation. The contractor can appeal an evaluation and other issues to the Prequalification Committee. The committee consists of the State Construction Engineer, the State Contracts Administrator, the Director of Construction and someone from the Treasury Office. The chair of the committee can unilaterally change the ability rating or the maximum capacity rating of the contractor, but this is almost never done - committee consensus is the norm; Contractor can appeal ratings.
		Contractors are well known. Any decision on contractors are done with high committee consensus. Committee does not jump to action based on a single evaluation. Committee looks at a trend or composite of several evaluations. Also, project evaluations are done by the resident manager and cleared by the program manager. However, we don't have hard and fast impartiality approach. The Prequalification Committee meets once a week. This is were the contractors can put in challenges on certain prequal decisions like category assignment, bid caps and project evaluations. The Committee has an assortment of people who have a broad base of knowledge and experience and are politically independent. We keep an eye on any one evaluator doing all of one company's evaluations - we try to get different evaluators to do that instead. There is a Contract Evaluation Review Team that takes a close look at the evaluations. A contractor can contest any part of an evaluation through one process, and a contractor can also contest any effects of an evaluation on the prequalification determination through another process.

Codes	States Responding	Continued Question & Response Aggregation: 5a) Specifically, how does your prequalification program assure impartial contractor ratings?
ContinuedMulti-person review and consensus of evaluation, evenness of opinion, balance of opinion, independence of opinion and appeals	Same states as previous page	The contractor rating system was developed with participation of the contracting industry and FHWA• The project evaluation is done by the project and resident engineer, and looked over by the assistant chief construction engineer and by the chief engineer• We have a number of different people doing the rating on a contractor for different projects. This can help identify either a divergent or common subjective experience• We have a Prequalification Committee that can be appealed to. We are working on designing a more formal appeals process• We have tried to define the different levels of performance but there is always the chance for differences among raters• More training is being provided for P.E.s performing the project evaluations to support consistency in measurement. Administrative/programmatic consistency is being encouraged. For the sake of consistency, the Associated General Contractors is pressing hard to reduce discretion in measurement and administration so that everyone gets treated the same•
		We negotiate whenever needed and regularly dialogue about issues. The actual contractor evaluation goes through several people• When contractors work in more than one area, there is a diversity of professional opinions on project evaluations. The contractor performance evaluation form has to be signed of on by the Resident Engineer, the District Construction Engineer and the District Engineer. The contractor can go to the Prequalification Committee to challenge evaluations and ratings and the committee offers further diverse professional opinions.
Priority factor, difficulty factor	CO	The priority factor is a multiplier that increases the effect of the contractor's performance evaluation score, based on the importance of the project to CDOT. A contractor's performance on a major project or a project of significant importance to CDOT will count more than it will on a minor project. The difficulty factor provides a way to give the contractor extra points for unusual circumstances that increased the difficulty of construction.
Criteria referencing, standardization, accurate measurement, objectivity, weighting, blind approaches, justification and documentation	IL, FL, IA, KY, MA, MO, NV, UT, VT, VA, WA, WI, WY	Some parts of the evaluation refer back to specifications, rules, contract requirements, and sometimes the contractor's Quality Assurance/Quality Control plan. Evaluations are blind in so far as different districts do no know how another district has rated a contractor. In regard to performance evaluations, any rating of 6 or less (on a scale of 2 to 8) must be explained on the Contractor's Performance Evaluation form. The weighting of the QA/QC plan is important• We measure things to make sure the work is being done correctly. We don't just count that the paper work is in, we look to see that it has been done correctly• We have a very objective rating scale for each category to be rated• The performance report requires narrative justifications for item scores of 5 (highest) or for scores below 4• We don't over standardize, so we are flexible in doing our reviews.•

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### Continued...Criteria referencing, standardization, accurate measurement, objectivity, weighting, blind approaches, justification and

Codes

documentation

### Responding

See previous page

States

Continued Question & Response Aggregation- 5a) Specifically, how does your prequalification program assure impartial contractor ratings?

The questions of the evaluation are contract requirements. Routine inspection reports, order records, documentation records, correspondence and diary entries are utilized to support question responses. The responses are objective and measurable. The contractor is not penalized without the necessary documentation• Prepare ratings independently of each other. None of the raters will be at liberty to review ratings done by other raters on the same contractor• We have neutral scores built into the factors. Factors are rated over a 3 year period with the exception of factor D (see contractor rating form in Documents Folder)• Subjective measurements are being phased out. We need to be fair to those producing quality work. The prequalification process levels the bidding playing field and establishes minimum standards•

We are establishing stronger reference criteria for contractor ratings, such as Department, State and National level specifications, standards and legislation. And we are establishing better ways of documenting indicator measurements of these criteria. For the sake of consistency, the Associated General Contractors is pressing hard to reduce discretion in measurement and administration so that everyone gets treated the same• Subjectivity and application of evaluation. We are in the developmental stages here• We average those numbers (several evaluations), making the ratings even more fair.

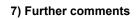
Codes	States Responding	Question & Response Aggregation
HEW M POON		5b) What are the unsolved problems in this regard (impartiality of ratings)?
Objectivity, standardized rating, reliability, validity, objective and uniform application	IL, KY, IA, MO, NE, VA, WA, WI, WY	Fairness can be effected by administrative unevenness in opinion and process. Two different districts can give different ratings on same contractor. There is the possibility that project engineers grade unevenly• Everyone has personalities• There is concern some resident engineers, to avoid conflict with the contractor, fail to document poor performance outside the mandatory inspection reports• We sometimes see what appears to be a halo effect in the scoring where we may hear from the field that there are problems with the work of Contractor X but when we look at the performance ratings of Contractor X, they are all high ratings• We are in the process of training each engineer how to apply a uniform, standardized project evaluation method•
		We need more time and resources to support more objective measurements of projects. Performance evaluations are not always done because of shortages in manpower and agencies who are supposed to do performance evaluations don't always do them. The meaning of some words in the performance report (such as "minor rework") has generated discussion on measurement meanings. Not all project engineers adhere to the rating scale. I guess the only perceived problem is that we still occasionally have to award contracts to contractors that have had poor performance in the past. Our construction division does a fairly good job of trying to emphasize the importance of the ratings. We are working on better criteria based/ objective measurements and on more uniform administrative processes. We are in the developmental stages here.
Differential treatment	KY, MA, ME	Contractor Performance Report can be weighted differently for those that have no experience than those that have experience. Those that do have experience should know better• Avoid being arbitrary or capricious. All this is in the public interest• We don't have hard and fast impartiality approach.
No differential treatment, adherence to the rules, uniform administrative processes	IL, MA, NE, WA	We always refer to the rules when making decisions on prequalification administrative issues. For instance, if you don't ask for it in the prequalification application, we don't give it to you• Everybody gets treated the same• We have a set procedure on how we go thru our prequalification process. Everyone is treated the same• We are working onmore uniform administrative processes.
Program oversight, review process and checks and balances on rules and procedures	GA, IL, OH	Over the committee is the Georgia Department of Transportation Board which governs the program. Major management issues and program rule changes go through the Board. So there is oversight and checks and balances at each level. Our weighting and calculation of rating procedures must go through our policy and procedures review process. Once every 2 years the district is subject to a Quality Assurance Review (QAR) to assure that we are impartially grading our contractors.
Averaging scores	WY	We average one year of data to develop contactor rating, but go back as far as 3 years when current year is unavailable.

Codes	States Responding	Continued Question & Response Aggregation- 5b) What are the unsolved problems in this regard (impartiality of ratings)?
Indepth research	SC	We started the process to develop a Contractor Evaluation System in 2002 as a Research and Development Problem. We hired a professor from Clemson University as our chief researcher. The results of his research provided a system with a 22 multiple choice question survey that we felt involved too much subjectivity. In 2004, we hired a consultant who developed the analysis of the factual performance data. We combined the two into what we feel is a fair system. We launched the system in January 2005.



# 6d) What do you think are the five (5) most important quality-based performance-rating factors for contractor prequalification? Rank order factor by importance (from 1 – highest importance to 5 – lowest)

Factor (Note: States' nominal responses were fit into the following four categories for quick comparison; however, responses could have been grouped and categorized in different ways depending on purpose. In addition, factor categories may not be operationally defined or measured in the same way from state to state. For more exact comparisons, view each state's measurement factors documents available in the "NMDOT Construction Contractor Prequalification Practices Survey Database".)	States Responding	Factor Frequency
Execution of Work: - Prosecution and Progress/Scheduling/ Progress of Schedule/Time of Completion/On Time/Completion of Schedule/Scheduling and Planning Foresight/Timely Completion of Project/Completion of the Project On Time/Pursuit of Work, Mitigate Cost and Time Overruns/Management and Administration and Organization of Work/Effective Supervision/Good Superintendent/Sufficient Resources/Sufficient Equipment/Adequacy and Competence of WorkForce/Good Subcontractor Management/Work Performance/Properly supervising, manning and equipping the job - adequate progress	CO, GA, IL, IN, MO, NJ, NC, OR, SC, UT, VA, WA, FL, IA, KY, MI, NE, OH, WY, MA, OR, VT, OH, NV, ME	25
Contract Compliance, Cooperation and Claims: - Procedural Compliance/Conformance With Contract Documents/Cooperation and Administrative Compliance/General Relationships and Cooperation/Processing of Paperwork/Contract Compliance/Contract Administration/Quality and Contract Compliance/Attitude/Communication and Partnering/%Change Orders To Bid Amount - Claims Denied - Claims Filed/Prompt Payment of Liquidated Damages/Public Relations/Working Relationship With WYDOT Personnel/Project Processes and Submittals	CO, FL, GA, IL, IN, MO, NJ, VT, VA, SC, UT, WY, OH, NV, NE, MI, ME, KY	18
Quality of Work and Materials, Punchlist: - Quality of Work/Workmanship/Quality of End Product/Quality of Materials and Workmanship/Reliance on Maximum and Minimum Tolerances/Warranty and Guarantee of Work/Punchlist	CO, GA, IA, MA, MO, NC, OR, SC, UT, VA, WA, IL, NV, VT, OH, NE, ME, KY	18
Safety. Labor. Environmental and Public Impact Requirements: - DBE, EEO, OJT and Labor Compliance/Safety Practices/Worker and Public Safety/Traffic Control/Environmental Compliance/Maintenance of Traffic and Impact to Public/Site Protection	CO, IL, IA, NJ, NC, OR, UT, VT, VA, FL, OR, NE, OH, NV, MI, ME, KY	16





Subquestion	States	Response
7a) How do you evaluate your program?	Florida, Georgia, Kentucky, Michigan, Missouri	Internal and/or external audit or review
	Georgia, Kentucky	FHWA review
	Illinois	ISO Certification
	Indiana	Considering comparing interviews with performance evaluation form
	Maine, Massachusetts, Nebraska, Nevada, North Carolina, Virginia, Washington, Wisconsin	Day to day discussions, informal self-review, self-evaluation as we go, on a as needed basis, check on complaints, on a ad hoc basis.
	New Jersey	Survey contractors for input
	Ohio	Part of larger district wide quality assurance review process
	Oregon	Plan and specifications quality control plan
	Utah	No formal evaluation
	Vermont	Ask questions such as "how do you justify decisions, how can the program be accountable for its decisions and actions?"
	Wyoming	District Construction Engineers meetings

Subquestion	States	Response
7b) What legislation do you have that supports your program? (Summarized here to 'do you have enabling legislation and/or regulations?' see the "NMDOT Construction Contractor Prequalification Practices Survey Database" for legislative references)	Florida, Georgia, Illinois, Indiana, Kentucky, Maine, Massachusetts, Michigan, Missouri, Nebraska, Nevada, New Jersey, North Carolina, Ohio, South Carolina, Vermont, Virginia, Washington, West Virginia, Wisconsin, Wyoming	Has enabling legislation or regulation.
	Colorado, Iowa, Utah	Unknown
7c) What data collection procedures do you use to collect contractor performance information? Do evaluations rely on the opinion of one individual?	Various states	The range of methods: Daily logs of construction, Stop work orders, Speed memos, Past performance reports, Contractor application, Letters of reference, Middle and end project evaluations, Discussions with primes and subs on a daily basis, Project inspection staff who collect data and complete check lists on a daily basis, Non-compliance issues photographed, Results oriented measurements, Notice of non-compliance forms and subsequent corrective action plans, Exit interviews with contractor, Utilization of AASHTO Site Manager, Contractor Ongoing project reports. Evaluations rarely relied on the opinion of just one individual. However, data collection varied along a continuum from single subjective opinion to multiple subjective opinion to single objective measurement to multiple objective measurement - and reference standards varied from multiple sourced, complex and objective standards to single source, sometimes subjectively and informally established standards. It was common for respondents to comment that it is important but difficult to separate fact from fiction, to separate personal agenda from substantive issue.
7d) What prevents your organization from implementing certain aspects of a quality-based program?	Various states	Main themes were: Lack of understanding of what the programs does, Lack of skilled and knowledgeable staff and general lack of staff, Lack of other resources such as budget, Political and/or industry resistance, Political trends, Politicized decision making hierarchies, Policy and procedure change processes that are difficult to implement - such as legislative changes or policy changes requiring public review, Whether or not a particular improvement can justify the additional cost and effort, Not enough automation, Lack of authority to take action on poor contractor performance, Evaluation procedures that interfere with performing accurate evaluations.

Subquestion	States	Response
7e) What is your program's underlying philosophy (such as preventing problems, prediction, assurance, and program purpose)?	Various States	Main themes were: Give contractors accurate and timely feedback and clear expectations, Help contractors improve and succeed and meet their goals, Get everyone involved to perform at top level, support dialogue and problem negotiation with contractors, Support economic growth, Build competition while protecting the public interest with competent and qualified contractors, Award to the most responsive and most responsible lowest bidder, Increase competition along quality parameters, State DOT is responsible for the contractors' performance, Earn the public trust and keep it, Best quality for the money, Contractors have to follow the rules and do a good job, Provide some legal and liability assurances, Improved documentation, Help narrow the band of potential problems and failures, Identify and allocate and manage risk, Improved project delivery, Improved adherence to contract requirements, Rate contractors as accurately as possible.
7g) What is your appeals process and where does it lie along the continuum of subjectivity/objectivity?	Various States	Main themes: Different things can be appealed, some things cannot and some use different appeal pathways, Formal appeals process versus informal appeals process, Internal stepwise administrative appeals process that begins with project staff and internal review committees and may end up with a Administrative Law Judge, For internal review committees select people with different skill and perspective sets, There are external civil law remedies so consider issues of liability, Multi-perspectives approach individually or group process, Process with rules of evidence, Objective measurements compared to preexisting measurable standards, Informal early warning system for corrective action before formal corrective action system kicks in - informal dialoging.
7h) Is contractor performance criterion used in the adjustment of ratings, in non-responsibility determination or for other purposes – How is it used?	Various States	Themes: Recognition awards, bonus points, incentive payments, discounts or other fiscal rewards for above average performance, No rewards other than greater bid ratings, more work categories, or longer prequalification renewal terms, The performance report is connected to eligibility amount, assigned categories and assigned items, Because our system is pass/fail, there is no adjustment of ratings, Can be used for emergency suspension, unqualify or non-responsibility determinations, Weighted average changes according to size of project and feeds into rating, Only in the most extreme conditions is performance information used in adjustment of capacity rating, Used to inform discussions.

### APPENDIX D: SURVEY RESPONSES FOR STATES THAT HAVE OR ARE DEVELOPING PREQUALIFICATION PROGRAMS



Colorado

Page 1 of 111 Monday, March 20 11:15:18 AM

Initial comments
[havecomments1]

Colorado is in the process of developing a quality-based/performance-based contractor prequalification system. The rating factors presented here are the top 5 of 13 measurement factors. See this state's documents folder for the full text of the "Construction Contractors Performance Evaluation Instructions".

#2a - Within your organization, what quality-basesd prequalification methods are considered "best practices" -Why? [best2a] 99

#2b - What practices are least preferred - Why? [best2b]

99

99

#3a - What have been your organization's most significant challenges in implementing its quality-based prequalification program? [challe3a]

#3b - How were these challenges 99 overcome? [challe3b]

#4a - What resources does your organization require to maintain a prequalification program?

[resour4a]



Colorado

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Rank:

#5a - Specifically, how does your 99 prequalification program assure impartial contractor rating? [fair5a]

#5b - What are the unsolved problems in this regard? [fair5b]

99

#### #6a1 What do you think is the first most important performance-rating factors ? [factor6a1]

B. 11 Accordance With Plans, Specifications, Requirements<sub>Rank:</sub>

### #6b1 - Method of measurement for the performance-rating factor [factor6b1]

1.00 Significantly more than expected

0.75

0.50 More than expected

0.25

0.00 Met expectations

-0.25

-0.50 Somewhat less than expected

-0.75

-1.00 Significantly less than expected

### #6c1 - Explanatory comments [factor6c1]

Contractor constructed the project according to the plans and specifications, and installed materials were placed in accordance with specifications or manufacturer's requirements

- 1. evaluates the quality of the contractor's work, and the ability of the contractor to construct the project as required by the plans and specifications.
- 2. provides one measure of the contractor's quality control and quality assurance on all aspects of the work.
- 3. evaluates the ability of the contractor to recognize and initiate actions to head off problems before they occur. It also evaluates the contractor's ability to proactively seek solutions in collaboration with CDOT.
- 4. Some factors to consider in evaluating this factor:
- -Was there a significant amount of rework, price reductions or disincentives due to poor quality work?
- -Did the contractor repeat errors that caused rework, price reductions or disincentives?
- -Did the contractor actively work to resolve problems as opposed to waiting to get caught?
- -Did the contractor bring solutions to the problems encountered on the project?
- -Did the contractor's work consistently meet the requirements of the specifications?
- 5. Expectation: Contractor consistently minimized work that resulted in price reductions and/or rework, and work consistently conformed to the requirements of the plans and specifications.

#### #6a2 - ... the second most important factor? [factor6a2]

#### **B3. Adequate Resources**

### #6b2 - Method of measurement for the performance-rating factor [factor6b2]

1.00

0.75 Significantly more than expected

0.50

0.25 Somewhat more than expected

0.00 Met expectations

-0.25 Somewhat less than expected

-0.50

-0.75 Significantly less than expected

-1.00

#### #6c2 - Explanatory comments [factor6c2]

Contractor provided adequate resources to construct the project as shown in the methods statement and the schedule

- This item measures how well the contractor meets the commitments of resources as detailed in the schedule and methods statements. The Department relies on these commitments in providing information to management, the public, and to public officials. Failure to meet any one of these commitments puts the project at risk of not being completed on time.
- 1. More than expected: The contractor provides additional resources or enhances the planned methods to meet or beat the planned project schedule.
- 2. Expectation: The contractor provides sufficient labor, equipment and materials, and follows the planned methods sufficiently to maintain the project schedule.
- 3. Less than expected: The contractor fails to provide sufficient labor, equipment or materials, or fails to follow the planned methods, or fails to maintain the project schedule.

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Rank:

2

#6a3 - ... the third most important factor? [factor6a3]

**B1. Superintendent** 

#6b3 - Method of measurement [factor6b3]

1.00

0.75

0.50

0.25 0.00 Met expectations

-0.25

-0.50 Less than expected

-0.75

-1.00 Unacceptable

### #6c3 - Explanatory comments [factor6c3]

Contractor provided a superintendent as required in the contract

- This item evaluates how well the contractor complied with the specification requiring a competent superintendent with decision making authority to be on the job at all times that work is being performed.
- It is important to CDOT that the contractor's superintendent be available and be able to make decisions and react to any situation on the project in a timely manner. The superintendent is the counterpart to the project engineer, and must be able to make decisions on the contractor's behalf. On-site decision-making authority is critical to effective project management.
- Contractors may be directed to perform additional work, to cease operations due to a variety of reasons, or to submit information to CDOT. A contractor's refusal to follow such directions can seriously threaten the quality of the project or the safety of the public.
- 1. Expectation: The superintendent had day-to-day decision making authority and was on the project and available when contractor or subcontractor personnel were working.
- 2. Less than expected: The superintendent was unavailable 25% of the time that work was being done on the project or was unable to make significant decisions on the project.
- 3. Unacceptable: The superintendent was unavailable 50% or more of the time that work was being done on the project, or could not make decisions on the project, or was unable to act on directions from the engineer.



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Rank:

#6a4 - ...the fourth most important factor? [factor6a4]

**B7. Traffic Control** 

### #6b4 - Method of measurement [factor6b4]

1.00 TC Rating of 4

0.75

0.50

0.25 0.00 TC Rating of 3

-0.25

-0.50 TC Rating of 2

-0.75 TC Rating of 1 - 2

-1.00 TC Rating of <1

### #6c4 - Explanatory comments [factor6c4]

Contractor provided an acceptable level of traffic control for the project

- Traffic control is a critical issue on most CDOT projects. Since the majority of our work takes place on roadways in use by the traveling public, the traffic control must always provide safe passage for the traveling public and a safe worksite for contractor and CDOT employees.
- 1. More than expected: Contractor consistently receives a rating of 4 on traffic control reviews.
- 2. Expectation: Contractor consistently receives a rating of 3 on traffic control reviews and consistently met the traffic control requirements in the plans, specifications and MUTCD.
- 3. Less than expected: Contractor consistently receives a rating less than 3 on traffic control reviews and does not consistently meet the traffic control requirements in the plans, specifications and MUTCD.
- 4. Unacceptable: Contractor consistently receives a rating of less than 2 on traffic control reviews.

### #6a5- What do you think is the fifth most important factor?

### **B10.** Furnished Material Met The Specification Requirements

### Rank: 2

### #6b5 - Method of measurement [factor6b5]

1.00

0.75 Significantly more than expected

0.50

0.25 Somewhat more than expected

0.00 Met expectations

-0.25 Somwhat less than expected

-0.50

-0.75 Significanly less than expected

-1.00

### #6c5 - Explanatory comments [factor6c5]

- This factor evaluates the quality of the materials furnished by the contractor and incorporated into the work.
- It is critical to the long term performance of the project that materials furnished by the contractor meet the specification requirements.
- In evaluating this factor the Project Engineer and the materials tester will review the quality of the materials furnished for the project. The quality of each of the materials along with the following items should be considered when determining the overall performance score for this factor:
- >The overall quality of the material. For example, if most of the materials were of high quality, a minor price reduction might not warrant an overall negative rating for the factor.
- >The relative quantity of the materials used on the project. For example, items with large quantities will normally affect the score more than items with small quantities
- >The relative importance of the materials used on the project. For example, concrete used in a bridge deck will normally affect the score more than concrete used in sidewalk or curbs.
- 1. More than Expected: Materials supplied by the contractor consistently met or exceeded the requirements of the specifications with no price reductions or significant material failures, contractor material documentation requirements were timely and complete. Requests for compliance or correction of submittals were not required by CDOT personnel.
- 2. Expectation: Materials supplied by the contractor consistently met the requirements of the specifications, there were a minimal number of failures, there were no price reductions, no removal and replacements were required due to failure of materials, contractor material documentation requirements were consistently met. Minimal requests for compliance or corrections of submittals were required by CDOT personnel.
- 3. Less than Expected: Materials supplied by the contractor consistently failed to meet the requirements of the specifications, numerous or significant price reductions, work was shut down due to material failures, removal and replacement of work was required due to material failures, contractor failed to meet material documentation requirements.



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#7 - Do you have any additional comments? - [Comm7]

- -We do not have a quality based prequalification system, but are in the process of developing one. We are developing a contractor rating system, in which contractor performance would be evaluated annually and at project completion on each project. The evaluations would be reviewed with the contractor at the time of evaluation, and then all evaluations on a contractor would be reviewed at the time of prequalification renewal. We are exploring ideas on how to deal with contractors with less than satisfactory performance.
- -(see this state's documents folder for full text of the CONSTRUCTION CONTRACTOR PERFORMANCE EVALUATION INSTRUCTIONS DRAFT 6-30-05): The following steps are to be followed in the use of this performance evaluation system.
- 1. Prior to advertisement of the project the Resident Engineer will fill out form A, which establishes the priority factor for the project...The priority factor is a multiplier that increases the effect of the contractor's performance evaluation score, based on the importance of the project to CDOT...
- 2. The Project Engineer will review the performance evaluation form with the contractor's representative at the preconstruction conference so the contractor is aware of the expectations that will be the basis of the performance evaluation.
- 3. A mid-year review with the contractor is required...A mid-year review is not required if there is less than 40 working days remaining on a working day contract or less than 2 months remaining on a calendar day or completion date contract, and no time extension is anticipated.
- 4. A contractor performance evaluation is required every construction project every 12 months and at the end of the project...
- 5. If at any time during construction the contractor's performance on any of the performance factors is below expectations, the contractor should be notified at the time so they have the opportunity to correct the situation prior to the performance evaluation.
- 6. The Project Engineer will fill out the contractor evaluation form B, providing comments for the various performance factors...When evaluating the contractor's performance, the Project Engineer will seek input from any specialty units involved in the project that may be affected by the contractor's work...
- 7. When evaluating the contractor's performance, the performance of subcontractors must also be considered. The prime contractor is responsible for all work done under the contract, including that of subcontractors...If the work of a subcontractor affects the evaluation score on a factor, the Project Engineer will include information in the comments section on which subcontractor affected the evaluation score...
- 8. The Project Engineer will determine the difficulty factor on form C. This factor provides a way to give the contractor extra points for unusual circumstances that increased the difficulty of construction....
- 9. The overall performance evaluation score is calculated on form C. The score is obtained by multiplying the results from form A by the results from form B. This product is added to 100 and the total is added to the difficulty factor established on form C. This total is the contractor's performance evaluation score.
- 10. The Project Engineer will print out the completed Performance Evaluation and review it with the Resident Engineer.
- 11. Upon approval of the evaluation score by the Resident Engineer, the Project Engineer and Resident Engineer will review the performance evaluation with the contractor's superintendent and project manager. This review is intended to provide feedback to the contractor on their performance on the project, especially areas where their performance is above or below expectations. For areas below expectations, there should be discussion on how the contractor intends to improve the performance.
- 12. After review of the performance evaluation with the contractor, the Project Engineer will submit the completed evaluation to the Agreements section at Headquarters for entry into the database.



