

Minnesota Department Of Transportation



Design-Build 2006 Customer Assessment



Tom Warne and Associates
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Executive Summary

The Minnesota Department of Transportation (Mn/DOT) has been engaged in the use of design-build as a project delivery method since 2002. Since that time they have contracted over \$650 million comprising five highway projects around the state. With one project completed and others well under way, it was determined that now would be an ideal time for the agency to seek input from the industry as to the effectiveness of its design-build program.

This report is the product of Mn/DOT's Design-Build 2006 Customer Assessment effort. It contains inputs received via an Internet-based survey of 33 industry representatives, phone interviews, and comments received during a Design-Build Forum held on March 30, 2006. Through this process the industry offered valuable and substantial information regarding the state's design-build program which will serve as a foundation for Mn/DOT to further improve this project delivery method.

A number of conclusions can be drawn from the information gathered in this study. Of significance is the fact that the industry is largely supportive of design-build as a project delivery method. While they offer many suggestions for improving the process, there is general acceptance of its continued use and there is a desire to make the identified changes. Elements of Mn/DOT's design-build process that have worked well include the use of Best Value as a selection method, the pre-proposal process, senior management's support and influence, the quality of the request for proposals documents, and the level of design offered in the preliminary plans.

There are areas that were identified that as candidates for improvement. These are reflected in the recommendations found at the end of this report and summarized here. They are:

1. Redesign the Alternative Technical Concepts (ATC)
2. Establish a means for achieving consistency in construction administration
3. Modify Mn/DOT's design-build contract documents to allow for scalability
4. Improve Mn/DOT's procedures for the utilization of DBE's
5. Examine the requirements for QC, QA, and IA and determine how to better manage these processes in the most cost effective manner possible
6. Modify the staffing of selection panels to address concerns with experience level, objectivity, and other issues expressed by the industry

7. Assess staffing assignments to address concerns with reviewer experience levels not being in sync with proposer/designer levels
8. Mn/DOT should address the significant impacts utility issues have on their projects
9. Mn/DOT should seek for simpler solutions to the contract documents and the “books” that are used in the Request for Proposals process
10. Mn/DOT should establish an on-going means for continuing the initiatives that have or will begin with this assessment

The process for implementing these improvements must be determined by Mn/DOT. However, experience in other states reflects the most effective means involve stakeholders from the industry as well as the state in crafting solutions that will address each of these issues.

Mn/DOT has made great strides in advancing its design-build program and the future potential of this approach is significant. Implementing these changes will no doubt make design-build an even more effective tool for the state to use in delivering its projects to the citizens of Minnesota.

Chapter One

Introduction

Design-build is a project delivery method that, for years, was utilized by the private sector to complete projects quickly and within specific budget constraints. In the mid-1990's state DOT's across the country began using this method for highway projects in an effort to garner the same benefits for the traveling public. Recognizing the substantial value design-build would bring to its capital program, the Minnesota Department of Transportation (Mn/DOT) began using design-build on some of its projects in 2002. Since that time the agency has bid five projects for a total dollar value in excess of \$650 million. The ROC 52 project was completed last year and has been deemed a resounding success in its use of design-build. There is a general concurrence that the overall design-build initiative has brought substantial benefit to the state and those who travel daily on these corridors. However, as with any new initiative the department recognizes that it is important to assess the performance of its design-build program and render whatever improvements are necessary to make it more effective.

In early 2006 Mn/DOT procured the services of Tom Warne and Associates to accomplish the following:

1. Conduct a survey of industry stakeholders assessing their views on Mn/DOT's design-build program to date
2. Facilitate a meeting of stakeholders called the Design-Build Forum to further explore how Mn/DOT might improve its design-build program
3. Prepare a report of findings emanating from 1 and 2 above and which would include recommendations for program improvement

This report provides the results of the survey described above and the inputs received at the Design-Build Forum held on March 30, 2006. Chapter 6 contains the conclusions and recommendations based on the consultant's experience and the information gathered for this effort.

Process-Stakeholder Survey

The survey conducted for this research into Mn/DOT's design-build program was developed in cooperation between Tom Warne and Associates and members of the staff at Mn/DOT's Office of Construction & Innovative Contracting. The survey solicited confidential responses to key phases of the design-build process including:

- Pre-proposal
- Request for proposals
- Selection
- Construction

In addition, questions relating to other elements of Mn/DOT's DB program were assessed. In all, the survey included 46 questions. A sample of the survey instrument can be found at Appendix A of this report.

Four groups of stakeholders were sampled in the conduct of this research. They were:

- Contractor
- Engineer
- Subcontractor
- Other

The survey instrument itself utilized an Internet based tool developed by Tom Warne and Associates and was distributed to 42 individuals representing these four areas of the industry in Minnesota. A total of 33 responses were received reflecting a 79% participation rate. Distribution of the responses among these segments was as follows:

- Contractor-14
- Engineer-13
- Subcontractor-3
- Other-3

While a sample size does not lend itself to rigorous statistical analysis, the outcomes of this research are nevertheless valuable to all members of the transportation industry in the state.

In developing the survey instrument it was determined that all responses would be confidential to encourage frank and open feedback to Mn/DOT. In addition, at the end of the survey there was an opportunity for participants to indicate a desire to visit specifically with Tom Warne to amplify their responses or offer additional information. A number of individuals afforded themselves this additional opportunity to express their thoughts about the program. The results of these oral interviews will be included as appropriate in this report with the same premise that confidentiality is maintained. To this end, this report will not give attribution to any of the comments or scores given, nor does anyone at Mn/DOT know the source of any of the inputs.

Process-Outreach Session

A second component of this assessment of Mn/DOT's design-build program was a facilitated meeting called the Design-Build Forum held on March 30, 2006 in St. Paul. At this meeting, representatives from each sector of the transportation industry in Minnesota and members of Mn/DOT's staff were invited to participate in an open discussion that was facilitated by Tom Warne. This open discussion and the further inquiry it provided was intended to capture the thoughts and feelings of the departments stakeholders in what was good about the design-build program, where it might be improved and any other issue relating to better

project delivery using design-build. Attendance included representatives from all sectors of the industry with some 46 individuals participating in all or part of the session.

Report Format

This report is divided into chapters representing the various phases in Minnesota's design-build program as stated earlier in this introduction. The results of the survey will be divided accordingly. In addition, Chapter 2 offers an overview of the demographic and background information for those who responded to the survey.

Where comments were general in nature they have been reflected in the chapter that is most suitable to the subject area. It should be noted that the chapters are a summary of the survey results and that the full content of the survey responses can be found in Appendix B of this report. Readers are encouraged to avail themselves of this additional detail in their desire to understand more fully the survey data.

During the Design-Build Forum notes were taken by both Mn/DOT and Tom Warne in order to capture the thoughts and ideas expressed by those participating in this important session. Themes from these notes are incorporated into the text of this report but the reader is encouraged to review Appendix C which contains the actual notes from the session.

Finally, Chapter Six entitled, "Conclusions and Recommendations" is where the consultant offers summary commentary about the outcomes observed and offers specific recommendations for Mn/DOT in improving their design-build program.

Chapter Two

Demographics and Pre-Proposal Process

The first few questions of the survey were intended to assess the demographic characteristics of the responders and their companies. Through these questions the report findings and recommendations gain context and value. In addition, there were a series of questions having to do with those actions that precede the actual Request for Proposals phase of a design-build effort, including the nature of their teaming activities and selection of team members.

Many of the questions elicited a single response whereas some required two or more. Percentages are based on the total number of responses. In some cases the results may not add to 100% due to rounding issues. For certain questions not all participants provided an answer resulting in some totals that don't sum to 33.

Demographics

Of the 42 invitations to respond to the survey there were 33 who did so within the stipulated time frame. The basic breakdown for those who responded is as follows:

- Contractor-14
- Engineer-13
- Subcontractor-3
- Other-3

The "Other" category deserves some explanation. This group includes firms that can be labeled as design subcontractors, geotechnical engineering, materials testing, program management, construction oversight or anything else that didn't fit specifically into the other three segments.

Figure 1 reflects the experience level of the survey participants relating to their participation in Mn/DOT's design-build program. Note that all had proposed on at least one design-build project in the state and two-thirds had proposed on 3 or more. This indicates the participants have first hand knowledge of Mn/DOT's process and are qualified to speak to the attributes of the program.

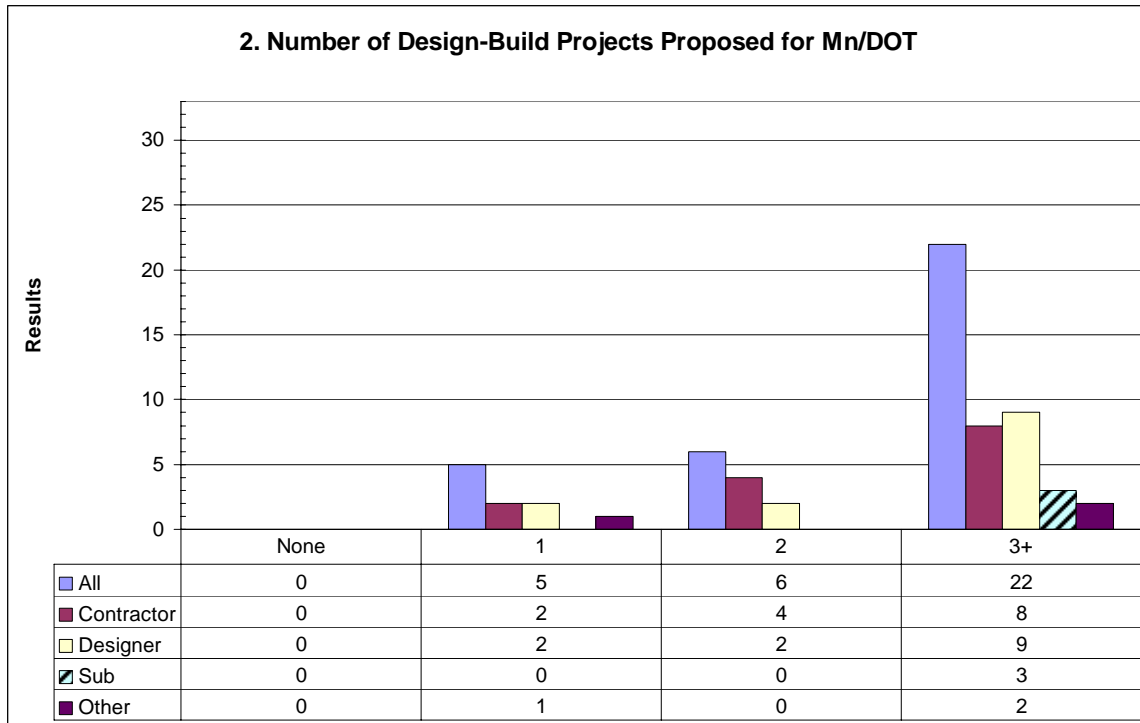


Figure 1. Number of Design-Build Projects Proposed for Mn/DOT

Many of Mn/DOT's industry partners provide their services outside of the state and have a vast array of project credentials beyond Minnesota's borders. Survey results show that 1/3 of the respondents had only Minnesota experience while 2/3's had both in-state and out of state design-build credentials.

The survey stipulated that only one response was being solicited from each firm. While it appears that some of the responses were aggregations of inputs from two or more employees from a given firm there is no way to separate these from firms that used a single person to complete the whole survey. Therefore, for reporting purposes it has been assumed that the next series of questions in the survey, numbers four through nine, were answered by one individual.

Figure 2 reflects the results of question #4 which queried the respondents on how many projects they had personally proposed on in the last five years.

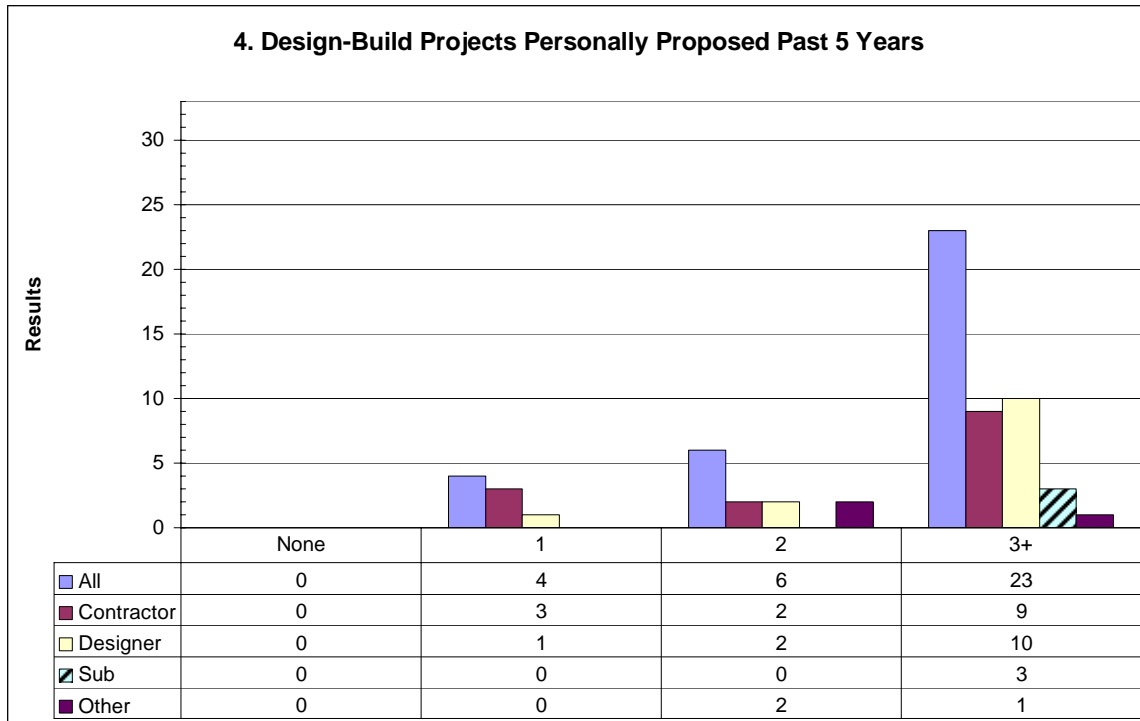


Figure 2. Design-Build Projects Personally Proposed on in the Past 5 Years

When asked how many projects the respondent had proposed on in the last five years (Mn/DOT and non-Mn/DOT) all indicated that they had done so on at least one project. However, ten, or almost a third of the respondents, had experience on only one or two projects. This limited experience must be factored into the analysis of the data points in these results. On the other hand, the other 2/3's of the respondents had what appears to be substantial design-build experience indicating three or more projects worth of experience to draw on.

To further understand the level of experience of the respondents with design-build, they were also asked about the dollar volume of the projects that they had proposed on. Here the results were interesting in the division between dollar volumes and how the Mn/DOT projects compare to non-Mn/DOT projects. Figure 3 shows that there were 12 respondents who had proposed on Mn/DOT projects totaling less than \$50 million whereas there were 21 who had proposed on projects valued in excess of \$100 million.

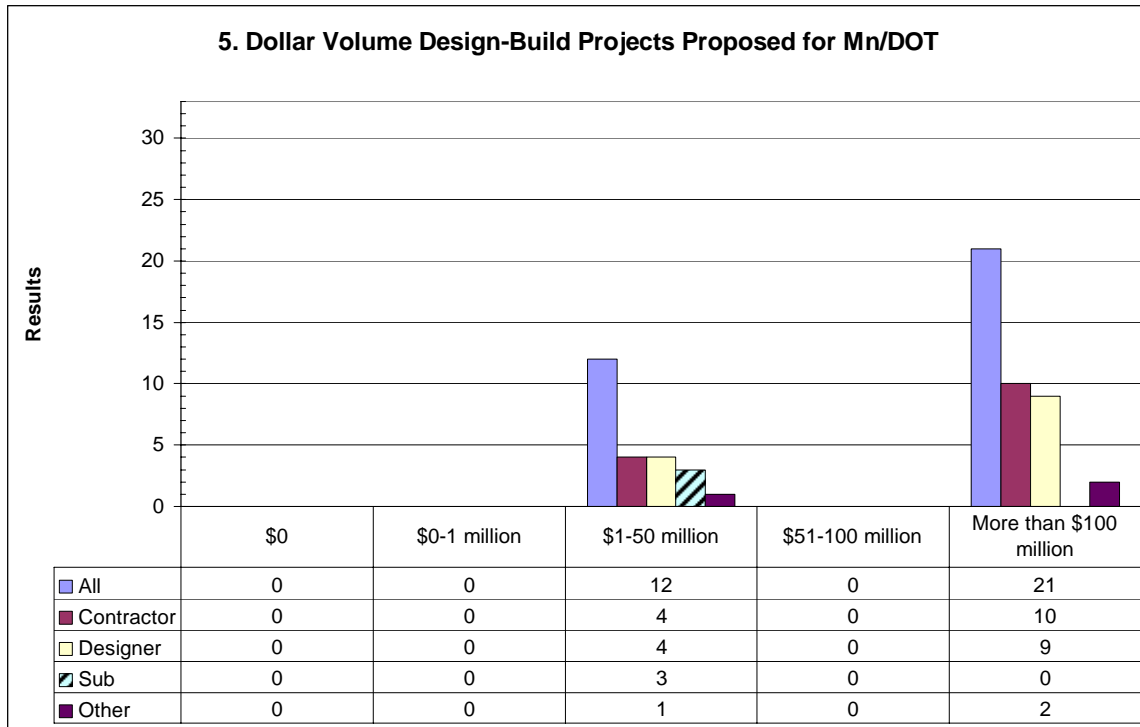


Figure 3. Dollar Volume of Mn/DOT Design-Build Projects Proposed

Further, it is not just one segment of the industry that has proposed on the smaller projects, rather the distribution is relatively even among Contractors, Designers and Subcontractors in this category of response.

In taking the broader view of the dollar volume proposed on for non-Mn/DOT projects there is a differing distribution in the responses. Figure 4 reflects these values.

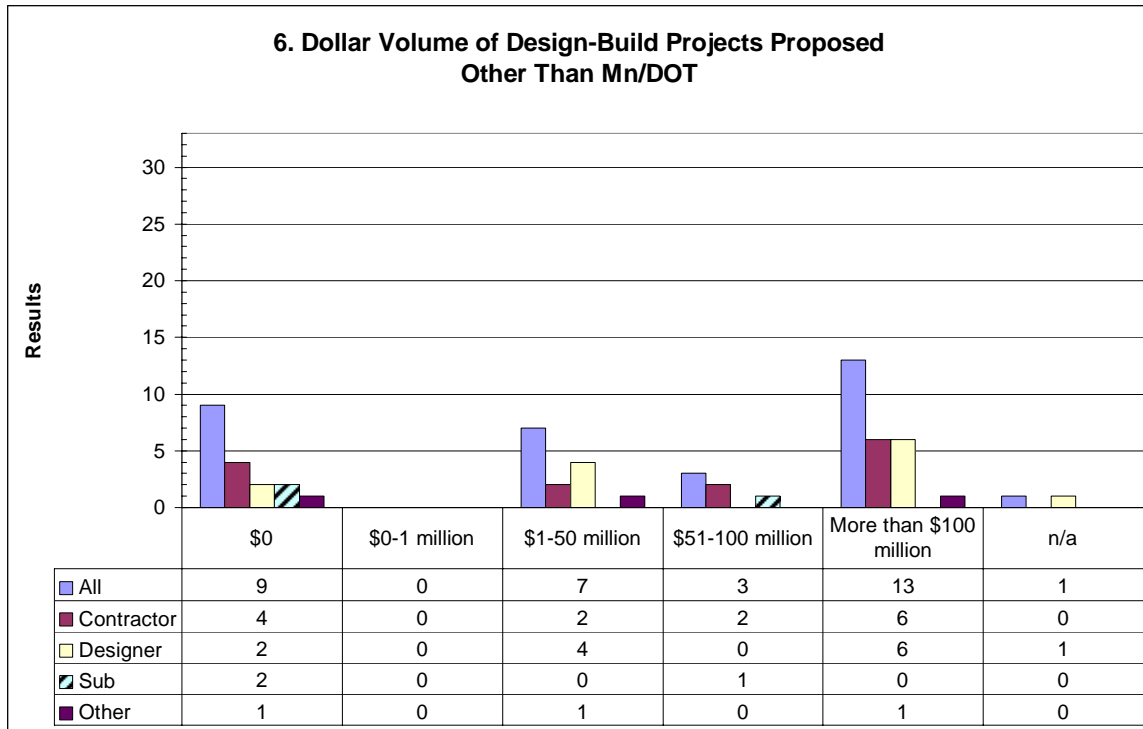


Figure 4. Dollar Volume of non-Mn/DOT Design-Build Projects Proposed

Note the more dispersed nature of the responses indicating the variety of project sizes being proposed on by those who participated in this survey. This is a reflection of the non-Minnesota experience that many participants brought to the survey and further adds color and perspective to the results in that they are now indicative of a broader range of experience.

The final area to report on in this demographics discussion concerned the experience level of the survey respondents based on their years of experience. Figure 5 reflects the age distribution demographic. Note that the results are divided into three nearly equal groupings. The simple numeric average puts the typical respondent in the 20-30 years of experience category which reflects a seasoned or experienced group of individuals participating in the survey. Taken alone this is not a significant issue. However, placed in context with the results and the nature of the other questions in the survey it does give greater credence to the responses and the fact that those responding have an experience level that qualifies them to make the judgments reflected in the results.

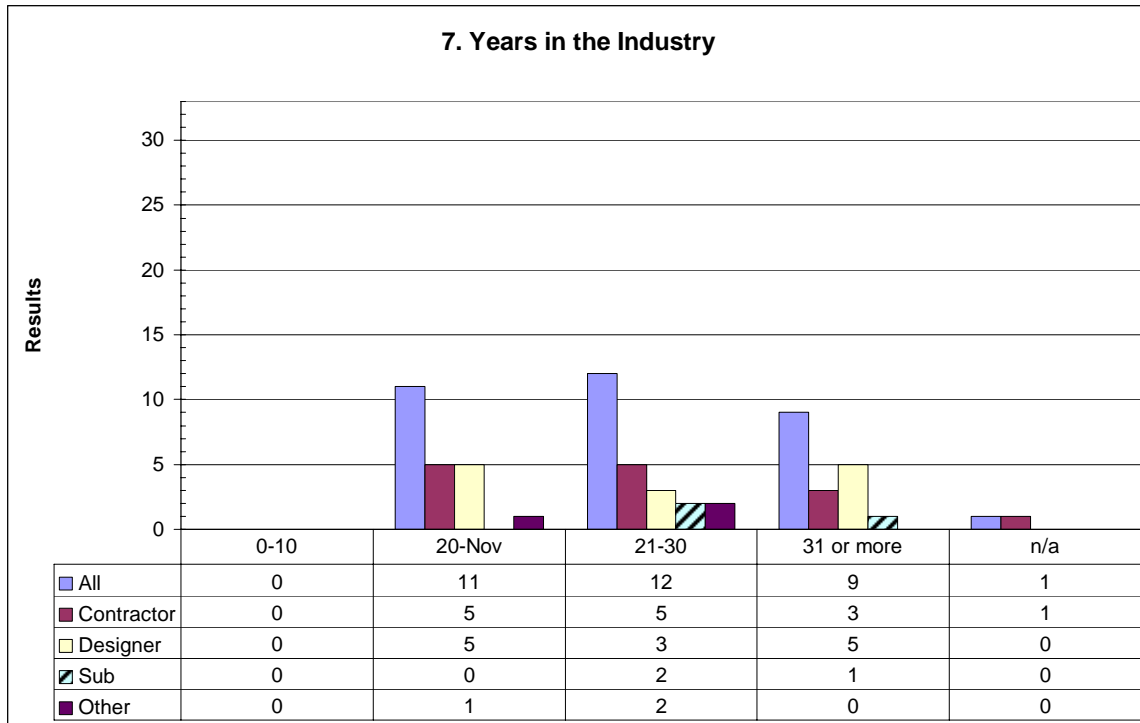


Figure 5. Years in the Industry

Pre-Proposal Process

The Pre-Proposal process is defined as all those activities and actions that occur prior to the issuance of the request for proposals (RFP). They typically include the following:

- Preliminary notification of pending projects
- Pre-qualification activities
- Teaming strategies and outcomes
- Preliminary review of contract documents and specifications
- Pertinent funding issues

In the pre-proposal process, Mn/DOT is in a position to share information with potential design-build teams and companies that are considering aligning themselves or joining a team. During this period the state may seek input about different contract provisions, specific project elements, answer inquiries that will impact teaming agreements, or any number of other preliminary activities that firms engage in prior to the release of the RFP. It is a critical time for the agency to clearly communicate information and for teams to form and take the available information and move ahead with their project pursuit. In this survey the participants were asked to rate Mn/DOT's communication efficiency. The results are found in Figure 6 and are divided by industry segment because of a particular nuance that comes out of the results.

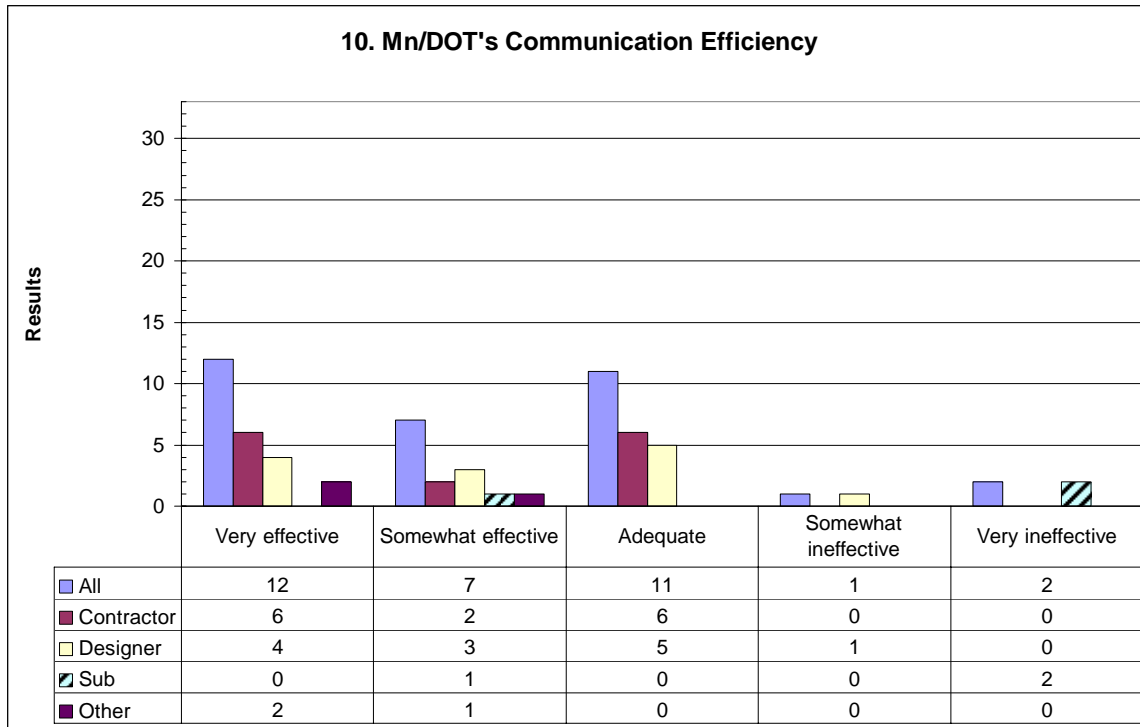


Figure 6. Mn/DOT's Communication Efficiency

Overall, the results look good in terms of how the industry rates Mn/DOT's communication efficiency. However, a close examination shows that two out of three subcontractors who participated in the survey rated this attribute of Mn/DOT's performance as being "Very Ineffective." So, while the majority of the industry seems to feel the state's communication efforts are efficient, there is a segment of the industry that is being left out or not being communicated with as they would wish. In addition, comments received through the survey, phone interviews and the Design-Build Forum indicate that Mn/DOT can improve how it communicates with potential teams as the RFP phase approaches.

Also on the subject of communication, question #11 asked how respondents became knowledgeable about upcoming design-build projects. Six alternatives were offered which are listed below:

- State Register
- Construction Bulletin
- Industry association
- Mn/DOT notices, newsletters, etc.
- Word of mouth
- Other

The results were striking. Nineteen of thirty-three or 58% of the respondents said that they get their information on upcoming projects from Mn/DOT notices, newsletters or other communication instruments. The next most common response (7 of 33 or 21%) said that "Word of mouth" was how they got their

information. Only one respondent said they relied on the Construction Bulletin. Notably, not one participant identified the State Register as their source of information and only 3 of 33 said that their industry association was theirs. These results are telling and should cause the state to focus their communication activities accordingly.

Teaming is an important part of the design-build process and often begins long before the RFP is issued by the state. This survey endeavored to assess specific elements of the teaming process and how it plays out in the course of proposing on design-build projects in Minnesota. The following discussion speaks to these elements as reported in the survey results.

The first element assessed was whether or not there was sufficient time for segments of the industry to assess project requirements and form what they believe to be a competitive team. Figure 7 contains the results to this question.

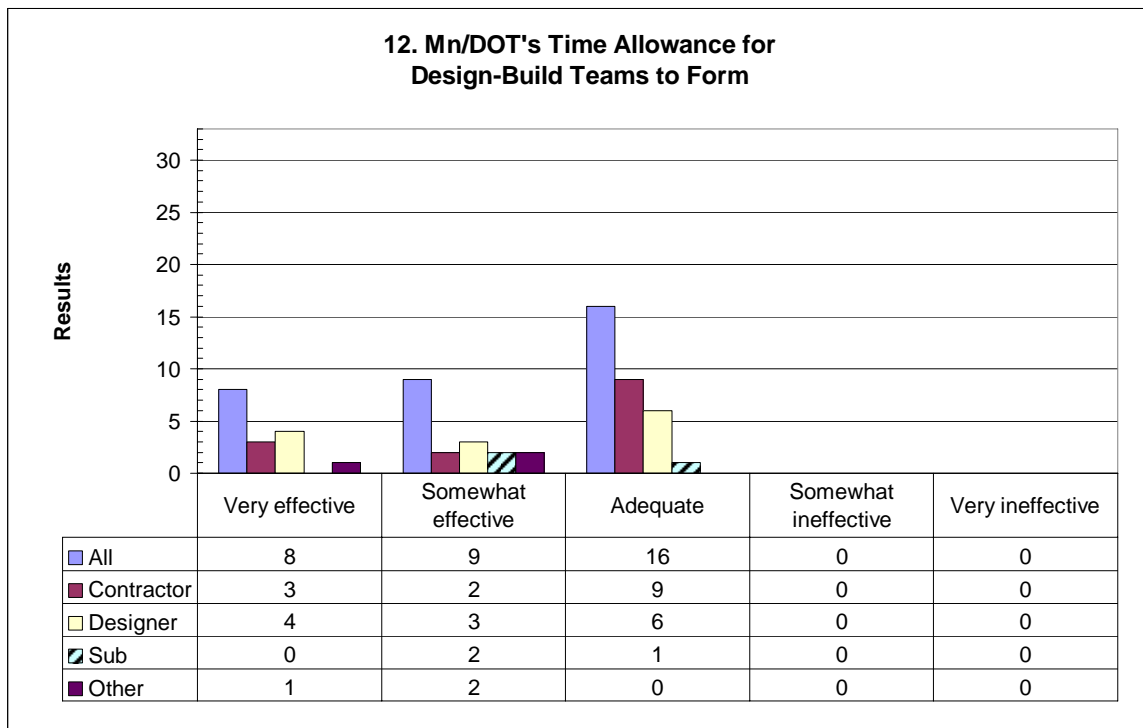


Figure 7. Mn/DOT's Time Allowance for Design-Build Teams to Form

Not a single respondent offered either of the two negative responses-“Somewhat Ineffective” or “Very Ineffective.” Rather all gave the state an “Adequate” rating or better. In fact, 15 or 33 gave the state either “Very Effective” or Somewhat Effective” ratings. The conclusion to be drawn from these results is that the industry is largely satisfied with the amount of time they have to team on upcoming design-build projects in Minnesota.

In order to get a sense of the dynamic nature of the teaming process in Minnesota two questions were asked and will be discussed together in this

report. The first question was: “How many teams have you been on? Figure 8 reflects the distribution of responses and indicates that 21 of 33 had been a part of 3 or more I teams.

