

FMI/CMAA Twelfth Annual Survey of Owners



ADAPTABILITY IN UNCERTAIN TIMES



MANAGEMENT CONSULTING • INVESTMENT BANKING
for the ENGINEERING and CONSTRUCTION INDUSTRY



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CMAA convened an advisory panel of owner members to consult in the development of the survey questionnaire and study objectives. These owners generously shared their experiences and expertise in identifying and prioritizing areas where new knowledge was desired.

The owners advisory panel consisted of:

Stephen Ayers, AIA, Architect of the U.S. Capitol

Mark Cacamis, PE, CCM, State Construction Engineer, Virginia Department of Transportation

Michael Germinario, PE, CCM, Program Director, U.S. Customs and Border Protection

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EXECUTIVE SUMMARY

“It is not the strongest of the species that survives, nor the most intelligent that survives. It is the one most adaptable to change.” — Charles Darwin

The current operating environment rewards those most adaptable to change. In this environment, markets react violently to each new economic report or each new day’s headlines about trouble around the corner or a world away. As the economic wheels continue to spin with little traction, firms are left with little choice but to adapt to survive.

In many ways, the industry finds itself in an unfortunately familiar place. The introduction to last year’s Survey of Owners outlines economic challenges similar to those faced today. The statement, “Fear of a double-dip recession exists while talk of further stimulus spending, specifically for infrastructure, is inciting optimism,¹” fits today as well as it did then.

The 2011 CMAA/FMI Survey of Owners, the 12th in the series, adds further depth and detail to an evolving portrait of construction program owners coping with an operating environment that is changing profoundly and, in all likelihood, permanently. As is the case in past years, the new survey explored what owners expect from their professional construction and program managers. New findings reveal how these expectations have evolved over time and highlight some impressively durable trends regarding what remains and what changes as the industry evolves.

The 12th annual survey asked owners about how the continuing global economic uncertainty has affected their solicitation and procurement policies. Specifically, national business and industrial media have reported throughout the last two years that states, localities and other owners have been receiving surprisingly low bids on their projects. This might create a rare opportunity to execute important projects at major cost savings, were it not that levels of government funding and availability of long-term credit remain highly uncertain.

Have owners actually experienced this trend, and if so, how have they responded? What are the implications of lower margins for service providers as result of these low bids and the sustainability of the industry in its current form if the current economic reality is likely to remain for a number of years?

The survey took place during the summer of 2011. The overall economic temper of that time is summed up with a Washington Post headline from August 19:

“Recovery could be one of longest, most difficult in U.S. history, economists say.”

The first half of the summer was dominated by a prolonged conflict over raising the federal debt ceiling and devising a strategy to reduce the nation’s deficits. All the while, the European debt crisis and slowing growth in emerging markets raised doubts about the global economic recovery and kept capital on the sidelines. Measures critical to the construction industry, such as a long-term surface transportation authorization bill, were repeatedly deferred and have now been put off into the election year of 2012. The stimulus spending provided by the American Recovery and Reinvestment Act (ARRA) of 2009 was ending, with ARRA itself derided as a failure by some in Congress and elsewhere.

¹ FMI Corporation, “FMI/CMAA 11th Annual Survey of Owners, Rising from the Ashes of Recent Economic Woes,” Fall 2010, pg. 2.

HIGHLIGHTS

- **The national economy has wrought significant changes in the contractor community, and these changes challenge owners to adjust or maintain their policies.**
 - More than half of respondents agreed or strongly agreed, “Due to national economic conditions, we find many bids are priced well below the levels we expected.” Nearly half (48 percent) agreed or strongly agreed that “We are taking advantage of this opportunity to get work contracted at the lowest possible price.”
 - Among those owners with best-value procurement policies, however, the tendency is to stick with that policy and resist the siren call of unexpectedly low bids. Nearly two-thirds (61 percent) of the best-value procurement owners disagreed or strongly disagreed with the statement, “In the interest of realizing these savings, we are departing, if necessary, from best-value strategy.”
 - Indeed, fewer than 10 percent of respondents agreed with this statement, and not a single survey participant strongly agreed with it.