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Initial comments [havecomments1] Have a program. See state's document folder for the presentation "Contractor Past Performance Rating" by Ananth Prasad.

#2a - Within your organization, what quality-basesd prequalification methods are considered "best practices" -Why? [best2a]

- 1. Our new grading system is an A+. It requires verification of correct work.
- 2. Our procedures that handle contractors with concerns is working well.
- 3. Prequalification of Contractors based in part on their past performance on projects. Contractors must address Department's concerns over performance, workmanship, quality, etc. at the time of prequalification.

#2b - What practices are least preferred - Why? [best2b]

Our practices are working well.

#3a - What have been your organization's most significant challenges in implementing its quality-based prequalification program? [challe3a]

- 1. Efficiency in the application process has been one of our goals and we are meeting our goal.
- 2. Getting uniformity in applying grading system. This has taken much training and continued reinforcement of the process.

overcome? [challe3b]

- #3b How were these challenges 1. Come up with new ways of managing the flow.
  - 2. Training and communication.

#4a - What resources does your One FTE. organization require to maintain a prequalification program? [resour4a]



**Florida** 

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#5a - Specifically, how does your prequalification program assure impartial contractor rating? [fair5a

- 1. We treat the contractors with courtesy and make sure that they have the information they need to self-correct. For instance, we provide verbal warnings before we take any other action, except on blatant violations. There are many levels of checks and balances in the process.
- impartial contractor rating? [fair5a] 2. We measure things to make sure the work is being done correctly. We don't just count that the paper work is in, we look to see that it has been done correctly.

#5b - What are the unsolved problems in this regard? [fair5b]

None at this time.

### #6a1 What do you think is the first most important performance-rating factors ? [factor6a1]

**CATEGORY 8 - Conformance With Contract Documents** 

Rank:

Rank:

#### #6b1 - Method of measurement for the performance-rating factor [factor6b1]

20 - Contractor worked diligently throughout the life of the project to provide quality products and services in accordance with the contract documents. Contractor personnel performed all quality controls, management, and oversight necessary to ensure quality. CEI personnel had documented quality control or contract performance concerns on (5% or less) of the

chargeable workdays.

- 16 The CEI personnel had documented quality control or contract performance concerns on 10% of the chargeable workdays.
- 12 The CEI personnel had documented quality control or contract performance concerns on 15% of the chargeable workdays.
- 8 The CEI personnel had documented quality control or contract performance concerns on 20% of the chargeable workdays.
- 4 The CEI personnel had documented quality control or contract performance concerns on 25% of the chargeable workdays.
- 0 The CEI personnel had documented quality control or contract performance concerns on more than 25% of the chargeable workdays.

### #6a2 - ... the second most important factor? [factor6a2] CATEGORY 4 - Timely Completion of Project

#### #6c1 - Explanatory comments [factor6c1]

- 1. Contractor efforts are such that the Department's CEI efforts are not essential to ensure quality. Includes Prime, Subs, Suppliers, etc. Includes all products and services (temporary and final).
- 2. Rely on documentation in dailies and other project records
- 3. No deficiency letters used
- 4. Based on chargeable work days. It should always total to Contract Time used.
  Examples: 1. Contractor did not lay pipe, true to the lines and grades. It is a non-conformance day for the day it happens provided the Contractor acknowledges the deficiency and has a plan of corrective action. If the Contractor is nonresponsive
- to the issue, it could result in multiple nonconformance days. 2. Contractor has closed a lane of traffic without the lane closure signs. This could result in multiple negative implications (Conformance to Contract Documents and DL in category #2)

#### #6b2 - Method of measurement for the performance-rating factor [factor6b2]

20 - The contractor finished the project within the original contract time. (no adjustments for weather)

- 18 The contractor finished the project within 90% of allowable contract time.
- 16 The contractor finished the project within 95% of allowable contract time.
- 14 The contractor finished the project within the allowable contract time.
- 7 The contractor completed the project more than 10% over the allowable contract time.
- 0 The contractor did not complete the project within the allowable contract time, but did finish the project in less than 10% over the allowable contract time.

#### #6c2 - Explanatory comments [factor6c2]

- 1. 14 points for finishing within Allowable Contract Time.
- 2. Bonus points for early completion or within Original Contract Time.
- 3. Significant scoring reduction for finishing
- 4. No deficiency letters used

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#6a3 - ... the third most important factor? [factor6a3]

**CATEGORY 1 - Pursuit of the Work** 

Rank: 3

### #6b3 - Method of measurement [factor6b3]

- 12 The contractor aggressively pursued the work 90% of the days. Documentation in the project files by the CEI reveals that the progress of the work was unsatisfactory no more than 10%.
- 9 The contractor aggressively pursued the work 80% of the days. Documentation in the project files by the CEI reveals that the progress of the work was unsatisfactory no more than 20%.
- 6 The contractor aggressively pursued the work on at least 70% of the days. Documentation in the project files by the CEI reveals that progress of the work was unsatisfactory no more than 30%.
- 3 The contractor aggressively pursued the work on at least 60% of the days. Documentation in the project files by the CEI reveals that progress of the work was unsatisfactory no more than 40%.
- 0 The contractor did not aggressively pursue the work on at least 50% of the days. Documentation in the project files by the CEI reveals that progress of the work was unsatisfactory no more than 50%.

### #6c3 - Explanatory comments [factor6c3]

Contractor diligently and systematically pursues the work with sufficient labor, materials and equipment at all times. Active progress is made on critical path items each day in accordance with the approved schedule. The contractor schedules the subcontractors so that they are pursuing their work as well. Contractor worked five (5) days a week unless the contract states otherwise, excluding weather days. Percent is based on allowable contract time (minus weather days) and on a five (5) workday week unless otherwise stated in the contract. At the discretion of the engineer there may be instances where the engineer may waive charging of time for grading purposes.

#6a4 - ...the fourth most important factor? [factor6a4]

**CATEGORY 2 - Proper MOT & Minimize Impacts to Traveling Public** 

Rank:

3

### #6b4 - Method of measurement [factor6b4]

- 12 The contractor met all project requirements in all areas considered. The contractor corrected deficiencies promptly (maximum of 24 hours) based on timely internal reviews as well as external feedback. Contractor took immediate action, as appropriate, to minimize impacts to the public and businesses, including adjusting operations as necessary. No deficiency letter to the contractor by the CEI noting MOT deficiencies.
- 10 No more than one (1) deficiency letter to the contractor by the CEI noting MOT deficiencies.
- 8 No more than two (2) deficiency letters to the contractor by the CEI noting MOT deficiencies.
- 6 No more than three (3) deficiency letters to the contractor by the CEI noting MOT deficiencies.
- 4 No more than four (4) deficiency letters to the contractor by the CEI noting MOT deficiencies.
- 2 No more than five (5) deficiency letters to the contractor by the CEI noting MOT deficiencies.
- 0 Six (6) or more deficiency letters to the contractor by the CEI noting MOT deficiencies.

### #6c4 - Explanatory comments [factor6c4]

Provide maintenance of traffic (MOT) in accordance with all applicable standards. Coordinate construction operations that directly affect the traveling public so as to minimize impacts to the public. Effectively used the worksite Traffic Supervisor to monitor and correct deficiencies. The contractor takes the initiative to identify and fix MOT concerns in a timely manner.



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#6a5- What do you think is the fifth most important factor?

**CATEGORY 7 Environmental Compliance** 

Rank:

### #6b5 - Method of measurement [factor6b5]

10/12 - The contractor met all contract requirements in all areas considered. The contractor promptly (within 24 hours) identified and corrected all deficiencies. These areas were promptly and

appropriately addressed to minimize adverse affects on the environment. No deficiency letter to the contractor by the CEI.

- 8 No more than one (1) deficiency letter to the contractor by the CEI.
- 6 No more than two (2) deficiency letters to the contractor by the CEI.
- 4 No more than three (3) deficiency letters to the contractor by the CEI.
- 2 No more than four (4) deficiency letters to the contractor by the CEI.
- 0 Five (5) or more deficiency letters to the contractor by the CEI.

## #7 - Do you have any additional comments? - [Comm7]

The Nine Categories (weighted)

- ¬Pursuit of the work (12)
- ¬Proper MOT and minimize impacts to traveling public (12)
- ¬Timely and complete submittal of documents (8)
- ¬Timely completion of project (16/20)
- ¬Cooperation/ Coordination (10)
- ¬Mitigate cost and time overruns (12)
- ¬Environmental compliance (10/12)
- ¬Conformance with contract documents (20)
- ¬DBE Utilization (2)

See http://www.dot.state.fl.us/construction/cppr/cppr%20guidelines%20main.htm for complete description of all categories. Complete descriptions are also in this state's documents folder in this database.

- \*How do you evaluate your program?
- -We get audited from time to time.
- \*What legislation do you have that supports your program?
- -Chapter 337, Florida Statutes for authority, and Chapter I4-22 of the Rules of the State of Florida Department of Transportation "Contractor Highway Qualification to Bid".
- \*What data collection procedures do you use to collect contractor performance information?
- -Daily report of Construction,
- Stop Work Orders, Speed Memos, etc.
- -CPPR spreadsheets
- \*Do evaluations rely on the opinion of one individual?
- -No.
- \*What prevents your organization from implementing certain aspects of a quality-based/performance-based program?
- -Nothing at this time.
- \*What is your program's underlying philosophy (such as preventing problems, prediction, assurance, and program purpose)?
- -We expect contractors to do a good job and we in turn give them accurate feedback on quality.
- \*What is the contractors' response to your program?

- 1 The contractor complied with all federal, state, and local environmental regulations, including permit requirements, National Pollutant Discharge Elimination System (NPDES), and the contract erosion control plan.
- 2 Contractor takes the initiative to review environmental compliance and corrects deficiencies as necessary to minimize the affects on the environment.
- 3 On projects over 300 days of allowable contract time, a bonus of 2 points will be given if the contractor did not receive any deficiency letters in this category.



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- --Some think its too tough, some contractors like it.
- \*What is your appeals process and where does it lie along the continuum of subjectivity/objectivity?
- -Contractor can appeal a Deficiency Letter to District Construction Engineer (DCE)
- -Contractor can appeal the Final Score to DCE
- -Contractor can appeal at the time of

Application of Qualification to State Construction Office (SCO)

- -Contractor has Administrative Hearing rights if all else fails.
- ¬Deficiency letters issued by Resident Engineer can be rescinded with concurrence from DCE
- ¬Appeal should be based on facts
- ¬Verbal Warning (VW) and Deficiency Warning Letter (DWL) cannot be appealed.
- ¬Dispute Review Board (DRBs) are not authorized to review Contractor's Past Performance Report (CPPR) issues. It is an Administrative issue not a Contract issue.

\*Is contractor performance criterion used in the adjustment of ratings, in non-responsibility determination or for other purposes?

- -Yes. See 14-22.012 Florida regulations in this state's document folder. Also see 14-22.014 for emergency suspension and 14-22.0141 for non-responsibility.
- \*Does your state have a process for rewarding above average performance?
- -They get better ratings and more work. Bonus points are available on all categories of the Contractor's Past Performance Report.



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Initial comments [havecomments1] Have a program. Survey administered by phone

#2a - Within your organization, what quality-basesd prequalification methods are considered "best practices" -Why? [best2a]

- 1. We strive for an inside view of the company we pregualify. We look at the company structure, look at the independent auditors statement, get to know the people and the history of that company.
- 2. We have a good past performance process where we gather field evaluation data that must be signed off on by four different engineers.

#2b - What practices are least preferred - Why? [best2b]

- 1. Our program has about 1300 to 1400 active contractor files. Using staff time to input, calculate and error check performance evaluations is extremely time
- 2. Bonding companies are not necessarily looking out for the public interest. Bonding companies work for their clients, the contractors. As a result, the Department does not allow financial bonding in exchange for financial pregualification. However, they do bid bonding in case the contractor defaults on the bid or on the contract.
- 3. There needs to be communication between Consultant Pregualification Office and the Contractor Pregualification Office, in particular for purposes of innovative contracting such as Design Build.

#3a - What have been your organization's most significant challenges in implementing its quality-based prequalification program? [challe3a]

- 1. We do a review of the contractor's file every two years. We probably need to do it every year. We do not have the FTEs to do this. So there are backlogs of
- 2. Getting qualified people at low salary is hard, so a lot of training goes into new people on the job. This drains resources.
- 3. The pregualification office now has to data input, calculate and error check performance evaluations. This takes too much time. What is needed is a web based system where engineers or their support staff can enter the information into a database.
- 4. We certify people who don't necessarily bid on any of our projects. Our pregualification process is so good that contractors try to acquire it in lieu of licensing (Georgia does not have general contractor licensing) as a certificate of quality - then they bid on instate jobs other than ours or on jobs out of state using the pregual certificate they have received from us.. In fact, out of state contractors from states that do not have pregualification often apply for and get our prequalification certificate which they display as they bid for jobs around the country. So we expend money on the prequalification process that we never realize a return on in terms of quality in state highway projects. Its nice that folks believe in our utter competence, but it would be nice to see a return on investment.
- 5. Communicating these administrative challenges to Engineers has been difficult.
- 6. There needs to be communication between Consultant Prequalification Office and the Contractor Prequalification Office, in particular for purposes of innovative contracting such as Design Build.

overcome? [challe3b]

#3b - How were these challenges. No solution found so far. Our dedication and competence keeps things from getting out of hand, but this is only a stop gap measure.



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pregualification program? [resour4a]

- #4a What resources does your 1. Program has been around since about 1963 and costs for model development can't be tracked.
- organization require to maintain a 2. Database is in MSWord and some of the information from the Pregual Program database goes into a state-wide project management database but the two
  - 3. Database application created in-house, enough FTEs, and well trained people that can hit the ground running.

prequalification program assure

- #5a Specifically, how does your 1. The evaluations begin with project evaluation. Then this evaluation must be signed by the Area Engineer, the District Construction Engineer, and the State Construction Engineer. Any of these people can impartial contractor rating? [fair5a] recommend changes to the contractor's evaluation.
  - 2. The contractor can appeal an evaluation and other issues to the Pregualification Committee. The committee consists of the State Construction Engineer, the State Contracts Administrator, the Director of Construction and someone from the Treasury Office. The chair of the committee can unilaterally change the ability rating or the maximum capacity rating of the contractor, but this is almost never done - committee consensus is the norm.
  - 3. Over the committee is the Georgia Department of Transportation Board which governs the program. Major management issues and program rule changes go through the Board. So there is oversight and checks and balances at each level.

#5b - What are the unsolved problems in this regard? [fair5b] 99



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Rank:

#6a1 What do you think is the first most important performance-rating factors ? [factor6a1]

**Quality of Work** 

#6c1 - Explanatory comments [factor6c1]

#6b1 - Method of measurement for the performance-rating factor [factor6b1] 1. Construction methods 2. Materials

3. Structural adequacy

4. Appearance

5. Workmanship

6. Attention to detail

#6a2 - ... the second most important factor? [factor6a2]

**Prosecution & Progress** 

Rank:

2

#6b2 - Method of measurement for the performance-rating factor [factor6b2]

1. Schedule

2. Prompt execution

3. Maintenance of work site

4. Environmental

5. Timely completion

6. Punchlist completion

#6c2 - Explanatory comments [factor6c2]

99

99



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#6a3 - ... the third most important factor? [factor6a3] Supervision Rank: 3 #6b3 - Method of measurement [factor6b3] #6c3 - Explanatory comments [factor6c3] 99 1. Availability 2. Competence 3. Coordination of activities 4. Control of work force and subcontractors 5. Responsiveness to safety 6. Traffic control 7. Erosion control 8. Extra work #6a4 - ...the fourth most important factor? [factor6a4] Cooperation/Administrative Compliance Rank: #6b4 - Method of measurement [factor6b4] #6c4 - Explanatory comments [factor6c4] 1. Public relations 99 2. Communications 3. Paperwork 4. Willing compliance 5. EEO paperwork and compliance 6. Frequency of complaints 7. Credibility 8. Willingness to work out problems 9. Coordination with other contractors, utilities and others #6a5- What do you think is the fifth most important factor? **Adequacy of Work Force** Rank: 5 #6b5 - Method of measurement [factor6b5] #6c5 - Explanatory comments [factor6c5] 1. Size 99 2. Competence 3. Attitude



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#7 - Do you have any additional comments? - [Comm7]

-All states need to unify in information sharing by some method such as conferences and dialogue. Contractors are prequalifying in many states so there might be interest in considering a certain degree of standardization in the process. Also, some states are not doing prequalification because nearby states are doing it.

\*How do you evaluate your program?

-We have to go through three different kinds of audits: 1) internal audit; 2) state audit; 3)FHWA audit

\*What data collection procedures do you use to collect contractor performance information?

-Internally we use the past performance report, externally we use the contractor application. When a contractor has not done work for Georgia before, we need three reference letters.

\*What prevents your organization from implementing certain programmatic aspects that you'd like to?

-Lack of awareness by people who do not understand the program.

\*What is your program's underlying philosophy?

-We look at for the publics' interest while also supporting the capacity of contractors. Georgia DOT is perceived as having responsibility for the contractor.

\*What is the contractors' response to your program?

\_Contractor's are pretty comfortable with the current prequal process. No contractor has challenged any measurements performed in the evaluation process.

\*Is contractor performance a criterion that is used in the adjustment of ratings?

-Yes. We use a weighted average scoring system where the weight changes according to the size of the project. The contractor submits application and their adjusted net worth is multiplied by their project evaluation performance factor which = maximum capacity rating. The ratings are assigned on a yearly basis.

\*Do you have a neutral appeals process?

-It is a multi-perspectives approach

\*Do evaluations rely on the opinion of one individual?

-No.

\*Does your state have a process for rewarding above average performance?

-Contractor's receive a larger capacity rating.

\*What is your main lesson learned?

-99



Illinois

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Initial comments [havecomments1]

Have a program. The contractor's performance is rated by the resident engineer once a year on specific contracts. Contractors are initially graded on capacity and then are given performance ratings on contracted jobs.

#2a - Within your organization, what quality-basesd prequalification methods are considered "best practices" -Why? [best2a]

It is the combination of various things. 1. End project performance evaluations are a good tool.

- 2. We have an interim evaluation tool that we can use if it is needed. If contractor's fall below a certain work level and they do not mitigate the problem, their work ratings can be removed. They get a ten day notice of non-compliance which is connected to claims and legal default policies.
- 3. Good communications with the districts is important.
- 4. Various systems should have checks and balances in order to find errors, verify information and to balance opinions.

#2b - What practices are least preferred - Why? [best2b]

- 1. Understaffing, need enough staff to do audits and to verify information.
- 2. Some states use private company bonding but the State has no oversight or control of the bonding process, and the State has no statutes or regulations allowing a reprimand via the bonding process.

#3a - What have been your organization's most significant challenges in implementing its quality-based prequalification program? [challe3a]

- 1. In the last couple of years it has been staffing shortages.
- 2. Also we require that contractors have long term leases on equipment or own equipment. This is a barrier to small business that just want to lease equipment per job.
- 3. Making program rule changes requires participation in the Joint Committee on Administrative Rules, which is a long involved participatory process.

overcome? [challe3b]

- #3b How were these challenges 1. We are trying to automate and streamline our administrative processes as much as possible, such as through software, our website and smaller mailings. We are trying to automate our system of checks and balances as much as we can. This puts more responsibility on the contractor to stay on top of the process. We are updating scheduling methods.
  - 2. We are now starting to discuss how small businesses can become pregualified without owning or leasing long term equipment in certain equipment areas

#4a - What resources does your prequalification program? [resour4a]

- 1. We have a pregualification section. We have 4 full time personnel: Myself, 2 analysts and an office coordinator that inputs data. But we really need 6 organization require to maintain a personnel: with 4 analysts. We now have to ask our districts to go out and verify things such as equipment. We need more time and resources to support more objective measurements of projects.
  - 2. We have between 7 and 12 letting periods per year, handle up to 1200 prequalification applications per year, and manage about 800 ongoing certifications per year - pregual ratings are good for 16 months and then the contractor needs to redo.
  - 3. We need to analyze an application, then double check that application, and verify the information if possible. During times of the year when letting. applications and company 'year ends' overlap, much overtime is required.
  - 4. Too long ago to know what the model development costs were. Use MSAccess connected to a mainframe Sequel server coded by a specialist. Costs to

Survey administered and database compiled by Jon Woodland, Research Bureau, New Mexico Department of Transportation; (505) 841-9156. See database for supporting documentation.



Illinois

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hard to quantify.

prequalification program assure

- #5a Specifically, how does your 1. We always refer to the rules when making decisions on pregualification administrative issues. For instance, if you don't ask for it in the pregualification application, we don't give it to you.
- impartial contractor rating? [fair5a] 2. In regard to performance evaluations, any rating of 6 or less (on a scale of 2 to 8) must be explained on the Contractor's Performance Evaluation form.
  - 3. Some parts of the evaluation refer back to specifications, rules, contract requirements, and sometimes the contractor's Quality Assurance/Quality Control
  - 4. The weighting of the QA/QC plan is important. Our weighting and calculation of rating procedures must go through our policy and procedures review process.
  - 5. Evaluations are blind in so far as different districts do no know how another district has rated a contractor.

#5b - What are the unsolved problems in this regard? [fair5b]

- 1. We need more time and resources to support more objective measurements of projects.
- 2. Local agencies who are supposed to do performance evaluations don't always do them.
- 3. Fairness can be effected by administrative unevenness in opinion and process. Two different districts can give different ratings on same contractor. There is the possibility that project engineers grade unevenly. Performance evaluations are not always done because of shortages in manpower.

#6a1 What do you think is the first most important performance-rating factors ? [factor6a1]

**Quality of Work** 

Rank:

#6b1 - Method of measurement for the performance-rating factor [factor6b1]

- 1. Exceeded project requirements in all areas considered
- 2. Exceeded in a majority of areas
- 3. Met project requirements in all areas
- 4. Did not meet project requirements in one area considered
- 5. Did not meet requirements in two or more areas considered.

#6c1 - Explanatory comments [factor6c1]

Consider the projects durability and appearance, the knowledge of the supervisory personnel and compliance with contract requirement (i.e. plans, specifications, field inspections)

#6a2 - ... the second most important factor? [factor6a2]

**Execution of Work** 

Rank:

#### #6b2 - Method of measurement for the performance-rating factor [factor6b2]

- 1. Exceeded project requirements in all areas considered and completed the project well ahead of schedule
- 2. Exceeded in a majority of areas and completed project slightly ahead of schedule
- 3. Met project requirements in all areas and the scheduled completion date was met
- 4. Did not meet project requirements within its control in one area considered and occasionally did not work when conditions permitted, the scheduled completion date was met
- 5. Did not meet requirements in two or more areas considered, and the scheduled completion date was not met.

#### #6c2 - Explanatory comments [factor6c2]

Organization and Prosecution: Consider the contractor's ability to diligently prosecute work by planning and scheduling labor, materials and the work of subcontractor's on a project site



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#6a3 - ... the third most important factor? [factor6a3]

Cooperation

Rank:

3

### #6b3 - Method of measurement [factor6b3]

- 1. Exceeded project requirements in all areas considered
- 2. Exceeded in a majority of areas
- 3. Met project requirements in all areas
- 4. Did not meet project requirements in one area considered
- 5. Did not meet requirements in two or more areas considered

### #6c3 - Explanatory comments [factor6c3]

Consider the contractor's willingness to negotiate contract disputes, respond to reasonable requests by the Resident (engineer) and respond to various Departmental correspondence

#6a4 - ...the fourth most important factor? [factor6a4]

Traffic Control/Site Protection

1

Rank:

#### #6b4 - Method of measurement [factor6b4]

- 1. Exceeded project requirements in all areas considered
- 2.Exceeded in a majority of areas
- 3. Met project requirements in all areas
- 4. Did not meet project requirements in one area considered
- 5. Either the Contractor did not meet requirements in two or more areas considered or the Contractor committed an act or omission which seriously compromised the safety of the public.

#### #6c4 - Explanatory comments [factor6c4]

Consider the appearance of the traffic control devices, the response to repair deficient devices and the Contractor's willingness to comply with the Traffic Control Plan (TCP)

#6a5- What do you think is the fifth most important factor?

**EEO/Labor Compliance** 

Rank:

5

#### #6b5 - Method of measurement [factor6b5]

- Contractor exceeded project requirements –met project requirements through extraordinary effort and initiative
- 2. Met requirements with minimum effort and initiative
- 3. Met requirements but had to be motivated by Department personnel
- 4. Did not meet project requirements.

#### #6c5 - Explanatory comments [factor6c5]

Consider the Contractor's compliance with the Equal Employment Opportunity program and compliance with the labor laws.



Illinois

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#7 - Do you have any additional comments? - [Comm7]

\*How do you evaluate your program?

-We are in the process of trying to get an ISO certification.

\*What legislation do you have that supports your program?