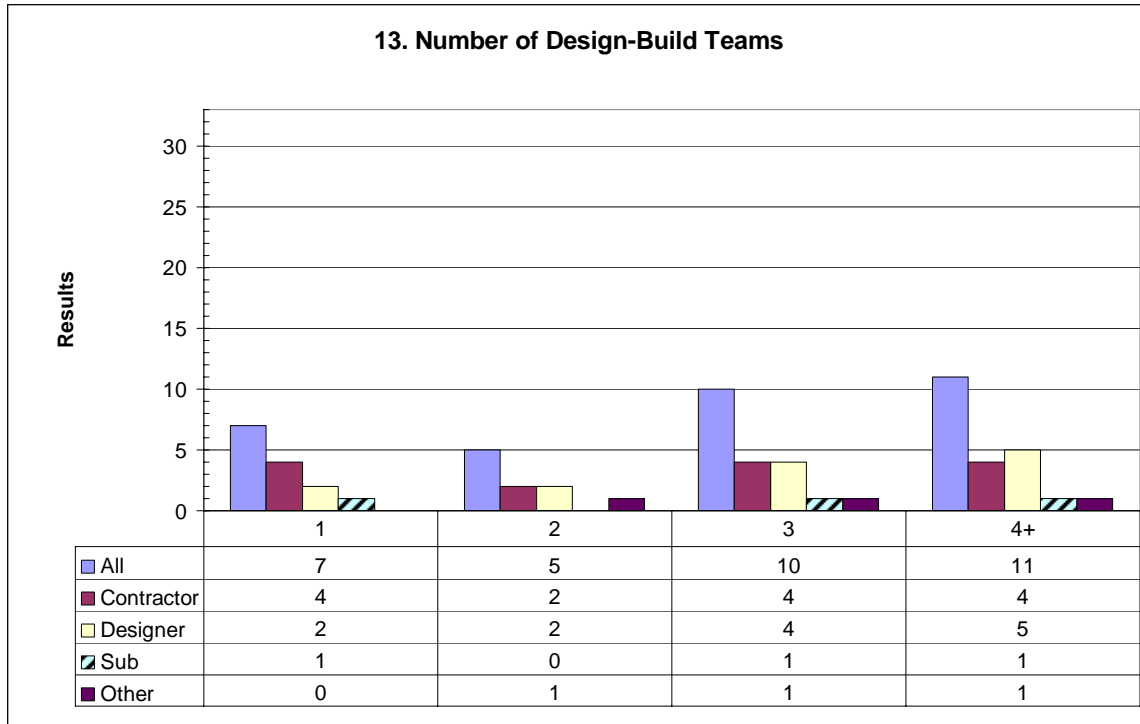


Figure 8. How Many Teams Has Your Firm Been On

Beyond participating in the pursuit of a design-build project is actually winning the work. As would be expected, there are more teams formed than there are successful teams. Figure 9 reflects how the participants responded to this query.

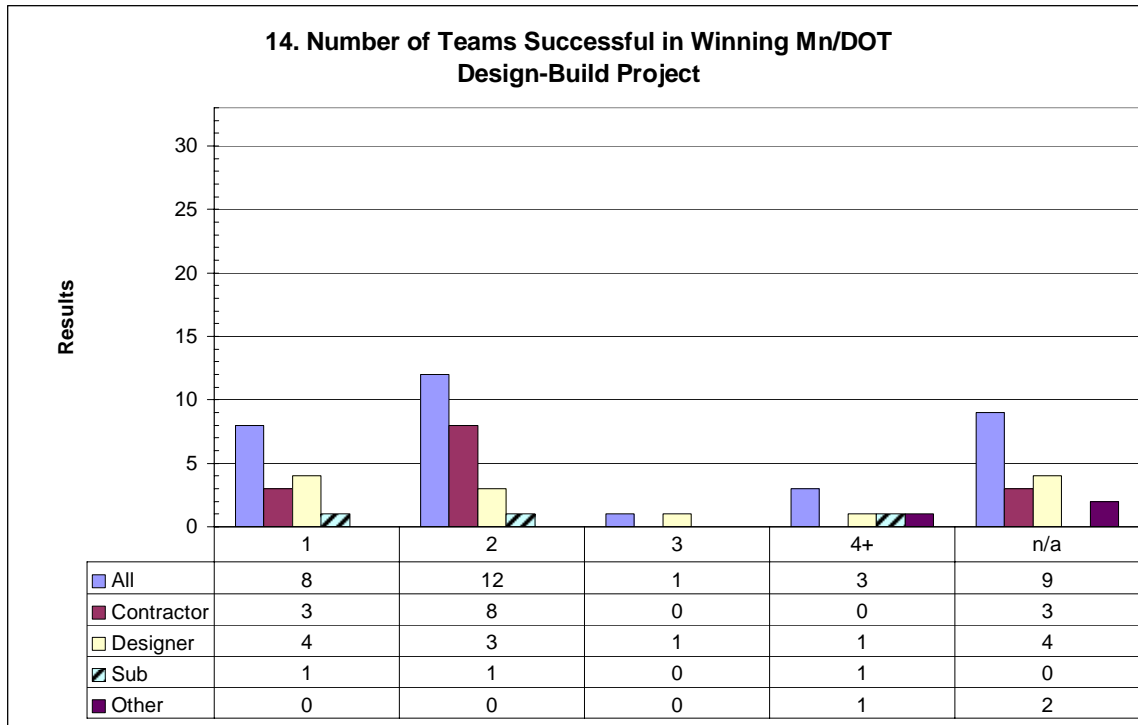


Figure 9. Number of Successful Design-Build Team Participation

The next two questions queried the decision-making process leading to teaming relationships and specifically what the attributes were for selecting particular team members. The first related to selecting a construction/contracting partner and the second an engineer/designer. There were clear delineations for both groups that are worthy of mention.

The most important attributes sought after in the selection of a construction/contractor partner were:

- Ability to be price competitive
- Past strategic relationship
- Reputation with Mn/DOT

After these three there is a second grouping of attributes that have approximately the same importance in the survey response. They were:

- General experience in DB use
- DB use experience in Minnesota
- Prior DB project experience
- General reputation

Of interest is the fact that the following attributes ranked very low and would indicate very little interest in them as discriminators in the selection process:

- Reputation for innovation
- Specialty skills or equipment
- Ability to bond the project

In selecting an engineer/design partner for a design-build team there were only two major groupings—those that were important and those that just didn't rise above a relatively low level of interest. Those attributes that were important were the following:

- Reputation with Mn/DOT
- Experience of DB in general
- Experience of DB in Minnesota
- Past strategic relationship
- Reputation for innovation

Those responses which reflect little importance in selecting these team members were:

- General reputation
- Size of the firm
- Specialty skills or equipment
- Ability to be price competitive

Overall, the contrast between these two areas is interesting. In the case of the contractor partners, innovation isn't ranked high. However, for designers it is an important attribute to consider. For the designers the high ranking of "Reputation with Mn/DOT" is not unexpected but the fact that this also was highly thought of for contractor team members is telling. In both cases experience with design-build is a plus to have. Conversely, neither group values "Specialty skills or equipment." Finally, for contractor partners the ability to be price competitive is important whereas for the designer partners it is less important.

Chapter Three Request for Proposals

The next area of focus relates to the Request for Proposals (RFP) phase of the project advertisement and selection process. This is a key area for design-build procurements because the RFP document identifies important information relating to the selection process, proposal requirements and the expectations of the owner for the finished product. On design-build projects, these are lengthy documents and require teams to invest considerable time and energy to see to their completion. This being the case, a critical review of the RFP process was an important element of this overall review.

Participants in the survey were asked to rate the quality of Mn/DOT's RFP documents from Excellent to Poor. Figure 10 reflects the response to this question.

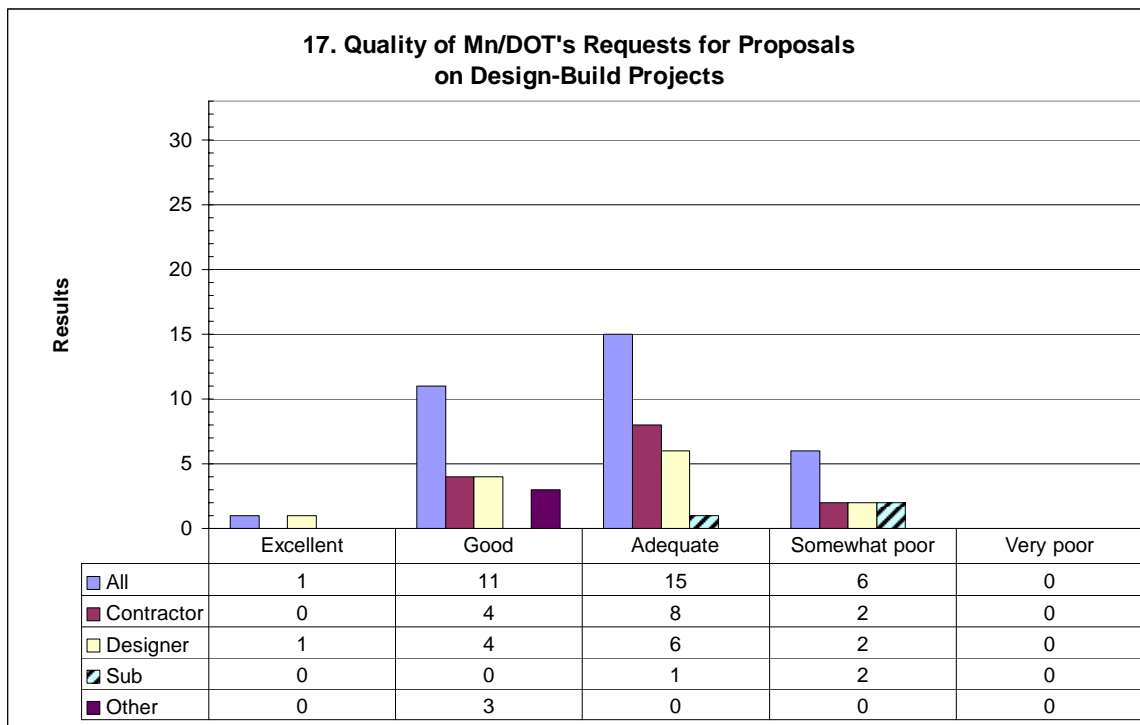


Figure 10. Quality of Mn/DOT's Request for Proposals on Design-Build Projects

Of the 33 responses only one rated them "Excellent" while 33% said they were "Good" and almost half rated them "Adequate." Noteworthy are the six responses that said they were "Somewhat Poor" and the fact that the responses for this rating were distributed across all three segments of the industry. Further review of the figure also shows that the Subcontractors rated the quality of the RFP documents lower than the other segments surveyed.

Comparisons are always good and are instructive when it comes to understanding how well Mn/DOT is doing in its design-build program. The next question asked those surveyed to rate Mn/DOT's documents against those from other states. It should be noted that only about half of the respondents had worked in other states so the totals for this particular data set are smaller than for other questions. None rated the Mn/DOT RFP's "Much better" or "Much worse." Rather, the results are almost evenly distributed in a bell curve format with the majority (11 of 33) rating them "About the same."

One of the areas that vary from state to state is the level of design that the department of transportation (DOT) offers in their RFP documents. In some cases, the state DOT will carry the design to a 60 or 70% completion. Others offer something on the order of a 10-15% design completion level. There are a number of schools of thought on this issue. Some say that a lower level of design offers the design-build team the maximum amount of flexibility and innovation. Those who promote higher levels of design feel that they have more control over the final product when they are able to be more specific about project elements. There is no single answer that will satisfy all parties so it becomes a question of what the owner is comfortable with. That said, the next series of questions offered sampled this notion of the level of design on Mn/DOT's design-build projects.

Figure 11 shows that when asked about the level of design offered by Mn/DOT on its design-build projects the industry overwhelmingly feels that it is about right.

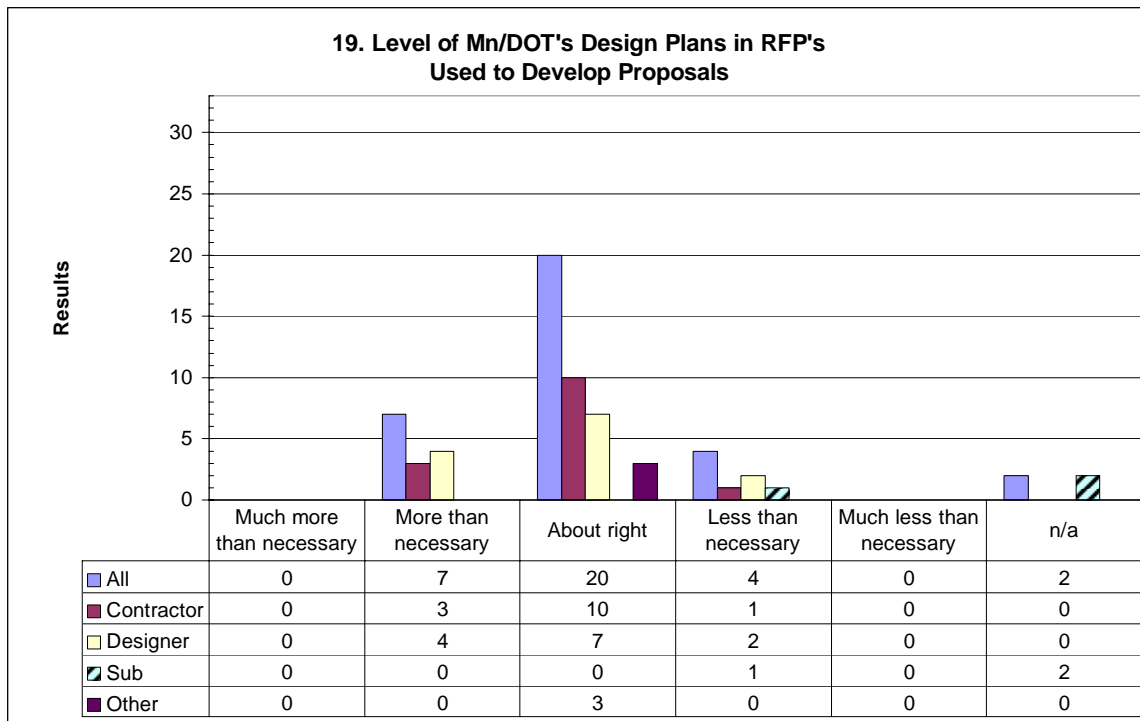


Figure 11. Level of Mn/DOT's Design Plans in RFP's Used to Develop Proposals

Seven of the 31 respondents offering opinions to this question felt that it was more than necessary with these inputs coming from both Contractors and Designers.

When asked what the industry thought the level of design was for plans contained in Mn/DOT's RFP's the responses were distributed as shown in Figure 12.

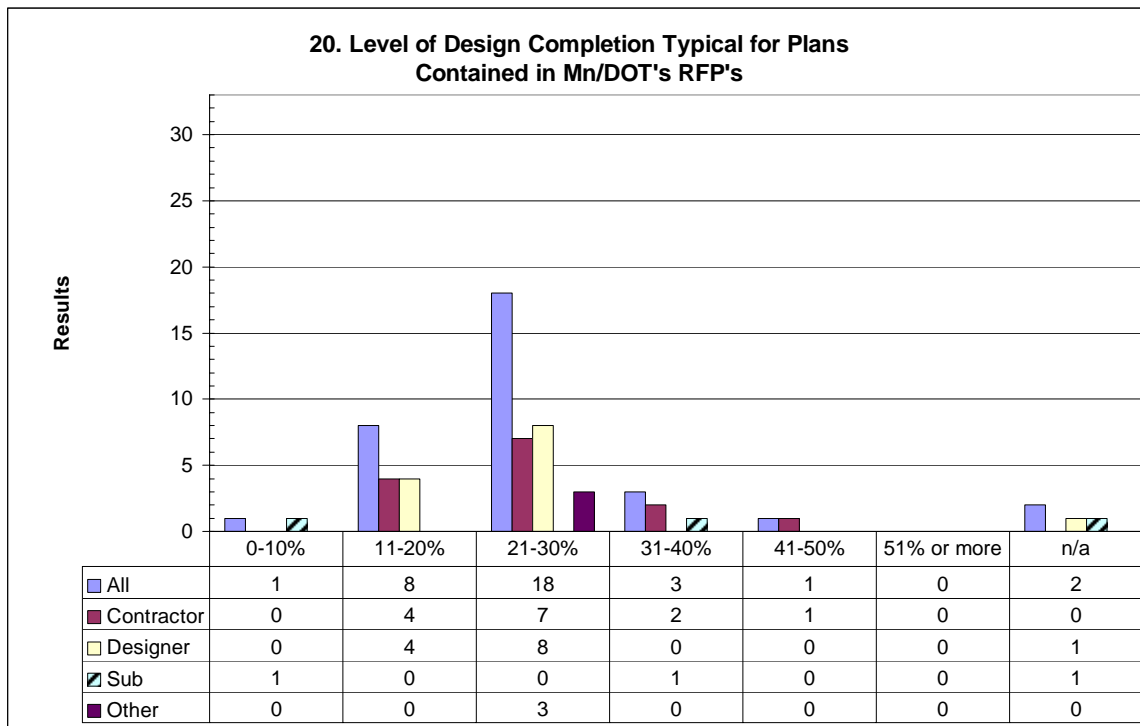


Figure 12. Level of Design Completion Typical for Plans Contained in Mn/DOT's RFP's

In all, 26 of 33 or 79% felt that Mn/DOT took their plans to a completion level in the range of 11-30%. In assessing this data it must be understood there is no nationally accepted standard for what a 30% set of plans looks like or a 65% set. In fact, it varies from state to state and sometimes from project manager to project manager within a state DOT. That said, there is a clear majority that rates the level of plans completion at 30% or below.

The next question has to do with what the respondents felt was the optimal level of design to be included in an RFP provided by Mn/DOT. The theory here is for Mn/DOT to provide a level of design that is most helpful to the design-build team but which doesn't expend any more money on this effort than is necessary to achieve the desired outcomes. Figure 13 shows the distribution of responses to this question.

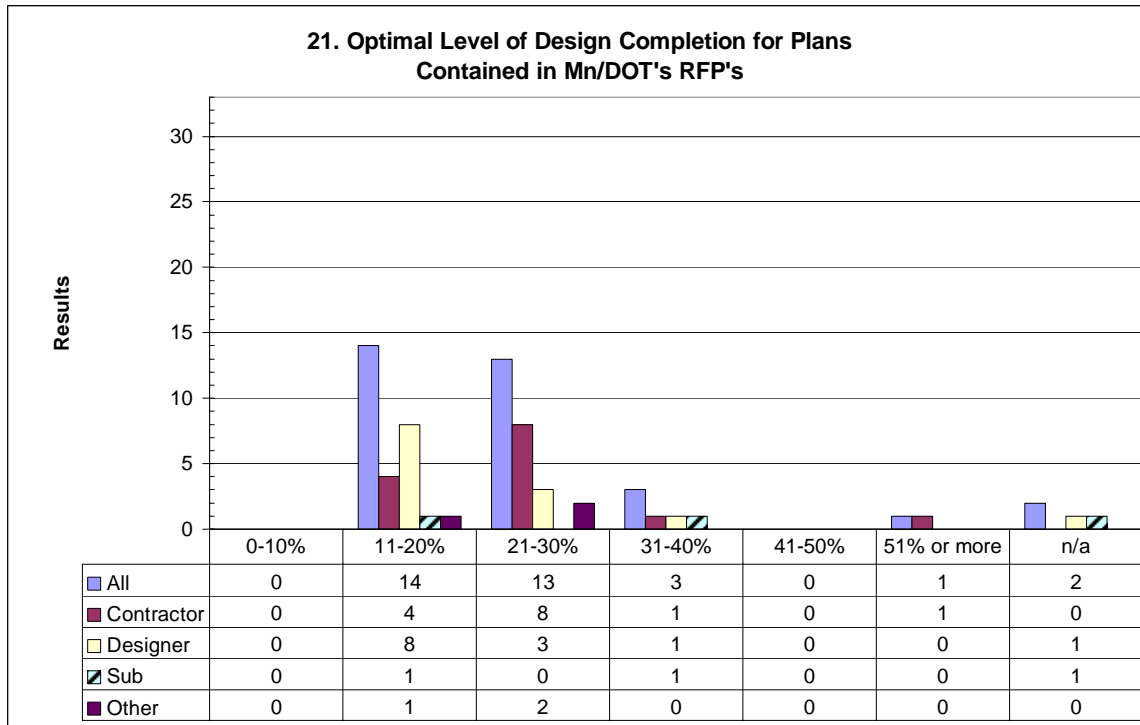


Figure 13. Optimal Level of Design Completing for Plans Contained in Mn/DOT's RFP's

Again, the majority of the response falls in the 11-30% range. In reviewing how Contractors and Designers responded it should be observed that the former wanted a higher optimal level and the latter a lower in nearly equal proportions. The conclusion would be that Designers want more flexibility and Contractors more specificity for bidding purposes.

Stipends are a common means for compensating the design-build teams for the level of effort required to propose on a typical DB project. There is no disputing the fact that teams expend considerable resources seeking to be successful on a typical design-build project. Where stipends are offered, they are provided as recognition of this extra expense and effort. They are not intended to cover the full cost of preparing a proposal but rather to defray a portion of it and Mn/DOT offers a stipend for its unsuccessful proposers. In examining its DB program, Mn/DOT was interested in knowing how closely this amount came to covering the costs incident to responding to their RFP's. Figure 14 shows the responses to this question.

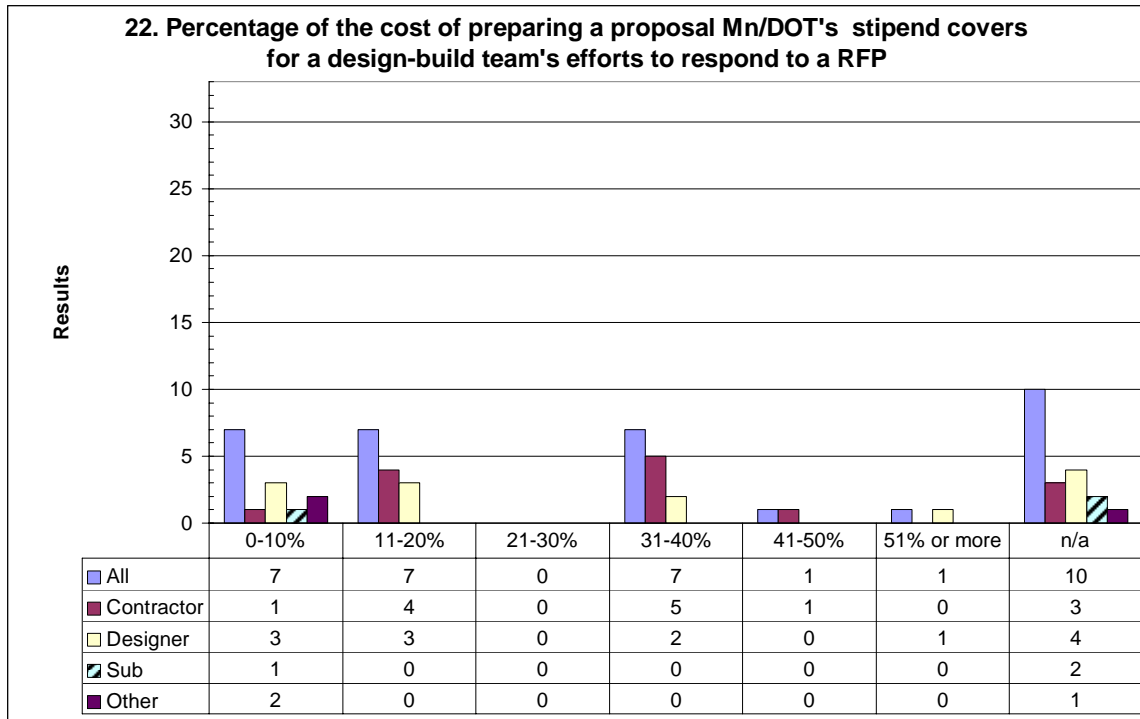


Figure 14. Percentage of Proposal Preparation Costs Covered By Mn/DOT's Stipend

There were more “Not Applicable (N/A)” responses to this question than any other in the survey. It is unknown what the reason was for so many of these responses but it may be a function of confidentiality and a desire to not share the cost attributes of a design-build teams pursuit of a Mn/DOT DB project.

From the responses given, about two-thirds indicate a 20% or less coverage of costs while nine of 23 or 39% offered more than 30% as their conclusion to this question. Ultimately, the stipend is not intended to fully cover the expense of a proposal but many states attempt to reimburse about 25% of these costs which is about the average noted in these results.

During the course of responding to an RFP, the design-build team may have questions or inquiries to make regarding different features or contract provisions. Mn/DOT has a specific process for addressing these during this time. It is a period when time is of the essence as contractors and engineers prepare preliminary plans and cost estimates in anticipation of completing their proposals. Question 23 of the survey asked how responsive Mn/DOT was to inquiries during the RFP process. Figure 15 shows how they responded.

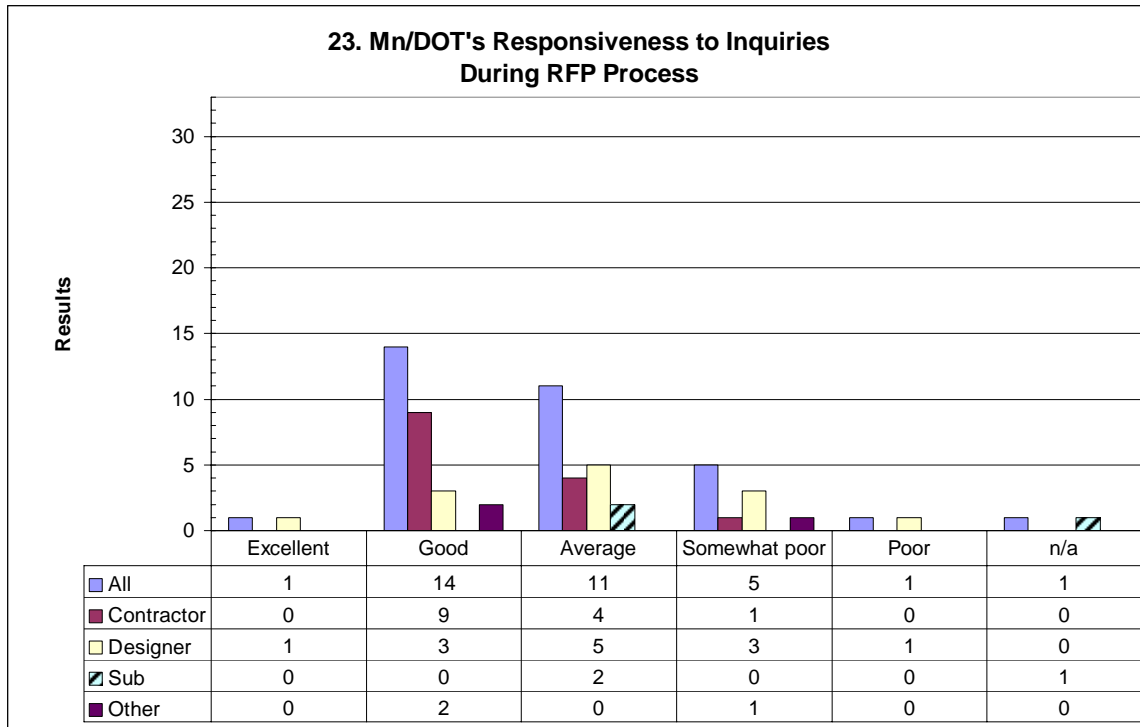


Figure 15. Mn/DOT's Responsiveness to Inquiries During the RFP Process

Of the 33 respondents 15 rated Mn/DOT either "Excellent" or "Good" and another eleven rated the agency "Average." Six or 18% rated Mn/DOT "Somewhat Poor" or "Poor."

In reviewing the narrative comments and combining them with input received during the Design-Build Forum it is clear that an opportunity exists for Mn/DOT to improve on its responsiveness to inquiries by design-build teams. Of note is the feeling that Mn/DOT isn't sensitive to the timing of their responses and that contractors must advance multiple designs in the preparation of their proposals per chance their inquiry is answered in a way that is problematic for their approach.

At least two of the comments noted that response time was a function of who the project manager is. If responses are timely with a particular project manager but not so with another, then the problem lies not in process but rather is probably a "people" issue. Either way, there was enough concern expressed here to warrant the state's attention to this issue.

Another element to be evaluated in the RFP portion of the design-build procurement process is the time allowed to prepare a proposal. Survey participants were asked to rate this factor for Mn/DOT's program. In this case only two of 33 rated the time as "Somewhat inadequate" while the majority rated the time allowed to prepare their proposals as being "About right" or "More than adequate."

The survey also asked for feedback on how Mn/DOT was utilizing their Alternative Technical Concepts (ATC) process. The ATC is used by contractors to advance a concept that may or may not be provided for in the request for proposals. It is a means whereby a contractor can receive a provisional approval of their idea and propose accordingly. It is a powerful tool and results in many ideas offered by design-build teams for consideration.

The ATC process netted more comments than any other question in the survey. It appears this is both a reflection of the industry's support of the process and also their desire to improve it. The reader is referred to Appendix B for a complete set of the responses to the survey while a summary of those comments and the thoughts expressed at the Design-Build Forum is provided here.

Inputs regarding the ATC process include the following:

- Concerns raised about the confidentiality of the state's deliberations and decisions
- Issues regarding the timeliness of the decisions
- Mn/DOT needs to be more open-minded and not reject industry practice just because it hasn't been done in Minnesota before
- Concerns that some ATC ideas are shared with other contractors
- Disagree with the apparent or perceived process of proposed ATC ideas being issued as addendums for all contractors to bid on
- Mn/DOT needs to accept ATC concepts that have already been approved on other Mn/DOT projects for approval on subsequent projects

The fact that ATC's elicited the greatest number and most lengthy responses from the industry is an indication of the need to improve this valuable tool for design-build projects.

Finally, the respondents were asked to comment on areas where the RFP imposes undue risk on the design-build team. Like the question on ATC's this one obviously "hit a chord" as there were numerous and lengthy responses. A full rendering of these comments is found in Appendix B that supplements the short summary provided in this chapter.

Overwhelmingly, the major area that design-build teams identified as contributors to risk for them is in the area of utilities. Problems obviously exist with the identification of all utilities, their timely relocation where conflicts exist, delays and other problems dealing with utility companies, and the inability of a design-build team to manage this important aspect of their projects. These topics were echoed in the Design-Build Forum further confirming the need to deal aggressively with the problems associated with utility conflicts on Mn/DOT's design-build projects.

Chapter Four Selection Process

The selection process starts early in the project development phase of a design-build project. Decisions must be made as to the means for evaluating and selecting the successful proposer. The determined methodology will drive how the RFP is written, how the selection process will be designed from an execution standpoint and ultimately the factors that will be used to determine which team is to build the project in the end. How this process is designed and implemented is important for all involved.

A review of the national practice of design-build procurements reflects a desire on the part of the DB teams for clarity of the selection criteria and objectivity in the ratings. In order to assess these attributes in Mn/DOT's program a series of questions were designed to determine how the industry rated the agency in these areas.

Figure 16 shows how the industry rated the objectivity of Mn/DOT in their selection process.