- **Project closeout remains an obstacle for many, but not all, owners.**
 - While more than one-third (38 percent) either agreed or strongly agreed with the statement “Getting a project fully completed is harder today than ever before,” 42 percent either disagreed or strongly disagreed.
 - The different experiences of these two owner groups reveal that while the current operating environment may not be getting any easier, it is not getting harder for a significant percentage of owners.

- **The long-observed trend among owners toward a more holistic, life-cycle view of their projects and programs is now firmly established.**
 - Survey respondents were asked to identify areas in which “you need and/or expect your CM, whether in-house or contracted, to make a major contribution to your success.”
 - For the first time, the function “Transitioning to ongoing operations and maintenance (startup)” ranked highest among 16 areas of support (percentage ranking the function as important or very important),
 - 77 percent of owners expect their CM to have either expertise or thorough working knowledge of facility startup.
 - The more traditional CM functions of document quality concerns and issues/disputes resolution were the other top CM functions identified by survey respondents.

- **Over 60 percent stated it is important or very important for the CM to “lead our effort to implement Integrated Project Delivery (IPD).”**
 - As the industry continues to debate the correct approach to Integrated Project Delivery, construction program owners are looking to professional construction managers for leadership and guidance in implementing IPD.
 - 71 percent expect their CM to have either expertise or thorough working knowledge of IPD.
 - The trend toward greater CM leadership on IPD creates an opportunity for savvy firms to deliver greater value for construction program owners.

NATURAL SELECTION AT WORK?

Put simply, natural selection is a biological process that explains why certain traits remain while others change as a species evolves. The key to this process is that it is not random. What changes does so by design so that the species is better suited to survive in a constantly changing environment. What do the implications of Darwin's theory, a cornerstone of evolution, hold for the business of construction in today's economic climate?

To be fair, natural selection does not offer a perfect lens by which to view business. Government bailouts of the auto industry, the American International Group, Fannie Mae and Freddie Mac, and a host of banks are all clear examples of artificial selection at work. But what are the implications for those firms not deemed "too big to fail."

As Charles Darwin's quote eloquently states, it is the adaptable firm that is likely to survive. As the challenged global economy continues to force its will on the operating environment, construction program owners must adapt to this new reality. At the same time, advances in process and technology are changing the way that projects are managed and buildings built. Clearly, for owners and service providers to succeed in this environment they must be willing to adapt.

CONTINUITY AND CONTEXT

The *12th Annual Survey of Owners* offers the opportunity to pull back from the day-to-day and observe the evolution of the construction industry in the current operating environment. To understand the current survey results in this light, they are best viewed in the context of earlier survey findings.

The CM's growing role as leader of the commissioning and startup process, for instance, has been evident for some time. The *10th Annual Survey of Owners* (2009) reported on broad trends toward outsourcing of a variety of functions throughout the industry, but most particularly predicted that use of outsourcing for "program activation and commissioning" and for "operations and maintenance" would see large gains through 2014.

That survey forecast a 60 percent increase in outsourcing of commissioning and a 30 percent gain in outsourced services for operations and maintenance.

The 2009 survey also concluded, "Owners are taking a more holistic view of their capital construction efforts and expect a broader set of services from pre-design to O&M functions." Between 2009 and 2014, the survey revealed that owners would increase the importance they place on "effective documentation and processes designed to support facility commissioning or turnover."

That survey isolated services or functions viewed as relatively unimportant at that time but which, over the coming five years, would see great gains in perceived importance. One observation: "Commissioning, or completion and submission of all commissioning, facility turnover, LEED® and other documentation necessary to support facility transfer or certification obtainable during the post-construction process, demonstrates one of the highest percentage gains in very and quite important ratings, further reinforcing a shift in perspective between 2009 and 2014."

Today, only two years into that five-year forecast period, transitioning to ongoing operations and maintenance has already migrated to the top of the list of functions deemed important or very important by owners, along with the more traditional CM functions of dispute claims resolution and document-quality concerns.

As expectations of owners continue to evolve, services providers must adapt to these new expectations to continue to add superior value. Those firms that embrace this challenge as an opportunity will position themselves for survival and future success.