-Title 44: see this state's documents folder

\*What data collection procedures do you use to collect contractor performance information?

\*Do evaluations rely on the opinion of one individual?

-No

\*What is the program's underlying philosophy?

-Our philosophy is award to the most responsive and most responsible lowest bidder. We want the best quality for the money. Here are our rules, you have to follow them. We want to increase competition along quality parameters. The program provides some legal assurances. The program helps to narrow the band of potential problems.

\*What prevents your organization from implementing certain aspects of a quality-based/performance-based program?

-Staff, resources, having the right people, political/industry resistance in the Joint Committee on Administrative Rules

\*What is the contractors' response to your program?

-99

\*What is your appeals process and where does it lie along the continuum of subjectivity/objectivity?

-99

\*Is contractor performance criterion used in the adjustment of ratings, in non-responsibility determination or for other purposes - How is it used?

\*Does your state have a process for rewarding above average performance?

-99

\*What is your main lesson learned?

-99



Indiana

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Initial comments [havecomments1]

In the process of developing a program.

#2a - Within your organization, what quality-basesd prequalification methods are considered "best practices" -Why? [best2a] 88

#2b - What practices are least preferred - Why? [best2b]

88

#3a - What have been your organization's most significant challenges in implementing its quality-based prequalification program? [challe3a]

\*Need more personnel.

#3b - How were these challenges 88 overcome? [challe3b]

#4a - What resources does your organization require to maintain a prequalification program?

[resour4a]



Indiana

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#5a - Specifically, how does your prequalification program assure impartial contractor rating? [fair5a]

#5b - What are the unsolved problems in this regard? [fair5b]

Quality of Materials and Workmanship -Weighted 35% Rank:

ank:

#6b1 - Method of measurement for the performance-rating factor [factor6b1]

#6a1 What do you think is the first most important performance-rating factors ? [factor6a1]

88

Cumulative point system:

10 All of the time;

8 Most of the time;

5 Half of the time;

2 Only occasionally;

0 At no time:

NA Not applicable

#6c1 - Explanatory comments [factor6c1]

1. Work conforms to specifications; 2. Assure that subcontractors meet quality specifications

#6a2 - ... the second most important factor? [factor6a2]

Prosecution of Work - Weighted 30%

Rank:

#6b2 - Method of measurement for the performance-rating factor [factor6b2]

Cumulative point system:

10 All of the time;

8 Most of the time;

5 Half of the time;

2 Only occasionally;

0 At no time;

NA Not applicable

#6c2 - Explanatory comments [factor6c2]

- 1. Proper on site staff;
- 2. Submit and follow work schedule;
- 3. Adequate equipment on site:
- 4. Coordinate and cooperate with other contractors or subcontractors on the project



Indiana

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#6a3 - ... the third most important factor? [factor6a3]

General Relationships and Cooperation - Weighted 20%

Rank: 3

### #6b3 - Method of measurement [factor6b3]

Cumulative point system:

- 10 All of the time;
- 8 Most of the time:
- 5 Half of the time;
- 2 Only occasionally;
- 0 At no time;
- NA Not applicable

#6a4 - ...the fourth most important factor? [factor6a4]

Organization -Weighted 15%

Rank:

#### #6b4 - Method of measurement [factor6b4]

Cumulative point system:

- 10 All of the time;
- 8 Most of the time:
- 5 Half of the time;
- 2 Only occasionally:
- 0 At no time;
- NA Not applicable

#6c4 - Explanatory comments [factor6c4]

#6c3 - Explanatory comments [factor6c3]

2. Settle disputes quickly and at the appropriate level;

1. Attitude toward contract personnel;

3 Consideration to the traveling public

- 1. Failure to plan activities;
- 2. Delay submitting required documents throughout life of the project

#6a5- What do you think is the fifth most important factor?

99

Rank:

99

#6b5 - Method of measurement [factor6b5]

99

#6c5 - Explanatory comments [factor6c5]

99



Indiana

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#7 - Do you have any additional comments? - [Comm7]

- -The above [enumeration of performance factors] represents our current efforts at quality based recertification. Prequalification of new entities could not be done using this system alone as there obviously is no history with INDOT.
- -Indiana has yet to institute their prequal program. We are in the process of rewriting the "Report on Contractor Performance" evaluation form so that it will be more objectively measurable. The rewritten draft will go to the Contractor's Association for analysis and comments. We do not expect it to cost extra to run the program insofar as short and long term gains will cancel out expenditures and perhaps show a gain. We are in the process of changing their laws currently prequalification is a right and they want to change it so that it is a privilege...currently a contractor can appeal a suspension and continue to work till the appeal is finished.
- \*How do you evaluate your program?
- -We have been thinking about ways to evaluate or measurements and ratings. Once we run our program for awhile we will have more data. Currently we are considering how to do interviews with people on the job site and comparing the results with the performance evaluation form.
- \*What legislation do you have that supports your program?
- -Legislation backs us up in everything we do and gives us the right to develop policies and procedures without going through a public review process.
- \*What data collection procedures to you use to collect contractor performance information?
- -Middle and end project evaluations with contractor discussions on primes and subs. PE and PE's direct supervisor do evaluations together. Then evaluation goes into database.
- \*What prevents your organization from implementing certain aspects of quality-based/performance-based program?
- -Need more personnel.
- \*What about contractor response to all this?
- -Contractor's are on the performance evaluation committee.
- \*Is contractor performance a criterion that is used in the adjustment of ratings or in a non-responsibility determination?
- -Yes
- \*Do you have a neutral appeals process?
- -Two steps: Pregualification Committee and then to the Administrative Law Judge. Contractors can go straight to the ALJ.
- \*Do evaluations rely on the opinion of one individual?
- -No, the PE and PE's direct supervisor do evaluations together.
- \*Does your state have a process for rewarding above average performance?
- -No
- \*How does your state use contract performance evaluation data?
- -The proposed weights are as follows:
- A. Organization and Personnel 15%
- B. Prosecution of Work 30%
- C. General Relationships and
- Cooperation 20%
- D. Materials and Workmanship 35%
- B & D effect the outcome the most so are weighted the most



Iowa

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Initial comments [havecomments1]

Have a program.

#2a - Within your organization, what quality-basesd prequalification methods are considered "best practices" -Why? [best2a]

- 1. Contractor Evaluations completed on each contractor and subcontractor at the end of each project.
- 2. Why This forces the project engineer to evaluate each contractor and every project

#2b - What practices are least preferred - Why? [best2b]

- 1. Least preferred is verbal recommendations from project engineers without any documentation.
- 2. Why, When we check into these they are often inaccurate.

#3a - What have been your organization's most significant challenges in implementing its quality-based prequalification program? [challe3a]

Most significant challenge has been obtaining an objective evaluation rather than subjective.

#3b - How were these challenges I'm not sure we have completely overcome this one, but we have tried to define our rating criteria very formally. overcome? [challe3b]

#4a - What resources does your organization require to maintain a prequalification program? [resour4a]

#4a - What resources does your We have one individual whose primary duties are to prequalify contractor, maintain the contractor performance database and evaluate which contractors organization require to maintain a should be approved to bid individual projects.



Iowa

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prequalification program assure impartial contractor rating? [fair5a]

#5a - Specifically, how does your We have a very objective rating scale for each category to be rated. And we furnish a copy of the evaluations to the contractor so they can object to their evaluation.

#5b - What are the unsolved problems in this regard? [fair5b] Not all project engineers adhere to the rating scale.

#6a1 What do you think is the first most important performance-rating factors ? [factor6a1]

Quality of the work

Rank:

#6b1 - Method of measurement for the performance-rating factor [factor6b1]

- 1. Smoothness
- 2. Strength tests
- 3. Density
- 4. Appearance

#6c1 - Explanatory comments [factor6c1]

Some of these measures can be based on tests taken during the project or on the final product. However, appearance (ascetics) is very subjective

#6a2 - ... the second most important factor? [factor6a2]

Completion of the project on time

Rank:

#6b2 - Method of measurement for the performance-rating factor [factor6b2]

Working days

#6c2 - Explanatory comments [factor6c2]

Compare working days charged against the working days allowed

Iowa

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#6a3 the third most important factor? [factor6a3]	Safety practices		Rank:	3
#6b3 - Method of measurement [factor6b3]		#6c3 - Explanatory comments [factor6c3]		
Number of accidents or safety violations		Measures of both contractor's activities and traffic accidents in the construction	n zone	
#6a4the fourth most important factor? [factor6a4]	Processing paperwork		Rank:	4
#6b4 - Method of measurement [factor6b4]  Days from when due to when submitted		#6c4 - Explanatory comments [factor6c4] Certified payrolls, materials reports, processing change orders, submittal of final	al documents	
#6a5- What do you think is the fifth most important factor?	Cooperation		Rank:	5
#6b5 - Method of measurement [factor6b5] Subjective		#6c5 - Explanatory comments [factor6c5] 99		



Iowa

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#7 - Do you have any additional comments? - [Comm7]

- -l'd like to be able to include quality in the low bid award process. However, the subjectivity of our contractor evaluation process is not refined enough to objectively determine which contractors are better contractors than another contractor.
- -The department fills out the "Contractor Evaluation Report" at the end of each project. This rating is included in the prequal process.



Kentucky

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Initial comments [havecomments1] Have a program. Evaluation process includes evaluation of the Kentucky Department of Highway's performance on a particular project by the Contractor.

#2a - Within your organization, what quality-basesd prequalification methods are considered "best practices" -Why? [best2a]

- 1. How we arrive at eligibility and capacity: its easy for contractor to figure out and we ask the right questions see our contractor application form. We look carefully at the application and the Prequalification Committee makes the final recommendation.
- 2. We start off all new contractors at 50% of their maximum capacity factor which allows them to enter bidding and build reputation and capacity.
- 3. Contractor has a choice of providing an audit in order to gain greater capacity rating.
- 4. We assist contractor in providing the information we need to give them the best level.
- 5. Why We limit a contractor until we find out what kind of work they perform. If they are managing well, they will probably have a good balance sheet. We want to prevent defaults if we can.

#2b - What practices are least preferred - Why? [best2b]

None so far.

#3a - What have been your organization's most significant challenges in implementing its quality-based prequalification program? [challe3a]

Make sure that you can analyze contractor information well enough to know how to assign contractor in terms of ability, work category and work items.

overcome? [challe3b]

- #3b How were these challenges 1. Limit the risk of financial loss. Negative working capital is the main screening factor that can hold a contractor back. The contractor owns the destiny of his/her company. The contractor needs to make their asset side bigger than their liability side.
  - 2. Have information go through lots of people

prequalification program? [resour4a]

- #4a What resources does your 1. We are a two person operation: Branch manager and assistant.
- organization require to maintain a 2. We use software called PQManager. It does time sheets, time lapses, generates letters and certificates, and creates lists.



Kentucky

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#5a - Specifically, how does your prequalification program assure impartial contractor rating? [fair5a]

- 1. Contractor Performance Report can be weighted differently for those that have no experience than those that have experience. Those that do have experience should know better.
- impartial contractor rating? [fair5a] 2. Contractor can appeal ratings.
  - 3. The performance report requires narrative justifications for item scores of 5 (highest) or for scores below 4.
  - 4. The contractor knows the policies and can see the performance reports.

#5b - What are the unsolved problems in this regard? [fair5b]

- 1. Everyone has personalities.
- 2. The meaning of some words in the performance report (such as "minor rework") has generated discussion on measurement meanings.

#### #6a1 What do you think is the first most important performance-rating factors ? [factor6a1]

#### Quality of work

Rank: 1

#### #6b1 - Method of measurement for the performance-rating factor [factor6b1]

- 5. Exceeded project requirements and required no rework
- 4. Met project requirements and required only minor rework
- 3. Met project requirements but required moderate rework
- 2. Met project requirements but required extensive rework
- 1. Did Not meet project requirements, accepted with reduced compensation

#### #6c1 - Explanatory comments [factor6c1]

(weights can vary according to contractor experience and type of work)

- 1. Quality of work including work performance of subcontractor(s).
- 2. Quality of work excluding work performance of subcontractors
- 3. Meeting of Contract Dates including approved extensions
- 4. Job closeout activities
- 5. Coordination and cooperation with DOH and other government agency personnel
- 6. Coordination and cooperation with other contractors, subs and utilities
- 7. Coordination and cooperation with general public
- 8. Public safety and traffic control
- 9. Workforce safety practices
- 10. Compliance with environmental requirements

#### #6a2 - ... the second most important factor? [factor6a2]

#### **Contractor Project management and Administration**

Rank:

4

#### #6b2 - Method of measurement for the performance-rating factor [factor6b2]

- 1. Project supervisory personnel
- 2. Project technical staff
- 3. Project craft workforce
- 4. Project organization
- 5. Project submittals
- 6. Equipment
- 7. Jobsite housekeeping

### #6c2 - Explanatory comments [factor6c2]

(weights can vary according to contractor experience and type of work)

Kentucky

Rank:

99

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Monday, March 20 11:15:33 AM #6a3 - ... the third most important factor? [factor6a3] 99

#6b3 - Method of measurement [factor6b3]

99

#6c3 - Explanatory comments [factor6c3]

99

#6a4 - ...the fourth most important factor? [factor6a4] 99

#6b4 - Method of measurement [factor6b4] #6c4 - Explanatory comments [factor6c4] 99

#6a5- What do you think is the fifth most important factor? 99

#6b5 - Method of measurement [factor6b5] #6c5 - Explanatory comments [factor6c5] 99



Kentucky

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#7 - Do you have any additional comments? - [Comm7]

- \*How do you evaluate your program?
- -FHWA reviews our program and has a questionnaire. We have internal review done once a year.
- \*What legislation do you have that supports your program?
- -Kentucky Revised Statutes 176.130 through 176.220, 45A.245, 176.909-176.110. See this state's document folder.
- \*What data collection procedures do you use to collect contractor performance information? Do evaluations rely on the opinion of one individual?
- -The State Prequalification Committee will gather, store and use the information collected from the Contractor's Performance Reports completed throughout the year to assist in determining a contractor's Maximum Eligibility Amount. Evaluations are done by the Resident Engineer and go to the Chief District Engineer for signature.
- \*What prevents your organization from implementing certain aspects of a quality-based/performance-based program?
- -Some issues have to be legislatively changed and that can be difficult. This can be beneficial or a barrier depending.
- \*What is your program's underlying philosophy?
- -Build competition and protect the taxpayer. Contractor needs to have all ducks in a row before they bid. We want as many qualified contractors to bid as possible.
- \*What is the contractors' response to your program?
- -Contractors that are already established love it. New contractors have to come in and get over the hurdle of negative balance sheets but we have definite ways for new contractors to build reputation and ability.
- \*What is your appeals process and where does it lie along the continuum of subjectivity/objectivity?
- -Appeals: An appeal application shall accompany every completed Contractor's Performance Report that is sent to the contractor. This appeal form will give the contractor the opportunity to object to a given rating by explicitly detailing the cause for the objection. The contractor has ten business days to submit the completed appeal application with the original Contractor's Performance report to the Chief District Engineer. It is the responsibility of the Chief District Engineer to address the appeal within ten business days upon receipt of the appeal, and to settle the matter between the Resident Engineer and the contractor. The ruling on the appeal will be conducted at the district level, and the final Contractor's Performance Rating will then be sent to the State Prequalification Committee at the central office in Frankfort, KY. Then an administrative appeal is available.
- \*Is contractor performance criterion used in the adjustment of ratings, in non-responsibility determination or for other purposes?
- -The Performance Report is connected to the eligibility amount, assigned categories and assigned items.
- \*Does your state have a process for rewarding above average performance?
- No bonus points. Can increase work items and categories if they have the capacity.
- \*What is your main lesson learned?
- Communication talk a lot with the contractor and with various people internally.



Maine

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Initial comments [havecomments1]

Have a program. Administered by phone. State has a partial pregualification program: no scoring or rating scale but a pass/fail system decision made by administrative committee consisting of knowledgeable engineers and senior managers.

#2a - Within your organization, what quality-basesd prequalification methods are considered "best practices" -Why? [best2a]

- 1. Committee review with several subject matter experts from highway, bridges, multi-modal, human resources, safety, etc.
- 2. Review Committee meets quarterly to evaluate program issues.
- 3. Encourage competition by allowing project specific prequalification. This allows smaller operations to get into minor rebuild or other minor projects, and encourages larger operations that specialize in certain areas (such as marine construction).
- 4. We met with our Associated Contractors folks while drafting program policies and procedures.
- 5. We view bonding capacity and safety experience rating factors from surety and insurance industries as key indicators of quality/risk of failure.

#2b - What practices are least preferred - Why? [best2b]

Financial balance sheets: They can be confusing and misleading unless reviewed by accountants. We defer to the experts who risk their own money on these issues - the insurance and surety industries.

#3a - What have been your organization's most significant challenges in implementing its quality-based prequalification program? [challe3a]

- 1. Convincing field engineers of the importance of contractor evaluations. Lack of adverse documentation from the field makes it difficult to justify non-renewal of an existing contractor's pregualification.
- 2. Rewriting the contractor evaluation form to make it meaningful, effective and easy to use.
- 3. Not enough FTE time need about 1/4 more FTE to do a complete job.
- 4. We are struggling with a foundational philosophical question: is our program supposed to be primarily regulatory (keeping some people out) or is it supposed to be primarily expediting (making things move faster and more efficient) the number of contractors.
- 5. Need a balance: need to be attracting more bidders to help generate competition for lowest bid while reducing the number of contractors who can't do the job.

overcome? [challe3b]

#3b - How were these challenges The Contracts Engineer was invited to a Resident Engineer's training session and explained that they (the resident engineers) had now been empowered (by the then-new pregualification process) to help address issues with incompetent contractors. Emphasized that timely and accurate completion of contractor evaluation forms was now a vital part of the pregualification process.

#4a - What resources does your pregualification program? [resour4a]

- 1. We are a state with a lower contractor population density than other states about 110 contractors.
- organization require to maintain a 2. Use Microsoft Excel for pregual data management and tracking. Developed a tracking spreadsheet that took about 2 hours to develop.
  - 3. Have an e-mail system that can be used for multiperson discussions use like a chat room. We have 1/2 FTE of a Senior Engineering Technician but actually need 3/4 FTE.
  - 4. Current pregualification staff is meticulous and well-trained. Recent personnel turnover within the unit may make maintaining the knowledge base difficult
  - 5. It took about six to eight mid-level to executive/senior level people who met about six times for about 3 hours each time to plan the initial program.



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pregualification program assure

- #5a Specifically, how does your 1. We attempt to build and maintain a documentation file spanning several projects and resident engineer evaluations for comparison purposes.
- 2. Contractors are well known. Any decisions on contractors are made with high committee consensus. Committee does not jump to action based on a single impartial contractor rating? [fair5a] evaluation. Committee looks at a trend or composite of several evaluations. Also, project evaluations are done not only by the resident manager but also by the program manager.
  - 3. We err on the side of maintaining competition.

#5b - What are the unsolved problems in this regard? [fair5b] We continue to discuss the concept of a multi-tiered prequalification system within construction specialties, allowing a more discrete evaluation of contractor abilities versus specific project job requirements.

#6a1 What do you think is the first most important performance-rating factors ? [factor6a1]

Quality of Work - (see this state's document folder)

Rank:

#6b1 - Method of measurement for the performance-rating factor [factor6b1]

- 1. Contractor quality control
- 2. Workmanship
- 3, Compliance with contract requirements;
- 4. Adequacy of personnel;
- 5. Contractor engineering and survey layout
- 6. Safety: New rating process and category being developed by new Safety Office.

#6c1 - Explanatory comments [factor6c1]

Weighted 40% and each category measurement given a certain amount of points

#6a2 - ... the second most important factor? [factor6a2]

**Prosecution and Progress** 

Rank:

2

#6b2 - Method of measurement for the performance-rating factor [factor6b2]

- 1. Adherence to Progress Schedule
- 2. Compliance with environmental regulations
- 3. Compliance with traffic regulations
- 4. Adequacy of equipment

#6c2 - Explanatory comments [factor6c2]

Weighted 25% and each category measurement given a certain amount of points



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#6a3 - ... the third most important factor? [factor6a3] Procedural/Administrative Rank: 3 #6b3 - Method of measurement [factor6b3] #6c3 - Explanatory comments [factor6c3] 1. Adequacy of supervision; Weighted 20% and each category measurement given a certain amount of points 2. Adequacy of subcontractor management; 3. Adequacy of processing paperwork #6a4 - ...the fourth most important factor? [factor6a4] Cooperation Rank: #6b4 - Method of measurement [factor6b4] #6c4 - Explanatory comments [factor6c4] 1. Partnering (Team Building); Weighted 10 % and each category measurement given a certain amount of points 2. Attitude (Cooperation) Implementation of federal, state, and local policies, procedures and regulations #6a5- What do you think is the fifth most important factor? Rank: 5 #6b5 - Method of measurement [factor6b5] #6c5 - Explanatory comments [factor6c5] 1. Compliance with labor standards and LLO requirements; Weighted 5% and each category measurement given a certain amount of points 2. Compliance with DBL requirements; 3. Compliance with OJT requirements



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#7 - Do you have any additional comments? - [Comm7]

- -The program protects us from poor quality contractors, helps build successful contractors, and provides consistency and improves product quality.
- -We use bonding company ratings as a reasonably accurate financial pregualification indicator.
- \*How do you evaluate your program?
- -Day to day discussions and self-review, plus ratings from resident engineers to spot contractors who may be over-extended, leading to review of prequalification status.
- \*What legislation do you have that supports your program?
- "Pursuant to 23 M.R.S.A. section 753 and 23 M.R.S.A. section 4206, the Commissioner has full power in the letting of all contracts for work under its jurisdiction and thus has the authority to determine whether bidders on construction contracts are responsible. Accordingly, the Commissioner has approved this Contractor's Pregualification. Procedure and hereby delegates all authority necessary to carry it out as provided in this Procedure."
- -Additional legislation to further strengthen the pregual process is being pursued.
- \*What data collection procedures do you use to collect contractor performance information?
- -Project Resident Engineer does rating at end of project, is reviewed and signed-off on by contractor and Program Manager, and then is entered into a database.
- \*Do evaluations rely on the opinion of one individual?
- -Response to this item needs to depend on whether we're talking about prequalification evaluations by the Committee or Contractor performance by the Resident Engineer. If we're talking about prequalification evaluations by the Committee: The Department's Chief Engineer will approve all Committee findings of Not Qualified. The local FHWA office also receives copies of our decisions. If we're talking about evaluation of contractor performance by Resident Engineers: The Program Manager for the project reviews and evaluates the Resident Engineer's ratings and recommendations before they become part of the data base.
- \*What prevents your organization from implementing certain aspects of a quality-based/performance-based program?
- -We believe at some level our existing program is quality and performance based. Our initial review of prequalification applications takes a hard look at previous projects, including seeking recommendations from contractor-supplied references and (in some cases) other state DOT's; we look closely at bonding and insurance company ratings for the contractor; and we've recently implemented a detailed review of their corporate safety and civil rights programs. Our review of applications for prequalification renewals depends heavily upon our own database of contractor performance and quality on projects they have done for us previously. Given the relatively small size of our contracting industry, the general success we've experienced with our program so far, and the apparent difficulties is developing a more specific, numerically-based prequalification system, we might question whether or not the apparent potential for improvement can justify the additional cost and effort. Currently our existing program seems to be meeting our needs quite well.
- \*What is your program's underlying philosophy?
- -Increased competition gets us better prices but we want to make sure that contractors have the capacity/competency to do the work.
- \*What is the contractors' response to your program?
- -In general quite good. We went to our Associated General Contractors and they were involved up front.
- \*What is your appeals process and where does it lie along the continuum of subjectivity/objectivity?
- -In general, it's as objective/subjective as the rest of our process. There is an appeals process to the Commissioner of Transportation then to the Maine Superior Court. Over the past few years, none of our actions have gone to appeal we dialogue a lot and that has worked so far.
- \*Is contractor performance criterion used in the adjustment of ratings, in non-responsibility determination or for other purposes How is it used?
- Because our system is pass/fail, there is no adjustment of ratings. However, consistently poor performance evaluations may result in a shorter renewal term, or in the ultimate, denial of prequal renewal. We have reduced renewal terms, but have not yet had to completely revoke a contractor's prequalification based on our internal ratings. We have, however, denied prequalification to companies with excessively poor safety ratings from their insurance carrier. As far as new applications are concerned, our prequalification standards contain the following provision: A finding by the Committee based upon substantial evidence that any one of the following conditions exists shall be sufficient grounds, though not mandatory grounds, for an overall determination of Not Qualified. The Department's Chief Engineer will approve all Committee findings of Not Qualified.



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- (1) Unsatisfactory and/or insufficient Contractor experience.
- (2) Number of personnel with applicable knowledge and experience significantly below industry standards.
- (3) Insufficient bonding capability.
- (4) Safety record significantly below industry standards.
- (5) Environmental record significantly below industry standards.
- (6) Civil rights or equal opportunity record significantly below industry standards.
- (7) A denial of prequalification or award of contract, disbarment, or other irregularities with respect to any federal, state, or local government or procurement agencies.
- (8) A pattern of unsupported Claims.
- (9) Conviction of a bid or other crime or indictment with substantial evidence regarding the same.
- (10) Deceptive, evasive or fraudulent statements or omissions contained in the Application, made or omitted at any interview or hearing, or otherwise made to or omitted from the Department.
- (11) Other substantial deficiencies that are clearly below industry standards and that clearly demonstrate that the Contractor is Not Qualified.
- \*Does your state have a process for rewarding above average performance?
- -For those that do better work consistently, we give a longer renewal period (two or three year renewals instead of the standard single year).
- \*What is your main lesson learned?
- -Prequal is worth the effort. The program costs less than the cost of claims, the claims process, or in calling in the bonding company to complete the job.