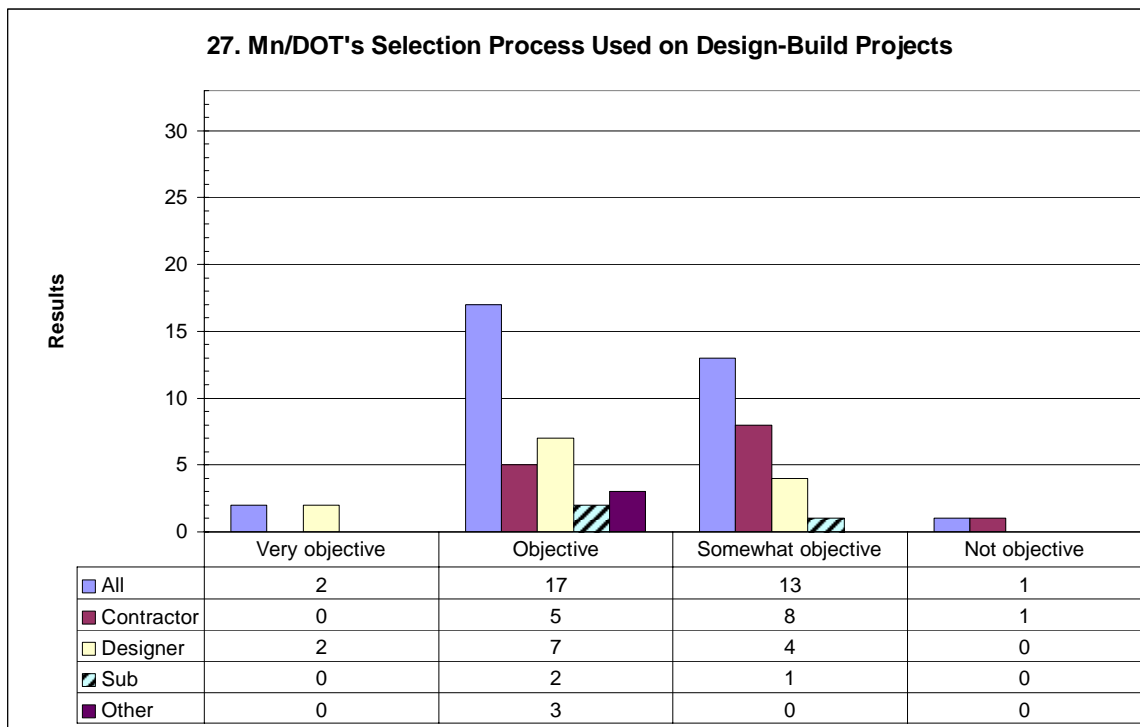


Figure 16. Mn/DOT's Selection Process Used on Design-Build Projects

Only two designers rated Mn/DOT as being "Very objective." Seventeen of thirty-three or 52% ranked the process as being "Objective." Fourteen responses offered "Somewhat objective" or "Not objective" as their ratings. These last two ratings indicate a less than full endorsement of the rating process and offer an

insight into how teams feel they are being treated. Concerns expressed, whether substantiated or not, must be addressed by an owner to preserve the industry's confidence in the design-build selection process. Comments from the design-build teams in the survey, the forum and in the phone interviews indicated a concern with the experience level of some selection panel participants and issues with the objectivity of some participants. Both concerns deserve attention from Mn/DOT due to frequency of their mention in this assessment process.

When the industry was queried about how clear the selection process is described in the RFP there were 30 affirmative responses ranging from "Average" to "Very Clear." These ratings must be considered in light of the narrative comments received in conjunction with this question. Three of the five comments offered dealt with concerns with subjectivity and a fourth identified the need to have more seniority in the membership of the selection panels which were just mentioned above.

Further exploring this issue Figure 17 offers the answers to the question: Have you ever thought the selection process favored another team for any reason?

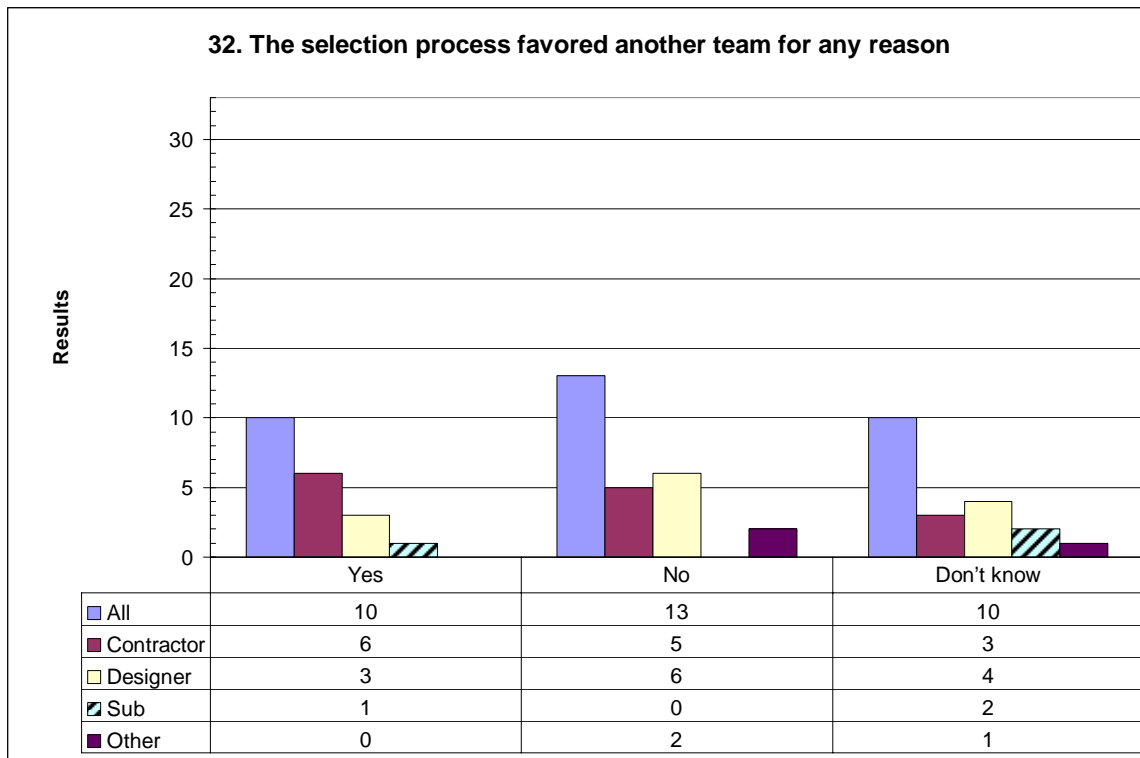


Figure 17. Have You Ever Felt the Selection Process Favored Another Team?

Nearly 1/3 of the respondents answered in the affirmative to this question. As each request for proposals is prepared by Mn/DOT they establish the scoring criteria and rating methodology to be used to select the successful proposer. In doing so they must create a system that is understood by potential proposers and which is defensible should there be a challenge to the agency's decision.

Clarity in this process creates a competitive and fair environment for all proposers. In regards to the scoring criteria used on Minnesota's design-build projects, two-thirds of the respondents said that they agreed with the criteria and the relative point weightings offered by Mn/DOT. In addition, by nearly the same margin they said that Mn/DOT should not consider any additional criteria for use in this process.

There are a variety of ways to effect the selection of a proposer for constructing a design-build project. They include the more traditional "low bid" process which awards a contract to the lowest responsible and responsive bidder. Also on the list is "Best Value" which rewards the design-build team that proposes the best combination of work, schedule and price. There are others such as "Price and Other Factors" which is really a derivative of "Best Value" that looks at the price, quality, schedule or other factors used in the selection process. Answering in the affirmative indicated support for the method noted. In this case, 27 or 82% of the respondents endorsed "Best Value" and another dozen "Price and Other Factors." Only four suggested that the preferred selection method would be "Low Bid."

Chapter Five Construction Process

After a successful proposer is identified by Mn/DOT the construction process then can begin. Many of the attributes of design-build manifest themselves during this phase and it is obviously the most visible to the public. How the industry viewed Mn/DOT's application of the design-build process during construction was the subject of the last portion of the survey.

Initially, the survey inquired as to the comparison of the design-build projects to those using design-bid-build (DBB). The question was: "How would you rate the construction process on Mn/DOT's design-build projects versus its typical non-design-build projects?" Ten of the survey participants noted a "N/A" to this question which assumes they had not participated in a design-build project to date. Figure 18 reflects the data coming from this question and is instructive on this point.

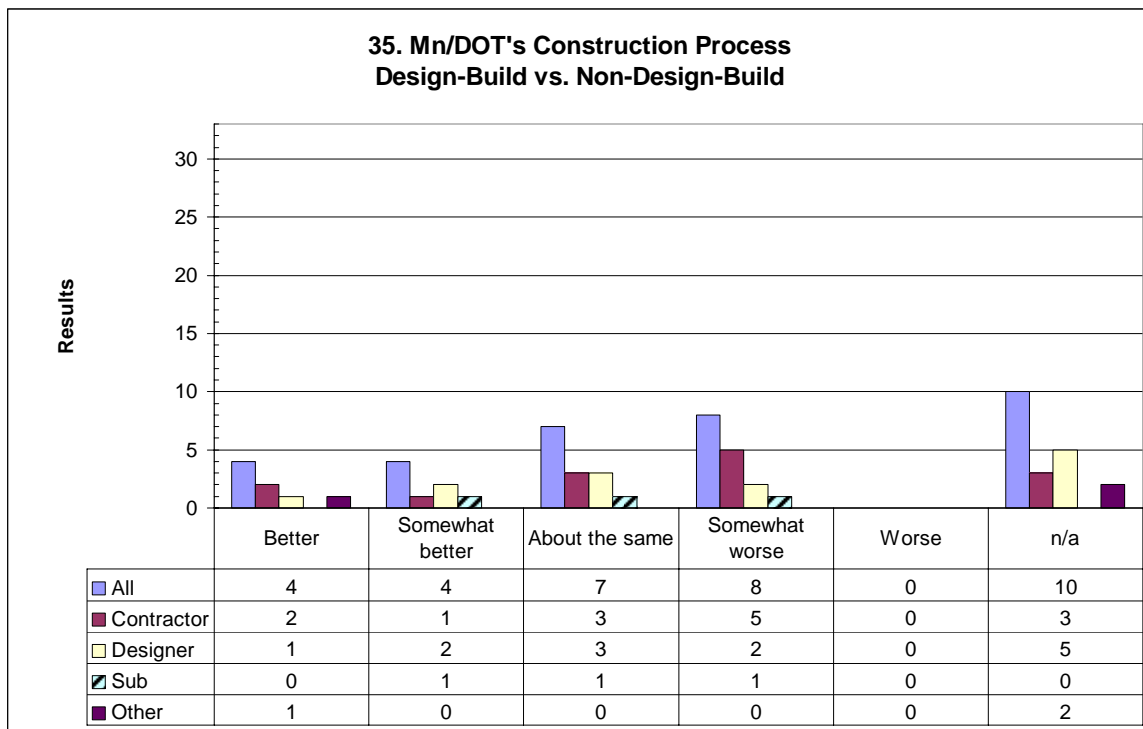


Figure 18. How Would You Rate the Construction Process: Design-Build vs. Non Design-Build?

Eight of 23 or 35% said that it was "Somewhat Worse" while seven or 30% said that it was "About the Same." The remaining eight are spread evenly among "Somewhat Better" and "Better." Additional information provided in the next question and later in this chapter will serve to amplify the feelings expressed about the construction process thus far.

The solicitation of areas where Mn/DOT could improve its construction process on design-build projects netted many responses. The survey allowed for three selections from among 13 offered. In all, the most common indication “Mn/DOT adjustment from DBB to DB” with 48% listing this as one of their three choices. Comments in the narrative section as well as during the Design-Build Forum center on several themes. They are:

- Experience level of Mn/DOT personnel administering DB projects
- DB teams being held to a higher standard than would be the case on DBB projects
- Redundancy and unnecessary nature of some project requirements
- Inappropriate use of lump sum prices to require the design-builder to meet higher requirements

Note that there are no other factors that stand out nearly as noticeable as this first one relating to the adjustment from DBB to DB at Mn/DOT. Beyond that compelling point, all of the following garnered about the same level of interest from the survey participants:

- Contract provisions & specifications
- Quality management
- DBE program
- Design reviews
- Timely decision making
- Consistency between projects
- Mn/DOT staff experience
- Third party issues
- Utilities

It should be noted that of this larger listing of issues only none ranked higher than half of the score given to the adjustment from DBB to DB factor.

There is a general sense offered by the industry that some Mn/DOT employees and consultants have not adjusted to the design-build process and are trying to apply historical or traditional practices in an environment that was designed to have more flexibility than is being allowed to date. In addition, there are comments offered by the design-build teams that they are being subjected to “personal preferences” offered by Mn/DOT staff as to how a project should be designed even though the design-builder feels their design meets the applicable standards. Based on the number of instances of mention, this is an issue worthy of Mn/DOT’s attention in moving ahead with its DB program.

The state also wanted to assess how the design-builders felt about their ability to pursue their proposed approach to a project without being impeded. Results are posted in Figure 19.

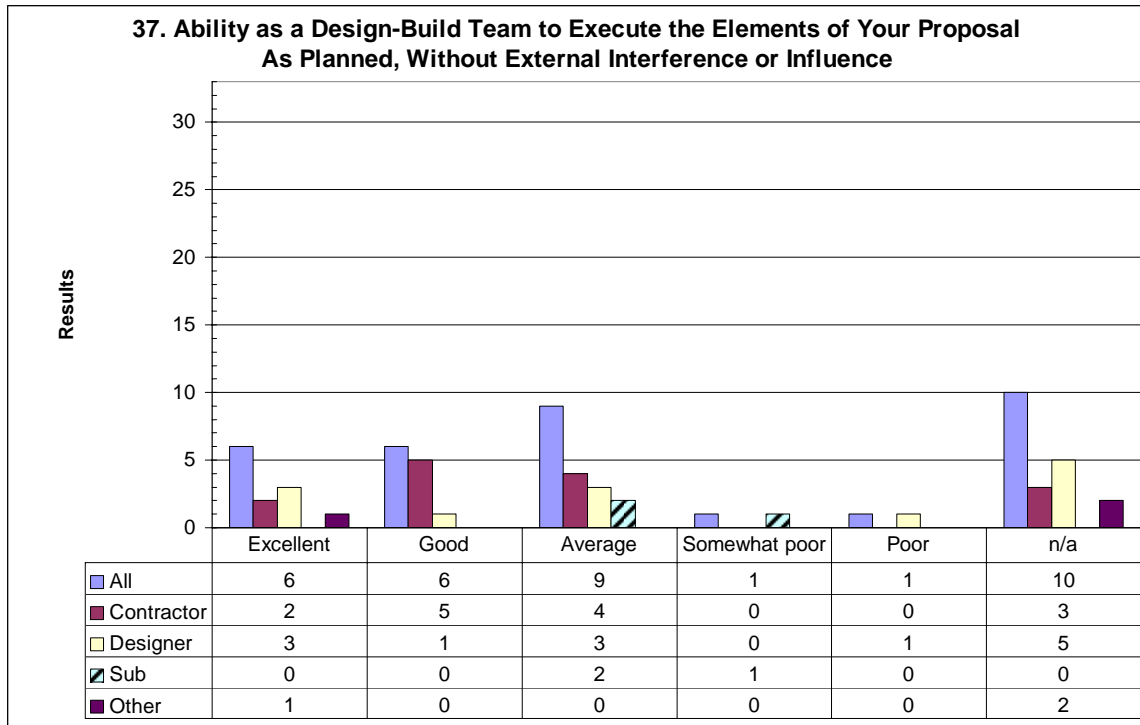


Figure 19. Ability to Execute the Proposal Without Outside Influence

Nine of 23 responses noted an “Average” level of ability to execute what they proposed in their response to the RFP. Twelve or 52% said their ability was either “Good” or “Excellent.” Only two indicated a lesser ability to do so. This is an important issue and must be considered in perspective with the other questions in this survey. In all, there is apparently a feeling that design-build teams can pursue their work in accordance with what they proposed.

The next question explored what factors were most common if the design-builder felt impeded in the prosecution of their work. Figure 20 reflects these results. Most notably, they were identified in the following order:

- Lack of DOT flexibility in applying design-build
- Mn/DOT staff
- Contract interpretation
- Differing site conditions
- Utilities
- Interference from third parties

The first three center on Mn/DOT staff and their administration of the contracts while the last three relate to other parties interfering with the way a design-build team performs their work.

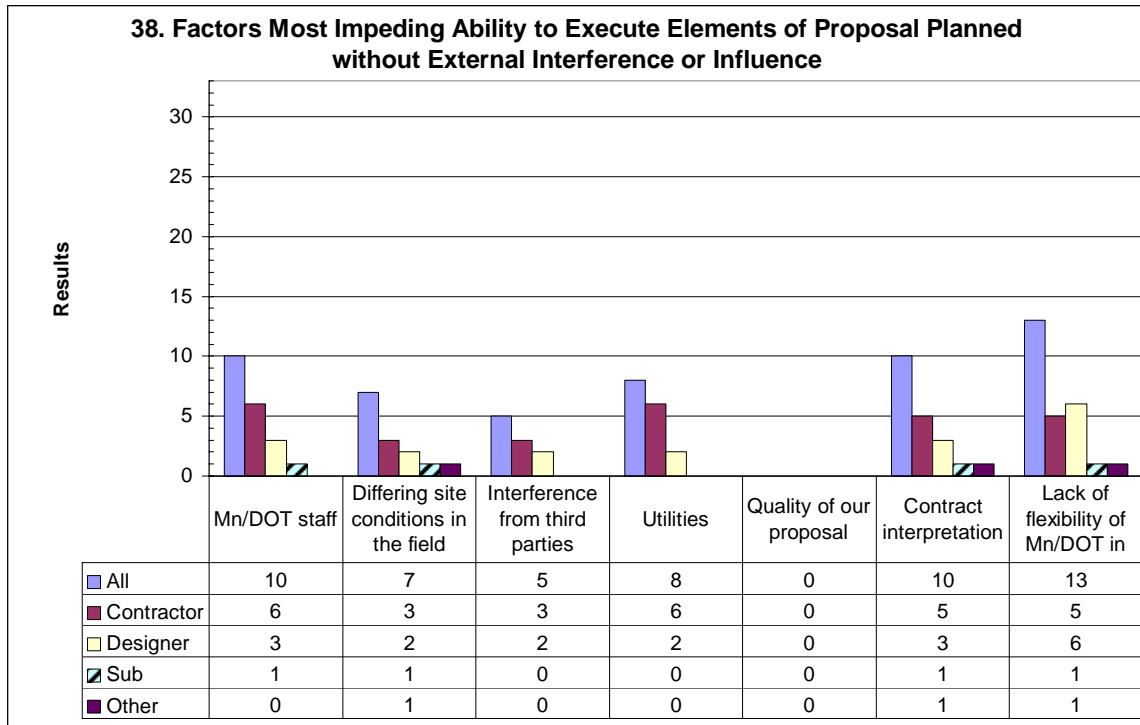


Figure 20. Factors Impeding the Execution of the Work

In an attempt to determine the factors that contribute to successful pursuit of design-build projects respondents offered the following found in Figure 21.

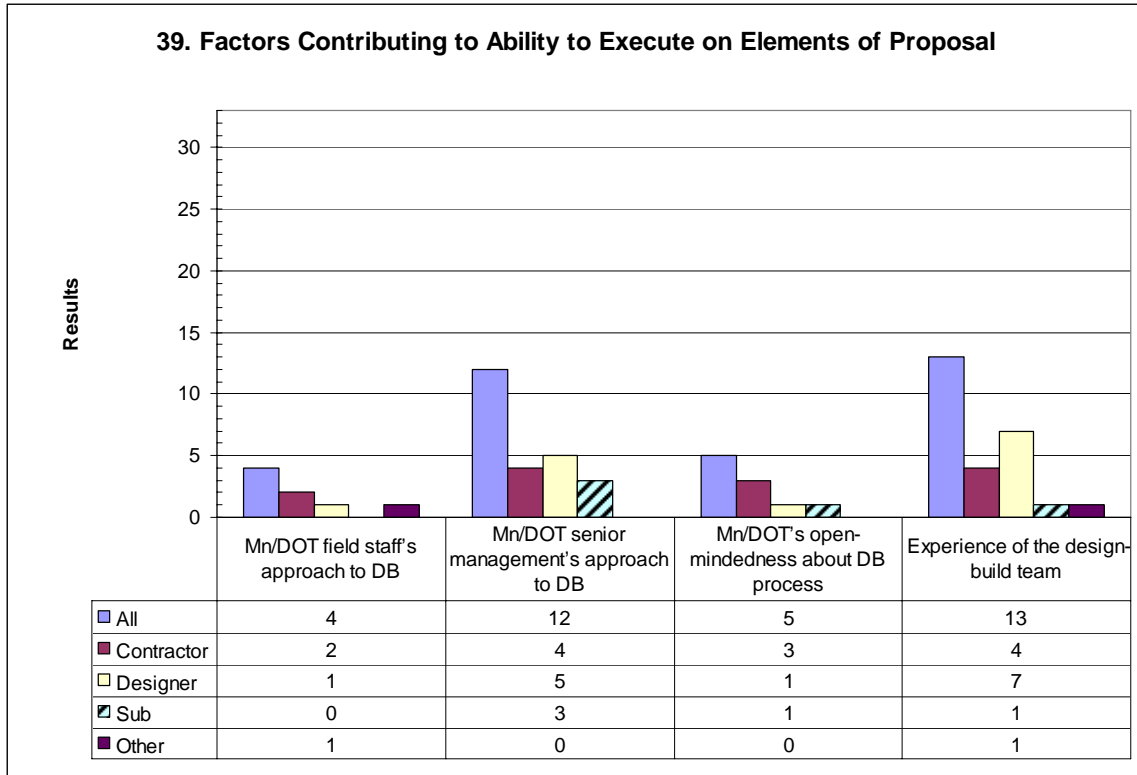


Figure 21. Factors Contributing to the Ability to Execute on the Proposal

Note that two of the factors outweigh the others in their identification by the design-build team participants. Thirteen of the 34 responses or 38% said that the “Experience of the design-build team” was the most important factor for executing the proposal. Closely following this were 12 responses stating that “Mn/DOT’s senior management’s approach to DB” was a major contributor. While the first and most popular response is not unexpected it should be noted how strongly the industry members surveyed feel about how Mn/DOT’s senior management is influencing their success on design-build projects. The narrative comments refer to co-location and also offer several reflections on how valuable partnering and teamwork are to the process.

An important measure of success for design-build projects is the level of quality found in the finished product. Detractors will often concede that design-build projects are usually finished well ahead of their design-bid-build counterparts and that they are more effective in controlling project cost growth. However, they often assert that the quality just isn’t as good. While those experienced in using design-build know the contrary, the next question in the survey attempted to determine how the respondents assessed the quality of the work on DB projects versus DBB. Figure 22 contains these results.

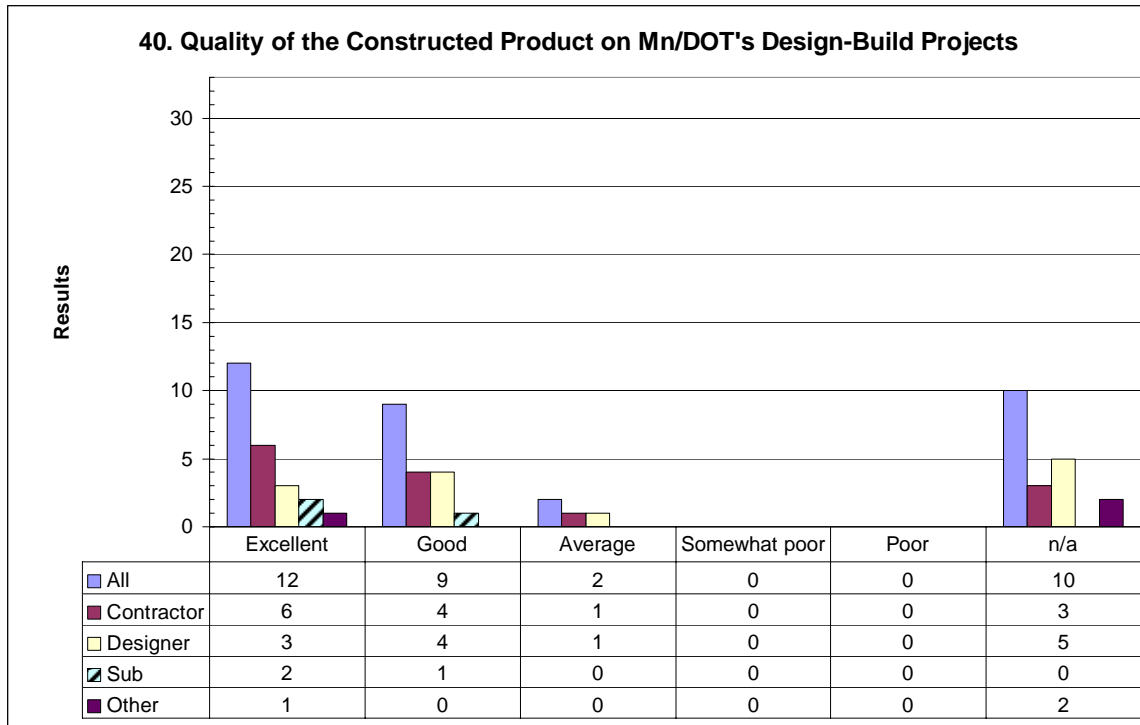


Figure 22. Quality of the Constructed Product on Design-Build Projects

A dozen of the 23 respondents, or 52% gave quality an “Excellent” rating with another 9 or 39% rating quality as “Good.” In all, not one respondent gave quality less than an “Average” rating in this question.

A major purpose of this outreach effort on the part of Mn/DOT is to determine what they might do to improve the design-build process on their projects. Survey participants were asked to offer suggestions to this point and identified four major areas where improvements could be made. Figure 23 offers the results to this query.

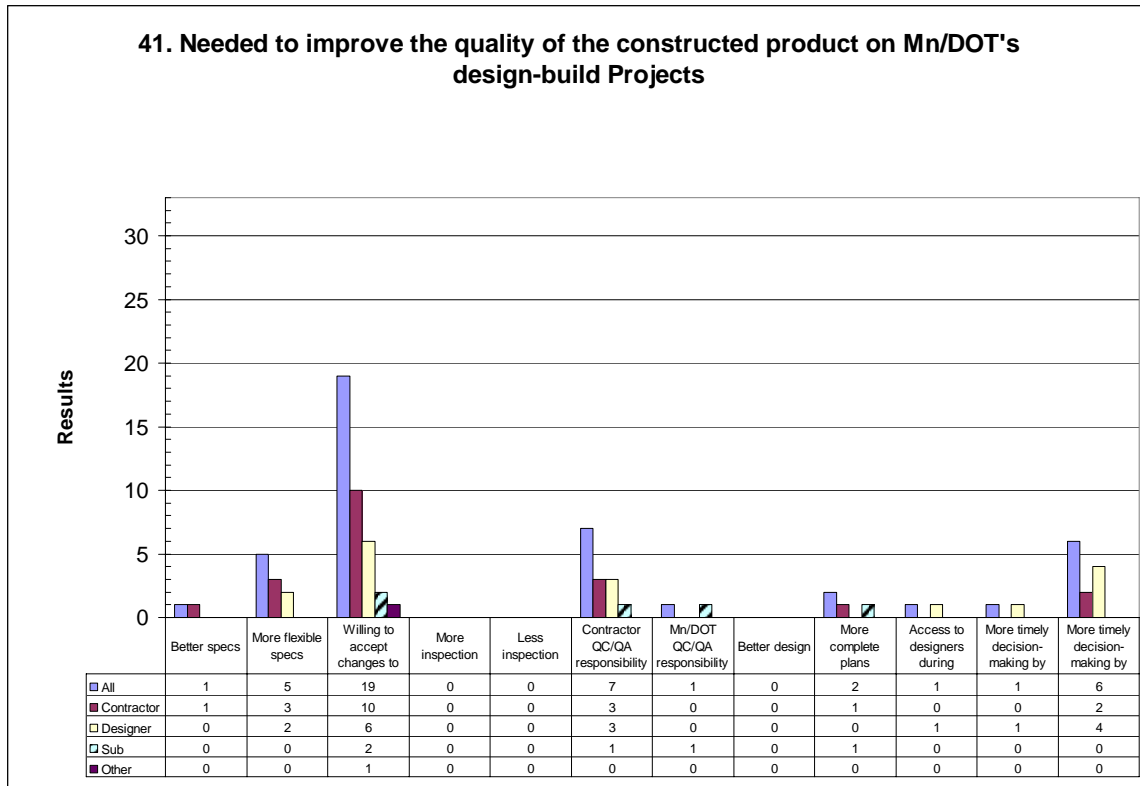


Figure 23. What Could Be Done to Improve the Design-Build Process

An overwhelming number (58%) said that “Willing to Accept Spec Changes” was the primary area where Mn/DOT could improve their process. This result, coupled with previous comments about ideas proposed in the ATC process and industry responses that Mn/DOT staff was focused on only how the state had done things previously points to an area that may need attention to improve the overall design-build process in the state.

Following far behind are three other areas receiving about the same ratings in the survey. They are:

- Contractor QC/QA responsibility
- More timely decisions
- More flexible specs (related to the discussion in the previous paragraph)

All four areas represent great opportunities for improving an effective tool in Minnesota.

There are some concerns about the Disadvantage Business Enterprise (DBE) as it relates to the state’s design-build program. Previous questions elicited narrative responses about the challenges of meeting goals and the frustrations experienced to date by some participants on design-build projects. The next two questions of the survey focused more specifically on the issue of the DBE process in design-build. The first question was: “How would you rate the ability to meet the disadvantaged business enterprise (DBE) objectives of Mn/DOT

under on design-build projects?” Respondents were offered a scale of 1 to 10 with one being Difficult and 10 being Easy. Figure 24 contains their responses.

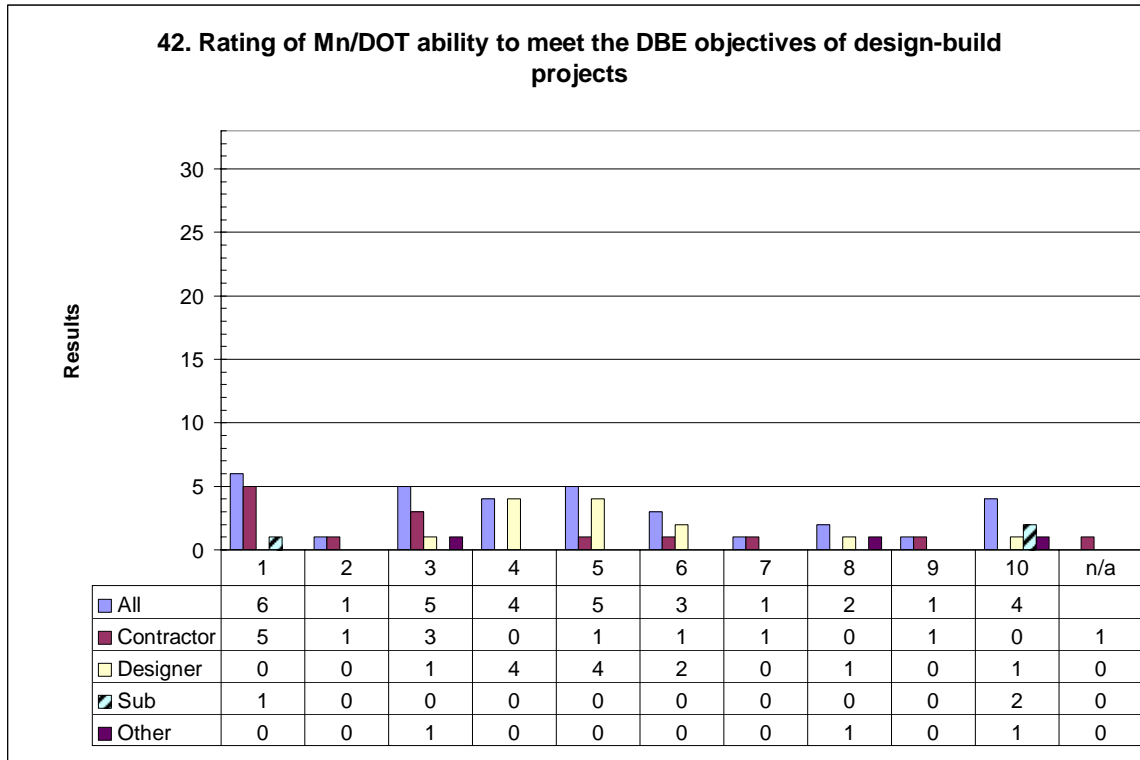


Figure 24-Rating the Ability to Meet the DBE Objectives of Mn/DOT on DB Projects

Overall, 24 or 75% of the respondents gave their ability to meet the DBE objectives of their projects less than a passing grade or a ranking from 1 to 6. The other 25% rated their ability from a passing to an excellent score.