Massachusetts

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Initial comments [havecomments1] Have a program. Survey administered by phone.

#2a - Within your organization, what quality-basesd prequalification methods are considered "best practices" -Why? [best2a]

- 1. Program not just based on bonding but is a well rounded system. We look at all issues in order to be fair to everyone.
- 2. No matter who you are, everyone is treated the same.
- 3. The more bidders you have, the better.
- 4. The Pregualification Committee meets once a week. This is were the contractors can put in challenges on certain pregual decisions like category assignment and bid caps.
- 5. The Committee has an assortment of people who have a broad base of knowledge and experience and are politically independent.
- 6. Our laws are pretty strong and you can't just change what the law says. A contractor suspension has been upheld by the court.

#2b - What practices are least preferred - Why? [best2b]

- 1. Bonding can be somewhat deceptive. A company can get bonded in an area with which they have no experience.
- 2. About 450 contractors have received a pregualification from us but only 30% bid on jobs the rest use the pregualification certificate on their resumes. This translates into expenditure of resources with less return than expected.

#3a - What have been your organization's most significant challenges in implementing its quality-based prequalification program? [challe3a]

- 1. We are in the process of changing our bidding categories. This means that we will have to re-pregualify all our contractors. Somehow, we have to fit this task into this year's work plan.
- 2. We need a database that can do automatic tracking and flagging. Need better task automation overall.
- 3. About 450 contractors have received a pregualification from us but only 30% bid on jobs the rest use the pregualification certificate on their resumes. This translates into expenditure of resources with less return than expected.
- 4. A contractor with no experience is a bit tricky to get pregualified.
- 5. A contractor's prequalification happens once a year. However a company's capacity can change within the year.
- 6. A contractor can put in a bid protest and then the process gets bogged down administratively. Need laws and regulations to allow capping

overcome? [challe3b]

#3b - How were these challenges You need to have legislative and statutory backing. The contractors are a large lobby group. Someone could say what right do you have to do contractor pregualification.

pregualification program? [resour4a]

- #4a What resources does your 1. Have an in-house developed database that is somewhat like MSAccess to keep track of applications.
- organization require to maintain a 2. We have a pregualification section. We have 2 full time FTEs and 2 halftime FTEs, but we need 4 full time FTEs. This need somewhat depends on the skill level I've got in the office.
  - 3. Program has being going for so long, can't remember resources expended for model development or for database.



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Rank:

#5a - Specifically, how does your 1. Everybody gets treated the same. prequalification program assure

- 2. We don't over standardize, so we are flexible in doing our reviews.
- impartial contractor rating? [fair5a] 3. We step contractors through the process and are proactive in checking for their and our understanding (did you mean to say this?). Avoid being arbitrary or capricious. All this is in the public interest.
  - 4. The Prequalification Committee meets once a week. This is were the contractors can put in challenges on certain prequal decisions like category assignment, bid caps and project evaluations.
  - 5. The Committee has an assortment of people who have a broad base of knowledge and experience and are politically independent.

#5b - What are the unsolved problems in this regard? [fair5b] None that can be ascertained.

#6a1 What do you think is the first most important performance-rating factors ? [factor6a1]

Workmanship

#6b1 - Method of measurement for the performance-rating factor [factor6b1]

10 Very good

- 8 Good
- 6 Fair
- 4 Poor

#6c1 - Explanatory comments [factor6c1]

Refers to the quality of the work product produced as defined by Construction Specifications, Plans and Industry Standards where applicable.

#6a2 - ... the second most important factor? [factor6a2]

Organization

2 Rank:

#6b2 - Method of measurement for the performance-rating factor [factor6b2]

10 Very good

- 8 Good
- 6 Fair
- 4 Poor

#6c2 - Explanatory comments [factor6c2]

Refers to all aspects of Project Management including, but not limited to supervision, cooperation, staffing of labor force, scheduling, payment of subcontractors, prosecution of work, timely submission of shop drawings/plans, erection/demolition procedures, and material acquisition schedules.



Massachusetts

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#6a3 - ... the third most important factor? [factor6a3] Equipment Rank: 3 #6b3 - Method of measurement [factor6b3] #6c3 - Explanatory comments [factor6c3] 10 Very good Refers to all equipment, machinery and operators used on the project. Equipment must be 8 Good suitable and readily available, when needed, for all phases of the project. Equipment operators 6 Fair must demonstrate proficiency and skill in the operation of said equipment. 4 Poor #6a4 - ...the fourth most important factor? [factor6a4] Supervision Rank: #6b4 - Method of measurement [factor6b4] #6c4 - Explanatory comments [factor6c4] Must demonstrate knowledge of construction and contract documents necessary to complete the 10 Very good 8 Good work as specified. The superintendent must also cooperate fully with Department Personnel and all other interested parties so that the work progresses as scheduled. The superintendent must 6 Fair Poor be authorized to make decisions in the field that are binding upon the Contractor. #6a5- What do you think is the fifth most important factor? 99 Rank: 99 #6b5 - Method of measurement [factor6b5] #6c5 - Explanatory comments [factor6c5] 99 99



Massachusetts

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#7 - Do you have any additional comments? - [Comm7]

- -The bonding process takes care of financial prequalification, though there are some problems with surety. You can get bonded in a category that you never had experience in. Prequalification Committee can set upper limit.
- \*How do you evaluate your program?
- -Self-evaluation as we go.
- \*What legislation do you have that supports your program?
- -Have enabling legislation. Massachusetts General Law Chapter 29. (See state's document folder)
- \*What data collection procedures to you use to collect contractor performance information?
- -Resident and district engineers perform project evaluations.
- \*Do evaluations rely on the opinion of one individual?
- -No.
- \*What prevents your organization from implementing certain aspects of quality-based/performance-based program?
- -Our laws are pretty strong and you can't just change what the law says. A contractor suspension has been upheld by the court.
- \*What is the program's underlying philosophy (such as preventing problems, prediction, assurance, and program purpose)?
- -Look out for the public's interest by taking care of the contractor.
- \*What is the contractors' response to your program?
- -We've had both significant challenges and significant support.
- \*What is your appeals process and where does it lie along the continuum of subjectivity/objectivity?
- -Appeals process includes informal and formal review by the Prequalification Committee. There is an appeals board. We do a lot of dialoging with the contractors.
- \*Is contractor performance criterion used in the adjustment of ratings, in non-responsibility determination or for other purposes How is it used?
- -There is a score for every job. Based on this score, contractors pass or fail.
- \*Does your state have a process for rewarding above average performance?
- -Can increase bid caps.
- \*What is your main lesson learned?
- -Program must have flexibility and also be backed up by legislation.



Michigan

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Initial comments [havecomments1] Have a program. Administered by phone.

#2a - Within your organization, what quality-basesd prequalification methods are considered "best practices" -Why? [best2a]

- 1. We utilize Trns\*port software. It is easy to use and comprehensive in terms of the tasks that it accomplishes.
- 2. We are a good informational organization. It is important for everyone to have the information they need.

#2b - What practices are least preferred - Why? [best2b]

Would prefer to do pregualification and regualification certifications every two years instead of every year. The would reduce the workload to manageable. We have 800+ contractors pregualified.

#3a - What have been your organization's most significant challenges in implementing its quality-based prequalification program? [challe3a]

- 1. A new and much tighter budget is in place.
- 2. It is difficult to produce enough documentation to allow the department to "take action." This difficulty is increased by the fact that different divisions of the department may have varying philosophies regarding documentation and/or taking action.
- 3. Our administrative rules are law but sometimes can be open to broad interpretation.
- 4. Balance between public interest and economic development can be tricky.

#3b - How were these challenges Still working on overcome? [challe3b]

prequalification program? [resour4a]

#4a - What resources does your 1. ½ FTE for the Departmental Specialist and 1FTE for Departmental Analyst. There is also a word processing assistant who probably spends about 75% of organization require to maintain a her time working in prequal - receives the applications, readies the applications for review, sends out any correspondence related to the applications, etc. 2. Data is taken from the inhouse designed contractor performance evaluation database before reviewing the work classification requests. Information regarding prior MDOT work is checked in another database (Trns\*port). The prequalification overall ratings are calculated by hand from the financial information submitted with the application.



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#5a - Specifically, how does your prequalification program assure impartial contractor rating? [fair5a]

- #5a Specifically, how does your 1. We keep an eye on any one evaluator doing all of one company's evaluations we try to get different evaluators to do that instead.
  - 2. There is a Contract Evaluation Review Team that takes a close look at the evaluations.
- impartial contractor rating? [fair5a] 3. A contractor can contest any part of an evaluation through one process, and a contractor can also contest any effects of an evaluation on the prequalification determination through another process.

#5b - What are the unsolved problems in this regard? [fair5b]

None known.

#### #6a1 What do you think is the first most important performance-rating factors ? [factor6a1]

Organization and Management (See documents folder)

Rank:

Rank:

#### #6b1 - Method of measurement for the performance-rating factor [factor6b1]

- 1. To what degree are Contractor's project management personnel available and given the authority to execute the directions of the Engineer?
- 2. To what degree are the Contractor's management personnel competent and effective in scheduling the work and organizing construction operations, including being punctual in starting and completing the work on the project and meeting critical intermediate phases in accordance with the contract?
- 3. To what degree does the Contractor furnish required documentation and reports in a timely manner? This includes, but is not limited to, certification of materials, delivery tickets, invoices, progress schedule, shop drawings, material sampling, requests for extensions of time, contractor staking and Contractor Quality Assurance/Quality Control (QA/QC) plans and documentation.
- 4. To what degree does the Contractor comply with the direction of the Engineer and follow the project authority as detailed in Division 1 of the Standard Specifications for Construction?
- 5. To what degree does the Contractor comply timely with all appropriate wage rates, labor, EEO, and D.B.E. laws and regulations, submit accurate certified payrolls and promptly pay all subcontractors?

#### #6a2 - ... the second most important factor? [factor6a2]

Resources

#### #6c1 - Explanatory comments [factor6c1]

Example of rating scale:

- 10 Management personnel are always available and execute the directions of the Engineer.
- 8 Management personnel are usually available and comply with the directions of the Engineer.
- 5 Management personnel are sometimes available and sometimes offer resistance to the directions of the Engineer prior to compliance.
- 1 Management personnel are routinely not available and disagree or disregard the directions of the Engineer most of the time.

### #6b2 - Method of measurement for the performance-rating factor [factor6b2]

- 6. To what degree does the Contractor have adequate and sufficient equipment to keep the project on schedule? Does the equipment meet the requirements of the specifications and efficiently provide a quality product?
- 7. To what degree does the Contractor have competent and sufficient personnel to keep the project on schedule?

#### #6c2 - Explanatory comments [factor6c2]

Example of rating scale:

- 10 The Contractor has sufficient equipment to complete the project ahead of schedule. All equipment meets or exceeds the specification requirements.
- 8 The Contractor has sufficient equipment to complete the project on schedule. All equipment meets the specification requirements.
- 5 The Contractor usually has adequate and sufficient equipment to complete the project on schedule. On some occasions, the Contractor has to be notified to provide equipment that meets the specification requirements.
- 1 The Contractor does not have adequate and sufficient equipment to complete the project on schedule. The Contractor has to be given written notification to provide equipment meeting the specification requirements.

Survey administered and database compiled by Jon Woodland, Research Bureau, New Mexico Department of Transportation; (505) 841-9156. See database for supporting documentation.



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Rank:

#6a3 - ... the third most important factor? [factor6a3]

Work Performance

#### #6b3 - Method of measurement [factor6b3]

- 8. To what degree does the Contractor have good safety practices? Does the Contractor follow their own safety program?
- 9. To what degree did the Contractor comply with contract requirements for maintaining traffic?
- 10. If applicable, to what degree does the Contractor meet the contract requirements for Contractor Quality Control (CQC)?
- 11. To what degree does the Contractor provide a quality product?
- 12. To what degree does the Contractor properly notify and coordinate work with utility companies, railroads, property owners, local unit of government, and Contractors working on adjacent projects?
- 13. To what degree does the Contractor submit the necessary documentation to permit timely closeout and finaling of project?
- 14. To what degree does the Contractor meet the environmental requirements of the contract?

### #6c3 - Explanatory comments [factor6c3]

Example of rating scale:

- 10 The Contractor takes the initiative to ensure the safety and health of the employees. They always comply with and sometimes exceed MIOSHA requirements. Safety equipment and devices are in excellent condition and are used by all contractor employees. MIOSHA issued no citations. The contractor always follows their safety program.
- 8 The Contractor ensures the safety and health of the employees and complies with the MIOSHA requirements. Safety equipment and devices are in good condition and are used by contractor's employees. The Contractor immediately carries out any requests by MDOT or MIOSHA for changes in safety measures. MIOSHA issued no citations. The Contractor follows their safety program.
- 5 The Contractor usually ensures the safety and health of the employees and usually complies with the MIOSHA requirements. Safety equipment and devices are in average condition and are sometimes not used by Contractor's employees. The Contractor carries out requests by MDOT or MIOSHA for changes in safety measures after written notification. MIOSHA may have issued citations.
- 1 The Contractor's safety and health practices are unsatisfactory. MIOSHA issued the Contractor citations. The Engineer imposed stoppages of work for safety issues. The Contractor only reluctantly makes changes requested by MDOT or did not make the change.

#6a4 - ...the fourth most important factor? [factor6a4]

**Subcontractor Management** 

Rank:

#### #6b4 - Method of measurement [factor6b4]

15. To what degree does the Contractor coordinate work with Subcontractor's work, exercise authority over Subcontractors, provide notice of Subcontractor work schedule and ensure that Subcontractors are in compliance with contract requirements?

#### #6c4 - Explanatory comments [factor6c4]

Example of rating scale:

- 10 The Contractor exceeds expectations in exercising authority, coordinating and monitoring work operations of their Subcontractors to ensure the schedule and specifications are met and that all documentation is submitted in a timely manner.
- 8 The Contractor always exercises authority, coordinates and monitors work operations with their Subcontractors to ensure the schedule and specifications are met, and that all documentation is submitted in a timely manner.
- 5 The Contractor usually exercises authority, coordinates and monitors work operations with their Subcontractors to ensure the schedule and specifications are met, and that all documentation is submitted in a timely manner. Any problems are corrected immediately upon notification by the Engineer.
- 1 The Contractor does not sufficiently exercise authority, coordinate or monitor work operations with their Subcontractors to ensure the schedule and specifications are met, and that all documentation is submitted in a timely manner. Problems are corrected only upon notification by the Engineer.



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#6a5- What do you think is the fifth most important factor?

99

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Rank: 99

#6b5 - Method of measurement [factor6b5]

99

#6c5 - Explanatory comments [factor6c5]

99

#7 - Do you have any additional comments? - [Comm7]

-We have a separate database for the contractor performance evaluation data. Data collection has been by hand then key entered, but they are planning on bringing in the FieldManager suite soon (see www.fieldmanager.com).

\*How do you evaluate your program?

-Yearly audits.

\*What legislation do you have that supports your program?

-Rule 247.1 to 247.83 - see docs folder.

\*What data collection procedures do you use to collect contractor performance information? Do evaluations rely on the opinion of one individual?

-Construction technicians and consultants collect the bulk of the data which the PE or RE has to sign off on.

\*What prevents your organization from implementing certain aspects of a quality-based/performance-based program?

-Budget, political trends and available personnel.

\*What is your program's underlying philosophy?

-We prefer that we have no failures.

\*What is the contractors' response to your program?

-Varies.

\*What is your appeals process and where does it lie along the continuum of subjectivity/objectivity?

-A contractor can appeal an evaluation, a prequalification decision and a Performance Improvement Plan. In regards to evaluation, the contractor can meet with project management staff to review an evaluation, and then to the Performance Evaluation Panel which is composed of three department employees who are not directly involved in the management of the project. The decisions of this panel are not subject to further contest or appeal. In regards to a prequalification decision, the bidder first meets with the prequalification manager, then to the prequalification review panel, then to the prequalification appeal board.

On all these boards/panels/committees, it helps to have people that represent a broad range of abilities and knowledge.

\*Is contractor performance criterion used in the adjustment of ratings, in non-responsibility determination or for other purposes How is it used?

-We requalify each contractor each year and use 2 years of contractor performance evaluation data primarily as input into the work category determination.

According to regulations, the performance information can be used in adjustment of capacity ratings - in practice this is done only in the most extreme conditions.

\*Does your state have a process for rewarding above average performance?



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-No, Michigan does not. However the contractors are able to request additional work classifications and/or request increases in their work classification ratings throughout the year without having to wait for the yearly renewal time.

\*What is your main lesson learned?

-Need to document heavily.



Missouri

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Initial comments [havecomments1] Have a program. A contractor must be in good standing or on a probationary status to be eligible to bid on MoDOT contracts.

#2a - Within your organization, what quality-basesd prequalification methods are considered "best practices" -Why? [best2a]

- 1. Our rating system utilizes contract requirements that are measurable, objective, and documented. Questions of the project evaluation are contract requirements. Routine project records and documentation support the responses. Not all questions included in the questionnaire are applicable on a project.
- 2. The project inspection staff is responsible for completing the individual project performance questionnaire and the resident engineer provides the completed questionnaire to the contractor for review and comments. The report is divided into sections corresponding to the Missouri Standard Specifications for Highway Construction. Point values are assigned to each question and each question is assigned to one of four categories: Quality, Prosecution and Progress, Contract Compliance, and Contract Administration. Contract Compliance is further divided into 3 subcategories; contract requirements, erosion control, and traffic control. From the four categories, the contractor is given an overall performance rating.
- 3. A contractor's summary rating is obtained by weighting the individual project ratings by their dollars value, i.e. a \$10M dollar project will carry 10 X the value of \$1M dollar project.
- 4. Statistical analysis of all summary ratings identify the various performance levels. Contractors receiving unacceptable ratings (mean 2 standard deviations) are disciplined. The first year, a contractor is placed on probation, a subsequent unacceptable rating will disqualify the contractor from bidding for a period of 1 year. A third subsequent unacceptable rating will disqualify the contractor for a period of 3 years. The system is designed to encourage performance improvement. Category and section performance results are provided to the contractor to help identify operational areas where greatest improvement can be realized. Continued unacceptable performance imposes progressive disciplinary actions. However, any contractor with a disciplinary status can return to good standing with an annual summary reflecting average performance ratings.

#2b - What practices are least preferred - Why? [best2b]

Previously our rating system was subjective and documentation requirements encouraged mid-range ratings. No contractors had been disciplined as a result.

#3a - What have been your organization's most significant challenges in implementing its quality-based prequalification program? [challe3a]

- 1. Our rating system requires proper documentation to penalize a contractor's performance.
- 2. The time to complete, process and report the results are substantial, though we are proceding with improvements with the automation of the system.
- 3. Our rating system evaluates 4 categories, Quality, Prosecution & Progress, Contract Compliance and Contract Administration. Quality evaluations comprise the various specification divisions, i.e., bridge, asphalt, grading, concrete paving, etc. The inspector responsible for the various elements is responsible for the documentation and completion for that portion of the evaluation. The resident engineer provides the oversight and approval of the final responses before it is sent to the contractor. The complexity of the task has required an effort to assure uniformity and standardization of evaluation activities.

overcome? [challe3b]

#3b - How were these challenges An effort to fully automate the processing of results is being initiated. We are dropping Lotus Notes as the data collection method for completing the questionnaire and summary results. We are reprogramming the system to collect and store performance evaluation information within Sitemanager as most of the data already reside there. We will be utilizing Visual Basic to gernerate and automatically complete many of the responses of the performance questionnaire report and evaluation. The change will make completion of the rating less cumbersome, improve the time required to complete the report and summary. Many response input errors will also be eliminated improving the effectiveness of the system. The new process should be in place by January 2006.

#4a - What resources does your prequalification program? [resour4a]

- 1. The responsibility for an objective and fair evaluation reaches through all positions within the Construction division through the Chief Engineer. Completion organization require to maintain a of the project evaluations starts with the project inspectors' grade levels. Processing the results is a central office function. Final approval of disciplinary notices is a Chief Engineer's responsibility.
  - 2. We use Lotus Notes for the database function and then use MSExcel for the spreadsheet calculations function. It is labor intensive but it works well. The change to Visual Basic, as noted in 3b., wiill dramatically improve the the system accuracy and time required for data entry and summary calculation. 3. It took a task force of 12 people meeting for two years on a monthly basis, sometimes for two consecutive days at a time, to come up with the pregual model. But they had to do everything from scratch.

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Missouri

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#5a - Specifically, how does your pregualification program assure

The contractor rating system was developed with participation of the contracting industry and FHWA. The questions of the evaluation are contract requirements. Routine inspection reports, order records, documentation records, correspondence and diary entries are utilized to support question impartial contractor rating? [fair5a] responses. The responses are objective and measurable. The contractor is not penalized without the necessary documentation.

#5b - What are the unsolved problems in this regard? [fair5b] There is concern some resident engineers, to avoid conflict with the contractor, fail to document poor performance, outside the mandatory inspection reports.

#6a1 What do you think is the first most important performance-rating factors ? [factor6a1]

**Quality of Work** 

Rank:

#6b1 - Method of measurement for the performance-rating factor [factor6b1]

- 1. Number of order records for specification violations
- 2. Number of failing inspection reports
- 3. Documentation records of correspondence related to Deficiencies

#6c1 - Explanatory comments [factor6c1]

Documentation relevant to quality issues

#6a2 - ... the second most important factor? [factor6a2]

**Prosecution and Progress of the Work** 

Rank:

2

#6b2 - Method of measurement for the performance-rating factor [factor6b2]

- 1. Project status at time of evaluation
- 2. Carryover projects evaluated on % Complete vs. % of time expired (either by working days or % of weighted calendar time allowed on the project)

#6c2 - Explanatory comments [factor6c2]

Additional guestions related to contractor supervision and subcontractor coordination are pertinent to this category



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#6a3 - ... the third most important factor? [factor6a3]

**Contract Compliance** 

Rank:

3

#6h3 -	Method	of measurement	[factor6h3]

- 1. Number of order records for specification violations
- 2. Acceptable contract schedule
- 3. Documentation records, correspondence re. contract requirement (outside of work quality issues) violations

### #6c3 - Explanatory comments [factor6c3]

Documentation relevant to contract compliance issues (ex. payroll compliance, DBE, erosion control, traffic control, job special provisions)

#6a4 - ...the fourth most important factor? [factor6a4]

**Contract Administration** 

Rank:

#6b4 - Method of measurement [factor6b4]

- 1. Acceptable contract schedule
- 2. Payroll submittals
- 3. Material certifications, warranties

#6c4 - Explanatory comments [factor6c4]

Documentation relevant to paperwork submittal issues

#6a5- What do you think is the fifth most important factor?

**Identification of Contractor Performance Levels** 

Rank:

5

#6b5 - Method of measurement [factor6b5]

Statistical Analysis and Review of Results

#6c5 - Explanatory comments [factor6c5]

Method of identifying levels of performance must be defined and objective, statistical analysis is industry accepted standard, System must allow for exceptions.



Missouri

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#7 - Do you have any additional comments? - [Comm7]

- -A review and appeal process must be included. Special conditions and situations occur that may warrant waivers. Example: Because the prime contractor is responsible for all activity on a project, our evaluation holds the prime responsible. A poorly performing subcontractor can result with the prime receiving an unacceptable rating. Allowances must be provided by the system rules for waivers.
- \*See http://www.fhwa.dot.gov/programadmin/contracts/cpq2002.htm for the Missouri DOT 2002 Contractor Performance Questionnaire. Also in state documents folder of this database.
- \*How do you evaluate your program?
- -State auditor has reviewed our system two different times.
- \*What legislation do you have that supports your program?
- -Title 7 DEPARTMENT OF TRANSPORTATION

Division 10 Missouri Highways and

Transportation Commission Chapter 10 Contractor Performance Rating to Determine Responsibility - see this states document folder

- \*What data collection procedures do you use to collect contractor performance information?
- -Project inspection staff collects data.
- \*Do evaluations rely on the opinion of one individual?
- -No
- \*What prevents your organization from implementing certain aspects of a quality-based/performance-based program?
- -We need more automation and this has not been given a priority.
- \*What is your program's underlying philosophy?
- -Improved quality, improved project delivery, improved adherence to contract requirements, improved efficiencies, improved documentation.
- \*What is the contractors' response to your program?
- -Initially, they did not receive the program well, but now they like it pretty well.
- \*What is your appeals process and where does it lie along the continuum of subjectivity/objectivity?
- -Resident engineer to district engineer to informal hearing with Contractor to Performance Review Committee
- \*Is contractor performance criterion used in the adjustment of ratings, in non-responsibility determination or for other purposes?
- -The construction and materials unit will act on each contractor or not, based on the overall and category ratings the contractor receives. These actions may range from recognizing very outstanding performance, to recommending that a contractor be declared nonresponsible. Probation or disqualification shall become effective upon the date stated in the written notification.
- \*Does your state have a process for rewarding above average performance?
- -There are recognition awards.



Nebraska

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Initial comments [havecomments1]

Have a program. NDOR has a financial prequalification system which we use a factor or a portion of it that is based on their quality and past performance.

#2a - Within your organization, what quality-basesd prequalification methods are considered "best practices" -Why? [best2a] We only have one system for prequalifying contractors.