The participants were then asked what Mn/DOT could do to improve their ability to meet the state's DBE objectives. In order of mention the top three rated strategies were:

- More realistic goals-79%
- More capable DBE subcontractors-64%
- A greater pool of DBE subcontractors-61%

To its credit, Mn/DOT is in the process of a major reform of the state's DBE program and many changes are still in their implementation phase. Nevertheless, there is a strong message of need for improvement in the way the DBE program is administered on Mn/DOT's design-build projects.

Two final questions posed in the survey offered additional insights for Mn/DOT regarding the effectiveness of their design-build program. The first queried the industry regarding which phases of the process needed to be improved the most.

Responses mirror many of the comments previously spoken to in this report. Three of the four areas garnered enough responses to be significant. Listed in order the four phases and their scores are:

- Proposal process and the Request for Proposals-46%
- Selection process-26%
- Construction process and contract administration-21%
- Pre-Proposal process-7%

In reviewing the narrative comments and comments from the Design-Build Forum there are a number of themes that emerge worth reviewing. Comments ranged from greater effectiveness through better staffing of projects, a desire to have smaller projects (below \$100 million), a need to modify or scale project requirements based on the size of the project, design issues and contract administration concerns. A thorough review of the statements made in conjunction with Question 45 in Appendix B would be advisable to gain the perspective and breadth of the comments received.

The final question was a general inquiry soliciting anything else the design-builders would like to share with Mn/DOT about their program. This resulted in a broad array of responses that were as varied as those just mentioned from Question 45. While there are no overriding themes emerging from these fourteen comments, they nevertheless, contain a great deal of valuable input for Mn/DOT to seriously consider as they seek to improve their design-build program.

Chapter Six

Conclusions Recommendations

The Minnesota Department of Transportation has experienced success in their use of design-build for their highway construction projects. That success has resulted in many benefits to the traveling public. It is anticipated that design-build will continue to be used in a deliberate manner by Mn/DOT on future projects. In light of this fact, Mn/DOT determined that this study of its process, including the industry survey and the Design-Build Forum held on March 30, 2006, would be an effective way to secure the feedback they needed to make meaningful changes to their program. Overall, the assessment was a success. The industry responded in volume and substance. This report contains a treasure trove of input that will assist Mn/DOT to this end. It is now up to the agency to move ahead and make the kinds of meaningful change its program deserves.

The overall program has many noteworthy features and areas where Mn/DOT is doing well. Ironically, the Proposal phase of the process gets the highest indication for need for improvement and yet it is the area where many of the agency's highest marks were scored. Areas needing improvement will be highlighted in the next section where recommendations are offered. The response rate to the Internet survey and the attendance and participation levels at the Design-Build Forum indicate a strong interest on the part of industry in improving the overall process and working in partnership with Mn/DOT to do so. There was no "cry" from the industry to do away with the design-build program. Rather, the collective message was that this was a program that offered more potential than it is achieving and here are the ways "we" can make it better.

In the course of preparing this report there are a series of recommendations that have emerged which should assist Mn/DOT in advancing the changes that will make their program more effective. They are:

1. Redesign the Alternative Technical Concepts (ATC) process to address the issues of timely decisions, more open decision-making, increased confidentiality and other attributes so that the full value of this tool can be realized.
2. Establish a means for achieving consistency in construction administration of the Mn/DOT design-build projects through greater training, mentoring of project managers and other project personnel, and greater involvement from the central office in guiding policy issues. This may be accomplished through initial training in a "design-build institute" or some other venue but must also be supplemented by strong and visible mentoring from Mn/DOT's senior leadership.
3. Modify Mn/DOT's design-build contract documents to allow for scalability of project requirements to match the size and unique characteristics of different projects.

4. Improve Mn/DOT's procedures for the utilization of DBE subcontractors on design-build projects based on the lessons learned from current and completed projects.
5. Examine the requirements for QC, QA, and IA as it relates to Mn/DOT's design-build projects and determine how to better manage these processes in the most cost effective manner possible. These efforts would seek to optimize state and contractor personnel resources and better delineate duties and responsibilities.
6. Modify the staffing of selection panels to address concerns with experience level, pre-dispositions, objectivity, and other concerns expressed by the industry.
7. Assess staffing assignments throughout the design-build process to address concerns expressed with reviewer experience levels not being in sync with proposer/designer levels.
8. Mn/DOT should determine how to reduce the impacts of utility conflicts and relocation issues on their design-build projects by improving the MUA process and establishing more definitive outcomes and actions on the part of third parties involved.
9. Mn/DOT should seek for simpler solutions to the contract documents and the "books" that are used in the Request for Proposals process.
10. Mn/DOT should establish an on-going means for continuing the initiatives that have or will begin with this assessment. Once these changes are made and additional projects completed, there will be other opportunities to further improve Mn/DOT's design-build process.

How Mn/DOT pursues these and other recommendations will be an important indication to the industry as to the future of this program. Experience in other states reflects the most effective means involve stakeholders from the industry as well as the state in crafting solutions that will address each of these issues.

Mn/DOT's design-build program is one which promises to continue to provide substantial benefit to the state and its citizens and deserves the attention and efforts that will result from this assessment.

APPENDIX A
Minnesota Department of Transportation
Design-Build
2006 Customer Assessment Questionnaire

Background Information

1. What segment of the industry does your company best represent?

- Contractor
- Subcontractor
- Designer
- Other

2. How many design-build projects has your company proposed on for Mn/DOT within the last five years?

- None
- 1
- 2
- 3+

3. How many design-build projects has your company proposed on outside of Minnesota within the last five years?

- None
- 1
- 2
- 3+
- n/a

4. How many design-build projects have you personally proposed on in the last five years?

- None
 - 1
 - 2
 - 3+
-

5. What is the dollar volume of work on design-build projects that your company has proposed on for Mn/DOT in the last five years?

- \$0
- \$0-1
- \$1-50
- \$51-100 million
- More than \$100 million

6. What is the dollar volume of work on design-build projects that your company has proposed on other than Mn/DOT over the last five years?

- \$0
- \$0-1 million
- \$1-50 million
- \$51-100 million
- More than \$100 million
- n/a

7. How many years have you personally worked in the transportation industry?

- 0-10
- 11-20
- 21-30
- 31 or more
- n/a

8. Have you ever been an employee of the Minnesota Department of Transportation?

- Yes
- No

9. Have you ever been an employee of any other state department of transportation?

- Yes
 - No
-

Pre-Proposal Phase

10. How effective is Mn/DOT at communicating with the industry about upcoming design-build projects?

- Very effective
- Somewhat effective
- Adequate
- Somewhat ineffective
- Very ineffective

If you gave Question 10 a "somewhat ineffective" or "very ineffective" rating, please provide your suggestions on improving this.

Suggestions:

11. How do you become informed of upcoming Mn/DOT design-build projects?

- State Register
- Construction Bulletin
- Industry association
- Mn/DOT notices, newsletters, etc.
- Word of mouth
- Other

12. Does Mn/DOT allow adequate time for design-build teams to form for its design-build projects?

- Very effective
- Somewhat effective
- Adequate
- Somewhat ineffective
- Very ineffective

13. How many teams have you been on?

- 1
 - 2
 - 3
 - 4+
-

14. How many teams has your firm been a part of that have been successful in winning a Mn/DOT design-build project?

- 1
- 2
- 3
- 4+

15. What are the attributes of the firms you consider most important in choosing a contractor/construction partner for a design-build team? (Select 3)

- General reputation
- Reputation with Mn/DOT
- Experience teaming with them on design-bid-build projects
- Experience with the use of design-build in general
- Experience with the use of design-build in Minnesota
- Ability to bond the project
- Past strategic relationship
- Specialty skills or equipment
- Ability to be price competitive
- Reputation for innovation
- Other (Specify)

16. What are the attributes of the firms you consider most important in choosing a design/engineering partner for a design-build team? (Select 3)

- General reputation
 - Reputation with Mn/DOT
 - Experience with the use of design-build in general
 - Experience with the use of design-build in Minnesota
 - Size of the firm
 - Past strategic relationship
 - Specialty skills or equipment
 - Ability to be price competitive
 - Reputation for innovation
 - Other (Specify)
-

Requests for Proposals

17. How would you rate the quality of Mn/DOT's requests for proposals on its design-build projects?

Excellent
Good
Adequate
Somewhat poor
Very poor

If you gave Question 17 a "somewhat poor" or "very poor" rating, please provide your suggestions on improving this.

Suggestions:

18. If you have worked in other states on design-build projects, how would you rate the quality of Mn/DOT's design-build requests for proposals against those in these other states?

Much better
Somewhat better
About the same
Somewhat worse
Much worse

19. How would you rate the level of design of the plans found in Mn/DOT's requests for proposals in terms of assisting your design-build team in developing its proposal?

Much more than necessary
More than necessary
About right
Less than necessary
Much less than necessary

20. In your opinion, what level of design completion is typical for plans contained in Mn/DOT's request for proposals?

0-10%
11-20%
21-30%
31-40%
41-50%
51% or more

21. What would you consider the optimal level of design completion for plans contained in Mn/DOT's requests for proposals?

- 0-10%
- 11-20%
- 21-30%
- 31-40%
- 41-50%
- 51% or more

22. What percentage of the cost of preparing a proposal does Mn/DOT's current level of a stipend cover for a design-build team's efforts to respond to a request for proposals?

- 0-10%
- 11-20%
- 21-30%
- 31-40%
- 41-50%
- 51% or more

23. How would you rate Mn/DOT's responsiveness to inquiries during the RFP process for its design-build projects?

- Excellent
- Good
- Average
- Somewhat poor
- Poor

If you gave Question 23 a "somewhat poor" or "poor" rating, please provide your suggestions on improving this.

24. How would you rate the amount of time Mn/DOT allows for the preparation of proposals on its design-build projects?

- Excessive
- More than adequate
- About right
- Somewhat inadequate
- Inadequate

25. Do you have any specific recommendations for improving the Alternative Technical Concept process?

Recommendations:

26. Are there certain areas of the RFP where there are excessive amounts of risk that are being placed on the design-builder?

Recommendations:

Selection Process

27. How objective would you rate the selection process used by Mn/DOT on its design-build projects?

Very objective

Objective

Somewhat objective

Not objective

If you gave Question 27 a "somewhat objective" or "not objective" rating, please provide your suggestions on improving this.

Suggestions:

28. How clear is the selection process as described in Mn/DOT's RFP's for its design-build projects?

Very clear

Clear

Average

Somewhat clear

Not clear

What could be done to make it clearer?

Comments:

29. Do you agree with the RFP scoring criteria categories and relative point weightings?

yes

no

30. Are there additional criteria categories that you feel should be considered?

yes

no

If yes, please specify.

Comments:

31. What is your preferred selection method for choosing the successful team on design-build projects in Minnesota? (Select up to 2)

- Low bid
- Best value
- Price and other factors
- Other (Specify)

32. Have you ever thought the selection process favored another team for any reason?

- Yes
- No
- Don't know

33. If you answered "Yes" to Question 32 please provide the reason why in the box below.

Comments

34. Have you been successful in winning a Mn/DOT design-build project?

- Yes
- No

Construction

35. How would you rate the construction process on Mn/DOT's design-build projects versus its typical non-design-build projects?

- Better
 - Somewhat better
 - About the same
 - Somewhat worse
 - Worse
-

36. What areas should Mn/DOT work on to improve the construction process on its design-build projects? (Select up to 3)

- Contract provisions/specifications
- Quality Management
- Disadvantaged business enterprise (DBE) program
- Design reviews
- Timely decision-making
- Consistency of administration between projects
- Mn/DOT staff experience
- Adequate Mn/DOT staffing levels
- Third party issues (e.g. local governments, railroads, etc.)
- Utilities
- Public involvement/community relations
- Ability of Mn/DOT staff to adjust from design-bid-build to design-build
- As-built plans
- Other (Specify)

37. How would you rate your ability as a design-build team to execute the elements of your proposal as you planned and without external interference or influence?

- Excellent
- Good
- Average
- Somewhat poor
- Poor

38. What factors most impeded your ability as a design-build team to execute on the elements of your proposal as you planned and without external interference or influence? (Select up to 3)

- Mn/DOT staff
 - Differing site conditions in the field
 - Interference from third parties (e.g. local governments, railroads, etc.)
 - Utilities
 - Quality of our proposal
 - Contract interpretations
 - Lack of flexibility on the part of Mn/DOT in applying design-build
 - Contracting approach
 - Other (Specify)
-

39. What factors most contributed to your ability as a design-build team to execute on the elements of your proposal? (Select up to 2)

- Mn/DOT field staff's approach to design-build
- Mn/DOT senior management's approach to design-build
- Mn/DOT's open-mindedness about the design-build process
- Experience of the design-build team
- Other (Specify)

40. How would you rate the quality of the constructed product on Mn/DOT's design-build projects?

- Excellent
- Good
- Average
- Somewhat poor
- Poor

If you gave Question 40 a "somewhat poor" or "poor" rating, please provide your suggestions on improving this.

Suggestions:

41. What could be done to improve the quality of the constructed product on Mn/DOT's design-build projects? (Select up to 3)

- Better specifications
 - More flexible specifications
 - More willingness to accept changes to specifications that provide the same or better product
 - More inspection
 - Less inspection
 - More responsibility for the contractor for performing QC/QA activities
 - More responsibility for Mn/DOT for performing QC/QA activities
 - Better design
 - More complete plans
 - More access to designers during construction
 - More timely decision-making by designers
 - More timely decision-making by Mn/DOT
 - Other (Specify)
-

42. How would you rate the ability to meet the disadvantaged business enterprise (DBE) objectives of Mn/DOT under on design-build projects? (Scale of 1-10 with 10 being extremely easy and 1 being extremely hard)

1	6
2	7
3	8
4	9
5	10

43. What could be done to improve your ability to meet the disadvantaged business enterprise (DBE) objectives of Mn/DOT under on design-build projects? (select up to 3)

More realistic goals

A greater pool of DBE subcontractors to choose from

More capable DBE subcontractors

More flexibility from the prime contractor

More networking events organized by the project stakeholders

Other (Specify)

Conclusion

44. What area of the design-build process needs the most improvement on Mn/DOT's design-build projects? (select all that apply)

Pre-proposal process

Proposal process and the Request for Proposals

Selection process

Construction process and contract administration

Please provide specific changes which should be considered.

Comments:

45. Are there specific items Mn/DOT should consider as a means of lowering the cost of design-build projects?

Recommendations:

46. What other inputs on Mn/DOT's design-build program would you like to offer?

Comments:

APPENDIX B

Minnesota Department of Transportation Design-Build 2006 Customer Assessment Questionnaire

33 Responded to the survey.

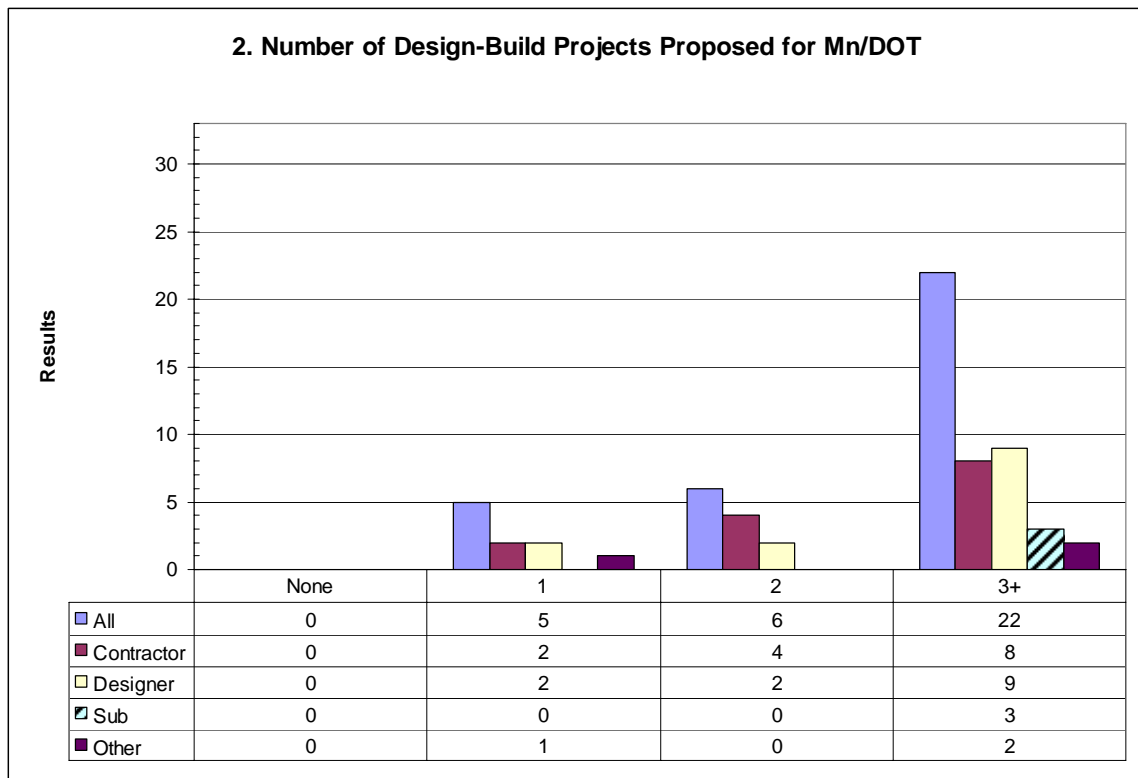
Background Information

1. What segment of the industry does your company best represent?

All		Contractor		Designer		Sub		Other		
14	42%	14								Contractor
3	9%					3				Subcontractor
13	39%			13						Designer
3	9%							3		Other

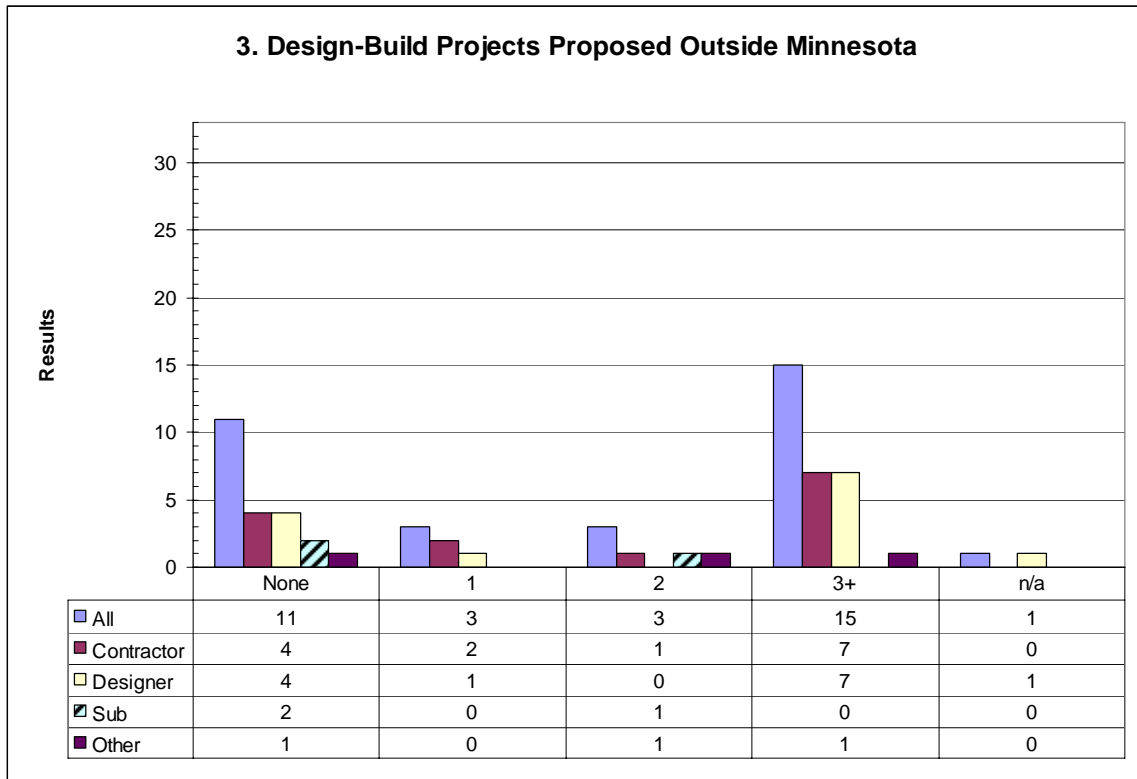
2. How many design-build projects has your company proposed on for Mn/DOT within the last five years?

All		Contractor		Designer		Sub		Other		
0	0%	0	0%	0	0%	0	0%	0	0%	None
5	15%	2	14%	2	15%	0	0%	1	33%	1
6	18%	4	29%	2	15%	0	0%	0	0%	2
22	67%	8	57%	9	69%	3	100%	2	67%	3+



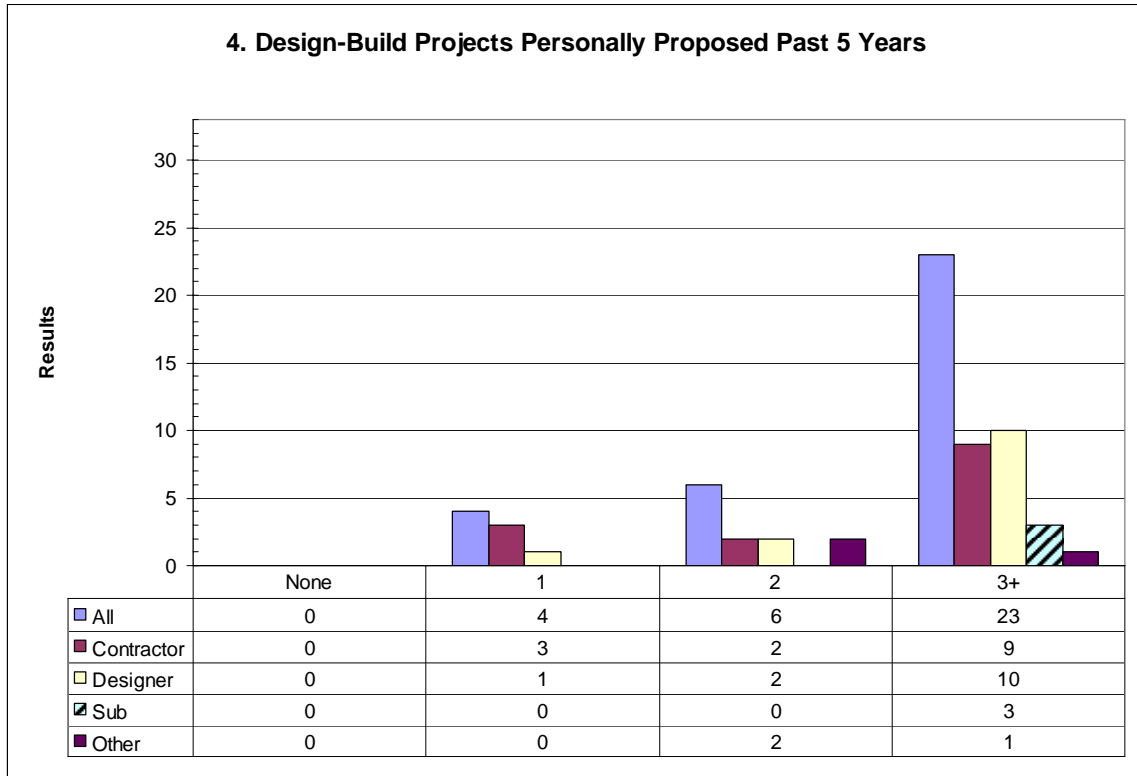
3. How many design-build projects has your company proposed on outside of Minnesota within the last five years?

All		Contractor		Designer		Sub		Other		
11	33%	4	29%	4	31%	2	67%	1	33%	None
3	9%	2	14%	1	8%	0	0%	0	0%	1
3	9%	1	7%	0	0%	1	33%	1	33%	2
15	45%	7	50%	7	54%	0	0%	1	33%	3+
1	3%	0	0%	1	8%	0	0%	0	0%	n/a



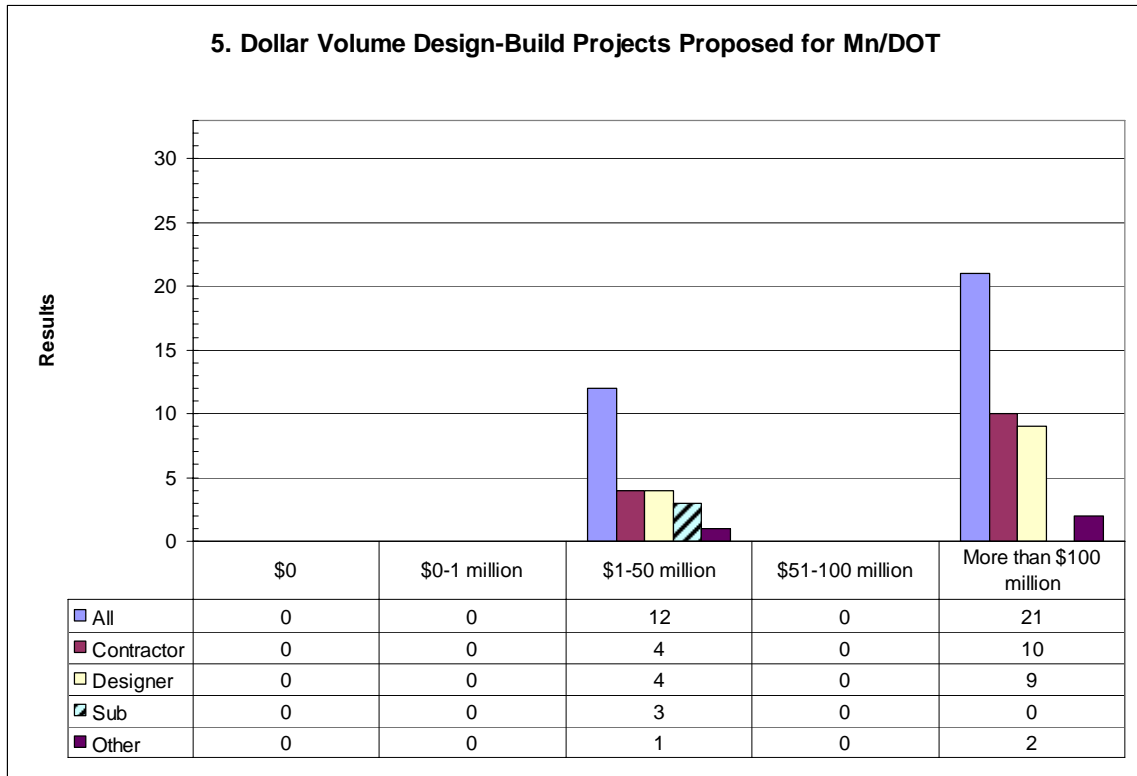
4. How many design-build projects have you personally proposed on in the last five years?

All		Contractor		Designer		Sub		Other		
0	0%	0	0%	0	0%	0	0%	0	0%	None
4	12%	3	21%	1	8%	0	0%	0	0%	1
6	18%	2	14%	2	15%	0	0%	2	67%	2
23	70%	9	64%	10	77%	3	100%	1	33%	3+



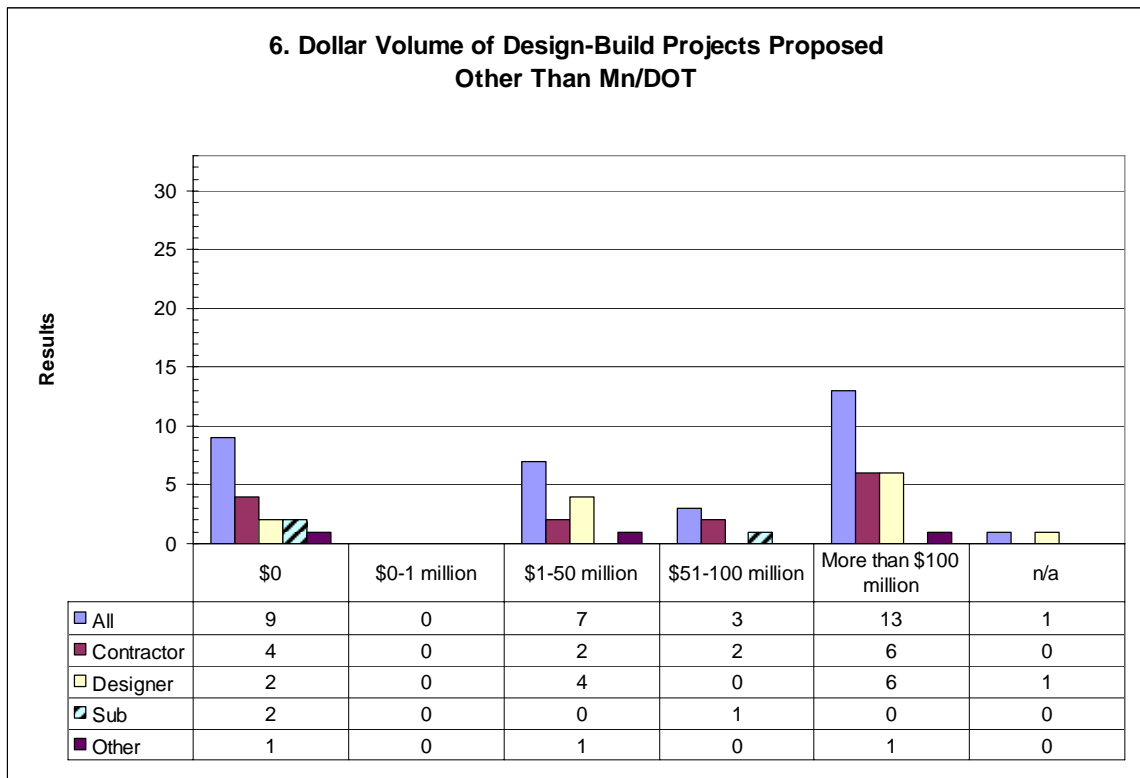
5. What is the dollar volume of work on design-build projects that your company has proposed on for Mn/DOT in the last five years?

All		Contractor		Designer		Sub		Other		
0	0%	0	0%	0	0%	0	0%	0	0%	\$0
0	0%	0	0%	0	0%	0	0%	0	0%	\$0-1 million
12	36%	4	29%	4	31%	3	100%	1	33%	\$1-50 million
0	0%	0	0%	0	0%	0	0%	0	0%	\$51-100 million
21	64%	10	71%	9	69%	0	0%	2	67%	More than \$100 million



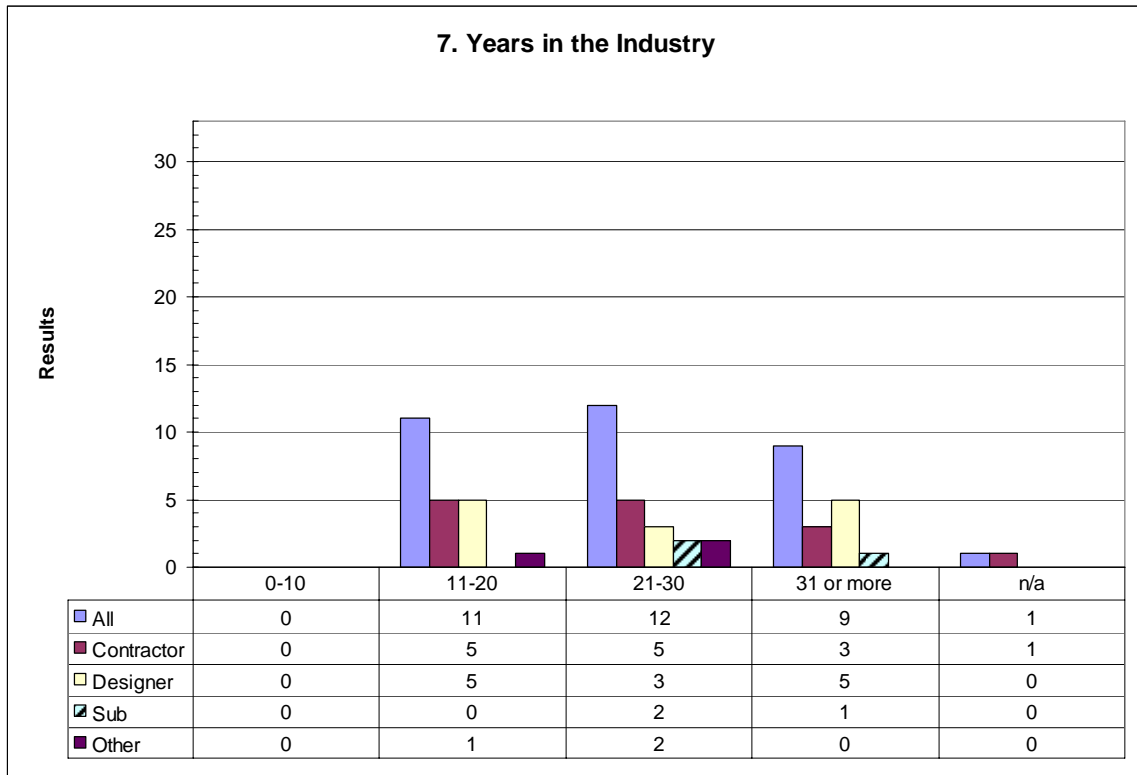
6. What is the dollar volume of work on design-build projects that your company has proposed on other than Mn/DOT over the last five years?