#2b - What practices are least preferred - Why? [best2b]

99

#3a - What have been your organization's most significant challenges in implementing its quality-based prequalification program? [challe3a]

The system has been in place a long time. It does take time to keep it up.

#3b - How were these challenges 99 overcome? [challe3b]

#4a - What resources does your organization require to maintain a prequalification program? [resour4a]

- #4a What resources does your 1. We have a software program called "RUG".
- organization require to maintain a 2. There are two people who do prequalification tasks part time and then do other duties the other part of the time.
  - 3. Have had program for 30 plus years and development has taken place over this time and cannot be quantified at this time.
  - 4. We also use AASHTO Trns\*port software.
  - 5. The project managers have to take some of their time as well to fairly evaluate the contractors. There is also some time for our IT staff to help us out from time to time.



Nebraska

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#5a - Specifically, how does your prequalification program assure impartial contractor rating? [fair5a

We have a set procedure on how we go thru our prequalification process. Everyone is treated the same. Below is a rough idea of what we do.

- 1. First the contractor fills out a standardized form located on our website http://www.dor.state.ne.us/letting/prequal-pkg-publications.htm
- impartial contractor rating? [fair5a] They have to turn it into us 10 days ahead of any given letting. We only accept info on our forms. They have to tell us what classes of work they want to be pregualified for.
  - 2. We first grind thru their numbers and establish a base number of what we would consider their Base Factor (it's a dollar figure). We would then check their experience.
  - 3. Then we check RUG to see what their current evaluation factor is. This evaluation is done by our field personnel. They rate the contractor on quality of work35% prosecution of work 25% safety 20% general attitude 10% equipment 5% and personnel 5%. Then the system averages the ratings from all the jobs the contractor has had within the last 3 years. We then multiply the evaluation factor against the base dollar figure. Then they are sent a letter saying what dollar limit they have with us.

#5b - What are the unsolved problems in this regard? [fair5b]

I guess the only perceived problem is that we still occasionally have to award contracts to contractors that have had poor performance in the past. Our construction division does a fairly good job of trying to emphasize the importance of the ratings.

#6a1 What do you think is the first most important performance-rating factors ? [factor6a1]

Quality of Work - 35%

Rank:

### #6b1 - Method of measurement for the performance-rating factor [factor6b1]

- 1. Work was performed in compliance with the plans, specs., and special provisions.
- 2. Contractor used acceptable construction methods.
- 3. Material certifications and test reports were provided in a timely manner.
- 4. Deductions for substandard materials were not required.
- 5. Deductions for substandard smoothness were not required.
- 6. Temporary and permanent striping was applied correctly (location and appearance).
- 7. The finished project was aesthetically appealing.
- 8. Contractor willingly removed and replaced work determined not to be in compliance.

### #6c1 - Explanatory comments [factor6c1]

- 1. Each measure has maximum value. The maximum value is multiplied by a factor representing % of time the measure is displayed. These factors reflect areas of performance that the contractor has demonstrated while completing terms and conditions of the contract. See this states Documents Folder with this database for the actual Contractor Evaluation Checklist spreadsheet.
- 2. The grade for this element should cover only the overall quality of the contractor's work and should not take into account any reasons for the degree of quality.
- 3. How Often Displayed: Always Percent of Time: 100% Factor to Use: 1...How Often Displayed: Usually Percent of Time: 99-80% Factor to Use: 0.9...How Often Displayed: Generally Percent of Time: 79-60% Factor to Use: 0.7...How Often Displayed: Intermediate Percent of Time: 59-40% Factor to Use: 0.5...

How Often Displayed: Seldom - Percent of Time: 39-1% - Factor to Use: 0.2...

How Often Displayed: Never - Percent of Time: 0% - Factor to Use: 0

- 4. Consider the construction methods that the Contractor used to accomplish the scope of the work, materials, structural adequacy, appearance, workmanship and attention to detail.
- 5. The grade for this element should cover only the overall quality of the contractor's work and should not take into account any reasons for the degree of quality.



Nebraska

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Rank:

Rank:

2

3

#6a2 - ... the second most important factor? [factor6a2]

Prosecution of Work - 25%

### #6b2 - Method of measurement for the performance-rating factor [factor6b2]

- 1. Contractor submitted an acceptable critical path or bar graph schedule as required.
- 2. The critical path schedule was updated and submitted when necessary.
- 3. Contractor began work on or before the agreed Notice To Proceed date.
- 4. Material certifications and test reports were provided in a timely manner.
- 5. Contractor monitored and coordinated the schedules and work of sub-contractors.
- 6. Required reports, payrolls, and other documentation were provided on time.
- 7. Contractor scheduled or requested staking and inspection work well in advance.
- 8. Superintendent discussed planned activities and needs with NDOR on a timely basis.
- 9. Contractor completed work within the time allowance allowed (original or adjusted).
- 10. Subcontractor was available to do work when required.
- 11. Subcontractor accommodated and coordinated work with others.
- 12. Subcontractor's progress did not delay the work of others.

### #6c2 - Explanatory comments [factor6c2]

- 1. Measure against allowable contract days /required openings.
- 2. Approved extensions of time should be taken into account.
- 3. Consider the Contractor's scheduling of work, prompt start of activities, construction methods, maintenance and appearance of the work site and a timely completion of the work.
- 4. How Often Displayed: Always Percent of Time: 100% Factor to Use: 1...How Often Displayed: Usually Percent of Time: 99-80% Factor to Use: 0.9...How Often Displayed: Generally Percent of Time: 79-60% Factor to Use: 0.7...How Often Displayed: Intermediate Percent of Time: 59-40% Factor to Use: 0.5...How Often Displayed: Seldom Percent of Time: 39-1% Factor to Use: 0.2...How Often Displayed: Never Percent of Time: 0% Factor to Use: 0

### #6a3 - ... the third most important factor? [factor6a3]

Safety - 20%

#### #6b3 - Method of measurement [factor6b3]

#### Employee Safety:

- 1. Contractor demonstrated that an employee safety program was in place.
- 2. Work site was properly maintained. (Housekeeping, elimination of hazards, etc.)
- 3. Emergency phone numbers were posted.
- 4. Contractor provided proper sanitation facilities.
- 5. Workers wore required or appropriate safety apparel.
- 6. Contractor adjusted work schedule for unusual weather conditions.
- 7. Contractor conducted periodic, regularly scheduled safety meetings.
- 8. Culvert excavations were shored or laid back to the angle of repose.
- 9. Workers subject to falls were afforded and used safety harnesses, lifelines, safety rails, etc.
- 10.Use of heavy equipment considered overhead hazards, swing radius, back-up alarms, etc.

#### Public Safety:

- 1. Contractor made installation and maintenance of traffic control a top priority.
- 2. Contractor personnel took the initiative to correct traffic control deficiencies without prompting.
- 3. Traffic control hardware and equipment was furnished and maintained in excellent condition.
- 4. Contractor provided certified, properly equipped, and competent flagging personnel when required.
- 5. Employees demonstrated knowledge of and concern for traffic control requirements.
- 6. Contractor maintained a copy of the traffic control plan on the project.
- 7. Contractor was careful not to unnecessarily or carelessly encroach on traffic.
- 8. Traffic control/lane closures were promptly removed when no longer needed.
- 9. Contractor vehicles obeyed all traffic laws and/or complied with flagger controls.
- 10. Vehicles were parked safely, either behind traffic control or beyond the clear zone.
- 11.Materials and equipment were stored beyond the clear zone.
- 12. Contractor responded promptly when notified of traffic control deficiencies.

### #6c3 - Explanatory comments [factor6c3]

- 1. Should be half safety of the traveling public and half safety of employees of contractor and state. Employee Safety Consider if the Contractor was in compliance with O.S.H.A. requirements, did the employees demonstrate a conscientious awareness of safety and accident prevention through their knowledge, proper practices and use of proper equipment and apparel...Public Safety Consider if Traffic Control Devices were properly installed, maintained and removed in a timely and efficient manner. Were employees charged with flagging duties properly managed, located and in the sufficient number with proper equipment and attire.
- 2. Consider if the Contractor was in compliance with O.S.H.A. requirements, did the employees demonstrate a conscientious awareness of safety and accident prevention through their knowledge, proper practices and use of proper equipment and apparel.
- 3. How Often Displayed: Always Percent of Time: 100% Factor to Use: 1...How Often Displayed: Usually Percent of Time: 99-80% Factor to Use: 0.9...How Often Displayed: Generally Percent of Time: 79-60% Factor to Use: 0.7...How Often Displayed: Intermediate Percent of Time: 59-40% Factor to Use: 0.5...How Often Displayed: Seldom Percent of Time: 39-1% Factor to Use: 0.2...How Often Displayed: Never Percent of Time: 0% Factor to Use: 0
- 4. Take from project managers records.

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Rank:

5

Rank:

#6a4 - ...the fourth most important factor? [factor6a4]

General Attitude - 10%

### #6b4 - Method of measurement [factor6b4]

From project manager's records.

- 1. Contractor made installation and maintenance of traffic control a top priority.
- 2. Contractor made installation and maintenance of erosion control a top priority.
- 3. Work site was properly maintained. (Housekeeping, drainage, erosion control, etc.)
- 4. Contractor accommodated and cooperated with Department inspectors and engineers.
- 5. Contractor accommodated and cooperated with property owners along the project.
- 6. Contractor accommodated and cooperated with utilities affected by the project.
- 7. Contractor accommodated and cooperated with the public.
- 8. Contractor accommodated and cooperated with all subcontractors.
- 9. Lines of communication were kept open and solutions to problems were willingly discussed.
- 10. Claims and disputes were settled at the project level.
- 11. Contractor willingly and constructively participated in scheduled partnering meetings.
- 12. When required, contractor submitted payrolls promptly.
- 13. Contractor followed through on commitments and promises made.
- 14. Contractor willingly maintained attention to detail.
- 15. Staking and inspection services were requested and scheduled well in advance.
- 16. Contractor personnel took the initiative to correct traffic control deficiencies.
- 17. Contractor provided a proper and reasonable notice of delays or cancelled work.
- 18.Contractor willingly removed and replaced work determined not to be within compliance.
- 19. Contractor did not routinely seek additional compensation for ordinary work items.
- 20.Superintendent or delegated representative discussed activities and needs with NDOR as needed.

#6a5- What do you think is the fifth most important factor?

Equipment - 5%

#### #6b5 - Method of measurement [factor6b5]

### Quality of Equipment:

- 1. Equipment ran well and required little or no extraordinary maintenance.
- 2. Equipment repairs or downtime did not negatively impact progress on the project.
- 3. Equipment did not cause damage to or contamination of completed work.
- 4. Equipment furnished was the type necessary to complete the work. Adequacy of Equipment:
- 1. Production and hauling units were sufficient to assure steady placement on the road.
- 2. Equipment shortages did not negatively impact progress on the project.
- 3. Equipment for primary operations was available when needed.
- 4. Equipment for minor or finishing operations was available when needed.

### #6c4 - Explanatory comments [factor6c4]

- 1. Based on attitude of contractor toward other contractors, the agency, property owners.
- 2. Did the employees of the Contractor exhibit and maintain a positive and cooperative attitude with the N.D.O.R. staff, other Contractors, Utility workers, R.O.W. owners and the general traveling public throughout the duration of the project?
- 3. How Often Displayed: Always Percent of Time: 100% Factor to Use: 1...How Often Displayed: Usually Percent of Time: 99-80% Factor to Use: 0.9...How Often Displayed: Generally Percent of Time: 79-60% Factor to Use: 0.7...How Often Displayed: Intermediate Percent of Time: 59-40% Factor to Use: 0.5...How Often Displayed: Seldom Percent of Time: 39-1% Factor to Use: 0.2...How Often Displayed: Never Percent of Time: 0% Factor to Use: 0

#### #6c5 - Explanatory comments [factor6c5]

- 1. Consider if the equipment, regardless of age, was in a condition to perform the required operation in a safe, effective and dependable manner with minimal downtime.
- 2. Consider if the Contractor had a sufficient quantity of equipment and attachments to complete the Project in a timely and efficient manner.
- 3. How Often Displayed: Always Percent of Time: 100% Factor to Use: 1...How Often Displayed: Usually Percent of Time: 99-80% Factor to Use: 0.9...How Often Displayed: Generally Percent of Time: 79-60% Factor to Use: 0.7...How Often Displayed: Intermediate Percent of Time: 59-40% Factor to Use: 0.5...How Often Displayed: Seldom Percent of Time: 39-1% Factor to Use: 0.2...How Often Displayed: Never Percent of Time: 0% Factor to Use: 0

#7 - Do you have any additional comments? - [Comm7]

- -It's important for the project managers to fair and honest. Our system works well for basic highway construction. It doesn't seem to be flexible enough for ITS kind of projects like automated work zone systems, and bridge de-icing systems.
- -The Financial Capacity rating is computed in with the contractor/project evaluation ratings for a final rating.
- -Contractor confidentiality issues are an important issue in light of the Freedom Of Information Act.
- \*How do you evaluate your program?

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Nebraska

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- -We would look at the program if we felt that our needs were not being met by our existing system.
- \*What legislation do you have that supports your program?
- -Section 39, 134, R.R.S. 1943
- \*What data collection procedures to you use to collect contractor performance information?
- -The project manager can do middle and end project reviews and is done on all contractors and subs.
- \*What prevents your organization from implementing certain aspects of quality-based/performance-based program?
- -No need to change current program.
- \*What is the program's underlying philosophy?
- -Try to rate the capacity of contractors as best as possible .
- -Prequal weeds out contractors who do not have financial capacity. The back up is the bond.
- \*What about contractor response to all this?
- -It costs a lot to do the full financial review that is required for pregualification.



Nevada

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Initial comments [havecomments1] Have a program.

#2a - Within your organization, what quality-basesd prequalification methods are considered "best practices" -Why? [best2a]

- 1. The program is easy to administrate and it works.
- 2. The financial and project performance aspects are good predictors of the performance of those who are gualified to bid.

#2b - What practices are least preferred - Why? [best2b]

- 1. We need stronger mechanisms that would allow us to prevent from pregualification, revoke pregualification, or suspend contractors that have serious performance problems.
- 2. A bonded company may look good on paper, but the bonding may not be an accurate representation of financial capability. As a result, we investigate a contractor's relationship to its parent company (if any) and make sure that we enter into contract with the company actually doing the work.

#3a - What have been your organization's most significant challenges in implementing its quality-based prequalification program? [challe3a]

Precluding bidding for poor contactors

#3b - How were these challenges Still working on. overcome? [challe3b]

#4a - What resources does your We have 300 contractors. organization require to maintain a 1. Need a contract clerk for 1/2 FTE pregualification program? [resour4a]

- 2. The other FTEs are hard to estimate because we have integrated the pregualification tasks into our everyday workday tasks. It doesn't take a lot of time.
- 3. Use WordPerfect for database.
- 4. Program has been around since the mid 1960s and can't give a cost estimate on model development.



Nevada

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#5a - Specifically, how does your prequalification program assure impartial contractor rating? [fair5a]

- #5a Specifically, how does your 1. Prepare ratings independently of each other. None of the raters will be at liberty to review ratings done by other raters on the same contractor.
  - 2. The project evaluation is done by the project and resident engineer, and looked over by the assistant chief construction engineer and by the chief engineer.

#5b - What are the unsolved problems in this regard? [fair5b]

99

#6a1 Wh	at do you	u think is the fir	st most important	performance-rating	factors?	factor6a1]	
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**GROUP 1- COOPERATION** 

Rank:	

#6b1	-	Method of	measurement to	r the	perform	ance-ra	iting	tactor	[factor6b1	ı

To what degree was the contractor cooperative with:

- 1. The Department? \_\_\_\_%
- 2. County and Municipal Officials? \_\_\_\_%
- 3. Adjacent property owners, considerate of their rights (ingress & egress, noise & dust)?
- 4. Providing protection for the public? \_\_\_\_%
- 5. Equal employment opportunity requirement? \_\_\_\_%
- 6. Safety requirement? \_\_\_\_%
- 7. Others? \_\_\_%

GROUP 1 RATING (Maximum 100 %) \_\_\_\_%

### #6c1 - Explanatory comments [factor6c1]

Note: Each question has a maximum value of 100 percent. Group 1 Rating is the average of total values.

### #6a2 - ... the second most important factor? [factor6a2]

**GROUP 2 - FURNISHING AND ORGANIZING THE JOB** 

#### Rank:

#### #6b2 - Method of measurement for the performance-rating factor [factor6b2]

To what degree was the contractor:

- 8. Properly supervising the job?\_\_%
- 9. Properly manning the job? %
- 10. Properly equipping the job?\_\_%
- 11. Maintaining consistent progress on the job?\_\_%

Organizing the job \_\_%

12. Others?\_\_%

(a)\_\_%

GROUP 2 RATING (Maximum 100 %)\_\_%

#### #6c2 - Explanatory comments [factor6c2]

Note: Each question has a maximum value of 100 percent. Group 2 Rating is the average of total values.



#6a3 - ... the third most important factor? [factor6a3]

# New Mexico Construction Contractor Prequalification Practices Survey - Report: States that have or are developing prequalification programs

**GROUP 3 - QUALITY OF WORK** 

Nevada

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Rank:	1
#6c3 - Explanatory comments [factor6c3]	
Note: Each question has a maximum value of 100 percent. Group 3 Rating is the average of tot values.	al
Rank:	99
#6c4 - Explanatory comments [factor6c4] 99	
Rank: 9	9
#6c5 - Explanatory comments [factor6c5] 99	
	#6c3 - Explanatory comments [factor6c3]  Note: Each question has a maximum value of 100 percent. Group 3 Rating is the average of tot values.  Rank: 9  #6c4 - Explanatory comments [factor6c4]  99  Rank: 9  #6c5 - Explanatory comments [factor6c5]



Nevada

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#7 - Do you have any additional comments? - [Comm7]

- \*How do you evaluate your program?
- -We check out complaints and better ideas as soon as they come up.
- -Ideas and issues are shared at the annual Resident Engineers week long meeting.
- -Our program has been in effect since the late 60's, early 70's, and has been pretty successful until recently. Our projects have gotten much larger, contractors are doing more creative bidding and the jobs are getting done but with more claims. We are looking at better ways of doing the process and will be sending out our own questionnaire soon.
- \*What legislation do you have that supports your program?
- -Nevada Revised Statutes 408.333
- \*What data collection procedures to you use to collect contractor performance information?
- -The resident engineer works with the contractor on a day to day basis who then completes the Resident Engineer Confidential Past Performance Report. Performance evaluations are submitted through our construction division to my office in which we use the information to affect wither an increase or decrease in the contractor's factor rating. This sum is used to increase the base pregualification amount given to the contractor for bidding purposes.
- \*What prevents your organization from implementing certain aspects of quality-based/performance-based program?
- -We would like to design and implement some type of performance based suspension and exclusion provision that could be used for poorly performing contractors. That would take a change of law and we are just now getting organized to try to do this. We are partnering with our AGC to do this.
- \*What about contractor response to all this?
- -Good. We have quarterly meetings with our Associated General Contractors.
- \*What is your program's underlying philosophy?

-99

- \*What is your appeals process and where does it lie along the continuum of subjectivity/objectivity?
- -In regard to prequalification status, contractors can appeal to the director only. In regard to project evaluation, contractors can appeal to the construction office.
- \*Is contractor performance criterion used in the adjustment of ratings, in non-responsibility determination or for other purposes?
- -We can adjust the rating but have no way of determining non-responsibility at this time (though we are working on it).
- \*Does your state have a process for rewarding above average performance?
- -Bid rating goes up as a natural course of doing jobs well.



**New Jersey** 

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Initial comments
[havecomments1]

Have a program. Survey administered by phone. See http://www.fhwa.dot.gov/programadmin/contracts/njproc.htm for more detail on this state's program.

#2a - Within your organization, what quality-basesd prequalification methods are considered "best practices" -Why? [best2a] Our screening process is a good safety check for limiting bidding capacity based on performance.

#2b - What practices are least preferred - Why? [best2b]

The system can be bureaucratic at times.

#3a - What have been your organization's most significant challenges in implementing its quality-based prequalification program? [challe3a]

None

#3b - How were these challenges 88 overcome? [challe3b]

#4a - What resources does your organization require to maintain a prequalification program? [resour4a]

#4a - What resources does your Two auditors, two engineers and one manager - but we do the bid process also, not just prequal.



**New Jersey** 

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#5a - Specifically, how does your prequalification program assure impartial contractor rating? [fair5a] 1. Appeals process 2. Code of ethics

#5b - What are the unsolved problems in this regard? [fair5b]

None.

#6a1 What do you think is the first most important performance-rating factors ? [factor6a1]

Quality/Contract Compliance

Rank:

#6b1 - Method of measurement for the performance-rating factor [factor6b1]

5.0=OUTSTANDING performance 4.0=ABOVE SATISFACTORY performance 3.0=SATISFACTORY performance 2.0=BELOW SATISFACTORY performance 1.0=UNACCEPTABLE performance #6c1 - Explanatory comments [factor6c1]

99

#6a2 - ... the second most important factor? [factor6a2]

**Progress Schedule** 

Rank:

#6b2 - Method of measurement for the performance-rating factor [factor6b2]

5.0=OUTSTANDING performance 4.0=ABOVE SATISFACTORY performance 3.0=SATISFACTORY performance 2.0=BELOW SATISFACTORY performance 1.0=UNACCEPTABLE performance #6c2 - Explanatory comments [factor6c2]

99

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# New Mexico Construction Contractor Prequalification Practices Survey - Report: States that have or are developing prequalification programs

**New Jersey** 

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#6a3 - ... the third most important factor? [factor6a3] Safety/Traffic Control/Environmental Rank: 2 #6b3 - Method of measurement [factor6b3] #6c3 - Explanatory comments [factor6c3] 5.0=OUTSTANDING performance 99 4.0=ABOVE SATISFACTORY performance 3.0=SATISFACTORY performance 2.0=BELOW SATISFACTORY performance 1.0=UNACCEPTABLE performance #6a4 - ...the fourth most important factor? [factor6a4] **Contractor Project Management** Rank: #6b4 - Method of measurement [factor6b4] #6c4 - Explanatory comments [factor6c4] 5.0=OUTSTANDING performance 99 4.0=ABOVE SATISFACTORY performance 3.0=SATISFACTORY performance 2.0=BELOW SATISFACTORY performance 1.0=UNACCEPTABLE performance #6a5- What do you think is the fifth most important factor? 99 Rank: 99 #6b5 - Method of measurement [factor6b5] #6c5 - Explanatory comments [factor6c5] 99 99



**New Jersey** 

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#7 - Do you have any additional comments? - [Comm7]

See http://www.fhwa.dot.gov/programadmin/contracts/njproc.htm for New Jersey DOT Contractor Performance Rating System Procedure - Pilot Program. Also available in the state documents folder of this database.

http://www.state.nj.us/transportation/business/procurement/ConstrServ/prequalrequire.shtm

- \*How do you evaluate your program?
- -We survey contractors for their input.
- \*What legislation do you have that supports your program?
- -State statute and administrative code

\*What data collection procedures do you use to collect contractor performance information? Do evaluations rely on the opinion of one individual?
-RE then to regional engineer - RE has to do an exit interview with contractor. (From FHWA website: To maintain objectivity, the project specific Contractor Performance Check lists will be completed by the Resident Engineer and inspection personnel concurrent with the Contractor's execution of the work. Checklists will be completed by inspection personnel, as required, for a given work item. Any work item in non-compliance that will negatively impact project cost, schedule or duration will be photographed by inspection personnel and reported to the Resident Engineer. Upon submission of a checklist from inspection personnel indicating non-compliance, the Resident Engineer will immediately submit a Notice of Non-Compliance Form and checklist with the noted non-compliance item(s) to the Contractor. A Contractor receiving a Notice of Non-conformance Form may be required to submit a Corrective Action Plan, if noted on the Notice of Non-Compliance Form.)

- \*What prevents your organization from implementing certain aspects of a quality-based/performance-based program?
- -Want to have application process on line are working on it.
- \*What is your program's underlying philosophy?
- -We are strict in our requirements. Our system is geared basically to those in NJ, NY and Penn.
- \*What is the contractors' response to your program?
- -Some are intimidated, most like it.
- \*What is your appeals process and where does it lie along the continuum of subjectivity/objectivity?
- -Meets with bureau, then can go to prequal committee that's it.
- \*Is contractor performance criterion used in the adjustment of ratings, in non-responsibility determination or for other purposes How is it used?
- -Bid capacity, suspension and unqualify.
- \*Does your state have a process for rewarding above average performance?
- -Incentive payment according federal guidelines.
- \*What is your main lesson learned?
- -Be impartial and safeguard the interests of the public.



**North Carolina** 

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Initial comments [havecomments1] Survey administered by phone.

We are in the process of developing our program. We are currently collecting information on work types, equipment lists, resumes, financial statements, and bonding letters from insurance agents.

#2a - Within your organization, what quality-basesd prequalification methods are considered "best practices" -Why? [best2a]

At this time, our method is a way of screening out someone who is green behind the ears in regards to serious projects. New companies can build their reputation by taking on smaller projects that are geared to small business enterprise.

#2b - What practices are least preferred - Why? [best2b]

- 1. Not enough FTEs. We are having a budget crunch.
- 2. Currently, our project evaluations do not feed back into our pregualification screening not enough staff and no established protocol for that yet.
- 3. Non-centralized prequalification. Now contractors need to be prequalified in 15 different department wide areas. Need to streamline and have one unit as the repository for all pregualification information so that state units can communicate with each other. Item #3 applies only to Private Engineering Firms, not contractors involved with highway construction.