All		Contractor		Designer		Sub		Other		
9	27%	4	29%	2	15%	2	67%	1	33%	\$0
0	0%	0	0%	0	0%	0	0%	0	0%	\$0-1 million
7	21%	2	14%	4	31%	0	0%	1	33%	\$1-50 million
3	9%	2	14%	0	0%	1	33%	0	0%	\$51-100 million
13	39%	6	43%	6	46%	0	0%	1	33%	More than \$100 million
1	3%	0	0%	1	8%	0	0%	0	0%	n/a



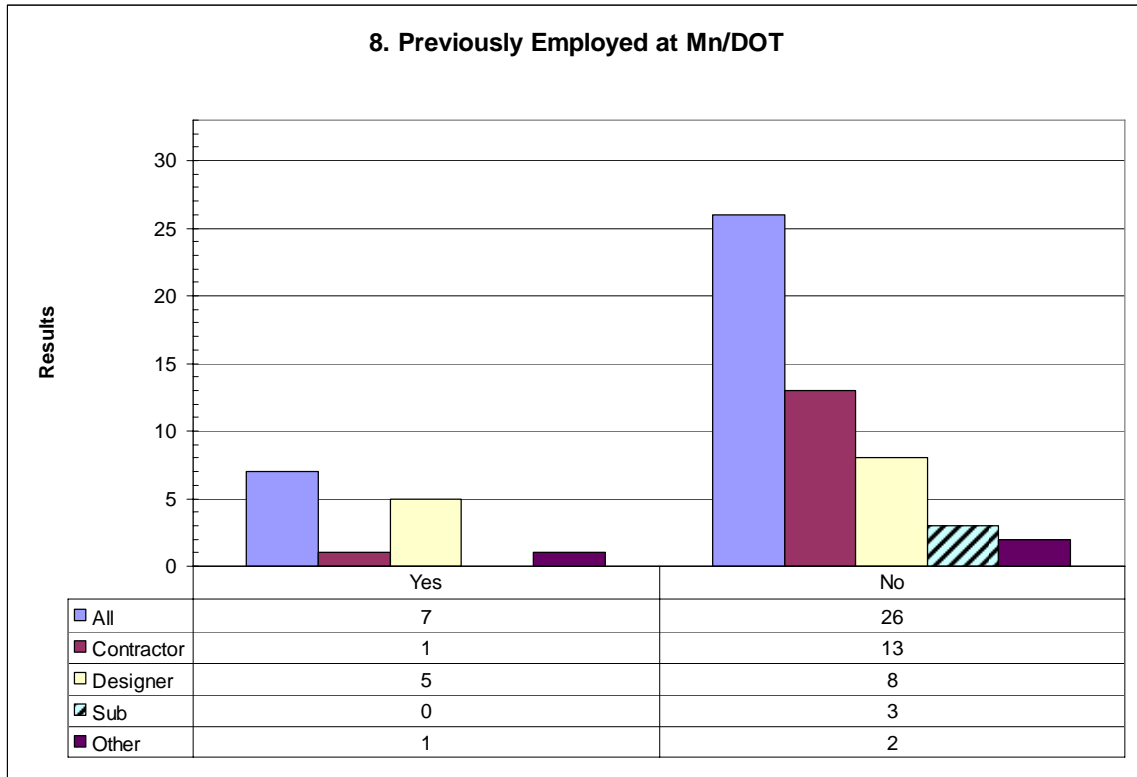
7. How many years have you personally worked in the transportation industry?

All		Contractor		Designer		Sub		Other		
0	0%	0	0%	0	0%	0	0%	0	0%	0-10
11	33%	5	36%	5	38%	0	0%	1	33%	11-20
12	36%	5	36%	3	23%	2	67%	2	67%	21-30
9	27%	3	21%	5	38%	1	33%	0	0%	31 or more
1	3%	1	7%	0	0%	0	0%	0	0%	n/a



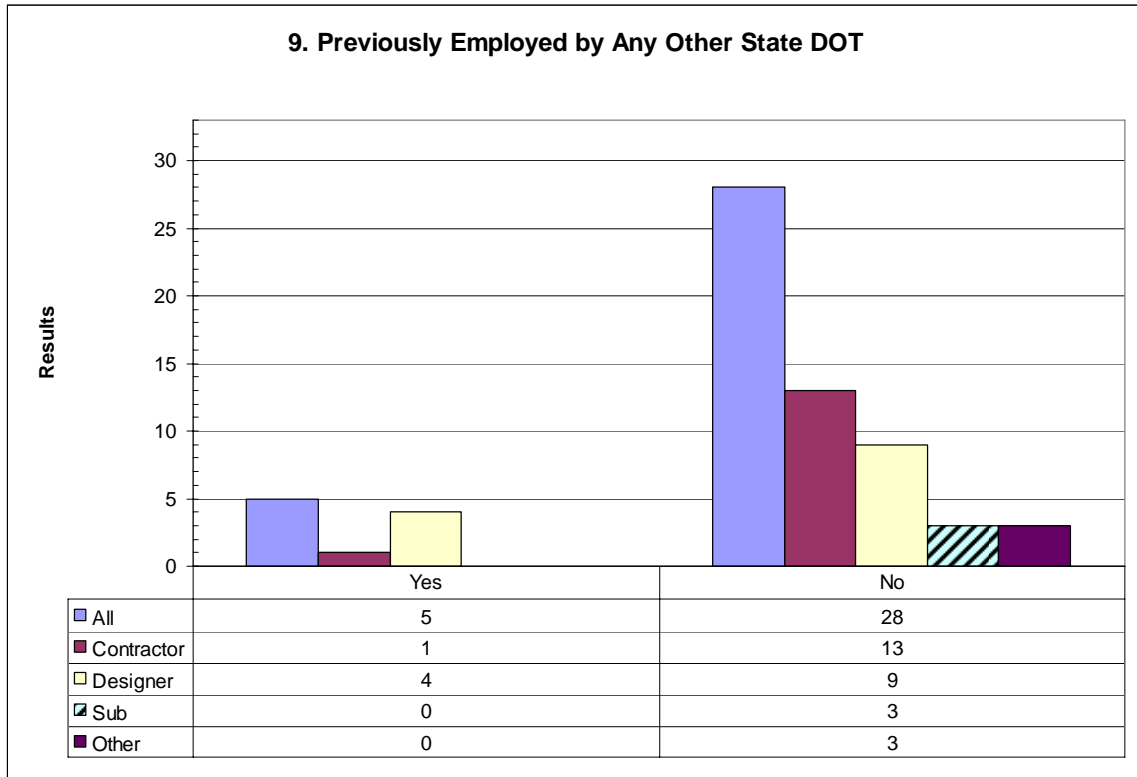
8. Have you ever been an employee of the Minnesota Department of Transportation?

All		Contractor		Designer		Sub		Other		
7	21%	1	7%	5	38%	0	0%	1	33%	Yes
26	79%	13	93%	8	62%	3	100%	2	67%	No



9. Have you ever been an employee of any other state department of transportation?

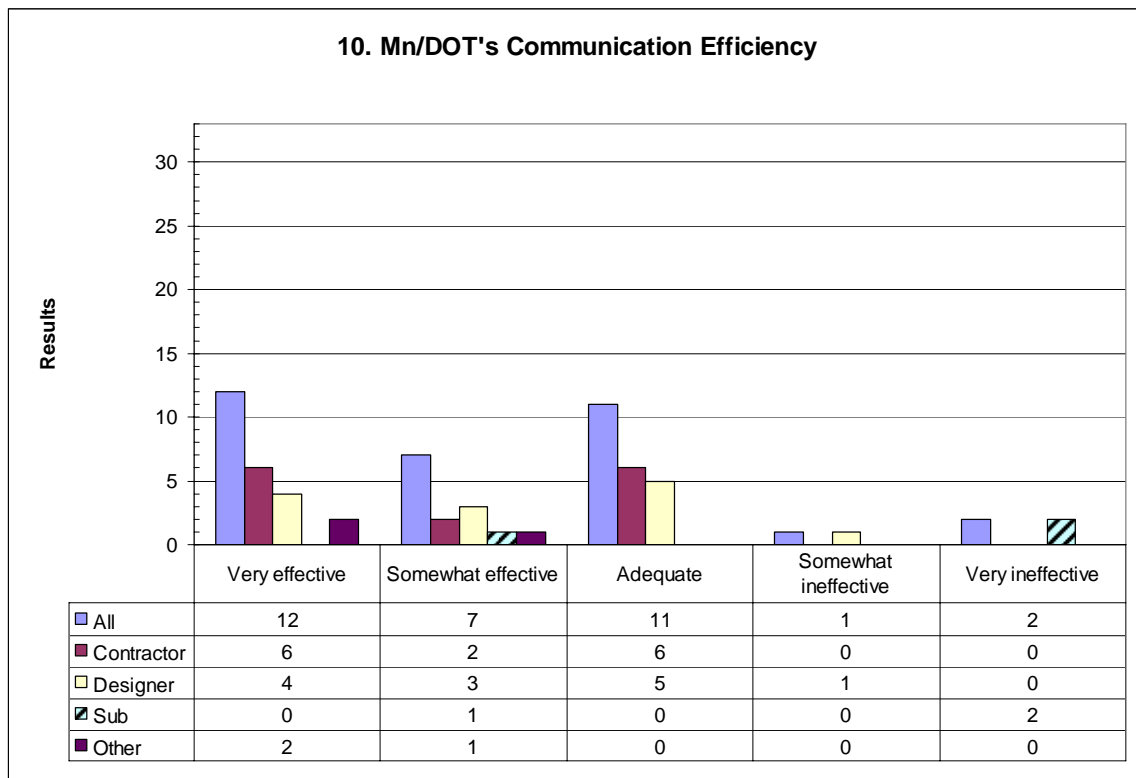
All		Contractor		Designer		Sub		Other		
5	15%	1	7%	4	31%	0	0%	0	0%	Yes
28	85%	13	93%	9	69%	3	100%	3	100%	No



Pre-Proposal Phase

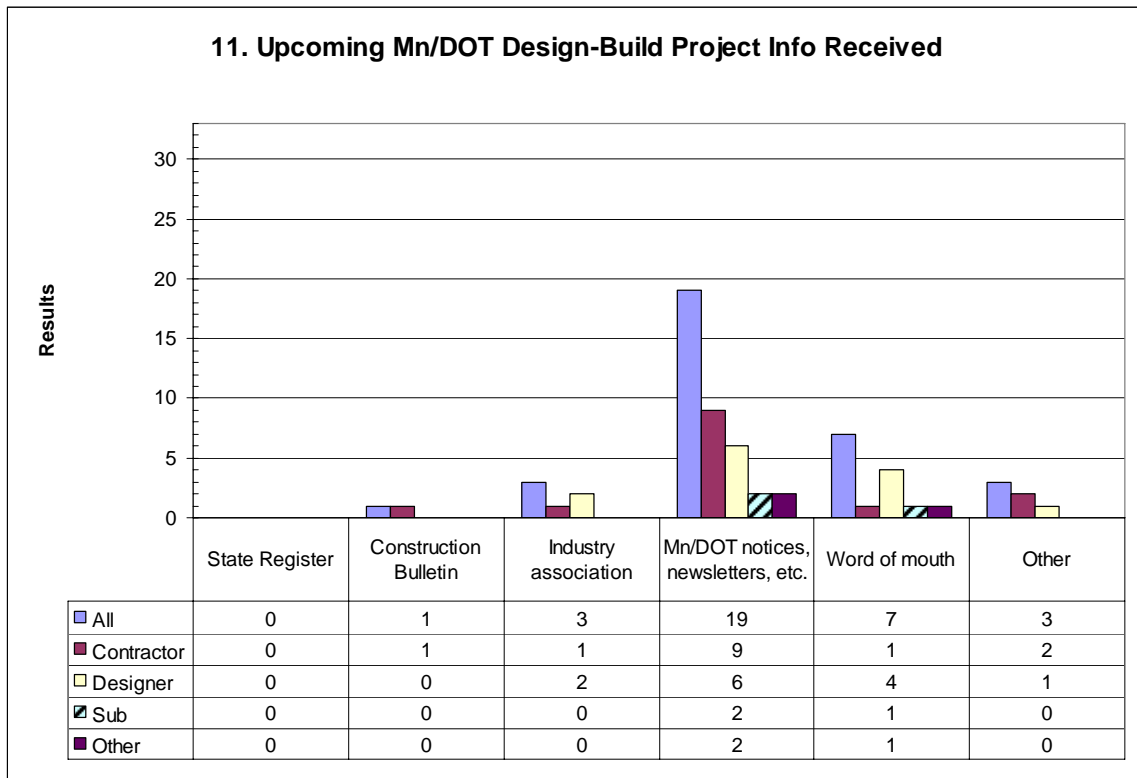
10. How effective is Mn/DOT at communicating with the industry about upcoming design-build projects?

All		Contractor		Designer		Sub		Other		
12	36%	6	43%	4	31%	0	0%	2	67%	Very effective
7	21%	2	14%	3	23%	1	33%	1	33%	Somewhat effective
11	33%	6	43%	5	38%	0	0%	0	0%	Adequate
1	3%	0	0%	1	8%	0	0%	0	0%	Somewhat ineffective
2	6%	0	0%	0	0%	2	67%	0	0%	Very ineffective



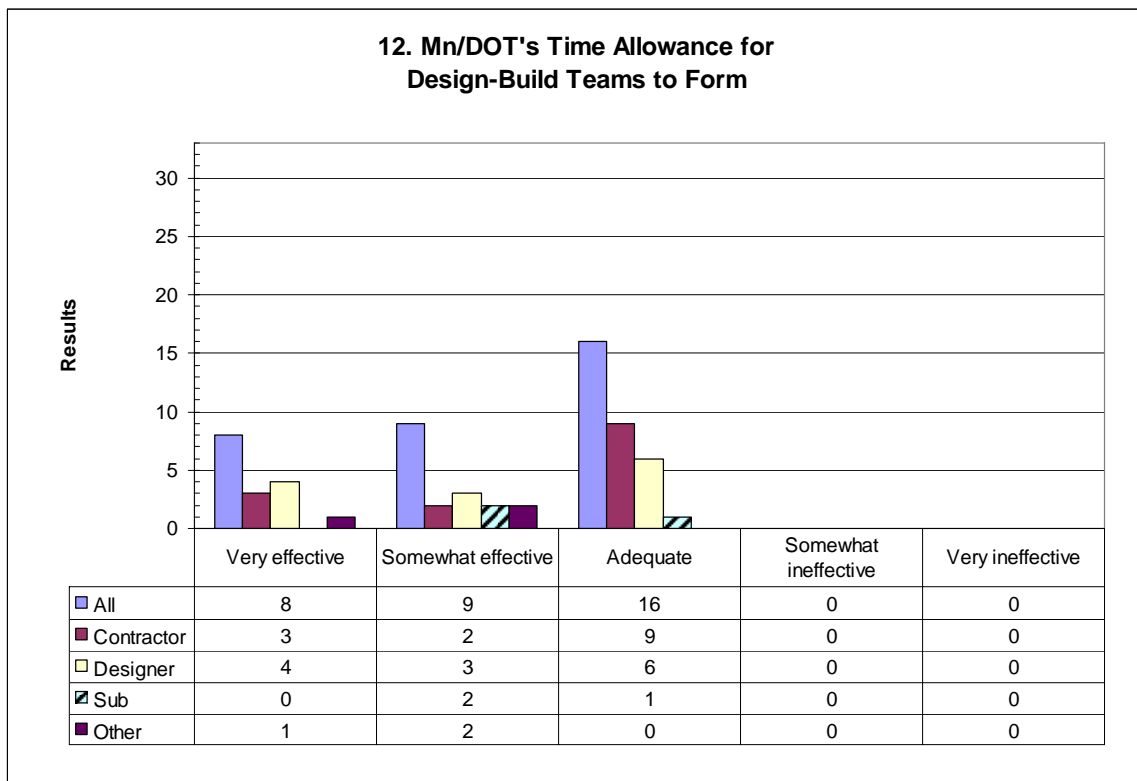
11. How do you become informed of upcoming Mn/DOT design-build projects?

All		Contractor		Designer		Sub		Other		
0	0%	0	0%	0	0%	0	0%	0	0%	State Register
1	3%	1	7%	0	0%	0	0%	0	0%	Construction Bulletin
3	9%	1	7%	2	15%	0	0%	0	0%	Industry association
19	58%	9	64%	6	46%	2	67%	2	67%	Mn/DOT notices, newsletters, etc.
7	21%	1	7%	4	31%	1	33%	1	33%	Word of mouth
3	9%	2	14%	1	8%	0	0%	0	0%	Other



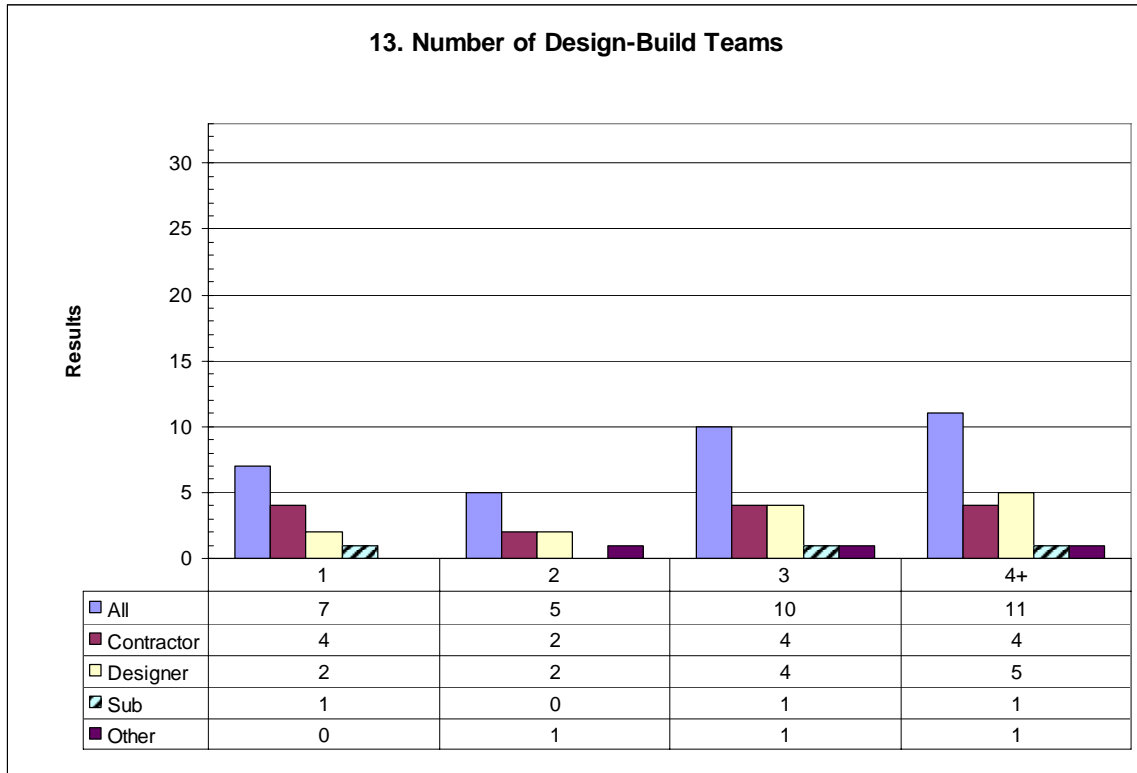
12. Does Mn/DOT allow adequate time for design-build teams to form for its design-build projects?

All		Contractor		Designer		Sub		Other		
8	24%	3	21%	4	31%	0	0%	1	33%	Very effective
9	27%	2	14%	3	23%	2	67%	2	67%	Somewhat effective
16	48%	9	64%	6	46%	1	33%	0	0%	Adequate
0	0%	0	0%	0	0%	0	0%	0	0%	Somewhat ineffective
0	0%	0	0%	0	0%	0	0%	0	0%	Very ineffective



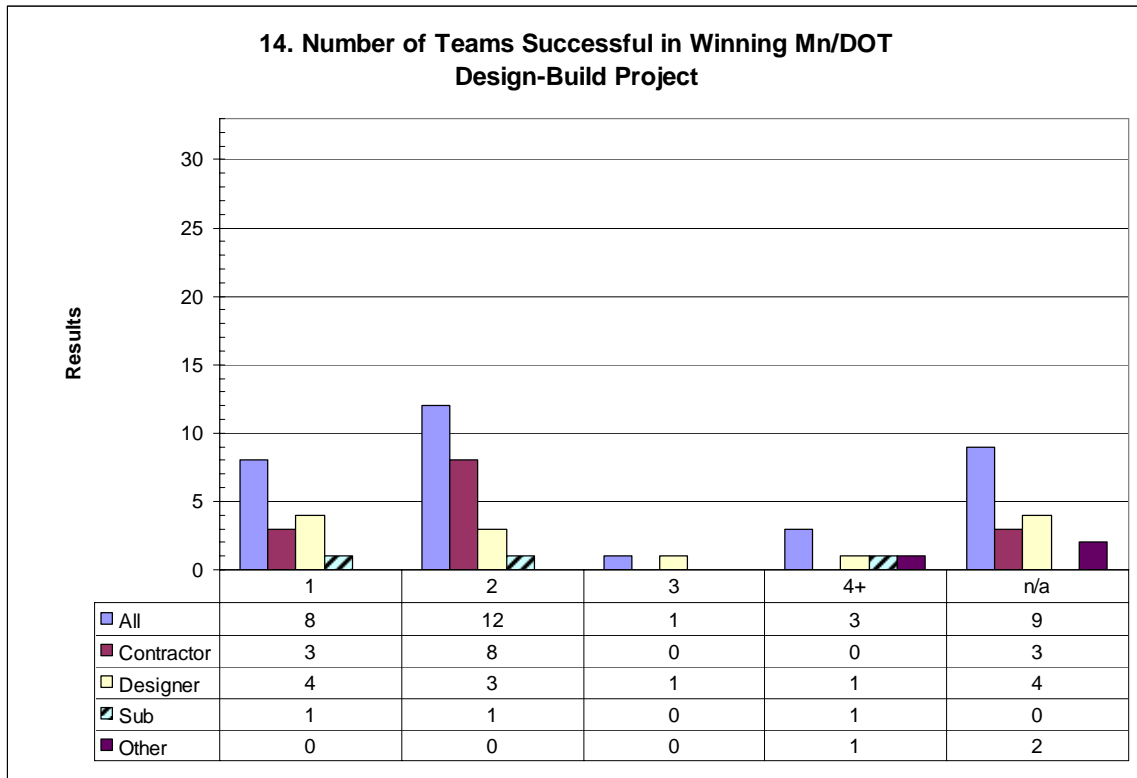
13. How many teams have you been on?

All		Contractor		Designer		Sub		Other		
7	21%	4	29%	2	15%	1	33%	0	0%	1
5	15%	2	14%	2	15%	0	0%	1	33%	2
10	30%	4	29%	4	31%	1	33%	1	33%	3
11	33%	4	29%	5	38%	1	33%	1	33%	4+



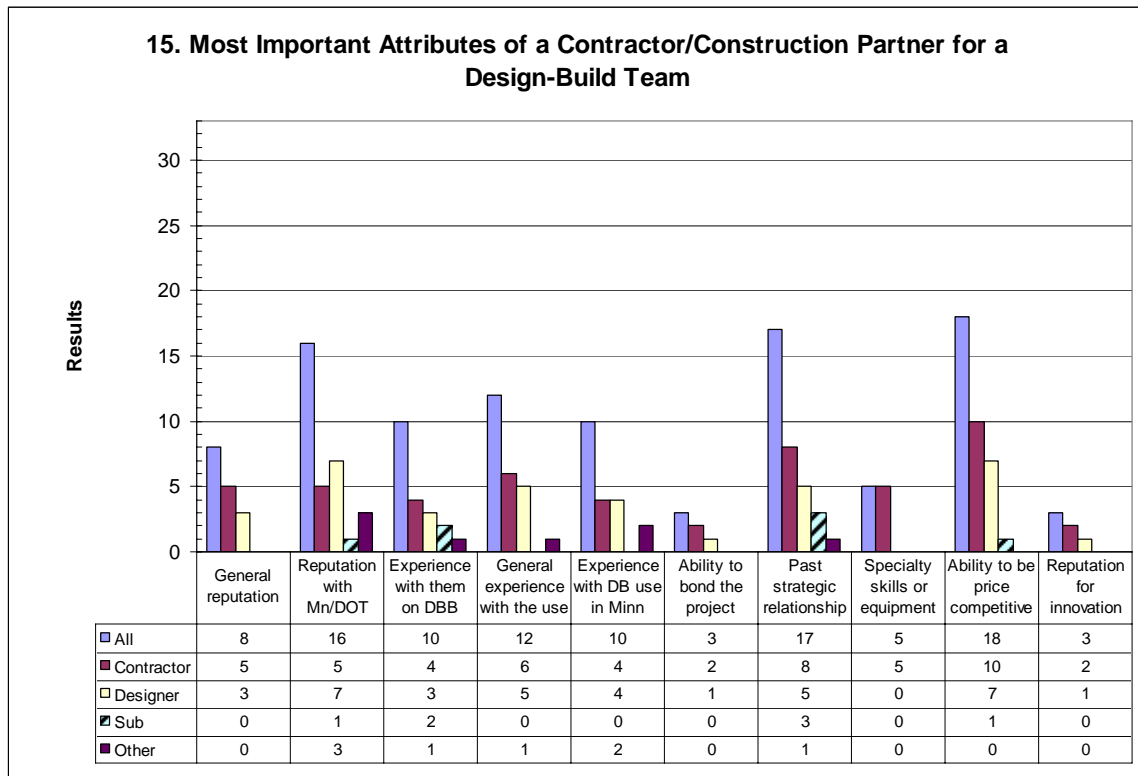
14. How many teams has your firm been a part of that have been successful in winning a Mn/DOT design-build project?

All		Contractor		Designer		Sub		Other		
8	24%	3	21%	4	31%	1	33%	0	0%	1
12	36%	8	57%	3	23%	1	33%	0	0%	2
1	3%	0	0%	1	8%	0	0%	0	0%	3
3	9%	0	0%	1	8%	1	33%	1	33%	4+
9	27%	3	21%	4	31%	0	0%	2	67%	n/a



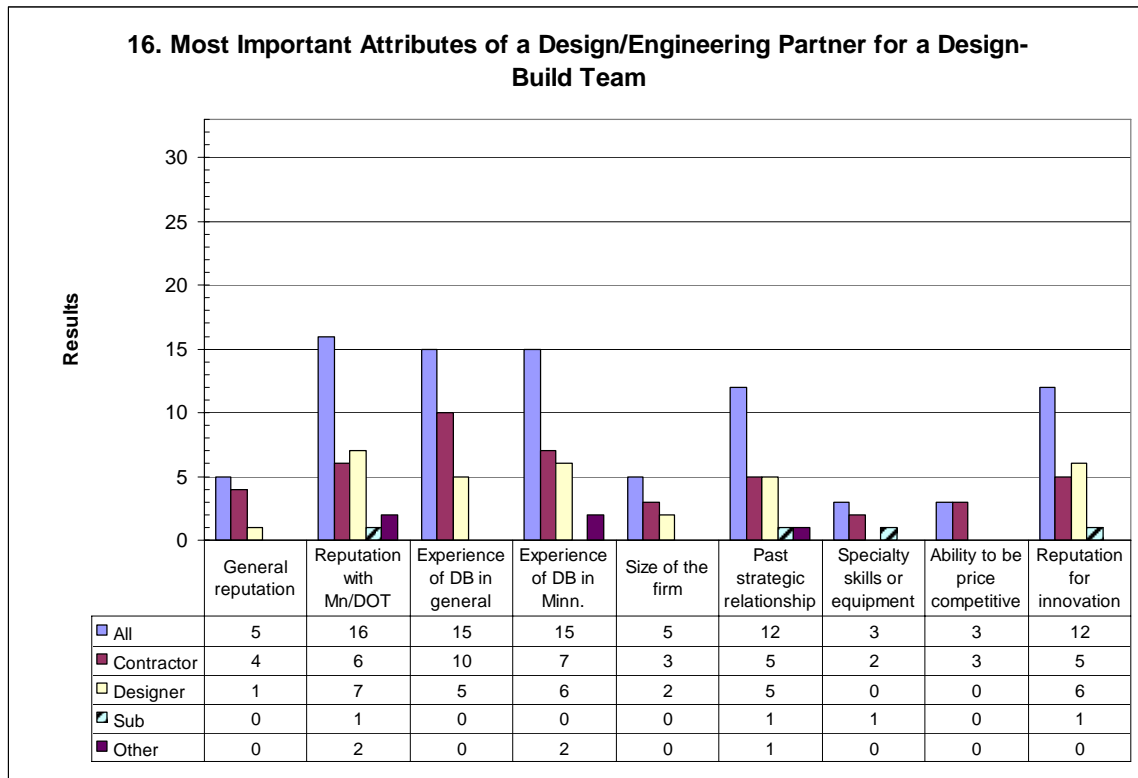
15. What are the attributes of the firms you consider most important in choosing a contractor/construction partner for a design-build team? (Select 3)

All		Contractor		Designer		Sub		Other		
8	24%	5	36%	3	23%	0	0%	0	0%	General reputation
16	48%	5	36%	7	54%	1	33%	3	100%	Reputation with Mn/DOT
10	30%	4	29%	3	23%	2	67%	1	33%	Experience with them on DBB projects
12	36%	6	43%	5	38%	0	0%	1	33%	General experience with the use of DB
10	30%	4	29%	4	31%	0	0%	2	67%	Experience with DB use in Minn
3	9%	2	14%	1	8%	0	0%	0	0%	Ability to bond the project
17	52%	8	57%	5	38%	3	100%	1	33%	Past strategic relationship
5	15%	5	36%	0	0%	0	0%	0	0%	Specialty skills or equipment
18	55%	10	71%	7	54%	1	33%	0	0%	Ability to be price competitive
3	9%	2	14%	1	8%	0	0%	0	0%	Reputation for innovation



16. What are the attributes of the firms you consider most important in choosing a design/engineering partner for a design-build team? (Select 3)