#3a - What have been your organization's most significant challenges in implementing its quality-based prequalification program? [challe3a]

- 1. Not enough FTEs. We are having a budget crunch.
- 2. Would like to be able to do more work site inspections. This would help us implement performance based evaluations. Currently, area engineers are doing most of the project policing. Resident engineers and their staff are doing inspections on the larger projects.
- 3. Would like to see prime contractors utilizing a certain percentage of Disadvantaged Business Enterprise services. Need legislation for that.
- 4. We are experiencing more work site fatalities. Also, we need to be able to do site safety audits.
- 5. We are in the process of developing a project and contractor rating system. We want to be able to do performance based evaluation. One of our discussions is about how a contractor handles issues of erosion control - this should be part of the project evaluation point system.
- 6. Non-centralized pregualification. Now contractors need to be pregualified in 15 different department wide areas. Need to streamline and have one unit as the repository for all pregualification information so that state units can communicate with each other - applies only to Private Engineering Firms, not contractors involved with highway construction.

overcome? [challe3b]

#3b - How were these challenges At this point, in regard to erosion control, we can cite for immediate corrective action. Notice of violations can come from the Department of Environment & Natural Resources.

#4a - What resources does your 1. Proper protocols organization require to maintain a 2. Enough FTEs prequalification program? [resour4a]

- 3. Centralized processing unit



**North Carolina** 

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#5a - Specifically, how does your prequalification program assure impartial contractor rating? [fair5a]

#5b - What are the unsolved 99 problems in this regard? [fair5b]

#6a1 What do you think is the first most important performance-rating factors? [factor6a1] Time of Completion

Rank:

#6b1 - Method of measurement for the performance-rating factor [factor6b1] #6c1 - Explanatory comments [factor6c1] 99

#6a2 - ... the second most important factor? [factor6a2] Quality of End Product

#6b2 - Method of measurement for the performance-rating factor [factor6b2] Rideability

#6c2 - Explanatory comments [factor6c2] 99

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# New Mexico Construction Contractor Prequalification Practices Survey - Report: States that have or are developing prequalification programs

**North Carolina** 

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#6a3 - ... the third most important factor? [factor6a3] Warranty/Guarantee Of Work Rank: 3 #6b3 - Method of measurement [factor6b3] #6c3 - Explanatory comments [factor6c3] 99 Honoring warranty #6a4 - ...the fourth most important factor? [factor6a4] **Environmental** Rank: #6b4 - Method of measurement [factor6b4] #6c4 - Explanatory comments [factor6c4] 1. Erosion control 99 2. Water quality #6a5- What do you think is the fifth most important factor? 99 Rank: 99 #6b5 - Method of measurement [factor6b5] #6c5 - Explanatory comments [factor6c5] 99 99



**North Carolina** 

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#7 - Do you have any additional comments? - [Comm7]

- \*How do you evaluate your program?
- -Practical everyday self-review
- \*What legislation do you have that supports your program?
- -North Carolina Administrative Code. The Department can help author the program policies and procedures which often refer to specifications and project special provisions. It is in project special provisions that real time changes can be made.
- -The Department of Transportation of the State of North Carolina, in accordance with General Statute 136-18(1), has been vested with the power of general supervision over all matters relating to the construction of State highways and the letting of contracts therefore. Pursuant to General Statute 136-28.1, it is the decision of the Department of Transportation that prospective Bidders shall pregualify with the Department. (See state's documents folder)
- \*What data collection procedures do you use to collect contractor performance information?
- -Assistants collect progress of work information which is then reviewed by resident engineers
- \*Do evaluations rely on the opinion of one individual?
- -No
- \*What prevents your organization from implementing certain aspects of a quality-based/performance-based program?
- -Money
- \*What is the contractors' response to your program?
- -They've been fairly comfortable with the process. They don't like to turn in their resumes.
- \*What is your appeals process and where does it lie along the continuum of subjectivity/objectivity?
- -There is a step wise complaint process. They can be removed from the bidder's list, liquidated damages can be withheld from amounts due.
- \*Is contractor performance criterion used in the adjustment of ratings, in non-responsibility determination or for other purposes How is it used?
- \*Does your state have a process for rewarding above average performance? -99



Ohio

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Initial comments [havecomments1]

Have a program.

#2a - Within your organization, what quality-basesd prequalification methods are considered "best practices" -Why? [best2a] We grade each contractor on every project annually (see attached C-95 policy). This is our only method.

#2b - What practices are least preferred - Why? [best2b]

99

#3a - What have been your organization's most significant challenges in implementing its quality-based prequalification program? [challe3a]

Completing the C-95 (Evaluation of Contractor Performance) in a timely manner.

#3b - How were these challenges Each district is graded quarterly through our Operational Performance index (OPI). overcome? [challe3b]

#4a - What resources does your organization require to maintain a prequalification program? [resour4a]

#4a - What resources does your Our field project engineers & inspectors complete the C-95.



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Rank:

#5a - Specifically, how does your prequalification program assure impartial contractor rating? [fair5a]

Once every 2 years the district is subject to a Quality Assurance Review (QAR) to assure that we are impartially grading our contractors.

#5b - What are the unsolved problems in this regard? [fair5b]

There were no major problems at the time of the QAR.

#### #6a1 What do you think is the first most important performance-rating factors ? [factor6a1]

### **Organization and Management**

### #6b1 - Method of measurement for the performance-rating factor [factor6b1]

- 1) To what degree are management personnel available with full authority to execute the directions of the engineer?
- 2) To what degree are management personnel competent and effective in scheduling the work and organizing construction operations, including being punctual in starting and completing the work on the project and meeting critical intermediate phases in accordance with the approved progress schedule?
- 3) To what degree did management personnel have the knowledge necessary regarding specifications, plans and the special provisions?
- 4) How adequately was the project staffed with competent workers who were monitored?
- 5) To what degree did the contractor furnish the required documentation and reports in a timely manner (i.e. Certification of materials, delivery tickets, invoices, progress schedule, shop drawings, material
- sampling, early notice of time extension, potential claims, etc.)?
- 6) Did the contractor inform project personnel in advance of scheduled day to day items of work?
- 7) To what degree was the chain of authority in the department respected by the contractor (positive attitude toward project personnel, etc.)?
- 8) Did the contractor comply with the direction of project personnel without delay?
- 9) To what degree did the contractor cooperate with other contractors performing work on adjacent projects?
- 10) Did the contractor comply with all wage rates and labor regulations, and submit accurate certified payrolls and promptly pay all subcontractors and material suppliers?
- 11) Did the contractor comply with all EEO laws and regulations, and appropriate D.B.E. regulations?

### #6c1 - Explanatory comments [factor6c1]

### Rating Question No. 1

- 10 Management personnel are available and execute the directions of the engineer.
- 08 Management personnel are routinely available and comply with the directions of the engineer.
- 05 Management personnel are available part of the time and sometimes offer resistance to the directions of the engineer prior to compliance.
- 01 Management personnel are routinely not available and disagree or disregard the directions of the engineer most of the time.

### Rating Question No. 2

- 10 Contractor is competent in scheduling work and is very punctual in starting project and meeting all contract dates.
- 08 Contractor effectively schedules work operations carefully and makes a good effort to meet all contract dates.
- 05 Contractor's work schedule is usually available and is generally followed to ensure contract dates are attained.
- 01 Contractor's day to day operations do not follow work schedule and contract dates are not met.

### Rating Question No. 3

- 10 The contractor has management personnel available who are thoroughly experienced and knowledgeable in the type of work being performed and have a thorough understanding of the specifications, plans and special contract provisions with no instruction needed from the project engineer.
- 08 The contractor has management personnel available who are experienced in the type of work being performed and are familiar with the specifications, plans and contract special provisions with minimal

instruction from the project engineer.

- 05 The contractor has management personnel available who are familiar with some of the types of work being performed and has some knowledge of the specifications, plans and contract special provisions and requires instruction from the project engineer.
- 01 The contractor has management personnel available who have limited knowledge of the type of work being performed and require constant instructions from the project engineer in interpreting the

specifications, plans and contract special provisions.

#### Rating Question No. 4

- 10 Contractor always staffs the project with an adequate number of competent workers to perform the work and continuously monitors their performance.
- 08 Contractor routinely staffs the project with enough competent workers to perform the work and monitors their performance.

Survey administered and database compiled by Jon Woodland, Research Bureau, New Mexico Department of Transportation; (505) 841-9156. See database for supporting documentation.



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05 Contractor staffs the project with inadequate number of competent workers to perform the work and occasionally monitors their performance.

01 Contractor does not staff the project with enough competent workers to perform the work and does not monitor their performance.

### Rating Question No. 5

10 Contractor furnished timely submittals of all required paperwork, documentation, material reports, time extension notices, claim information, etc. as required with minimal request.

08 Contractor routinely furnished timely submittals of all required paperwork, documentation, material reports, time extension notices, claim information, etc. as required with minimal request.

05 Contractor has to be asked numerous times to furnish required paperwork, documentation, material reports, time extension notices, claim information, etc.

01 Contractor does not furnish required paperwork, documentation, material reports, time extension notices, claim information, etc. in a timely manner and must be asked in writing.

#### Rating Question No. 6

- 10 The contractor always informed the project engineer of his schedule of operations.
- 08 The contractor routinely informed the project engineer of his work schedule.
- 05 The contractor informed the project engineer of his work schedule after repeated notifications.
- 01 The contractor informed the project engineer of his work schedule only after written notification.

### Rating Question No. 7

- 10 The contractor followed chain of authority by initiating all requests and communications through the project engineer.
- 08 The contractor routinely followed chain of authority by initiating requests and communications through the project engineer.
- 05 The contractor occasionally followed the chain of authority by initiating requests and communications through the project engineer.
- 01 The contractor did not follow the chain of authority by initiating requests and communications through the PE/PS.

#### Rating Question No. 8

- 10 The contractor always complied with the direction from the project engineer.
- 08 The contractor routinely complied with the direction from the project engineer.
- 05 The contractor complied with the direction after repeated notification from the project engineer.
- 01 The contractor complied only upon written direction from the project engineer.

#### Rating Question No. 9

- 10 The contractor conducted his work so as not to interfere with or hinder the work of other contractors on adjacent projects.
- 08 The contractor routinely conducted his work so as not to interfere with or hinder the work of other contractors on adjacent projects only after notification from the project engineer.
- 05 The contractor conducted his work so as not to interfere with or hinder the work of other contractors only after repeated notification from the project engineer.
- 01 The contractor conducted his work so as not to interfere or hinder the work of other contractors only upon written notice from the project engineer.

### Rating Question No. 10

- 10 This contractor has no documented violations of the ODOT contract specifications relating to Labor Standards and Wage-Rate Compliance and prompt payment.
- 08 The contractor had documented violations of the ODOT contract specifications relating to Labor Standards/Wage-Rate Compliance and prompt payment. However, these violations were



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immediately corrected upon notification by the Department.

05 The contractor had documented violations of the ODOT contract specifications relating to Labor Standards and Wage-Rate Compliance and prompt payment. These violations were corrected only after repeated notification by the Department.

01 This contractor has numerous documented violations of the ODOT contract specifications relating to

Labor Standards/Wage-Rate Compliance and prompt payment which were not corrected.

### Rating Question No. 11

10 Contractor always complied with all EEO laws and regulations, and appropriate D.B.E. regulations.

08 Contractor complied with all EEO laws and regulations, and appropriate D.B.E. regulations after notification by the Department.

05 Contractor complied with all EEO laws and regulations, and appropriate D.B.E. regulations after repeated notification by the Department.

01 Contractor did not comply with all EEO laws and regulations and appropriate D.B.E. regulations.

#6a2 - ... the second most important factor? [factor6a2]

Equipment

Rank: 1

### #6b2 - Method of measurement for the performance-rating factor [factor6b2]

- 12) Did the contractor provide the appropriate number and type of equipment necessary for performance of the work?
- 13) Did the contractor provide preventative maintenance and repairs of equipment to ensure against breakdowns which would impede the progress of the project?

#### #6c2 - Explanatory comments [factor6c2]

### Rating Question No. 12

10 Contractor always provided the appropriate numbers and types of equipment to do the work.

08 Contractor did not always provide the appropriate numbers and types of equipment to do the work. However, this did not substantially effect the progress of the project.

05 Contractor did not always provide the appropriate numbers and types of equipment to do the work which effected the progress of the project.

01 Contractor did not provide the appropriate numbers and types of equipment to do the work.

#### Rating Question No. 13

- 10 Equipment breakdowns that may have occurred did not impede the progress of the project.
- 08 Equipment breakdowns that occurred caused minimal delay to the project.
- 05 Equipment breakdowns that occurred impeded the progress of the project.
- 01 Equipment breakdowns severely impeded the progress of the project.



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Rank:

#6a3 - ... the third most important factor? [factor6a3]

**Work Performance** 

### #6b3 - Method of measurement [factor6b3]

- 14) To what degree was the work site maintained in a safe and clean condition?
- 15) To what degree did the contractor maintain adequate signs, lights, barricades, and properly trained flagpersons in accordance with Ohio Manual of Uniform Traffic Control Devices, traffic control plan

and approved revisions?

- 16) To what degree did the contractor meet contract requirements including specifications, supplemental specifications, special provisions, plans, supplementary documents and erosion control with minimal instruction from the department
- 17) To what degree did the contractor provide attention to the quality of work performed eliminating the need to remedy or remove defective work?
- 18) To what degree did the contractor properly notify and coordinate work with utility companies in protection of existing utilities?
- 19) To what degree did the contractor minimize urgencies of construction that required ODOT to compromise the quality of work or abandon good construction practices in order to complete the project. (ODOT forced to allow poor weather paving, incorporate non-specified material, etc.)?
- 20) To what degree were final clean up and punch list items complete?

### #6c3 - Explanatory comments [factor6c3]

#### Rating Question No. 14

- 10 Contractor always maintained the work site in a safe and clean condition.
- 08 Contractor often maintained the work site in a safe and clean condition and immediately corrected deficiencies upon notification from the project engineer.
- 05 Contractor maintained the work site in a safe and clean condition after repeated notification from the project engineer.
- 01 Contractor did not maintain the work site in a safe and clean condition.

#### Rating Question No. 15

- 10 Contractor assigned an individual to continually monitor and maintain all traffic control requirements. Any job site conditions which effected the traveling public were corrected immediately (even after hours) with no direction from the project engineer.
- 08 Contractor assigned an individual to continually monitor and maintain all traffic control requirements. Most deficiencies were immediately corrected without notification by the project engineer.
- 05 It was necessary to notify the contractor of traffic control deficiencies. The deficiencies were corrected upon notification from the project engineer.
- 01 Contractor required continual notification of job site deficiencies in traffic control requirements. Deficiencies were corrected only after written notification by the project engineer.

### Rating Question No. 16

- 10 Contractor always complied with the contract requirements.
- 08 Contractor routinely complied with the contract requirements. Any non-compliances were immediately corrected upon notification from the project engineer.
- 05 Non-compliances were corrected only upon repeated notification from the project engineer.
- 01 Contractor complied with contract requirements only upon written order of suspension of work from the project engineer.

### Rating Question No. 17

- 10 The contractor did not have to remedy or remove any defective work.
- 08 It was necessary for the contractor to make minor repairs and corrections to the work.
- 05 It was necessary for the contractor to make numerous repairs to the work.
- 01 It was necessary for the contractor to remove or correct a substantial amount of work due to poor workmanship.

#### Rating Question No. 18

- 10 The contractor provided advance notifications to all potentially effected utilities prior to commencing work and did whatever was necessary to cooperate with the utility and protect their existing facility.
- 08 The contractor routinely provided proper notification and cooperated with each effected utility company. Documented problems existed but were immediately corrected by the contractor. 05 The contractor provided proper notification to all effected utilities after direction from the project engineer. Documented problems existed where the contractor did not cooperate fully with the utility company in protecting the existing facility.
- 01 The contractor did not provide the proper notification to the effected utilities and/or after notification, did not make an effort to cooperate with the utility company nor protect the existing facility.



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### Rating Question No. 19

- 10 Contractor scheduled and conducted operations to avoid urgencies.
- 08 Contractor attempted to schedule and conduct operations to avoid urgencies. Any problems created were immediately corrected.
- 05 Contractor's scheduling and conducting of operations created urgencies which were corrected only upon direction of the project engineer.
- 01 Contractor did not schedule and conduct operations to avoid urgencies.

### Rating Question No. 20

- 10 The contractor performed final clean-up on or before the completion date and received no punch list.
- 08 The contractor performed final clean-up on his own and once given the final punch list, completed the work on or before the specified date.
- 05 The contractor completed the final clean-up and the punch list only after repeated notification from the project engineer.
- 01 The contractor did not complete the final clean-up and the final punch list in a timely manner.

#### #6a4 - ...the fourth most important factor? [factor6a4]

#### **Subcontractor Management**

Rank:

.

#### #6b4 - Method of measurement [factor6b4]

- 21) To what degree did the contractor coordinate work with subcontractors work?
- 22) To what degree did the contractor exercise authority over subcontractors and provide notice of subcontractor work schedule?
- 23) To what degree did the contractor monitor subcontractor activities to ensure approved materials were supplied and incorporated into the project?
- 24) To what degree did the contractor ensure that subcontractors submitted all paperwork required for approvals, materials, and payrolls?

### #6c4 - Explanatory comments [factor6c4]

#### Rating Question No. 21

- 10 The contractor coordinated work Operations with its subcontractors.
- 08 The contractor routinely coordinated all work operations with its subcontractors. When coordination did not occur, this did not substantially effect the progress of the project.
- 05 The contractor coordinated work operations with its subcontractors (sub-subcontractors) only upon notification from the project engineer.
- 01 The contractor did not coordinate work operations with its subcontractors.
- Rating Question No. 22
- 10 Contractor exercised authority over subcontractors and provided notice of subcontractor schedule at all times.
- 08 Contractor routinely exercised authority over subcontractors and provided notice of subcontractor schedule most of the time.
- 05 Contractor exercised authority over subcontractors and provided notice of subcontractor schedule only upon notification from the project engineer.
- 01 Contractor did not exercise any authority over subcontractors and/or did not provide notice of subcontractors' work schedule.

#### Rating Question No. 23

- 10 Contractor monitored subcontractors' activities to ensure approved materials were supplied and incorporated into the project at all times.
- 08 Contractor routinely monitored subcontractors' activities to ensure approved materials were supplied and incorporated into the project. Any problems were corrected immediately upon notification by the project engineer.
- 05 Contractor monitored subcontractors' activities to ensure approved materials were supplied and incorporated into the project only upon repeated notification from the project engineer.
- 01 Contractor did not monitor subcontractors' activities to ensure approved materials were supplied and incorporated into the project at all times.

### Rating Question No. 24

10 Contractor ensured subcontractors submitted all paperwork required for approvals, materials, and payrolls in a timely manner.



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08 Contractor routinely ensured subcontractors submitted all paperwork required for approvals, materials, and payrolls in a timely manner with minimal notification from the project.

05 Contractor ensured subcontractors submitted all paperwork required for approvals, materials,

and payrolls in a timely manner with repeated notification from the project.

01 Contractor did not ensure subcontractors submitted all paperwork required for approvals, materials, and payrolls in a timely manner. Information had to be requested in writing.

#6a5- What do you think is the fifth most important factor?

99

Rank: 99

#6b5 - Method of measurement [factor6b5]

99

#6c5 - Explanatory comments [factor6c5]

99

#7 - Do you have any additional comments? - [Comm7]

-For computational purposes, each performance rating factor is of equal value. Depending on the job and other circumstances, one factor, or a measure within one factor, may be more important than another.

\*How do you evaluate your program?

-A quality assurance review of each district is performed on such things such as how equally the C-95 is scored for each contractor across different districts. We are currently conducting a review of C-95 measurement issues.

\*What legislation do you have that supports your program?

-Ohio Administrative Code 5501:2-3-01 to 5501:2-3-10

\*What data collection procedures do you use to collect contractor performance information?

-Project engineer or project inspector evaluates project, then it is reviewed and signed by the District construction engineer, then the evaluation is sent to the contractor. In one sense, the evaluations rely on the opinion of one individual but there must be approval for this opinion.

\*What appeals process do you have?

-The contractor can appeal to the central office Prequalification Review Board which has three ODOT managers. This is the terminal administrative appeals point.

(See OhioC-95 Guidelines.pdf in the documents folder)

\*Does your state have a process for rewarding above average performance?

-A contractor's bidding capacity may increase. The bidding capacity is calculated once a year. We require bid and performance bonds with pay items for both



Oregon

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Initial comments
[havecomments1]

In the process of developing a program. Administered by phone. Oregon's prequal program does not use performance evaluations to determine prequalification status. However, ODOT uses "the results of those evaluations to require other corrective action of affected contractors or to revoke bidding privileges". In addition, the state is listed on the FHWA website: http://www.fhwa.dot.gov/programadmin/contracts/orproc.htm for its contractor performance evaluation process. For this reason, ODOT was given a "developing program" status for this survey.

#2a - Within your organization, what quality-basesd prequalification methods are considered "best practices" -Why? [best2a]

- 1. Special prequalifications on projects that require specialized skills.
- 2. Asking the right questions in order to get the right kind of responses in order to be able to correctly evaluate a potential contractor
- 3. We don't want any one to fail what is the cost to the public in a failed project?

#2b - What practices are least preferred - Why? [best2b]

Enforcement practices that are not supported by the political will of the department. May need to call in a bond and the department needs to be able to see the whole process to the end.

#3a - What have been your organization's most significant challenges in implementing its quality-based prequalification program? [challe3a]

- 1. Challenges with having the authority to take corrective action on poor contractor performance.
- 2. Evaluation procedures may interfere with performing accurate evaluations and better ones may need to be developed.

#3b - How were these challenges We are working on. overcome? [challe3b]

#4a - What resources does your organization require to maintain a prequalification program? [resour4a]

#4a - What resources does your They keep everything in MSAccess databases. They are in the incremental development of a program and have no model development costs yet.



Oregon

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#5a - Specifically, how does your prequalification program assure impartial contractor rating? [fair5a]

#5b - What are the unsolved problems in this regard? [fair5b]

99

#6a1 What do you think is the first most important performance-rating factors ? [factor6a1]

**Quality of Materials and Workmanship** 

Rank:

### #6b1 - Method of measurement for the performance-rating factor [factor6b1]

- 1. Was the work completed with the quality of materials, workmanship or other quality specifications required?
- 2. Was the work completed on the project without the assessment of negative price adjustments for materials, or work that did not comply with contract quality requirements?
- 3. Did ODOT allow non-specification work (quality of workmanship) to remain, even thought no price adjustment was assessed?
- 4. Did the contractor provide proper certification documents?
- 5. Was the project cleaned up and the final punch list completed in a timely manner?

### #6c1 - Explanatory comments [factor6c1]

- 1. If not, the problem was serious enough for the PM to send a notice to the contractor to suspend work: 0 Notice=3 points, 1-2 Notices=2 points, 3+ Notices=1 point
- 2. If not, calculate the percentage as a total of the negative price adjustment divided by total contract payments: 0%=4 points, >0-1%=3 points, >1-3%=2 points, >3%=1 point
- 3. If so, it was serious enough that the PM sent written notice to the contractor to allow non-specification work to remain in place: 0 Notices=3 pts, 1+ Notice=2 pts, 2+ Notices=1 pt.
- 4. If not, the problem was serious enough that the PM had to send written notice to the contractor to suspend work: 0 Notice=3 pts, 1+ Notice=2 pts, 2+ Notice=1 pt.
- 5. If not, the problem was serious enough for the PM to send a written notice to the contractor to provide the necessary resources to complete cleanup and punchlist work: 0 Notice= 3 pts, 1+ Notice = 1 pt.

#6a2 - ... the second most important factor? [factor6a2]

Supervision

Rank: 2

#### #6b2 - Method of measurement for the performance-rating factor [factor6b2]

- 1. Was the superintendent on the job at all critical times? (00150.40.b)
- 2. Did the contractor comply with directions of PM or inspector(s) in areas other than those already covered in this evaluation form? (00150.00)
- 3. Did any of the contractor's supervisors have to be removed from the job? (00180.30)

#### #6c2 - Explanatory comments [factor6c2]

- 1. 0 Notice=3 pts, 1-2 Notices=2 pts, 3+ Notices=1 pt.
- 2. 0 Notice=4 pts, 1 Notices=2 pts, 2+ Notices=1 pt.
- 3. 0 Notice = 5 pts, 1 Notice Re Sub's Supv.=4 pts, 1 Notice Re Prime's Supv.=2 pts, 1 Notice each Re Sub & Prime Supv.=1 pt.



Oregon

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#6a3 - ... the third most important factor? [factor6a3]

**Progress Schedule** 

Rank:

3

### #6b3 - Method of measurement [factor6b3]

- 1. Was the contract completed within the allotted contract time and without liquidated damages?
- 2. Did the contractor submit the required schedules and narrative reports?

### #6c3 - Explanatory comments [factor6c3]

- 1. 0%=5 points, >0-2%=4 points, >2-5%=3 points, >5-10%=2 points, >10%= 1 point
- 2. 0 Notice=3 pts, 1+ Notices=1 pts

#6a4 - ...the fourth most important factor? [factor6a4]

DBE/EEO/OJT

Rank:

### #6b4 - Method of measurement [factor6b4]

- 1. Did the contractor meet the Commercially Useful Function (CUF) requirements for this project?
- 2.Did the contractor meet the Equal Employment Opportunity requirements for this project?
- 3. Did the contractor fulfill the On-The-Job Training (OJT) requirements for this project?