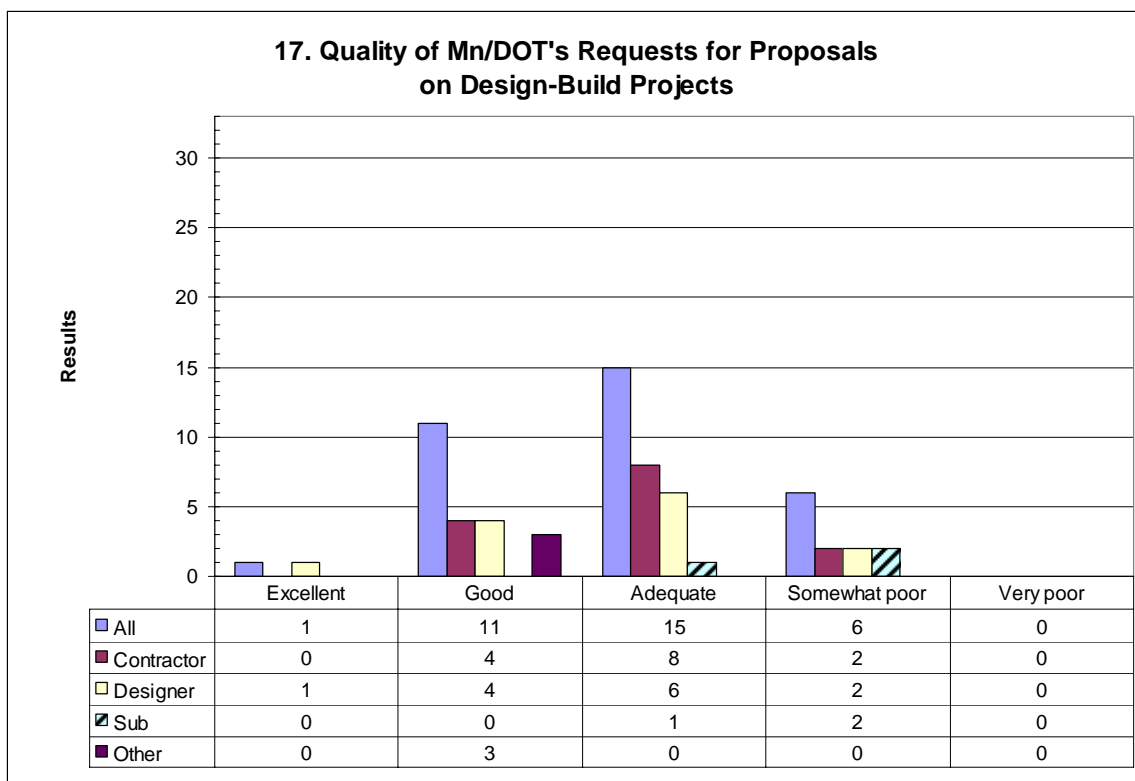
	All	Contractor	Designer	Sub	Other							
5	15%	4	29%	1	8%	0	0%	0	0%	0	0%	General reputation
16	48%	6	43%	7	54%	1	33%	2	67%	2	67%	Reputation with Mn/DOT
15	45%	10	71%	5	38%	0	0%	0	0%	0	0%	Experience of DB in general
15	45%	7	50%	6	46%	0	0%	2	67%	2	67%	Experience of DB in Minn.
5	15%	3	21%	2	15%	0	0%	0	0%	0	0%	Size of the firm
12	36%	5	36%	5	38%	1	33%	1	33%	1	33%	Past strategic relationship
3	9%	2	14%	0	0%	1	33%	0	0%	0	0%	Specialty skills or equipment
3	9%	3	21%	0	0%	0	0%	0	0%	0	0%	Ability to be price competitive
12	36%	5	36%	6	46%	1	33%	0	0%	0	0%	Reputation for innovation



Requests for Proposals

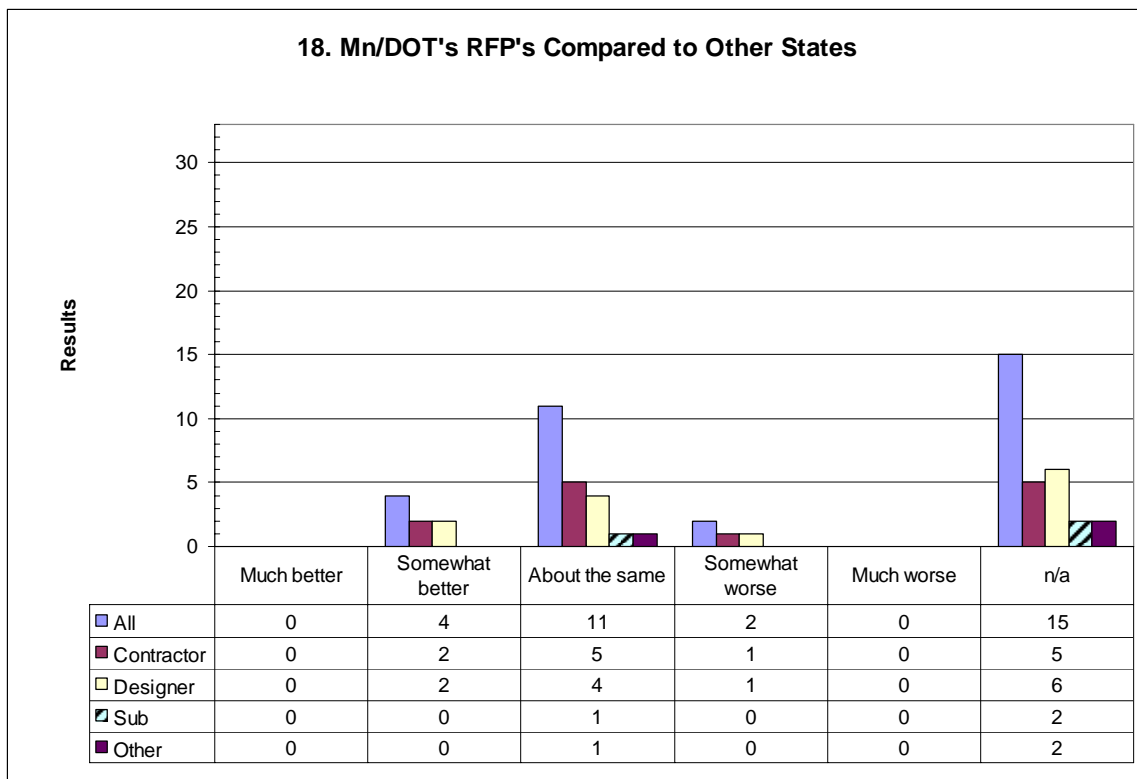
17. How would you rate the quality of Mn/DOT's requests for proposals on its design-build projects?

All		Contractor		Designer		Sub		Other		
1	3%	0	0%	1	8%	0	0%	0	0%	Excellent
11	33%	4	29%	4	31%	0	0%	3	100%	Good
15	45%	8	57%	6	46%	1	33%	0	0%	Adequate
6	18%	2	14%	2	15%	2	67%	0	0%	Somewhat poor
0	0%	0	0%	0	0%	0	0%	0	0%	Very poor



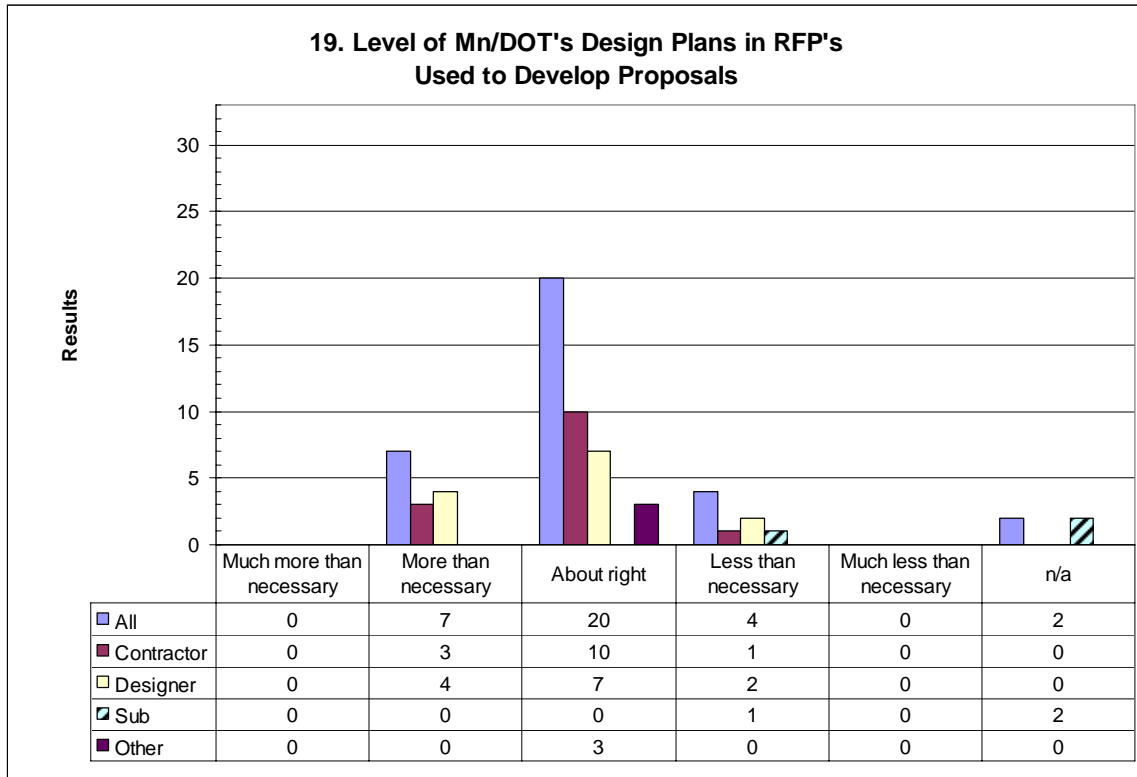
18. If you have worked in other states on design-build projects, how would you rate the quality of Mn/DOT's design-build requests for proposals against those in these other states?

All		Contractor		Designer		Sub		Other		
0	0%	0	0%	0	0%	0	0%	0	0%	Much better
4	12%	2	14%	2	15%	0	0%	0	0%	Somewhat better
11	33%	5	36%	4	31%	1	33%	1	33%	About the same
2	6%	1	7%	1	8%	0	0%	0	0%	Somewhat worse
0	0%	0	0%	0	0%	0	0%	0	0%	Much worse
15	45%	5	36%	6	46%	2	67%	2	67%	n/a



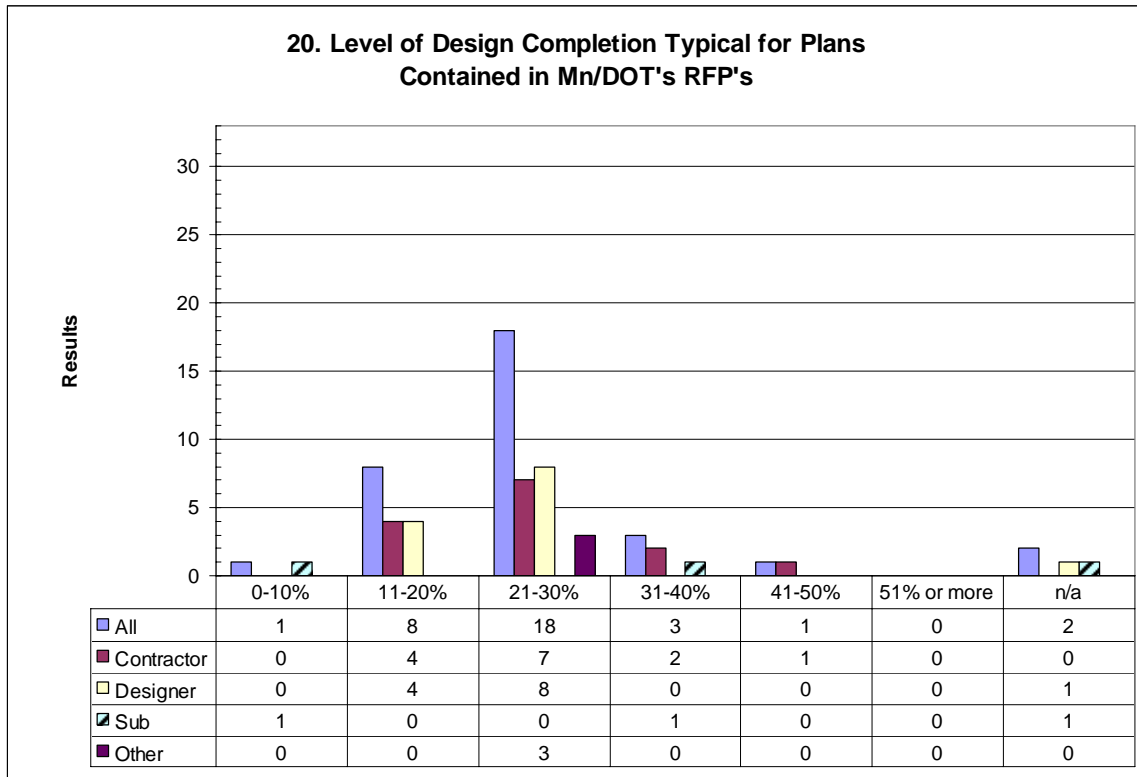
19. How would you rate the level of design of the plans found in Mn/DOT's requests for proposals in terms of assisting your design-build team in developing its proposal?

All		Contractor		Designer		Sub		Other		
0	0%	0	0%	0	0%	0	0%	0	0%	Much more than necessary
7	21%	3	21%	4	31%	0	0%	0	0%	More than necessary
20	61%	10	71%	7	54%	0	0%	3	100%	About right
4	12%	1	7%	2	15%	1	33%	0	0%	Less than necessary
0	0%	0	0%	0	0%	0	0%	0	0%	Much less than necessary
2	6%	0	0%	0	0%	2	67%	0	0%	n/a



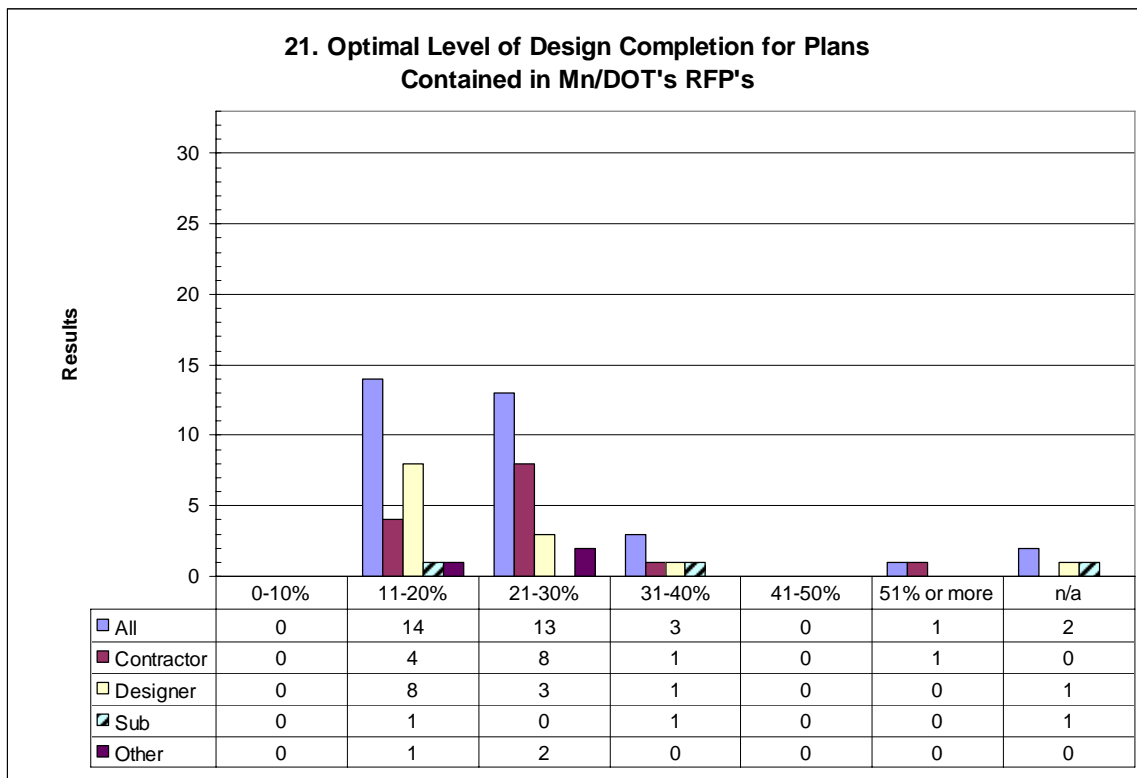
20. In your opinion, what level of design completion is typical for plans contained in Mn/DOT's request for proposals?

All		Contractor		Designer		Sub		Other		
1	3%	0	0%	0	0%	1	33%	0	0%	0-10%
8	24%	4	29%	4	31%	0	0%	0	0%	11-20%
18	55%	7	50%	8	62%	0	0%	3	100%	21-30%
3	9%	2	14%	0	0%	1	33%	0	0%	31-40%
1	3%	1	7%	0	0%	0	0%	0	0%	41-50%
0	0%	0	0%	0	0%	0	0%	0	0%	51% or more
2	6%	0	0%	1	8%	1	33%	0	0%	n/a



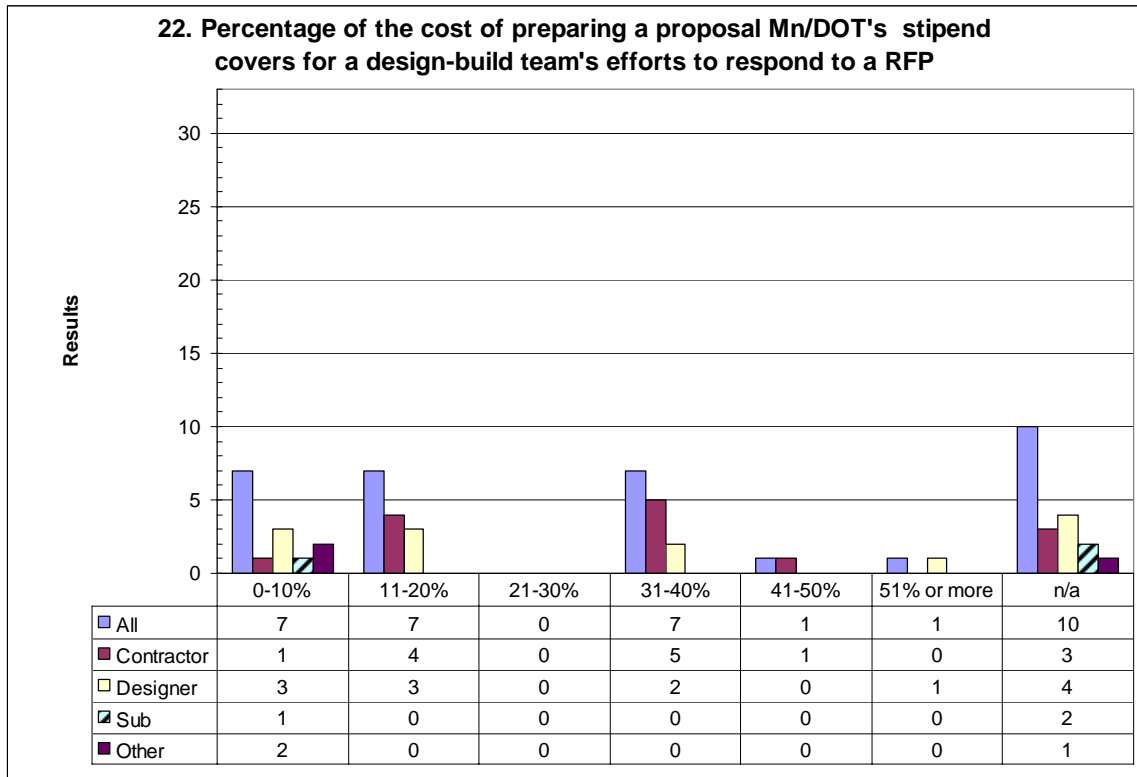
21. What would you consider the optimal level of design completion for plans contained in Mn/DOT's requests for proposals?

All		Contractor		Designer		Sub		Other		
0	0%	0	0%	0	0%	0	0%	0	0%	0-10%
14	42%	4	29%	8	62%	1	33%	1	33%	11-20%
13	39%	8	57%	3	23%	0	0%	2	67%	21-30%
3	9%	1	7%	1	8%	1	33%	0	0%	31-40%
0	0%	0	0%	0	0%	0	0%	0	0%	41-50%
1	3%	1	7%	0	0%	0	0%	0	0%	51% or more
2	6%	0	0%	1	8%	1	33%	0	0%	n/a



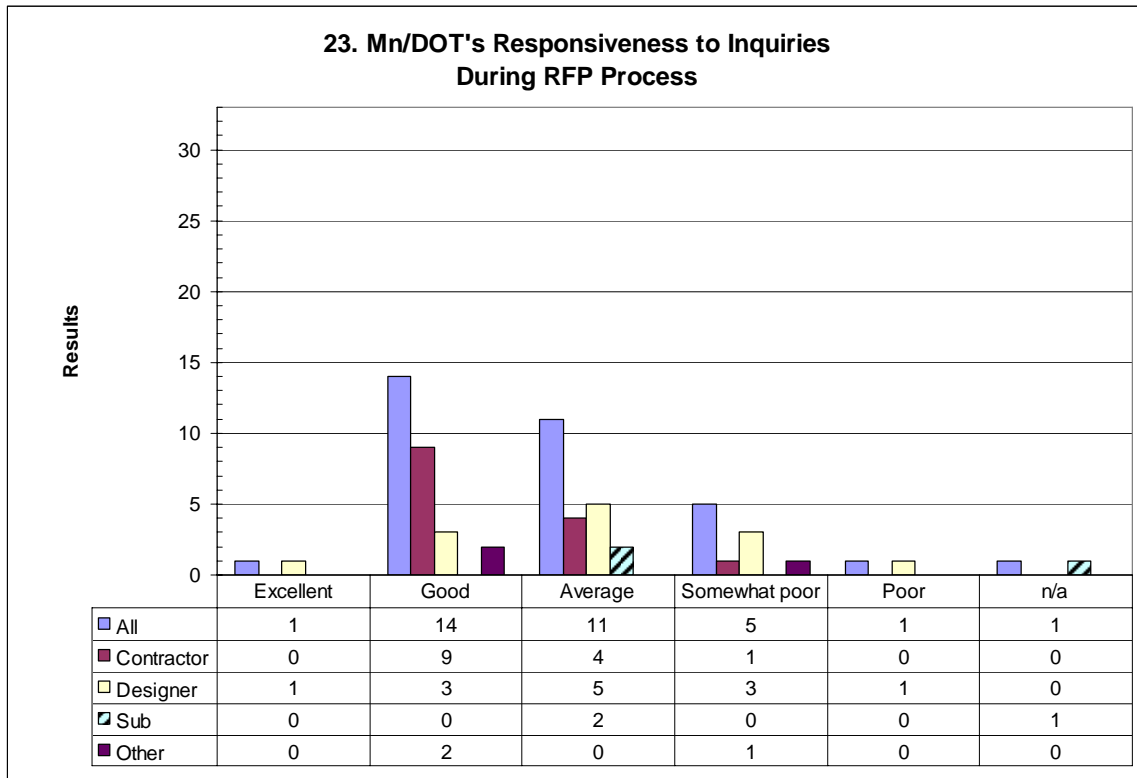
22. What percentage of the cost of preparing a proposal does Mn/DOT's current level of a stipend cover for a design-build team's efforts to respond to a request for proposals?

All		Contractor		Designer		Sub		Other		
7	21%	1	7%	3	23%	1	33%	2	67%	0-10%
7	21%	4	29%	3	23%	0	0%	0	0%	11-20%
0	0%	0	0%	0	0%	0	0%	0	0%	21-30%
7	21%	5	36%	2	15%	0	0%	0	0%	31-40%
1	3%	1	7%	0	0%	0	0%	0	0%	41-50%
1	3%	0	0%	1	8%	0	0%	0	0%	51% or more
10	30%	3	21%	4	31%	2	67%	1	33%	n/a



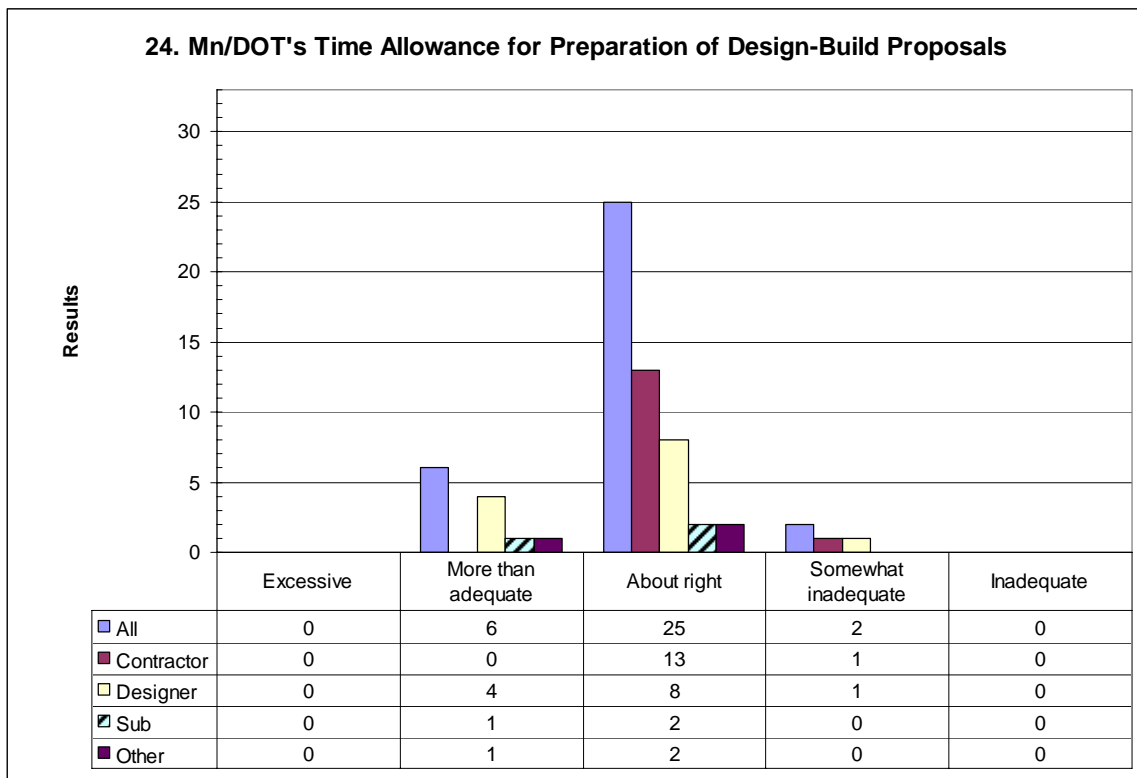
23. How would you rate Mn/DOT's responsiveness to inquiries during the RFP process for its design-build projects?

All		Contractor		Designer		Sub		Other		
1	3%	0	0%	1	8%	0	0%	0	0%	Excellent
14	42%	9	64%	3	23%	0	0%	2	67%	Good
11	33%	4	29%	5	38%	2	67%	0	0%	Average
5	15%	1	7%	3	23%	0	0%	1	33%	Somewhat poor
1	3%	0	0%	1	8%	0	0%	0	0%	Poor
1	3%	0	0%	0	0%	1	33%	0	0%	n/a



24. How would you rate the amount of time Mn/DOT allows for the preparation of proposals on its design-build projects?

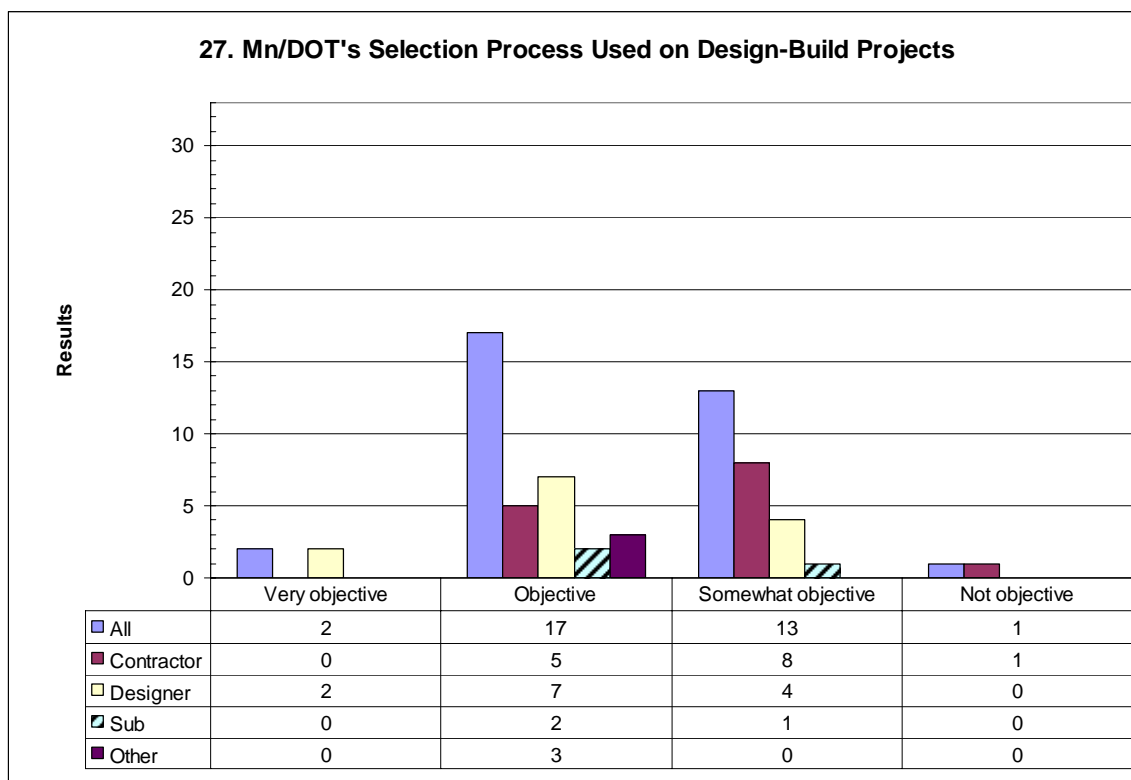
All		Contractor		Designer		Sub		Other		
0	0%	0	0%	0	0%	0	0%	0	0%	Excessive
6	18%	0	0%	4	31%	1	33%	1	33%	More than adequate
25	76%	13	93%	8	62%	2	67%	2	67%	About right
2	6%	1	7%	1	8%	0	0%	0	0%	Somewhat inadequate
0	0%	0	0%	0	0%	0	0%	0	0%	Inadequate



Selection Process

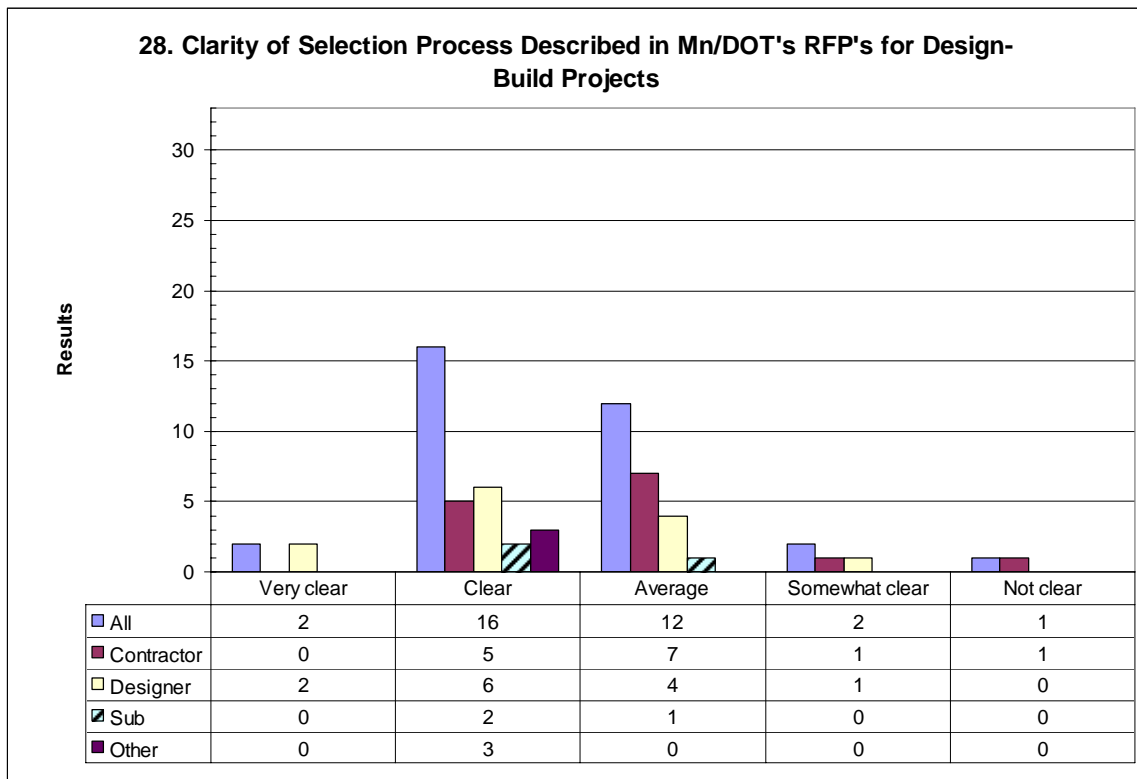
27. How objective would you rate the selection process used by Mn/DOT on its design-build projects?

All		Contractor		Designer		Sub		Other		
2	6%	0	0%	2	15%	0	0%	0	0%	Very objective
17	52%	5	36%	7	54%	2	67%	3	100%	Objective
13	39%	8	57%	4	31%	1	33%	0	0%	Somewhat objective
1	3%	1	7%	0	0%	0	0%	0	0%	Not objective



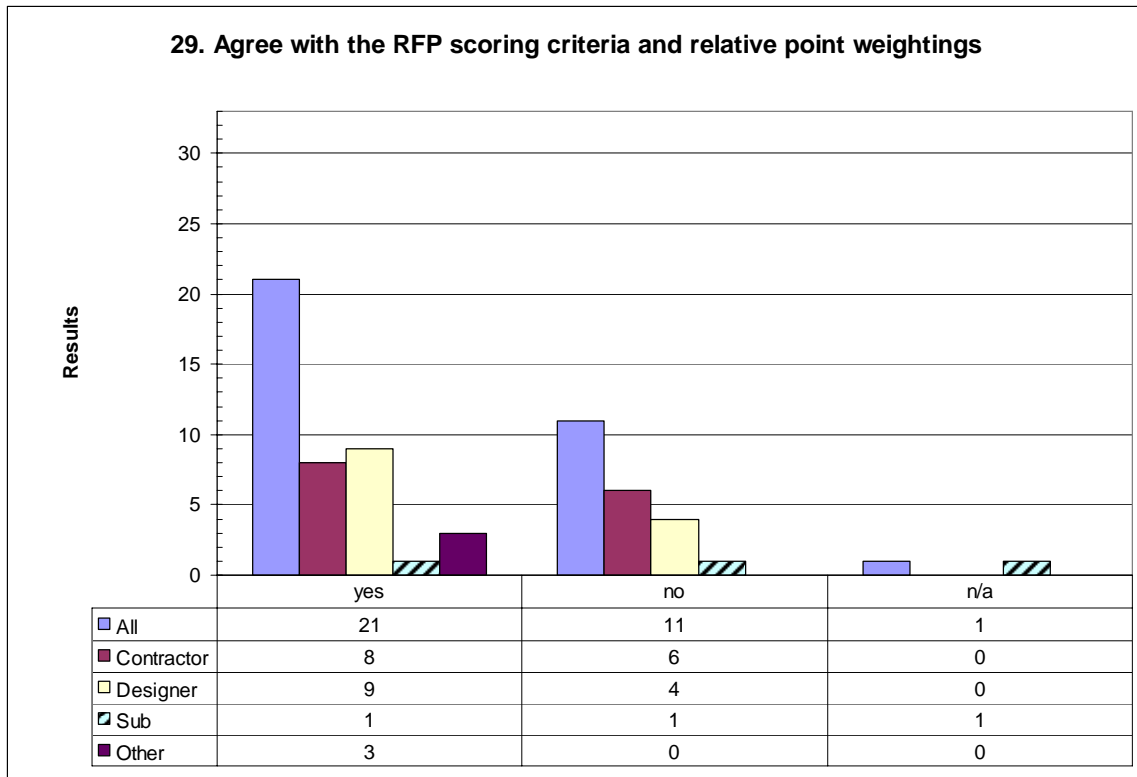
28. How clear is the selection process as described in Mn/DOT's RFP's for its design-build projects?

All		Contractor		Designer		Sub		Other		
2	6%	0	0%	2	15%	0	0%	0	0%	Very clear
16	48%	5	36%	6	46%	2	67%	3	100%	Clear
12	36%	7	50%	4	31%	1	33%	0	0%	Average
2	6%	1	7%	1	8%	0	0%	0	0%	Somewhat clear
1	3%	1	7%	0	0%	0	0%	0	0%	Not clear



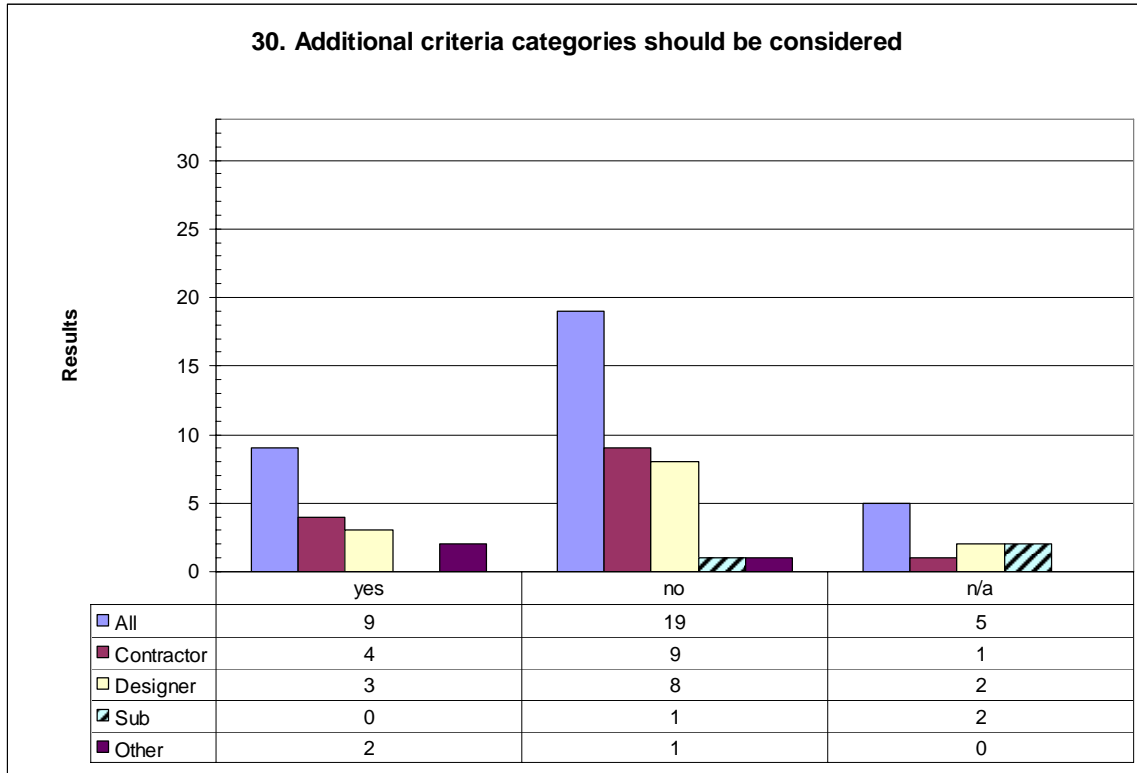
29. Do you agree with the RFP scoring criteria categories and relative point weightings?

All		Contractor		Designer		Sub		Other		
21	64%	8	57%	9	69%	1	33%	3	100%	yes
11	33%	6	43%	4	31%	1	33%	0	0%	no
1	3%	0	0%	0	0%	1	33%	0	0%	n/a



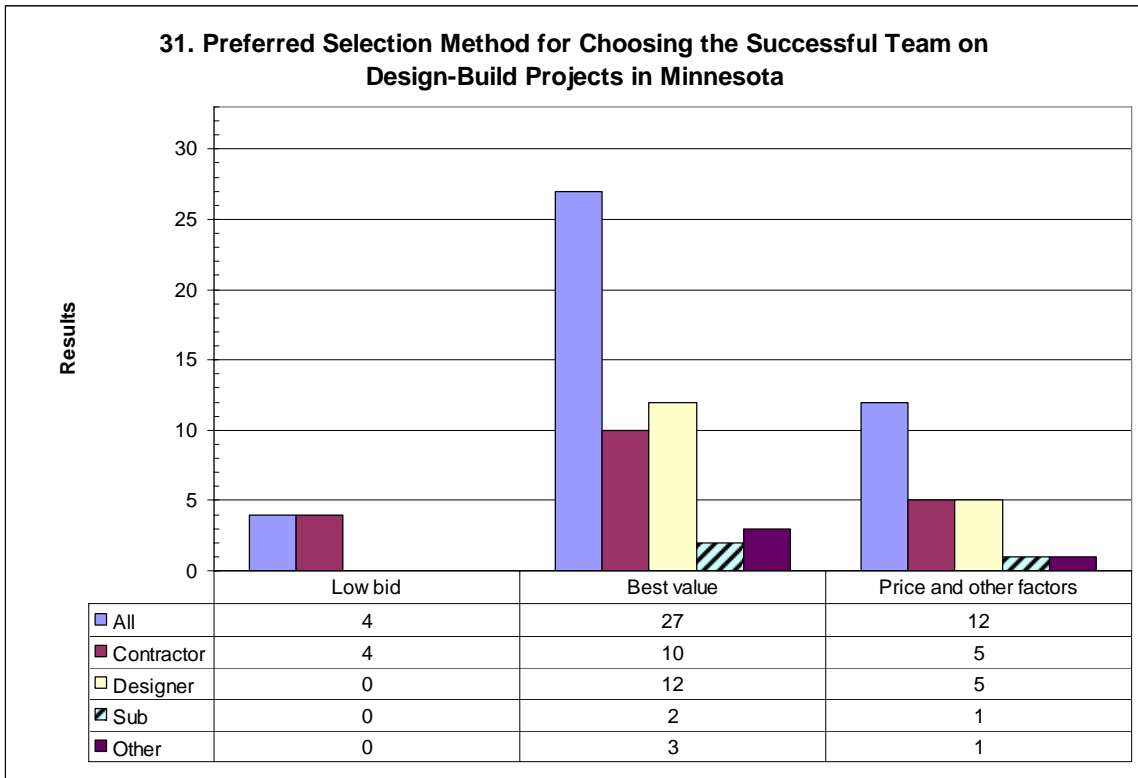
30. Are there additional criteria categories that you feel should be considered?

All		Contractor		Designer		Sub		Other		
9	27%	4	29%	3	23%	0	0%	2	67%	yes
19	58%	9	64%	8	62%	1	33%	1	33%	no
5	15%	1	7%	2	15%	2	67%	0	0%	n/a



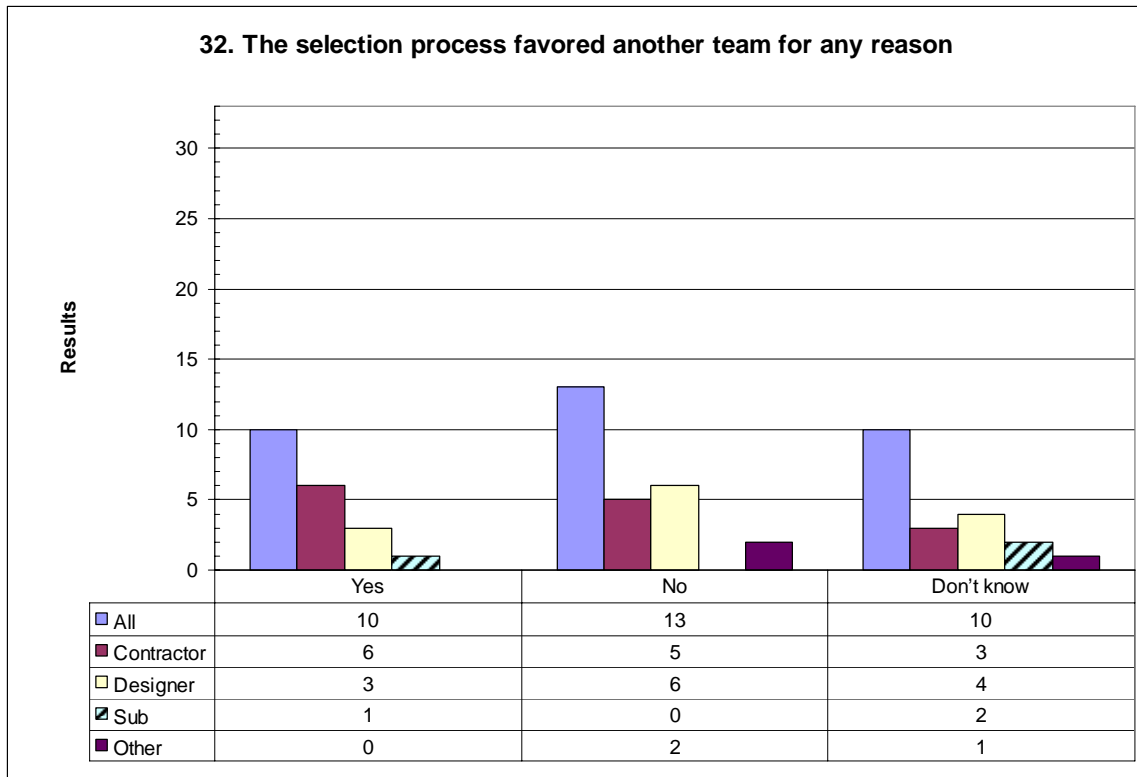
31. What is your preferred selection method for choosing the successful team on design-build projects in Minnesota? (Select up to 2)

All		Contractor		Designer		Sub		Other		
4	12%	4	29%	0	0%	0	0%	0	0%	Low bid
27	82%	10	71%	12	92%	2	67%	3	100%	Best value
12	36%	5	36%	5	38%	1	33%	1	33%	Price and other factors



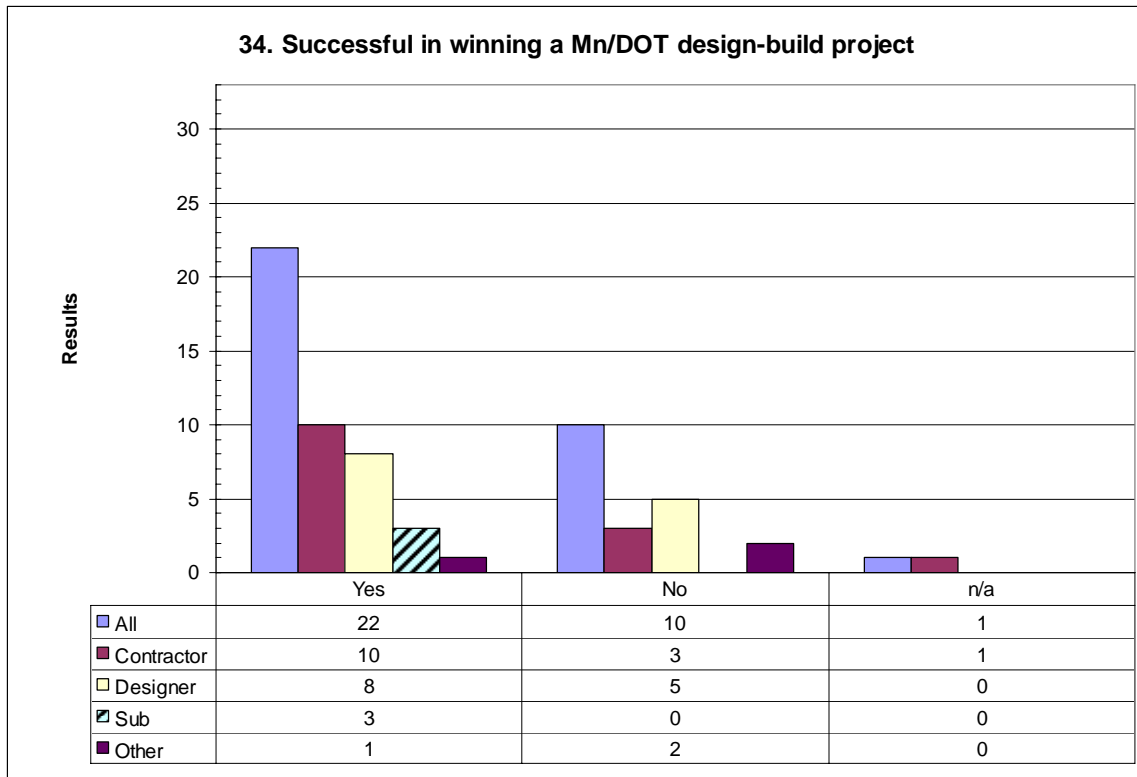
32. Have you ever thought the selection process favored another team for any reason?

All		Contractor		Designer		Sub		Other		
10	30%	6	43%	3	23%	1	33%	0	0%	Yes
13	39%	5	36%	6	46%	0	0%	2	67%	No
10	30%	3	21%	4	31%	2	67%	1	33%	Don't know



34. Have you been successful in winning a Mn/DOT design-build project?

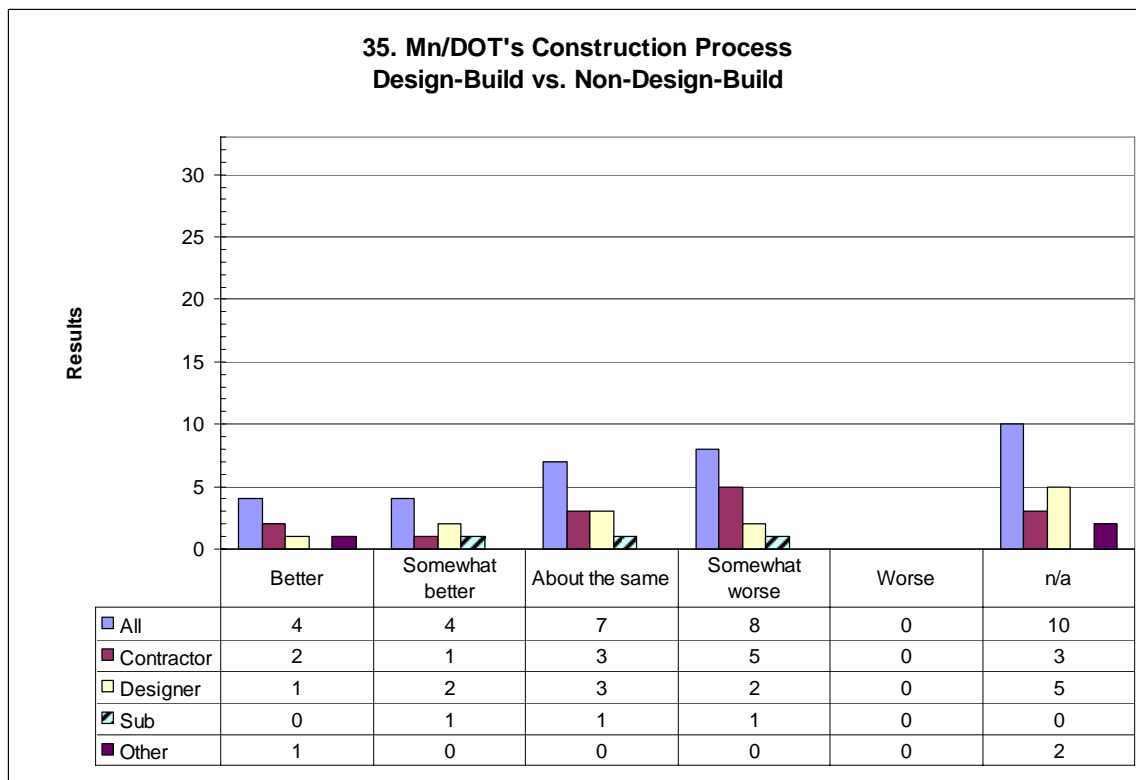
All		Contractor		Designer		Sub		Other		
22	67%	10	71%	8	62%	3	100%	1	33%	Yes
10	30%	3	21%	5	38%	0	0%	2	67%	No
1	3%	1	7%	0	0%	0	0%	0	0%	n/a



Construction

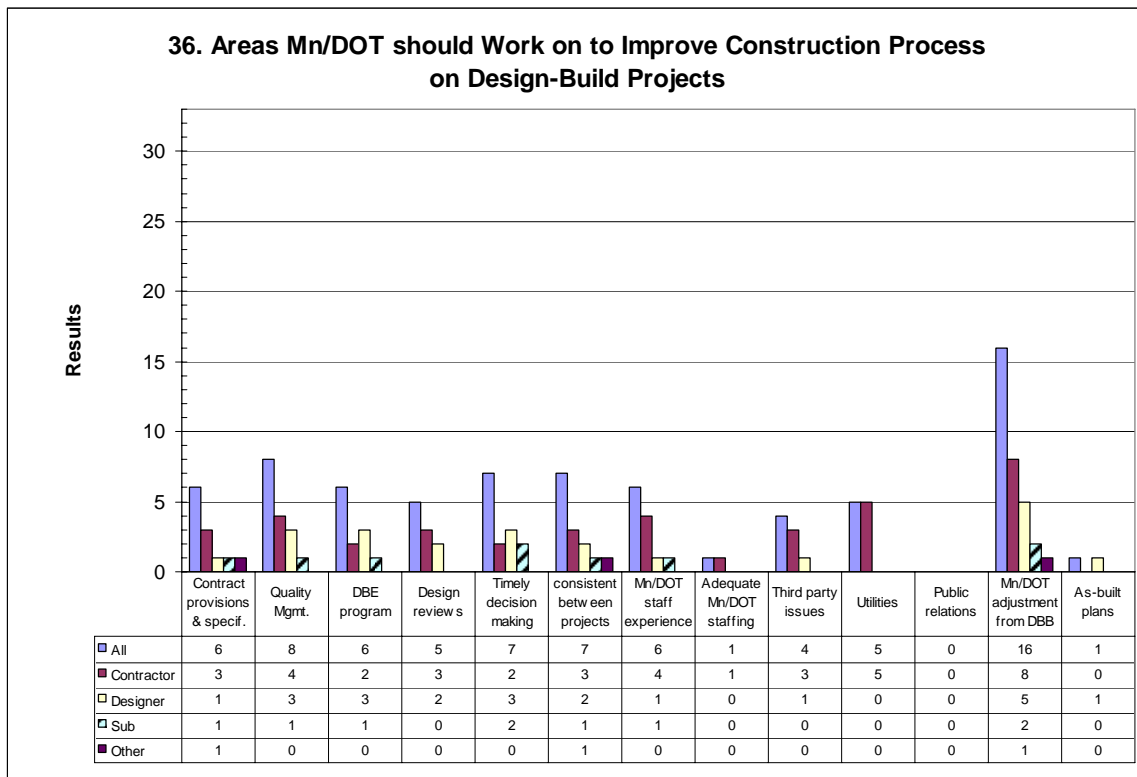
35. How would you rate the construction process on Mn/DOT's design-build projects versus its typical non-design-build projects?

All		Contractor		Designer		Sub		Other		
4	12%	2	14%	1	8%	0	0%	1	33%	Better
4	12%	1	7%	2	15%	1	33%	0	0%	Somewhat better
7	21%	3	21%	3	23%	1	33%	0	0%	About the same
8	24%	5	36%	2	15%	1	33%	0	0%	Somewhat worse
0	0%	0	0%	0	0%	0	0%	0	0%	Worse
10	30%	3	21%	5	38%	0	0%	2	67%	n/a



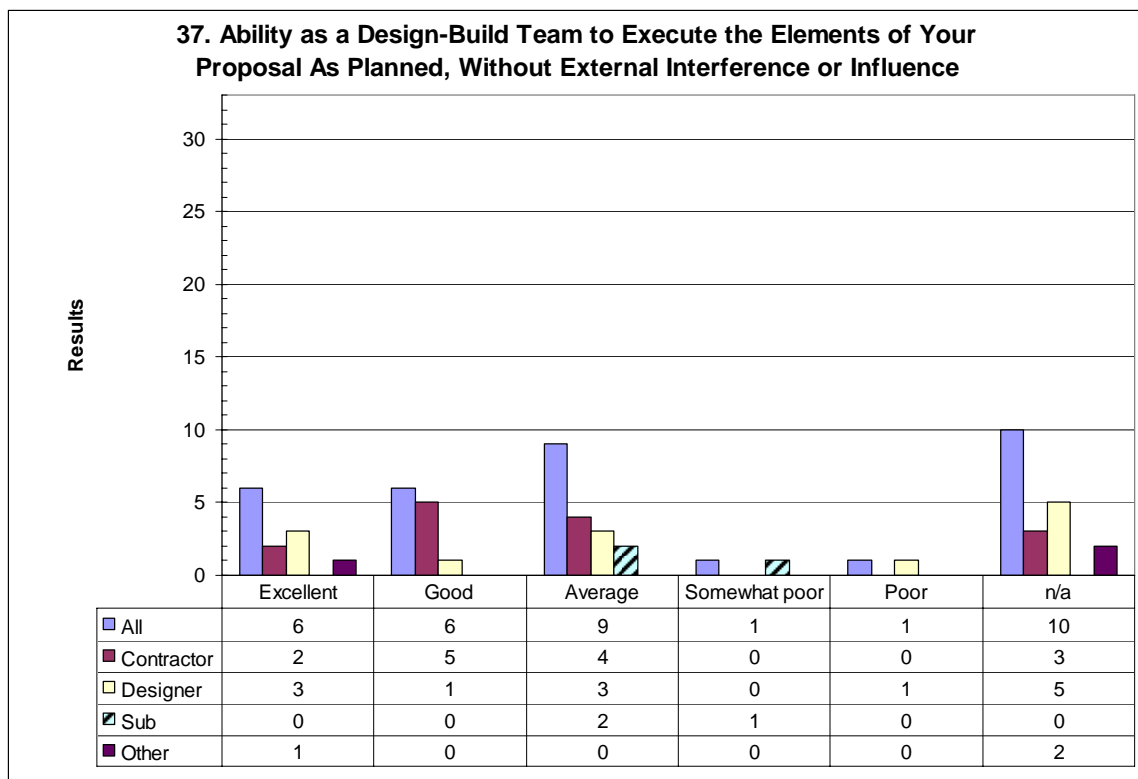
36. What areas should Mn/DOT work on to improve the construction process on its design-build projects? (Select up to 3)

All		Contractor		Designer		Sub		Other		
6	18%	3	21%	1	8%	1	33%	1	33%	Contract provisions & specif.
8	24%	4	29%	3	23%	1	33%	0	0%	Quality Mgmt.
6	18%	2	14%	3	23%	1	33%	0	0%	DBE program
5	15%	3	21%	2	15%	0	0%	0	0%	Design reviews
7	21%	2	14%	3	23%	2	67%	0	0%	Timely decision making
7	21%	3	21%	2	15%	1	33%	1	33%	consistent between projects
6	18%	4	29%	1	8%	1	33%	0	0%	Mn/DOT staff experience
1	3%	1	7%	0	0%	0	0%	0	0%	Adequate Mn/DOT staffing levels
4	12%	3	21%	1	8%	0	0%	0	0%	Third party issues
5	15%	5	36%	0	0%	0	0%	0	0%	Utilities
0	0%	0	0%	0	0%	0	0%	0	0%	Public relations
16	48%	8	57%	5	38%	2	67%	1	33%	Mn/DOT adjustment from DBB to DB
1	3%	0	0%	1	8%	0	0%	0	0%	As-built plans



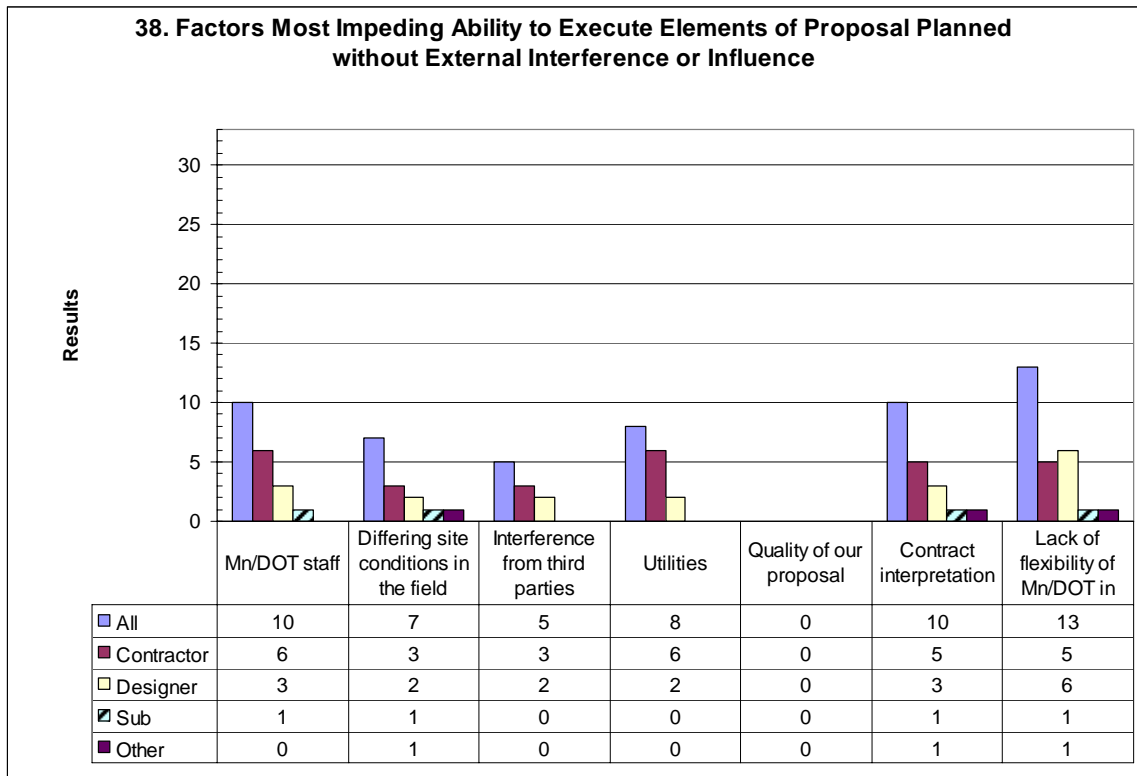
37. How would you rate your ability as a design-build team to execute the elements of your proposal as you planned and without external interference or influence?