### #6c4 - Explanatory comments [factor6c4]

see this state's documents folder for the complete Performance Evaluation Form

#6a5- What do you think is the fifth most important factor?

**Traffic Control** 

Rank:

5

### #6b5 - Method of measurement [factor6b5]

- 1. Did the contractor provide and comply with the Traffic Control Plan?
- 2. Were traffic restrictions on this project in accordance with contract allowances.

### #6c5 - Explanatory comments [factor6c5]

see this state's documents folder for the complete Performance Evaluation Form



Oregon

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#7 - Do you have any additional comments? - [Comm7]

- -Oregon has some challenges with having the authority to take corrective action on poor contractor performance and with evaluation procedures that may interfere with performing accurate evaluations.
- -Current prequalification is limited to fiscal capacity and is self certifying. The contractor performance evaluation does not feed into the prequalification process.
- -A plan and specifications quality control program is being developed.
- -Construction projects are evaluated at the end of the job and contractors are given a score. Contractor performance evaluation factor evaluation questions are referenced to sections in the state's Standard Specifications.
- -For some rules, have to go through the Attorney General and public hearings to get some rules approved the system has checks and balances.

Alternative contact:
Bob Pappe, ODOT Contract Administration Engineer
503-986-3012

Or Dan Anderson 503-986-3136



**South Carolina** 

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Initial comments [havecomments1] In the process of developing a program. See this state's document folder for Power Point presentation.

#2a - Within your organization, what quality-basesd prequalification methods are considered "best practices" -Why? [best2a]

- 1. We are just rolling out a Contract Performance Evaluation System that evaluates the contractor, evalutes the Resident Construction Engineer and evaluates the SCDOT performance on highway construction projects.
- 2. The contractor's score will be used to screen bidders on important projects and may be used to place substandard performers on probation.
- 3. Seventy percent of the contractors score comes from result based data because it is based on measurable facts of performance.
- 4. The remaining 30% comes from a survey submitted by our Resident Construction Engineers. This survey is given less weight because of its subjective nature.

#2b - What practices are least preferred - Why? [best2b]

We went along with the Kentucky model for awhile. We tried to take the subjectivity out of it but did not succeed. So we had to come up with something more objective.

#3a - What have been your organization's most significant challenges in implementing its quality-based prequalification program? [challe3a]

The most significant challenge has been to overcome the contracting community's suspicions of the subjectivity involved in an evaluation.

overcome? [challe3b]

#3b - How were these challenges We have tried to answer this by basing the majority of the score on measurable facts of performance.

organization require to maintain a our intranet. prequalification program? [resour4a]

- #4a What resources does your 1. We use SiteManager as our construction management tool and we draw our data from it. The RCEs submit the survey at the completion of the projects via
  - 2. The RCEs submit the survey at the completion of the projects via the DOT intranet.
  - 3. We started the process to develop a Contractor Evaluation System in 2002 as a Research and Development Problem. We hired a contractor who provided a system with a 22 multiple choice question survey that leaned toward the subjective. So in 2004, we hired a consultant who developed a way to analyze factual performance data. We combined the two ways into what we feel is a fair system. We launched the system in January 2005.



**South Carolina** 

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#5a - Specifically, how does your prequalification program assure University a subjectivity.

- 1. We started the process to develop a Contractor Evaluation System in 2002 as a Research and Development Problem. We hired a professor from Clemson University as our chief researcher. The results of his research provided a system with a 22 multiple choice question survey that we felt involved too much subjectivity.
- 2. In 2004, we hired a consultant who developed the analysis of the factual performance data. We combined the two into what we feel is a fair system. We launched the system in January 2005.

#5b - What are the unsolved problems in this regard? [fair5b]

We think that we have solved the subjectivity issue.

#6a1 What do you think is the first most important performance-rating factors ? [factor6a1] On Time				
#6b1 - Method of measurement for the performance-rating factor [factor6b1] Completion of the project ahead or behind schedule	#6c1 - Explanatory comments [factor6c1] Completion on schedule is a prime criteria of good performance			
#6a2 the second most important factor? [factor6a2] Quality of Work		Rank:	2	

#6b2 - Method of measurement for the performance-rating factor [factor6b2]

We have an inspection team to measure and score quality of work in progress

#6c2 - Explanatory comments [factor6c2]

The Quality Management Team inspects every project during the work. The contractor receives a score from the results of this inspection



**South Carolina** 

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#6a3 the third most important factor? [factor6a3]	Change Orders		Rank:	3
#6b3 - Method of measurement [factor6b3]		#6c3 - Explanatory comments [factor6c3]		
Percent of change orders to bid amount		Although some change orders are not the contractor's fault, we feel a good conickel and dime the Department every chance he gets. Major change orders with the Department are not counted	ntractor will not which are the fau	It o
#6a4the fourth most important factor? [factor6a4]	Claims Denied		Rank:	4
#6b4 - Method of measurement [factor6b4] Number of claims denied		#6c4 - Explanatory comments [factor6c4] No comment necessary		
#6a5- What do you think is the fifth most important factor?	Claims Filed			
was mark to you think is the man most important factor?	Oldinis i lied		Rank:	5
#6b5 - Method of measurement [factor6b5]		#6c5 - Explanatory comments [factor6c5]		
Number of claims filed		We go through great measures to resolve issues to avoid claims, so if a claim contractor is not trying to work will the Department.	is filed, we feel the	те



**South Carolina** 

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#7 - Do you have any additional comments? - [Comm7]

- -State's evaluation system includes evaluation of the contractor, evaluation of the Resident Construction Engineer, and evaluation of the SCDOT.
- -Contractor Performance Report:
- -Part I: Project Results

5 indexed performance charts for On-Budget, QMT, On-Time, Claims filed, and Claims denied, Data comes from SiteManager, 70% of the score.

#### -Part II: Project Management

9 multiple-choice questions. Questions about Safety, Traffic Control, Environmental, Closeout activities, Public Relations, Rework, EEO/DBE, and Cooperation and Cooperation with other contractors, subs, and utilities, 30% of the score.

#### -Part III: Contractor Resources

9 multiple-choice question.

Questions about Partnering, Project Management, Technical Staff, Craft Workforce, Supervisor Personnel, Interactions, Coordination/Cooperation with SCDOT, Equipment Quality, Jobsite Housekeeping, and Project Submittals

Prepared by the RCE when Form 3099 is submitted, 10% of the score.

#### -Part IV: Additional Comments

3 Comment areas

Prepared by the RCE when Form 3099 is submitted, Does not count in the scoring, but extremely valuable.

-It has taken us some time to evolve to this point, and I think our system will likely evolve further as we put it into practice.

### \*How do you evaluate your program?

- We have not amassed enough data to do a formal evaluation of the program yet.

### \*What legislation do you have that supports your program?

- We have legislation that support prequalification, but the law is vague enough to allow us to be very flexible in what we try out.

### \*What data collection procedures to you use to collect contractor performance information?

- We would like to add an interim/year's end project evaluation event, that would be an improvement - but that requires a new set of performance measurements because our current results oriented measurements are geared to end of project.

\*What is the program's underlying philosophy preventing problems, prediction, assurance, purpose.

-Our philosophy is earn the public trust and keep it; tell the contractors what you expect; we are not out to grade and fail contractors but to help them improve their performance, including ours; we are trying to get everyone involved to perform at top level.



Utah

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Initial comments [havecomments1] Have a program.

#2a - Within your organization, what quality-basesd prequalification methods are considered "best practices" -Why? [best2a]

- 1. Practices based on written policies and procedures, state procurement code.
- 2. Our philosophy is to be as equitable & unbiased to as many customers as possible. Our program equally benefits the public, the contractor and the Utah DOT.
- 3. We use pre-existing weighted factors (see documents section for Utah):

A = CONTRACTOR PERFORMANCE FACTOR

(Project Engineer Rating)

B = EXPERIENCE RATING FACTOR

(Contract Performance Rating)

C = FINANCIAL RATING FACTOR

(Comptroller Computation using Financial)

D = ADDITIONAL EXPERIENCE FACTOR

(Pregualification Board)

4. 4. For contractors who have not performed work for UDOT, a neutralizing score is given; A factor (one point given) and B factor (2.5 points given).

#2b - What practices are least preferred - Why? [best2b]

Bonding only looks at the value of a business and predicts the likelihood the business will complete the contract work, while pregualification also looks at the contractor's approach to and the quality of their work.

#3a - What have been your organization's most significant challenges in implementing its quality-based prequalification program? [challe3a]

- 1. Attempt to make the program as flexible as possible in order to be responsive to all possible scenarios, such as: a newly formed company with no work experience but with experienced principles wanting an "unlimited" category of work.
- 2. At certain times of year, need more staff.

overcome? [challe3b]

- #3b How were these challenges 1. We follow state procurement rules, and UDOT policies and procedures. In the above example, we used the experience of the company Principal for company classification of work. Company pregualification valuation was computed from the company financials. It is important to have all the rules and guidelines in place prior to processing of the application. They help navigate one through potentially murky situations, but also, it is a time-consuming and difficult process to change the rules with no immediate assurance of acceptance. Changing rules is an important issue.
  - 2. Automate as much as possible in terms of information access and management tasks.

#4a - What resources does your prequalification program? [resour4a]

- 1. The Electronic Bid System and other modules of our Project Development Business System (PDBS), is the integrated system connected remotely stateorganization require to maintain a wide recording activities within a project. The program has the capability to make automatic calculations and reports.
  - 2. A pregualification board that meets as needed.
  - 3. Established comptroller formula.
  - 4. Good rules and procedures.



Utah

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prequalification program assure impartial contractor rating? [fair5a] subjective experience.

- #5a Specifically, how does your 1. We have neutral scores built into the factors to fairly accommodate new bidding contractors without discriminating against current bidders.
  - 2. There will be numerous ratings for each contractor completed by the individual project's engineer. This can help identify either a divergent or common

#5b - What are the unsolved problems in this regard? [fair5b]

1. At this time few have been brought to our attention. One case is the situation of the newly formed company with no work experience wanting unlimited categories of work. The other a contractor inquiry of why we do not consider their bonding capacity within our formula.

#6a1 What do you think is the first most important performance-rating factors ? [factor6a1]

Safety

Rank:

#6b1 - Method of measurement for the performance-rating factor [factor6b1]

- 1. Number of accidents:
- 2. Number of stop work orders;
- 3. Number of certain types of OSHA ratings

#6c1 - Explanatory comments [factor6c1]

Safety Rating based on Average Region Safety and Loss Coordinator's audits on Project (0-100)

#6a2 - ... the second most important factor? [factor6a2]

**Quality of Work** 

Rank:

2

#### #6b2 - Method of measurement for the performance-rating factor [factor6b2]

- 1. Protected completed work from damage during continued construction.
- 2. Material dispute analysis submitted proved to have issues with contractor/consultant lab personnel or equipment.

(Number submitted: 0 = 10; 1-2 = 7; 3-4 = 4; 5 or more = 0)

3. Rejected materials dispute analysis outright.

(Number submitted: 0 = 10; 1-2 = 7; 3-4 = 4; 5 or more = 0)

4. Produced surfacing or base material that was required to be removed and replaced.

(Number of lots removed and replaced: 0 = 10; 1-2 = 7; 3-4 = 4; 5 or more = 0)

5. Overall percent within limits of paving.

(Percent within limits: 100 = 10; 95-99 = 9; 91-94 = 8; 85-90 = 7; 81-84 = 5; 75-80 = 4; 71-74 = 2; 61-70 = 1; 60 or less = 0)

#6c2 - Explanatory comments [factor6c2]

Contractor Rating form score affects pregualification factoring (A).



**Environmental Compliance** 

Utah

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Rank:

3

### #6b3 - Method of measurement [factor6b3]

#6a3 - ... the third most important factor? [factor6a3]

- 1. Adherence to 404 permits (Section 404 of the Clean Water Act establishes a program to regulate the discharge of dredged and fill material into waters of the United States, including wetlands).
- 2. Staying within environmental boundaries

#6c3 - Explanatory comments [factor6c3]

Contractor complied with environmental laws and regulations.

#6a4 - ...the fourth most important factor? [factor6a4]

Completion on Schedule

Rank:

#6b4 - Method of measurement [factor6b4]

- 1. Contractor submitted Baseline CPM that clearly represented his approach to the project.
- 2. Contractor submitted monthly updates to the construction schedule.
- 3. Contractor used construction schedule as a tool to manage the project.
- 4. Request for extensions of time backed up by valid documentation.
- 5. Project schedule discussed during the weekly planning meetings.

#6c4 - Explanatory comments [factor6c4]

Time overrun;

Milestones not met that resulted in disincentives

#6a5- What do you think is the fifth most important factor?

**Number Of Complaints** 

Rank:

5

#6b5 - Method of measurement [factor6b5]

Liquidated damages assessed for non-performance

#6c5 - Explanatory comments [factor6c5]

Liquidated damage assessed for non-performance.



Utah

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#7 - Do you have any additional comments? - [Comm7]

See: Utah Documents Folder in this database.

\*No formal evaluation component of program as far as respondent knows. Unknown if there is legislation underlying program. Contractor performance rating can be done at the middle, or at several middles, and at the end of the project by Project Engineer. Wish that there were more staff at certain times of the year. The underlying philosophy is to be fair and consistent to as many stakeholders at the same time as possible. No complaints from contractors about the system so far. Important lesson learned is automate as much as possible in terms of information access and management tasks.

UDOT FORMULA TO DETERMINE PREQUALIFICATION AMOUNT:

ADJUSTED EQUITY x A x (B + C + D)

WHERE: ADJUSTED EQUITY DETERMINED FROM CONTRACTOR FINANCIAL INFORMATION

A = CONTRACTOR PERFORMANCE FACTOR (Project Engineer Rating)
B = EXPERIENCE RATING FACTOR (Contract Performance Rating)
C = FINANCIAL RATING FACTOR (Comptroller Computation using Financial)
D = ADDITIONAL EXPERIENCE FACTOR (Prequalification Board)

Price adjustment used in factor B (B = EXPERIENCE RATING FACTOR (Contract Performance Rating)



Vermont

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Initial comments [havecomments1] Have a program. Administered by phone. Responses to 6a1, 6a2, 6a3, 6a4 and 6a5 are respondents summary of important factors to found on the VermontProjectPerfromanceRatingForm.xls.

#2a - Within your organization. what quality-basesd prequalification methods are considered "best practices" -Why? [best2a]

Our contractor rating process is directly related to contractor capacity issues. We have a rating process that consists primarily of Yes or No questions - this puts the evaluation measurements on more solid ground.

#2b - What practices are least preferred - Why? [best2b]

Subjective rating and measurement processes - we are moving away from that.

#3a - What have been your organization's most significant challenges in implementing its quality-based prequalification program? [challe3a]

- 1. Organizational culture issues change is difficult and a new thought takes time to be accepted.
- 2. Certain problem contractors are not very supportive.

overcome? [challe3b]

- #3b How were these challenges 1. New folks are more proactively supportive of this idea.
  - 2. The pregualification process will automatically deal with problem contractors. The automatic process of pregualification encourages engagement in selecting the best contractors.

prequalification program? [resour4a]

- #4a What resources does your 1. There is a prequalification committee of 7 members (heads of sections) that meet weekly.
- organization require to maintain a 2. The program itself requires 1 FTE Administrator who does scheduling of meetings, attending meetings, notifications of decisions and communication with contractors. Then 1/4 FTE goes to pregual activities of the Construction Services Engineer. Another 1/2 FTE is needed for someone to do data entry and data
  - 3. In addition, Resident Engineers enter in the project evaluations, which takes time.
  - 4. MSExcel is needed.



Vermont

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#5a - Specifically, how does your prequalification program assure

- #5a Specifically, how does your 1. Subjective measurements are being phased out. We need to be fair to those producing quality work.
  - 2. The prequalification process levels the bidding playing field and establishes minimum standards.
- impartial contractor rating? [fair5a] 3. We have a Prequalification Committee that can be appealed to. We are working on designing a more formal appeals process.

#5b - What are the unsolved problems in this regard? [fair5b]

99

#6a1 What do you think is the first most important performance-rating factors ? [factor6a1]

Good Superintendent (see document folder)

Rank:

#6b1 - Method of measurement for the performance-rating factor [factor6b1]

- 1. On project entire time
- 2. Experienced

#6c1 - Explanatory comments [factor6c1]

- 1. Did the Contractor have an individual that was clearly the Superintendent as defined in 105.06, and did this individual have the ability to make decisions for the company?
- 2. Did the Contractor have enough people available to maintain their operations in an acceptable fashion? (i.e. deck pours, paving, etc)
- 3. Did the Contractor's personnel maintain and protect the original control points and other important layout features as required by the contract?
- 4. Did the Contractor's personnel respond to requests and direction, such as written orders, of Agency personnel in a timely manner? (This should reflect the Contractor's overall conduct, not a singular occurrence).

#6a2 - ... the second most important factor? [factor6a2]

Safety

Rank:

2

#6b2 - Method of measurement for the performance-rating factor [factor6b2]

1. Fines or other corrective actions from OSHA

#6c2 - Explanatory comments [factor6c2]

1. Did the Contractor comply with VOSHA regulations?



Vermont

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Rank:

3

#6a3 - ... the third most important factor? [factor6a3]

Environmental

#6b3 - Method of measurement [factor6b3]

- 1. Erosion
- 2. Sediment protection

#### #6c3 - Explanatory comments [factor6c3]

- 1. Did the Contractor submit the project and material disposal area erosion control plan(s) at the pre-construction conference or before?
- 2. Could the Contractor begin work on the project without making changes to the submitted erosion control plan?
- 3. Were temporary erosion control items installed properly in a timely manner and in accordance with the approved plan?
- 4. Were temporary erosion control items properly maintained until replaced by permanent items?
- 5. Did the Contractor's On-site Coordinator complete the required monitoring forms in a timely manner?
- 6. Did the Contractor's On-site Coordinator monitor the erosion control plan for effectiveness and record necessary modifications on the plan?
- 7. Were permanent erosion control items installed in accordance with the approved plan and in a timely manner?
- 8. Did the Contractor correct project environmental issues without the issuance of Written Order(s)?
- 9. Were materials supply areas, quarries or waste areas opened and closed in conformance with the specifications and project permits?



Vermont

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#6a4 - ...the fourth most important factor? [factor6a4] **Quality of Work** Rank: #6b4 - Method of measurement [factor6b4] #6c4 - Explanatory comments [factor6c4] 1. Use of our evaluation form See VermontProjectPerformanceRatingForm.xls in document folder. #6a5- What do you think is the fifth most important factor? Attitude Rank: 5 #6b5 - Method of measurement [factor6b5] #6c5 - Explanatory comments [factor6c5] 1. Communicates well See Contract Administration section in the VermontProjectPerformanceRatingForm.xls in the 2. Cooperation document folder. #7 - Do you have any additional \*How do you evaluate your program? comments? - [Comm7] -Well, how do you justify decisions? How can the program be accountable for its decisions and actions? We are working that out. It's a good process because it makes the components and processes of the program more concrete. \*What legislation do you have that supports your program? -No legislation but we have a rule making process that has the effect of law. The pregualification procedures have gone through the rule making process. \*What data collection procedures do you use to collect contractor performance information? -Inspection staff are onsite all the time and keep daily logs related to the evaluation process. They document issues. -The Project Engineer is engaged in a one to one involvement with the contractor. -The contractor provides ongoing project reports

\*Do evaluations rely on the opinion of one individual?

-No.

-We do interim and final project evaluations. The interim is good for feedback dialogue between the Department and the contractor.



Vermont

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- \*What prevents your organization from implementing certain aspects of a quality-based/performance-based program?
- \*What is your program's underlying philosophy (such as preventing problems, prediction, assurance, and program purpose)?
- -We don't have the luxury of enough contractors. We support dialogue and problem negotiation with our contractors. We assist contractors in meeting their goals.
- -The prequalification process levels the bidding playing field and establishes minimum standards which increases fair competition among contractors
- -We want to get the most bang for the public buck.
- \*What is the contractors' response to your program?
- -Problem contractors resist it, good contractors like it.
- \*What is your appeals process and where does it lie along the continuum of subjectivity/objectivity?
- -The contractor appeals in writing to the Construction Services Engineer. When we phase into capacity related rating, a more formal appeals process will be designed.
- \*Is contractor performance criterion used in the adjustment of ratings, in non-responsibility determination or for other purposes How is it used?
- -Currently in the process designing our approach.
- \*Does your state have a process for rewarding above average performance?
- -This will become part of our rating equation such as increasing category and bidding capacity.



Virginia

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Initial comments [havecomments1]

In the process of developing a program.

#2a - Within your organization, what quality-basesd prequalification methods are considered "best practices" -Why? [best2a]

- 1. Use of Contractor's Performance Report scores to adjust firm's maximum bidding capacity. This report is completed for each contractor on a project at a minimum of once per year and evaluates: Quality, Prosecution of Work, Project Communication, Safety, and Environmental aspects of the projects.
- 2. However we are looking at letting bonding companies do the contractor's financial and stability ratings. We are going to let bonding companies set the bidding cap. That will give us more time for the performance/quality based evaluation activities.
- 3. We already have rules that allow us to remove a contractor from the bidding list for certain violations.
- 4. We are working on incorporating an EMR safety rating that the contractor would provide in the prequalification application. The Experience Modification Rate (EMR) is an insurance industry factor used to adjust workers' compensation premiums based on an insured's past loss history.
- 5. We are trying to replace interim evaluations with once a month evaluations. We do weekly or more than weekly traffic control evaluations with a 25 question check list.
- 6. Our evaluations refer to state road and bridge specifications and to what's on the contractor's contract.

#2b - What practices are least preferred - Why? [best2b]

- 1. While our current Contractor's Performance Report is a measurement of the quality of the contractor we feel that it needs to be changed to be more objective and we need to try to minimize the inherent rater inconsistencies that our current process may have.
- 2. We are reviewing our Construction Quality Improvement Program in order to distill out the most important indicators that show we are getting good quality. This program has 400 questions and takes two or three days to completed.

#3a - What have been your organization's most significant challenges in implementing its quality-based prequalification program? [challe3a]

Developing a measurement of quality that is fair, objective, and repeatable with consistency between different raters, and relatively easy to implement.

#3b - How were these challenges overcome? [challe3b]

#3b - How were these challenges We have not overcome them yet. We are looking to use as many existing measurements as possible.

- 1. For instance, our specifications require weekly work zone safety reviews, environmental reviews, etc. We are looking to use this information more in our prequalification program.
- 2. We are also working to modify the questions in our Contractor's Performance Report to be more directly related to contract and specification compliance. We are taking the approach that if a contractor works safely, protects the environment, and builds the project in accordance with our standards, specifications and contract documents we should end up with the quality we desire.
- 3. Our goal is to get more information/scores into the contractor's quality evaluation than our current one per year per contract.

#4a - What resources does your organization require to maintain a prequalification program? [resour4a]

#4a - What resources does your We have a database to hold the scores of the Contractor's Performance Report. The reports themselves are completed in the field offices by the inspectors and organization require to maintain a Resident Engineers. Our pregualification office consists of two people who do the actual analysis and pregualification of our contractors.

Survey administered and database compiled by Jon Woodland, Research Bureau, New Mexico Department of Transportation; (505) 841-9156. See database for supporting documentation.



Virginia

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pregualification program assure impartial contractor rating? [fair5a]

#5a - Specifically, how does your This is the biggest challenge of our program. We have tried to define the different levels of performance but there is always the chance for differences among

#5b - What are the unsolved problems in this regard? [fair5b] We sometimes see what appears to be a halo effect in the scoring where we may hear from the field that there are problems with the work of Contractor X but when we look at the performance ratings of Contractor X, they are all high ratings.

#6a1 What do you think is the first most important performance-rating factors ? [factor6a1]

Scheduling and Planning/Foresight

Rank:

#6b1 - Method of measurement for the performance-rating factor [factor6b1]

- 1. Original Schedule/CPM vs. As Built Schedule/CPM
- 2. Original Completion Date vs. Actual Completion Date

#6c1 - Explanatory comments [factor6c1]

- 1. How did original schedule compare with the actual schedule?
- 2. What proactive measures did the contractor take to predict and make adjustments to stay within contract time limit?

#6a2 - ... the second most important factor? [factor6a2]

**Reliance on Maximum and Minimum Tolerances** 

Rank:

#6b2 - Method of measurement for the performance-rating factor [factor6b2]

- Material Testing
- 2. Testing for things like Ridability, Density, Etc.

#6c2 - Explanatory comments [factor6c2]

- 1. Indicates quality of material used.
- 2. Indicates quality of method of construction and workmanship.

Survey administered and database compiled by Jon Woodland, Research Bureau, New Mexico Department of Transportation; (505) 841-9156. See database for supporting documentation.