All		Contractor		Designer		Sub		Other		
6	18%	2	14%	3	23%	0	0%	1	33%	Excellent
6	18%	5	36%	1	8%	0	0%	0	0%	Good
9	27%	4	29%	3	23%	2	67%	0	0%	Average
1	3%	0	0%	0	0%	1	33%	0	0%	Somewhat poor
1	3%	0	0%	1	8%	0	0%	0	0%	Poor
10	30%	3	21%	5	38%	0	0%	2	67%	n/a



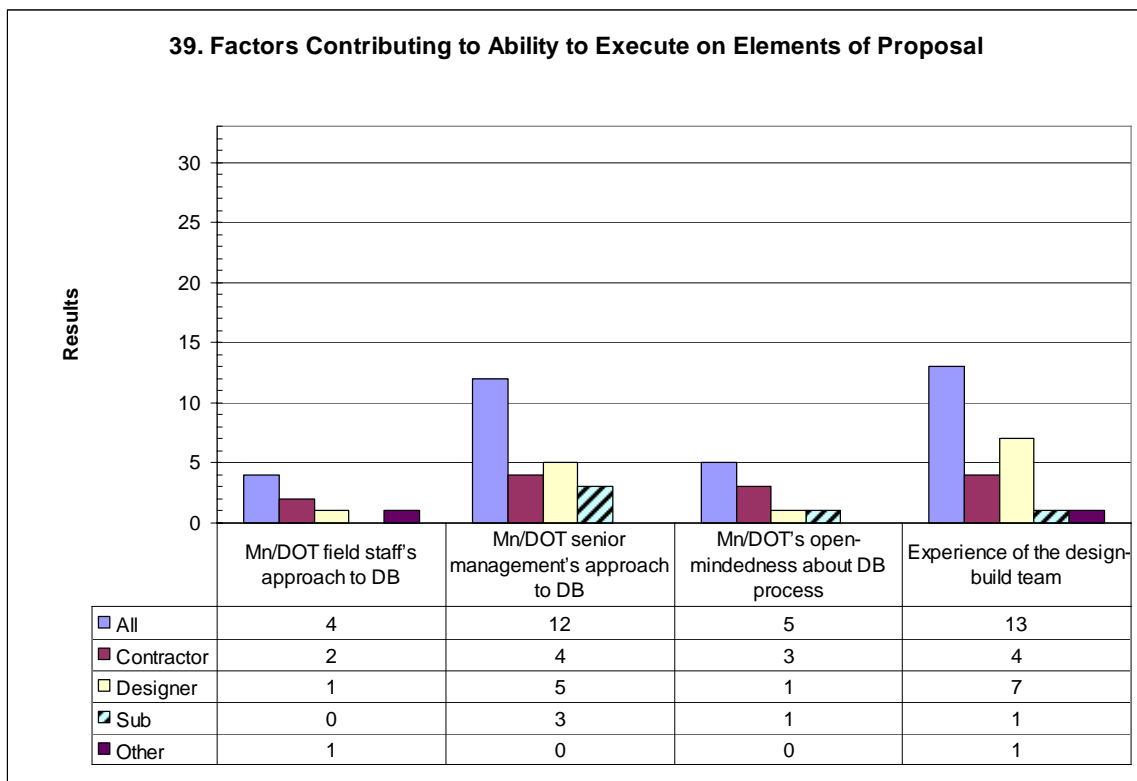
38. What factors most impeded your ability as a design-build team to execute on the elements of your proposal as you planned and without external interference or influence? (Select up to 3)

	All	Contractor		Designer		Sub		Other		
10	30%	6	43%	3	23%	1	33%	0	0%	Mn/DOT staff
7	21%	3	21%	2	15%	1	33%	1	33%	Differing site conditions in the field
5	15%	3	21%	2	15%	0	0%	0	0%	Interference from third parties
8	24%	6	43%	2	15%	0	0%	0	0%	Utilities
0	0%	0	0%	0	0%	0	0%	0	0%	Quality of our proposal
10	30%	5	36%	3	23%	1	33%	1	33%	Contract interpretation
13	39%	5	36%	6	46%	1	33%	1	33%	Lack of flexibility of Mn/DOT in applying DB



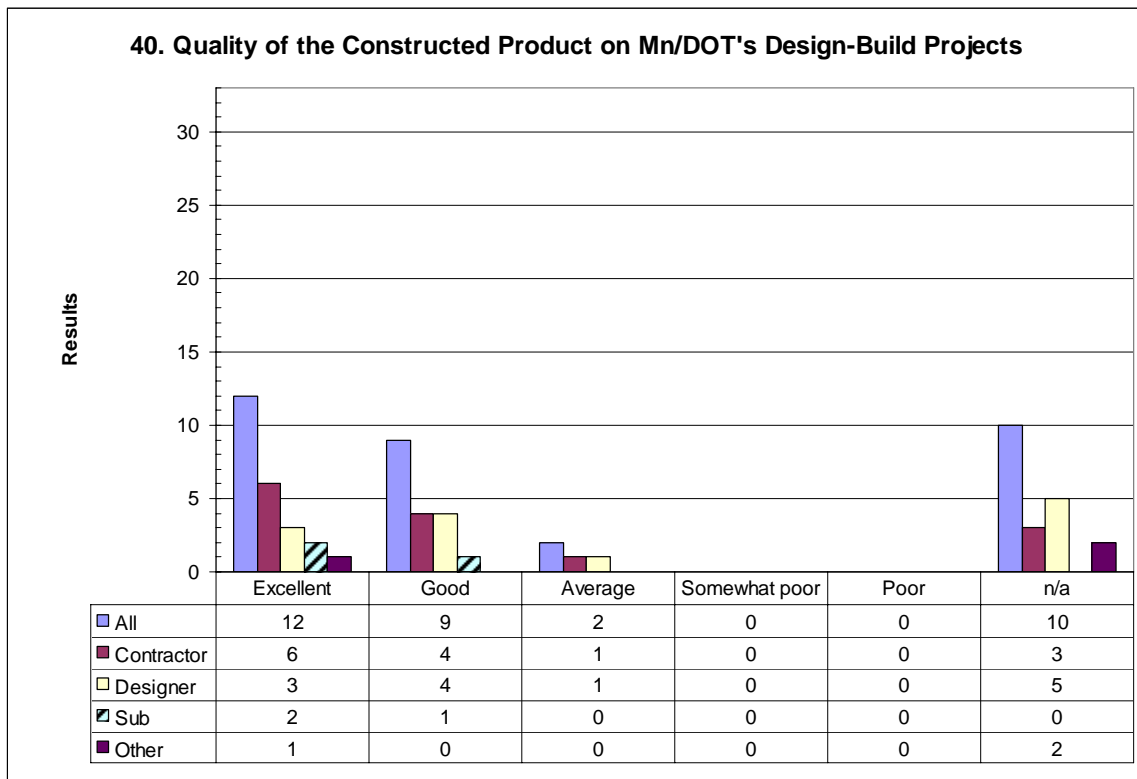
39. What factors most contributed to your ability as a design-build team to execute on the elements of your proposal? (Select up to 2)

	All	Contractor	Designer	Sub	Other					
4	12%	2	14%	1	8%	0	0%	1	33%	Mn/DOT field staff's approach to DB
12	36%	4	29%	5	38%	3	100%	0	0%	Mn/DOT senior management's approach to DB
5	15%	3	21%	1	8%	1	33%	0	0%	Mn/DOT's open-mindedness about DB process
13	39%	4	29%	7	54%	1	33%	1	33%	Experience of the design-build team



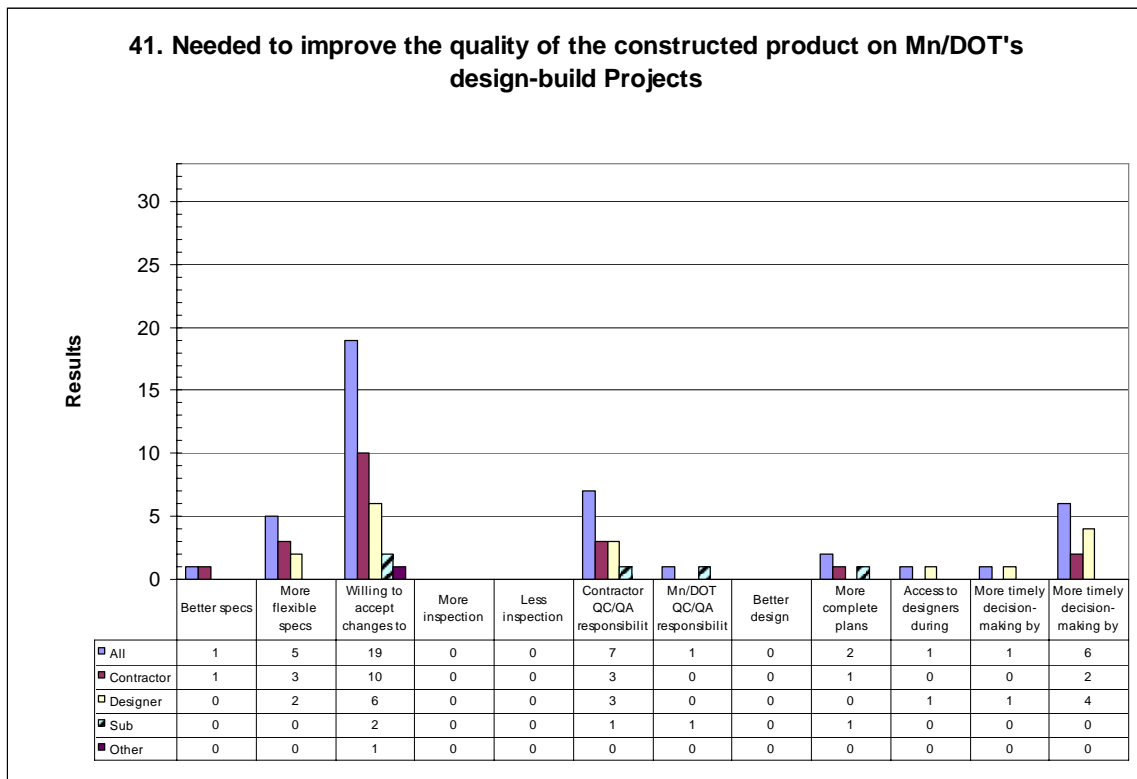
40. How would you rate the quality of the constructed product on Mn/DOT's design-build projects?

All		Contractor		Designer		Sub		Other		
12	36%	6	43%	3	23%	2	67%	1	33%	Excellent
9	27%	4	29%	4	31%	1	33%	0	0%	Good
2	6%	1	7%	1	8%	0	0%	0	0%	Average
0	0%	0	0%	0	0%	0	0%	0	0%	Somewhat poor
0	0%	0	0%	0	0%	0	0%	0	0%	Poor
10	30%	3	21%	5	38%	0	0%	2	67%	n/a



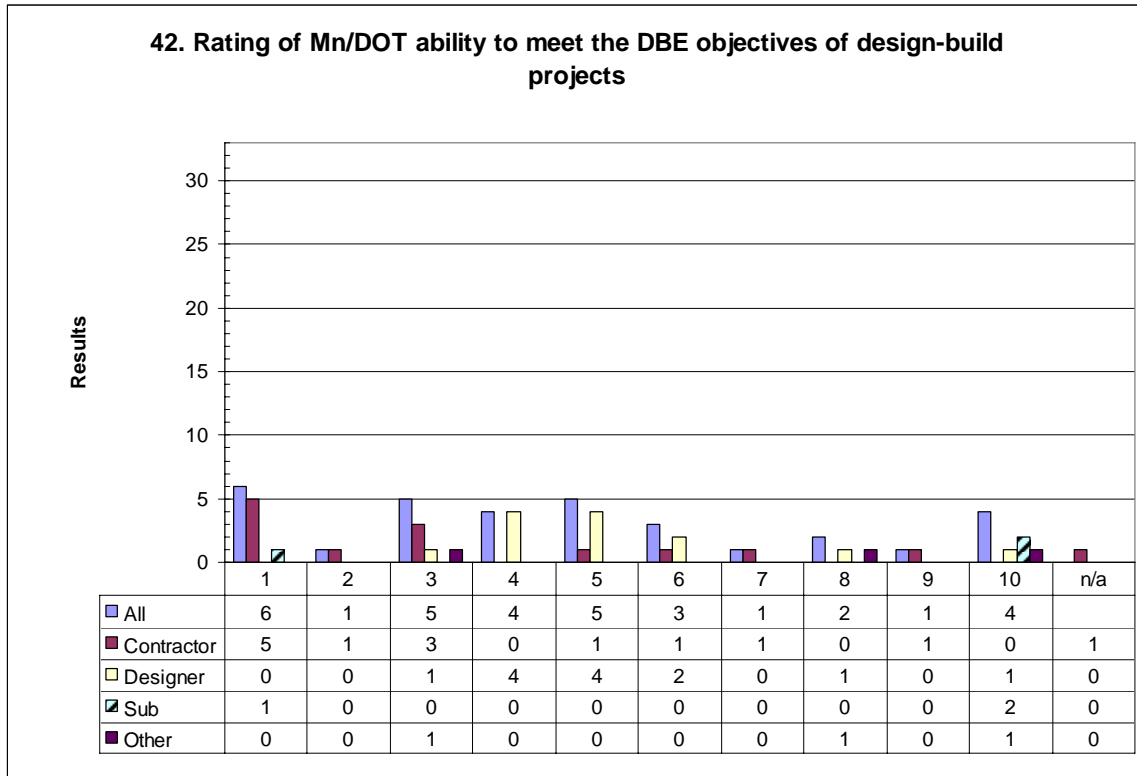
41. What could be done to improve the quality of the constructed product on Mn/DOT's design-build projects? (Select up to 3)

All		Contractor		Designer		Sub		Other		
1	3%	1	7%	0	0%	0	0%	0	0%	Better specs
5	15%	3	21%	2	15%	0	0%	0	0%	More flexible specs
19	58%	10	71%	6	46%	2	67%	1	33%	Willing to accept changes to specs
0	0%	0	0%	0	0%	0	0%	0	0%	More inspection
0	0%	0	0%	0	0%	0	0%	0	0%	Less inspection
7	21%	3	21%	3	23%	1	33%	0	0%	Contractor QC/QA responsibility
1	3%	0	0%	0	0%	1	33%	0	0%	Mn/DOT QC/QA responsibility
0	0%	0	0%	0	0%	0	0%	0	0%	Better design
2	6%	1	7%	0	0%	1	33%	0	0%	More complete plans
1	3%	0	0%	1	8%	0	0%	0	0%	Access to designers during construction
1	3%	0	0%	1	8%	0	0%	0	0%	More timely decision-making by designers
6	18%	2	14%	4	31%	0	0%	0	0%	More timely decision-making by Mn/DOT



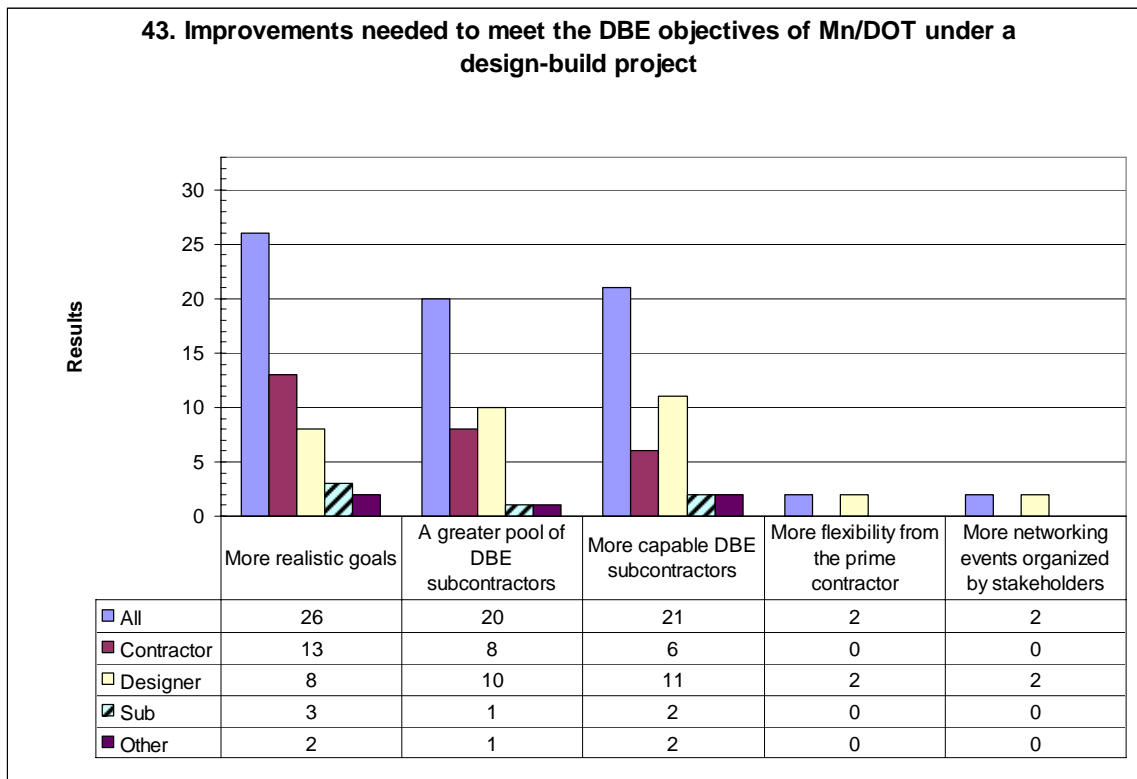
42. How would you rate the ability to meet the disadvantaged business enterprise (DBE) objectives of Mn/DOT under on design-build projects? (Scale of 1-10 with 10 being extremely easy and 1 being extremely hard)

All		Contractor		Designer		Sub		Other		
6	18%	5	36%	0	0%	1	33%	0	0%	1
1	3%	1	7%	0	0%	0	0%	0	0%	2
5	15%	3	21%	1	8%	0	0%	1	33%	3
4	12%	0	0%	4	31%	0	0%	0	0%	4
5	15%	1	7%	4	31%	0	0%	0	0%	5
3	9%	1	7%	2	15%	0	0%	0	0%	6
1	3%	1	7%	0	0%	0	0%	0	0%	7
2	6%	0	0%	1	8%	0	0%	1	33%	8
1	3%	1	7%	0	0%	0	0%	0	0%	9
4	12%	0	0%	1	8%	2	67%	1	33%	10
1	3%	1	7%	0	0%	0	0%	0	0%	n/a



43. What could be done to improve your ability to meet the disadvantaged business enterprise (DBE) objectives of Mn/DOT under on design-build projects? (select up to 3)

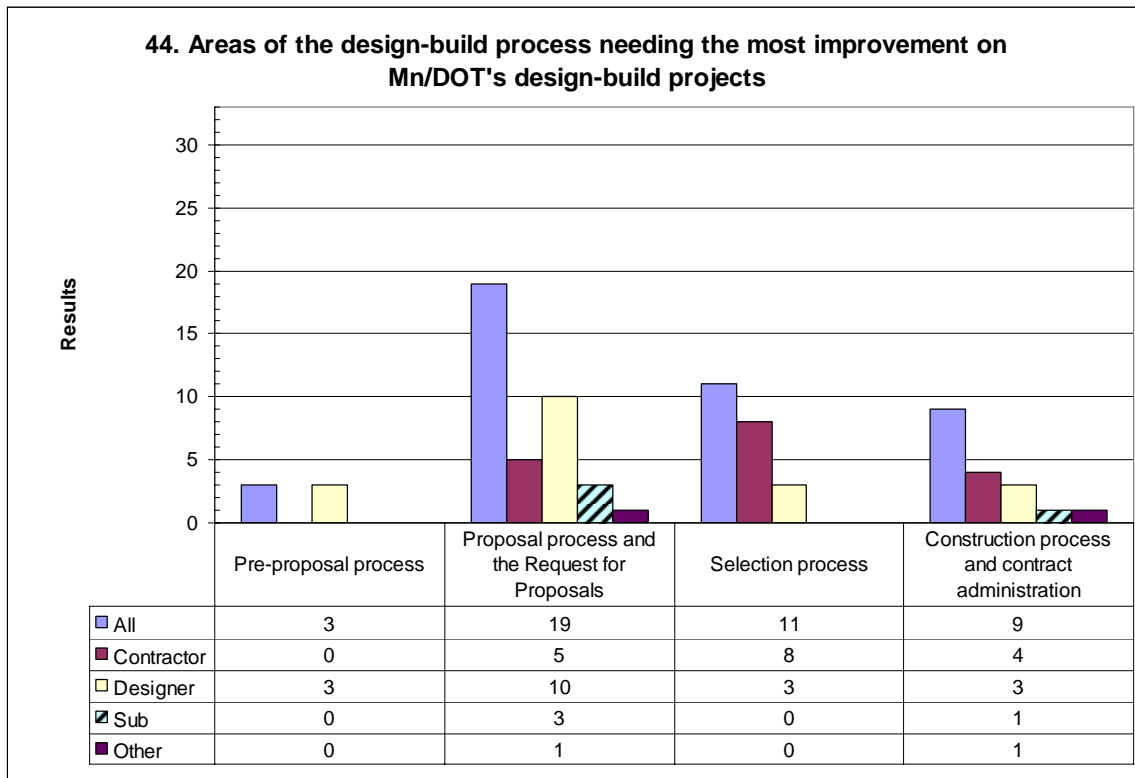
All		Contractor		Designer		Sub		Other		
26	79%	13	93%	8	62%	3	100%	2	67%	More realistic goals
20	61%	8	57%	10	77%	1	33%	1	33%	A greater pool of DBE subcontractors
21	64%	6	43%	11	85%	2	67%	2	67%	More capable DBE subcontractors
2	6%	0	0%	2	15%	0	0%	0	0%	More flexibility from the prime contractor
2	6%	0	0%	2	15%	0	0%	0	0%	More networking events organized by stakeholders



Conclusion

44. What area of the design-build process needs the most improvement on Mn/DOT's design-build projects? (select all that apply)

All		Contractor		Designer		Sub		Other		
3	9%	0	0%	3	23%	0	0%	0	0%	Pre-proposal process
19	58%	5	36%	10	77%	3	100%	1	33%	Proposal process and the Request for Proposals
11	33%	8	57%	3	23%	0	0%	0	0%	Selection process
9	27%	4	29%	3	23%	1	33%	1	33%	Construction process and contract administration



APPENDIX C
Design-build Forum
March 30, 2006
Facilitated by Tom Warne
Hiway Federal Credit Union

46 people present

10:10-10:15 Agenda overview/Introductions- Gary Thompson

10:15-10:28 Opening remarks-Gary Thompson
PowerPoint presentation of the history of design-build in Minnesota.

10:28-11:00 Review of survey results-Tom Warne

Industry Survey 42 solicitations, 33 responses (79%)
Responses are confidential
Individual Interviews as requested

11:00-12:00 Discussion about the pre-proposal process

A . Good-Keep doing

- Advanced notification is strong
- Mn/DOT advance coordination work with the utilities
- Mn/DOT obtains geotechnical information in advance of RFP
- Early information-provide “bootleg” plans early
- Worked hard at public relations in advance of project; gets the community on board and helps schedule when it is tight. Helps with the partners.
- Level of design is appropriate and useful

B . Improve in process

- Get drafts of the RFP and prelim plans out earlier with as much information as possible- even if it isn’t complete so the teams can start brainstorming
- Put some teeth in the Master Utility Agreements (MUA)
 - Hard to get any recovery from utilities if they delay us.
 - Work session with Mn/DOT and utility companies. Until work order signed they can hold you hostage. No benefit to companies to sign early or provide information earlier.
 - Like MUA concept
 - Must tie utilities to the critical path, but it is hard to do
 - Who pays impact how the MUA works
 - Hard to prove work activity delays Re-sequence work can be done to accommodate utilities- but there is no compensation
 - Negotiating process is 3 way partnership and changes difficult.

- Different dynamics in an Interstate job versus TH job.
 - Work orders with the utilities process are a lot of work.
 - Industry would like input into MUA revisions
 - Utility information sheets are good place to hold the utilities accountable.
- Have a design-build orientation for all the players- for all segments of the industry. Especially those putting the RFP together.
- Right-of-way right of entry needs to be cleared up
- Cash flow curve requirements
 - Might need to go to bank to get them involved
- Early communication of the selection criteria- even if draft.
 - Mn/DOT does a good job with matching the evaluation criteria to the selection criteria
- Contract clauses to deal with items that effect payments like:
 - fuel escalation
 - trucking rates (and then denied additional compensation.)
 - and material escalation- deal with before proposal published.
- Consolidation all extraneous information- too much data and book 3 hard to get through. Clarify requirements. Obligated to perform but not as clear as book1, 2a and 2b.
- Deducts- but no incentives.
- Warranties have gotten better, but not great
- DBE selection-
 - Better definitions of the skills of DBE firms, what counts and what doesn't towards the DBE goal?
 - Confusing information – just because they are certified does not mean they will count toward the DBE goal
 - DBE eligible at the beginning should remain eligible for the life of the project
 - Can the DBE goal calculation be made public?
 - Difficult to get commitments from DBE on D-B because there are not quantities or hard numbers for them to bid on.
 - Try to get a larger resource pool.
 - DBE issues are not exclusive to Design-Build, but also Design-Bid-Build
 - Industry is not comfortable with providing both %DBE and \$ value of DBE work during the proposal process (on LSI form). Somebody could back the information into a bid cost before the bid opening. Why can't just the % or \$ be provided? Why can't we follow what they did on T-REX?
 - Need to get Mn/DOT Civil Rights people involved early to help explain the process.
 - Make sure DBE doesn't delay the award of the project.
- Confidential Information
 - Overall proposal process confidentiality- does all of the information stay confidential until the award? This has been clarified in the new

legislation. Unless there is a lawsuit-this is pretty well locked down until the project is awarded.

- LSI form- letter of subcontract intent. Fix or eliminate due to DBE concerns noted above.
- What is happening in other states with regard to DBE?
- AASHTO and Civil Rights will be in town in August
- NAFC national is here in June

12:00-12:35 Lunch

12:35-1:15 Discussion about the proposal process

A . Good-Keep doing

- Best value
- Overall legislated selection process-- formula, best value.
- Good job of letting the industry know what the criteria is and making sure the evaluation criteria matches the selection criteria
- Liked the ATC concept
- Focus on performance requirements- performance rather than testing
- Like the ROC 52 RFP better, easier to follow
- Tabs are good- folder
- Defined project selection procedures- that are followed.
- Reference Information Documents (RID) are thorough
- Programmatic approach to bring consistency to d-b approach

B . Improve in process

- Contract Documents
 - Accuracy of RID documents-
 - RFP more tailored to the specific job
 - Whole kitchen sink in book 3- looking for more streamlined requirements.
 - Conflicts between books- Roc 52 was well spelled out- easier to find information.
 - Too many places to look and too much unorganized information.
 - Redundancy and conflicts in information in books
 - Books 2B and 3 are hard for first timers
 - Index the books and information
- Selection Process
 - Are the appropriate people on the selection committee?
 - Should be top staff- not people from the last job that have axes to grind. What is Mn/DOT's process?
 - Eliminate cities and counties from the selection process?
 - How does the industry know that personal conflicts are not entering into the evaluation? Perception that Mn/DOT may not be objective in rating.

- Mn/DOT & FHWA have oversight members (non-voting) during the process to make sure the scoring is fair
 - AGC has members on selection committee
 - Evaluation committee should do reference checks to validate resumes
 - Concern about conflicts of interest-for Mn/DOT staff on the selection panels (real and perceived).
 - Why aren't the scores more consistent? Educate participants in the D-B selection process, many variations exist.
 - Let's not turn the process into who can write the best proposal. More quantitative rating.
 - Improve the feedback given at the debriefing
 - If you are going to have presentations –score them. If not- don't have them
- ATC Process
 - Concept is good
 - The one-on-one meetings are not consistently good.
 - Want a lot of good feedback and early feedback.
 - Mn/DOT needs to say what they are willing to change
 - Hand select people to do the evaluations – innovative people
 - ATC- timeliness of decisions, don't hold them up!
 - Often times teams are pursuing two options until a decision is made
 - Putting ATC is expensive, if most ATC's are rejected it isn't worth the time and effort to submit any.
 - Re-open ATC window if big addendum is issued
- No bid addendums at the end- difficult to make last second changes

1:15-2:00 Discussion about the construction process

A . Good-Keep doing

- Partnering
- Co-location
- Dispute resolution ladder
- Over shoulder reviews
- Contractor responsible for quality
- Speed
- Public perception-work is always progressing
- Good image.
- Good job on traffic management
- Quality is good
- Awards
- Communication with the public is better
- Manage through crisis after crisis of money issues. (But, this creates impression that we can do it without additional money- and we can't keep the program going without additional dollars.

B . Improve in process

- Design review process needs to be better defined. Design quality manual comes out after award and so it is vague. What are Mn/DOT's expectations?
- Change Order Process
 - Streamline contract provisions- changes
 - Change order process- getting it through Mn/DOT to get paid quicker. Supplemental agreements and work orders
 - Payment of design change orders- verbage that doesn't provide enough \$- non-construction rate doesn't compensate the designer.
- Quality oversight
 - Too many layers
 - Redundancy
 - Confusion on the chain of command for quality – who's in charge?
 - Mn/DOT should rely less on consultants and instead rely on experienced Mn/DOT staff.
- Higher standards for design-build than design-bid-build projects
 - Example traffic control devices- require more than a D-B-B project-
 - Environmental control
 - Lump sum items- subject to differing opinions lump sum versus line item- hard to bid preferences. Maybe a base bid with opportunities
- Complaints don't get changed from one project to the next- problems identified in one project, show up in the same manner in the next plan.
- Industry doesn't like maximum payout curves.
- Final Contract Acceptance needs to be clarified – “construction” or “substantial completion” language acceptance instead?
- Need to do a better job of communicating our successes to the public
- Too many qualification requirements on some projects (staff levels)
- Way too much administration requirements (paperwork). Sometimes we are more focused on doing the correct paperwork and not solving the issue at hand.
- Define what is flexible and what is not in the RFP? e.g. if you said you must have 12' lanes, why are you allowing a change to 11' lanes later?
- There is value to Mn/DOT in allowing the contractor to proceed at their risk without final plans.
- Mn/DOT needs to be able to let go. Ability of Mn/DOT to let go of some of the oversight, over-check, triple check

2:00-2:18 Wrap up, concluding remarks

APPENDIX D About The Author

Thomas R. Warne, P.E.

Tom Warne and Associates, LLC
9874 S. Spruce Grove Way
S. Jordan, UT 84095
801-302-8300

President, Tom Warne and Associates, LLC-June 2001 to present

Tom Warne and Associates was founded with the express purpose of assisting public agencies in becoming more effective and private companies in their quest for greater profitability in the 21st Century. Projects and engagements include large design-build efforts, strategic planning, partnering facilitation, succession management, legislative initiatives, market analysis, government relations, leadership seminars, process improvement initiatives, and client interventions. Clients include a variety of public and private entities including the FHWA, AASHTO, state DOT's, engineering consulting firms, and contractors. Major projects include the Woodrow Wilson Bridge, San Francisco Oakland Bay Bridge, Los Angeles to Pasadena Blue Line, SR-22 in Orange County, University Light Rail, Utah, Pasadena Gold Line, Hood Canal Floating Bridge, Tri-Rail Double Track in Florida, the ICC in Maryland, and the Louisiana TIMED Project.

Mr. Warne has become known in the industry as the individual to turn to for resolving technical or process problems facing both public and private sector entities. His wide experience on complex policy and transportation projects gives him the background and experience to assist clients with even the most difficult of issues. One of his emphasis areas has been transportation finance issues at the state and national level. As an expert on available revenue sources and trends across the country Tom has served as a resource to the Utah legislature for over two years as well as an expert/facilitator to Idaho's Forum on Transportation Investment for the last year. His weekly internet newsletter, The Tom Warne Report (tomwarnereport.com) provides up to date information on many transportation related issues including federal, state and local funding initiatives.

Most notable among the projects where Mr. Warne has been called upon to assist owners in resolving complex issues are the Woodrow Wilson Bridge, the San Francisco Oakland Bay Bridge and the Hood Canal Floating Bridge. In each case, as chair of an expert panel, his background and experience have been instrumental in assisting these agencies in determining a course of action that was both fiscally and procedurally appropriate for the circumstances.

Executive Director, Utah Department of Transportation (UDOT)-May 1995 to June 2001

Appointed by Governor Michael O. Leavitt. Responsible for the design, construction, and maintenance of Utah's 6000-mile state highway system. UDOT is an agency of 1800 employees and has an annual operating budget of approximately \$700 million. During this period was responsible for the \$1.59 billion I-15 Reconstruction Project which has become the benchmark for large highway construction projects. This design-build project was completed three months ahead of schedule and over \$32 million under budget. The most recent public opinion poll showed UDOT with a 75% approval rating.

Deputy Director, Chief Operating Officer, Arizona Department of Transportation (ADOT)-September 1992 to May 1995

Responsible for the day to day operations of the Highways, Motor Vehicle, Administrative Services, Planning and Aeronautics Divisions comprising over 4500 employees. During this period was responsible for Arizona's 145 mile, \$4.5 billion regional freeway construction program. This voter approved initiative provided a loop freeway system for the Maricopa County area supplementing the already constructed network of interstate highways in the region.

Arizona Department of Transportation-July 1983 to September 1992

Other positions of responsibility from Resident Engineer to State Construction Engineer. During this period was responsible for over \$1 billion of highway construction. In addition, was responsible for the implementation of the management concept known as partnering on Arizona's highway construction contracts. This process virtually eliminated lawsuits and unresolved disputes on Arizona's highway construction projects. Assisted about half the states and numerous private companies in their efforts to implement partnering on their highway construction projects.

US Army Corps of Engineers, August 1979 to July 1983

Rising to the rank of Captain, was responsible for a variety of military construction projects from roads to light commercial work.

Professional Activities

President of the American Association of State Highway and Transportation Officials, 2000-2001

Chair, Standing Committee on Highways, American Association of State Highway and Transportation Officials, 1998-2000

Chair, Western Association of State Highway and Transportation Officials (WASHTO), 1998-1999

Vice Chair, Transportation Research Board (TRB) Executive Committee, 2001

Chair, Task Force on Design-Build, Transportation Research Board, 2002 to present

Member, Eno Transportation Foundation's Board of Advisors

Education

BS in Civil Engineering, Brigham Young University, 1979

MS in Civil Engineering, Arizona State University, 1988

Registered Professional Engineer

Arizona and Utah

Other Activities

Author of the book, Partnering For Success.

Numerous presentations both nationally and internationally