Virginia

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#6a3 - ... the third most important factor? [factor6a3] Communication and Partnering. Rank: 3 #6b3 - Method of measurement [factor6b3] #6c3 - Explanatory comments [factor6c3] 1. Meeting of required response times and deadlines for such things as material tests, shop Effective, timely communication is critical to insure that issues and problems are identified and resolved promptly and without negatively affecting the quality of the work on the project drawings, etc. 2. Response times for requests for information. #6a4 - ...the fourth most important factor? [factor6a4] Safety Rank: #6b4 - Method of measurement [factor6b4] #6c4 - Explanatory comments [factor6c4] Contractor's Experience Modification Ratio (EMR); Work Zone Safety Reviews Indicates the attitude of the company toward safety. #6a5- What do you think is the fifth most important factor? **Environmental Compliance** Rank: 5 #6b5 - Method of measurement [factor6b5] #6c5 - Explanatory comments [factor6c5] 1. Project E&S Reviews Indicates the attitude of the company toward the environment. 2. Number of Permit Violations and Severity of Violations 3. Time to correct violations



Virginia

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#7 - Do you have any additional comments? - [Comm7]

- -We believe that this is the direction we need to move in, however there will be some challenges in developing measurements of quality that are objective and relatively easy to implement.
- -One of our most important focuses is how to substantiate standards, how to measure and document that a standard has been met.
- \*How do you evaluate your program?
- -We monitor through our everyday activities and tasks and the process of developing better ways to do things.
- \*What legislation do you have that supports your program?
- -Our legislation allows a prequalification program. The specific rules are decided upon by the Commonwealth Transportation Board with members appointed by the Governor. We don't have to go through the state-wide code hearings.
- \*What data collection procedures to you use to collect contractor performance information?
- -One of our most important focuses is how to substantiate standards, how to measure and document that a standard has been met. We are just rolling out AASHTO Site Manager. Our project inspectors make or break an evaluation in terms of accuracy and objectivity.
- \*What prevents your organization from implementing certain aspects of quality-based/performance-based program?
- -Nothing at this time, other than the day to day aspects of decision making and decision making hierarchies.
- \*What is the program's underlying philosophy?
- -The highest level quality and safety standards. We are involved in the identification of risk, allocating risk and managing risk.
- \*Get situational examples to help clarify.
- -Here is an example regarding the need to work through objectivity issues: A contractor has put up 1000 feet of 1010 contracted for silt fence. The Engineer keep grading the contractor down because he has not put all the fence up the last 10 feet. The contractor says, well, I've put up 99% of the fence.
- \*What about contractor response to all this?
- -High quality contractors support the program and want more objective/fair measurements. The more objective the system becomes, the less fly-by-night operators can succeed.
- \*Does your state have a process for rewarding above average performance?
- -According to the VDOT's memorandum on contractor performance evaluations: (Form C-36, Form C-36 Interim and Form C-36S), NUMBER:CD-2002-8, DATE:October 18, 2002, SPECIFIC SUBJECT:COMPLETION & SUBMITTAL INSTRUCTIONS
- -An exceptional near perfect work rating allows bonus points to be awarded.
- -Also: Section III of the evaluation form, Bonus Area, is to be completed by the individual that was directly involved in the administration of the project with input from the Project Inspector. Section III is to be used to acknowledge quality that exceeds the minimum standards. This bonus area is designed to benefit a Contractor that consistently exceeds expectations and performs exceptionally in the listed elements.
- -Bonus points may be awarded if a Contractor routinely performs above and beyond normal requirements, is exceptional in attention to and performance of the listed elements, or expends extra time, effort and resources on the listed elements. Bonus scores for Section III are to be calculated in whole numbers. Bonus points will only be allowed if each category score in Section II equals or exceeds 80% of each maximum point value. A brief explanation of why bonus points are given must be placed in the bonus area. If further explanation is necessary it can be placed in the remarks area of Section V.

\*CONTRACTOR'S PERFORMANCE REPORT document present a somewhat different list of factors and weights than gotten from the respondent.



Washington

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Initial comments [havecomments1] Have a program. Survey administered by phone

#2a - Within your organization, what quality-basesd prequalification methods are considered "best practices" -Why? [best2a]

- 1. We have the ability to let go of poor performing contractors because of the ability to document performance.
- 2. For new contractors coming in, we require that they have completed 5 projects in the last 3 year period.
- 3. There is a Conditional Status category where contractors may only have one state project in process at a given time until performance improves. (See WAC 468-16-100 Conditional qualification - in the Washington state documents folder)
- 4. There is a Suspension category where a contractor is suspended anywhere from 3 to 6 months.
- 5. There is a Revocation category were the contractor has bidding and work privileges revoked as a result of multiple suspensions.
- 6. We have statutes and rules to back up the program.
- 7. Why? This allows us to select candidate contractors that have the best chance of succeeding. We are able to reward quality workmanship.
- 8. Poor performance is penalized by lower bidding capacity and good performance is promoted by an increased bidding capacity. Contractors receiving a standard or higher peformance rating may be granted an increase in the factor for determining their bidding capacity. This factor may be decreased for firms with less than standard performance. See WAC 468-16-140.

#2b - What practices are least preferred - Why? [best2b]

- 1. There is some subjectivity in the ratings done by project engineers. We are working on that.
- 2. The process somewhat limits the entry of new or small companies, though there are definite steps companies can take to overcome that. (See WAC 468-16-080 in state's document folder)
- 3. Why? For the first, need to be as objective as humanly possible. For the second, it can be tricky finding a balance between inclusion based on a track record of quality (and on public interest) and the needs of new or small business development - but it can be done.
- #3a What have been your organization's most significant challenges in implementing its quality-based prequalification program? [challe3a]
- 1. The program pregualifies companies, not individuals. Some individuals in companies may have a great amount of experience, which is good, but the company itself may not have proven experience or capacity.
- 2. Getting pregual program buy-in from small or new companies has been a challenge because of the difficulty of getting these folks pregualified according to state statutes.

overcome? [challe3b]

- #3b How were these challenges 1. However, contractors can overcome these challenges by working on our smaller projects and progressively working their way up in terms of experience and
  - 2. It was important to get the Associated General Contractors buy-in.
- prequalification program? [resour4a]
- #4a What resources does your 1. WSDOT's prequalification staff consist of the Pregualification Manager and one Assistant.
- organization require to maintain a 2. We need, and don't have, about 1 more FTE. Actually, we need 1 FTE more for about 9 months of the year, and from March 1st to the middle of May we could use 3 FTEs more because of contractor end of year issues and other scheduling issues.
  - 3. We utilize a centralized mainframe database developed in-house (has no feeder sites).
  - 4. An MSAccess database is utilized for calculations.



Washington

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#5a - Specifically, how does your prequalification program assure impartial contractor rating? [fair5a

- #5a Specifically, how does your 1. More training is being provided for P.E.s performing the project evaluations to support consistency in measurement.
  - 2. Administrative/programmatic consistency is being encouraged.
- impartial contractor rating? [fair5a] 3. We are establishing stronger reference criteria for contractor ratings, such as Department, State and National level specifications, standards and legislation. And we are establishing better ways of documenting indicator measurements of these criteria.
  - 4. For the sake of consistency, the Associated General Contractors is pressing hard to reduce discretion in measurement and administration so that everyone gets treated the same.
  - 5. We negotiate whenever needed and regularly dialogue about issues.
  - 6. The actual contractor evaluation goes through several people.

#5b - What are the unsolved problems in this regard? [fair5b]

We are working on better criteria based/ objective measurements and on more uniform administrative processes.

#6a1 What do you think is the first most important performance-rating factors ? [factor6	Progress of Work	Rank:	1
#6b1 - Method of measurement for the performance-rating factor [factor6b1]  1. Completion of project within allotted time 2. Scheduling and execution of schedule 3. Delivery of materials and supplies 4. Operation and use of equipment 5. Use of personnel	#6c1 - Explanatory comments [factor6c1] 99		
#6a2 the second most important factor? [factor6a2] Quality of Work		Rank:	2
#6b2 - Method of measurement for the performance-rating factor [factor6b2]  1. Adherence to plans and specifications 2. Standards of Workmanship 3. Completion of final (punch list) work	#6c2 - Explanatory comments [factor6c2] 99		



Washington

Rank:

3

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#6a3 - ... the third most important factor? [factor6a3] Administration/Management/Supervision

#6b3 - Method of measurement [factor6b3]	#6c3 - Explanatory comments [factor6c3]
<ol> <li>Supervision and decision making</li> <li>Coordination and communication with subcontractors and suppliers</li> <li>Submission of documents and reports</li> <li>Adequacy and timeliness of progress schedules</li> <li>Public safety and traffic control</li> <li>Compliance with laws, ordinances and regulations</li> <li>Maintenance of employee safety standards</li> <li>Coordination and cooperation with department personnel on project matters</li> <li>Compliance with EEO, affirmative action, and MBE/DBE/WBE requirements</li> <li>Relations with the general public, other agencies and adjacent contractors</li> </ol>	99
#6a4the fourth most important factor? [factor6a4] Equipment	Rank:
#6b4 - Method of measurement [factor6b4]  1. Condition  2. Maintenance	#6c4 - Explanatory comments [factor6c4] 99
#6a5- What do you think is the fifth most important factor? 99	Rank: 99
#6b5 - Method of measurement [factor6b5] 99	#6c5 - Explanatory comments [factor6c5] 99



Washington

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#7 - Do you have any additional comments? - [Comm7]

- -Washington has assigned new weights to the Prime Contractor Performance Report and these are reflected in survey questions 6a2, 6a2, 6a3, and 6a4.
- -Washington has had a prequalification program since 1937. It has current statutory authority under RCW 47.28.070 and the implementing administrative code is WAC 468.16 The other information we talked about is found on our website at: http://www.wsdot.wa.gov/biz/contaa/
- -Other states are contracting out the administration, planning and design of a project.
- \*How do you evaluate your program?
- -Through day to day activities.
- \*What legislation do you have that supports your program?
- -(See WashingtonRulesChapter468-16WACPrequalificationOfContractors.htm in state's document folder)
- \*What data collection procedures do you use to collect contractor performance information?
- -Project engineer staff inspectors go out, typically, everyday to the site.
- \*Do evaluations rely on the opinion of one individual?
- -No.
- \*What prevents your organization from implementing certain aspects of a quality-based/performance-based program?
- -Funding
- \*What is your program's underlying philosophy (such as preventing problems, prediction, assurance, and program purpose)?
- -Developing economic growth highway construction projects create jobs.
- \*What is the contractors' response to your program?
- -Most buy in.
- \*What is your appeals process and where does it lie along the continuum of subjectivity/objectivity?
- -(See WAC 468-16-200 Hearings procedure in Washington\WashingtonRulesChapter468-16WACPrequalificationOfContractors.htm in the state's documents folder)
- \*Is contractor performance criterion used in the adjustment of ratings, in non-responsibility determination or for other purposes? How is it used?
- -Ratings are used to increase or decrease work class eligibility and maximum bidding capacity.
- \*Does your state have a process for rewarding above average performance?
- -We use increase in work class eligibility and/or maximum bidding capacity.
- \*What is your main lesson learned?
- -Be objective as humanly possible.



**West Virginia** 

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Initial comments [havecomments1]

State has program.

#2a - Within your organization, what quality-basesd prequalification methods are considered "best practices" -Why? [best2a]

- 1. Keeps contractors within their capability.
- 2. New contractors are given a number 5 or neutral rating and they can build capacity from there.

#2b - What practices are least preferred - Why? [best2b]

- 1. No control over subs
- 2. End of fiscal year work crunch issues

#3a - What have been your organization's most significant challenges in implementing its quality-based prequalification program? [challe3a]

Integration of automation improvements into current practices

#3b - How were these challenges unknown overcome? [challe3b]

#4a - What resources does your organization require to maintain a prequalification program?

[resour4a]



**West Virginia** 

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#5a - Specifically, how does your prequalification program assure impartial contractor rating? [fair5a]

#5b - What are the unsolved problems in this regard? [fair5b]

unknown

#6a1 What do you think is the first most important performance-rating factors ? [factor6a1] Workmanship		Rank:	1	
	#6b1 - Method of measurement for the performance-rating factor [factor6b1]  1. Outstanding 2. Satisfactory 3. Fair 4. Unsatisfactory	#6c1 - Explanatory comments [factor6c1] 99		
	#6a2 the second most important factor? [factor6a2] Performance		Rank:	2
	#6b2 - Method of measurement for the performance-rating factor [factor6b2]  1. Outstanding 2. Satisfactory 3. Fair 4. Unsatisfactory	#6c2 - Explanatory comments [factor6c2] 99		



#6a3 - ... the third most important factor? [factor6a3]

# New Mexico Construction Contractor Prequalification Practices Survey - Report: States that have or are developing prequalification programs

Supervision

**West Virginia** 

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Rank: 3 #6b3 - Method of measurement [factor6b3] #6c3 - Explanatory comments [factor6c3] 99 1. Outstanding 2. Satisfactory 3. Fair 4. Unsatisfactory #6a4 - ...the fourth most important factor? [factor6a4] Coordination Rank: #6b4 - Method of measurement [factor6b4] #6c4 - Explanatory comments [factor6c4] 1. Outstanding 99 2. Satisfactory 3. Fair 4. Unsatisfactory #6a5- What do you think is the fifth most important factor? Labor Rank: 5 #6b5 - Method of measurement [factor6b5] #6c5 - Explanatory comments [factor6c5] 1. Outstanding 99 2. Satisfactory 3. Fair 4. Unsatisfactory



West Virginia

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#7 - Do you have any additional comments? - [Comm7]

-16 month prequals. Contractor is required to get an audit for any job above \$200,000. There is a formula.

\*How do you evaluate your program?

-99

\*What legislation do you have that supports your program?

-Statute Authority: Chapter 17, Article 4, Section 19; Regulation: 157-3-4. Bidding Requirements and Conditions.

\*What data collection procedures do you use to collect contractor performance information? Do evaluations rely on the opinion of one individual?

\*What prevents your organization from implementing certain aspects of a quality-based/performance-based program?

\*What is your program's underlying philosophy?

\*What is the contractors' response to your program?

\*What is your appeals process and where does it lie along the continuum of subjectivity/objectivity?

\*Is contractor performance criterion used in the adjustment of ratings, in non-responsibility determination or for other purposes. How is it used? -Yes.

\*Does your state have a process for rewarding above average performance?

\*What is your main lesson learned? -99



Wisconsin

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Initial comments [havecomments1]

Developing quality based program.

#2a - Within your organization, what quality-basesd prequalification methods are considered "best practices" - Why? [best2a]

We rate our contractors after most projects and give them a rating 0-10.

#2b - What practices are least preferred - Why? [best2b]

None that can be thought of.

#3a - What have been your organization's most significant challenges in implementing its quality-based prequalification program? [challe3a]

- 1. Getting everyone to agree to it since it is subjective on the quality aspect.
- 2. Integration of the process electronically.

#3b - How were these challenges Working on. overcome? [challe3b]

#4a - What resources does your organization require to maintain a prequalification program? [resour4a]

- #4a What resources does your 1. We require a partial full time position. However to upgrade the system which we are proposing will take significantly greater resources.
- organization require to maintain a 2. A variety of people have integrated pieces of the program into their normal workday.
  - 3. We use Transp\*rt for some tasks.



Wisconsin

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#5a - Specifically, how does your It does not address this. prequalification program assure impartial contractor rating? [fair5a]

#5b - What are the unsolved problems in this regard? [fair5b] Subjectivity and application of evaluation. We are in the developmental stages here.

#6a1 What do you think is the first most important performance-rating factors ? [factor	Not received from state	Rank:	99
#6b1 - Method of measurement for the performance-rating factor [factor6b1] 99	#6c1 - Explanatory comments [factor6c1] 99		
#6a2 the second most important factor? [factor6a2] Not received from state		Rank:	99
#6b2 - Method of measurement for the performance-rating factor [factor6b2] 99	#6c2 - Explanatory comments [factor6c2] 99		

Wisconsin

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Monday, March 20 11:15:37 AM #6a3 - ... the third most important factor? [factor6a3] Not received from state Rank: 99 Method of measurement [factor6b3] #6c3 - Explanatory comments [factor6c3] 99 #6a4 - ...the fourth most important factor? [factor6a4] Not received from state Rank: 99 #6b4 - Method of measurement [factor6b4] #6c4 - Explanatory comments [factor6c4] 99 99 #6a5- What do you think is the fifth most important factor? Not received from state Rank: 99 #6b5 - Method of measurement [factor6b5] #6c5 - Explanatory comments [factor6c5] 99 99



Wisconsin

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#7 - Do you have any additional comments? - [Comm7]

- \*How do you evaluate your program?
- -Adhoc feedback. Last program revision was 1999. When something important comes up, we discuss and revise.
- \*What legislation do you have that supports your program?
- -Section 66.0901(2), Wisconsin Statutes
- \*What data collection procedures do you use to collect contractor performance information? Do evaluations rely on the opinion of one individual?
- -RE or Project Engineer does project evaluation and then that data is entered into Trns\*port. Evaluations rely on the opinion of one person.
- \*What prevents your organization from implementing certain aspects of a quality-based/performance-based program?
- -We'd like to do more qualify based prequalification. We are doing mostly financially based prequalification current project evaluation does not feed into pregual ratings unless we judge that it is important to do so in a particular situation.
- \*What is the contractors' response to your program?
- -They've come to accept it.
- \*What is your appeals process and where does it lie along the continuum of subjectivity/objectivity?
- -The contractor can appeal to the Project Engineer for the project evaluation.
- \*Is contractor performance criterion used in the adjustment of ratings, in non-responsibility determination or for other purposes?
- -Used to inform discussions.
- \*Does your state have a process for rewarding above average performance?
- -We can give more capacity and categories based on project evaluations.



Wvomina

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Initial comments [havecomments1] Have a program.

#2a - Within your organization, what quality-basesd prequalification methods are considered "best practices" -Why? [best2a]

- 1. Our program helps keep contractors from going broke by limiting people to what they can do.
- 2. The Prequalification process works well things move through the process easily.

#2b - What practices are least preferred - Why? [best2b]

Non-standardized methods are least preferred.

#3a - What have been your organization's most significant challenges in implementing its quality-based prequalification program? [challe3a]

1. Training resident engineers to do project evaluations in a standardized way. We are still in the process of getting people to think and measure in a standardized way.

overcome? [challe3b]

#3b - How were these challenges Through training, meetings, discussions and modeling by example we are getting engineers to do a more standardized evaluation. We are focused on how different measurement approaches create different results.

organization require to maintain a 2. MSAccess database pregualification program? [resour4a]

- #4a What resources does your 1. One FTE to do all of it including bidding.

  - 3. Legislation, administrative code, policies and procedures
  - 4. They borrowed a pregual program model from another state and implemented it. Since then they have made changes to the model.



Wvomina

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prequalification program assure

- #5a Specifically, how does your 1. We average one year of data to develop contactor rating, but go back as far as 3 years when current year is unavailable.
- 2. When contractors work in more than one area, there is a diversity of professional opinions on project evaluations. Then in addition, we average those impartial contractor rating? [fair5a] numbers, making the ratings even more fair.
  - 3. The contractor performance evaluation form has to be signed of on by the Resident Engineer, the District Construction Engineer and the District Engineer.
  - 4. The contractor can go to the Pregualification Committee to challenge evaluations and ratings and the committee offers further diverse professional opinions.

#5b - What are the unsolved problems in this regard? [fair5b] We are in the process of training each engineer how to apply a uniform. standardized project evaluation method.

#### #6a1 What do you think is the first most important performance-rating factors ? [factor6a1]

Management and Organization of Work (see folder)

Rank:

### #6b1 - Method of measurement for the performance-rating factor [factor6b1]

- 1. Effectiveness of supervision in scheduling the work, organization and construction operations.
- 2. Availability and authority of project superintendent.
- 3. Timely and complete preconstruction conference.
- 4. Coordination and supervision of employees to insure contract compliance
- 5. Open and timely negotiation of contract modification(s) and dispute(s).
- 6. Knowledge of supervisory personnel regarding specifications, plans and special provisions.
- 7. Supervision of work crews.

#### #6c1 - Explanatory comments [factor6c1]

U = Unacceptable, MA = Marginally Acceptable, NI = Needs Improvement, G = Good, C = Commendable, E = Excellent, N/A = Not Applicable

#### #6a2 - ... the second most important factor? [factor6a2]

#### **Project Processess and Submittals**

Rank:

#### #6b2 - Method of measurement for the performance-rating factor [factor6b2]

- 1. Timely, accurate and complete submittal of shop drawings.
- 2. Preparation and updating proposed work schedule.
- 3. Timely submittal of materials certifications, delivery tickets & invoices.
- 4. Project record keeping and project documentation kept current.
- 5. Accuracy and completeness of data submitted for contract amendments, time extensions, stockpile materials and disputes.
- 6. Validity and merit of disputes.
- 7. Compliance with wage rates and labor regulations and all contractual EEO specifications
- 8. Furnishing certified payrolls for contractor and subcontractors in a timely manner.
- 9. Prompt Payment of suppliers and subcontractors

#### #6c2 - Explanatory comments [factor6c2]

U = Unacceptable, MA = Marginally Acceptable, NI = Needs Improvement, G = Good, C = Commendable, E = Excellent, N/A = Not Applicable



Wyoming

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#6a3 - ... the third most important factor? [factor6a3]

**Working Relationship with WYDOT Personnel** 

Rank:

#### #6b3 - Method of measurement [factor6b3]

- 1. Notifying WYDOT project supervisor of problems before continuing work.
- 2. Effecting changes within the scope of the contract as directed by the Resident Engineer.
- Informed WYDOT project supervisor of schedule changes in accordance with the contract.
- 4. Timely response to communications from WYDOT.
- 5. Commitment to principles of partnering.
- 6. Participation in progress meetings.

#### #6c3 - Explanatory comments [factor6c3]

U = Unacceptable, MA = Marginally Acceptable, NI = Needs Improvement, G = Good, C = Commendable, E = Excellent, N/A = Not Applicable

#### #6a4 - ...the fourth most important factor? [factor6a4]

#### **Prosecution of the Work**

#### Rank:

.

#### #6b4 - Method of measurement [factor6b4]

- 1. Complied with project completion dates.
- 2. Started work on time and completed critical phases as scheduled.
- 3. Had available and sufficient manpower, equipment and materials to perform the work.
- 4. Knowledge and competence of work force in performance of assigned job duties.
- 5. Skill and experience of work force.
- 6. Equipment commitment in performing the work.
- 7. Worked continuously and scheduled to enhance the mobility of the traveling public.

#### #6c4 - Explanatory comments [factor6c4]

U = Unacceptable, MA = Marginally Acceptable, NI = Needs Improvement, G = Good, C = Commendable, E = Excellent, N/A = Not Applicable

#### #6a5- What do you think is the fifth most important factor?

#### Cooperation with Others/Public Relations

### Rank:

4

#### #6b5 - Method of measurement [factor6b5]

- 1. Coordinate and schedule utility relocation and adjustments.
- 2. Cooperation with other government agencies.
- 3. Dissemination of information to the public.
- 4. Response to Complaints.

#### #6c5 - Explanatory comments [factor6c5]

U = Unacceptable, MA = Marginally Acceptable, NI = Needs Improvement, G = Good, C = Commendable, E = Excellent, N/A = Not Applicable



Wyoming

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#7 - Do you have any additional comments? - [Comm7]

- -The Wyoming Department of Transportation has in place a Prequalification system that bases the Prequalification of a contractor on a performance evaluation. This evaluation is prepared by our field engineers after the completion of a project by a contractor using four Form PQ-1. At the end of each calendar year our five (5) districts compile these evaluations (Form PQ-3) and submits them to our office. Our office uses Form PQ-4 to compile a composite for the state for each contractor to be used in the coming year to set Prequalification. We feel that this system fairly represents a contractors evaluation since it is established by using a statewide evaluation, not a single, possibly biased evaluation. From the forms you can see which category holds the most weight in the evaluation system by looking how the categories are weighted. Of course, as the years advance with new ideas, so does our system with the tweaking of our Prequalification system to meet new demands.
- \*How do you evaluate your program?
- -District Construction Engineers meetings.
- \*What legislation do you have that supports your program?
- -Wyoming Department of Transportation Rules and Regulations, General Section,
- Chapter 6, Bidder Prequalification for Transportation Projects; W.S. 24 2 108, Road and bridge construction; W.S. 27-14-101, et seq., Wyoming Worker=s Compensation Act.
- \*What data collection procedures do you use to collect contractor performance information?
- -Resident engineer does evaluation, then it goes to the district construction engineer and the district engineer for signature.
- -Do evaluations rely on the opinion of one individual?
- -No.
- \*What prevents your organization from implementing certain aspects of a quality-based/performance-based program? -Nothing.
- \*What is your program's underlying philosophy (such as preventing problems, prediction, assurance, and program purpose)?
- \*What is the contractors' response to your program?
- -We work with contractors a lot and try to help them build capacity the more qualified bids we have, the better it is.
- \*What is your appeals process and where does it lie along the continuum of subjectivity/objectivity?
- -Steps for appeals are: the state construction maintenance engineer, then the Prequalification Committee, then to the Department directors, then to the Transportation Commission.
- -In the event the Applicant is not satisfied with the prequalification rating given the Applicant, a written notice from the Applicant must be filed with the Prequalification Officer requesting a hearing by the Prequalification Committee.
- The hearing will be held within 30 days of receipt of the appeal. The Applicant will be notified of the Prequalification Committee's finding within ten (10) days after the hearing. The Applicant may make a formal request within thirty (30) days to the Wyoming Department of Transportation Executive Staff for a review of the Prequalification Committee's finding if not satisfied with the finding of the Prequalification Committee. The Applicant may make a formal request within thirty (30) days to the Transportation Commission of Wyoming for a review of the Executive Staff's finding if dissatisfied with the finding of the Executive Staff. The Commission's finding of fact shall be deemed final, binding and conclusive-without further recourse.
- \*Is contractor performance criterion used in the adjustment of ratings, in non-responsibility determination or for other purposes? -Yes, for both.
- \*Does your state have a process for rewarding above average performance?
- -Increased bidding capacity. If their access or ownership to equipment is sufficient, then can expand to other work categories.
- \*What is your main lesson learned?
- -How well the job is done is as important as how fast it is done.



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