THE ECONOMY'S EFFECT ON PROCUREMENT STRATEGY

During the past year, some news media reports have highlighted a trend of construction owners receiving low bids in response to their RFPs. In response to that trend, this survey asked for owners' direct experiences with bid values. Specifically, the survey asked owners to indicate levels of agreement or disagreement on a scale of 1 to 5 on statements regarding the economic climate's impact on bid levels and procurement strategies.

The results in Exhibit 1 are clear. More than half of respondents (52 percent) agreed or strongly agreed with the statement, "Due to national economic conditions, we find many bids are priced well below the levels we expected," while only 27 percent disagreed or strongly disagreed.

These low bids create an opportunity for construction owners to contract work at a discount. At the same time, they pose a threat to service providers in the industry who must now operate with little or no room for error.

Are owners taking advantage of these low bids to get work done more inexpensively? Nearly half of respondents (46 percent) agreed or strongly agreed with only 20 percent disagreeing or strongly disagreeing (Exhibit 2).

Despite an economic environment that is producing lower bids, owner organizations that use best-value procurements are sticking to their guns and resisting the temptation to pursue these extra-low bids. Among best-value owners, fewer than 10 percent agreed: "In the interest of realizing these savings, we are departing, if necessary, from best-value strategy." In fact, not a single respondent strongly agreed with the statement, and an overwhelming 67 percent either disagreed or strongly disagreed (Exhibit 3).

Exhibit 1 Bids are priced well below the levels we expected.

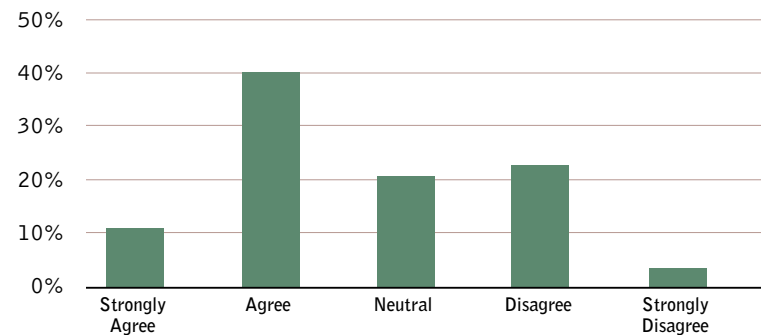


Exhibit 2 Taking advantage to get work contracted at the lowest possible price.

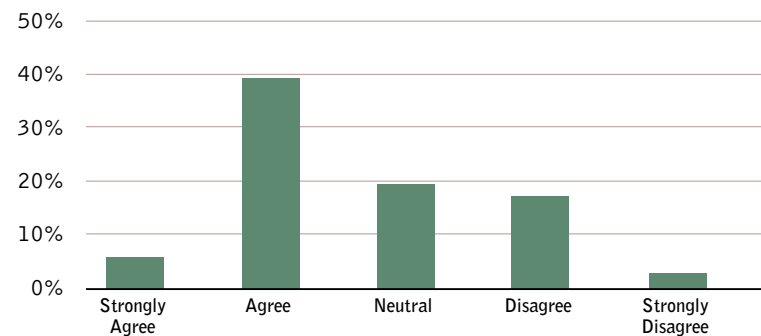
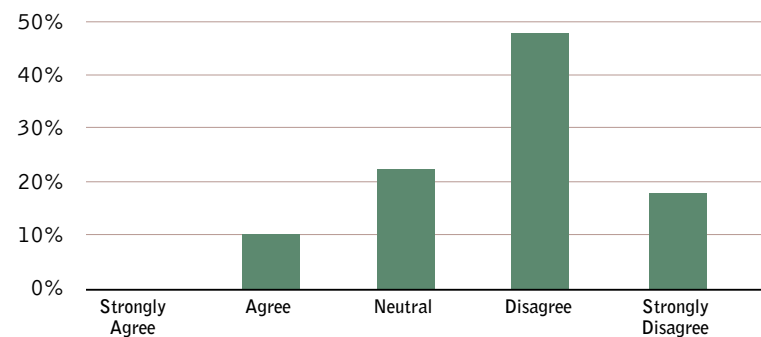


Exhibit 3 We are departing from best-value strategy.



PROJECT CLOSEOUT REMAINS CHALLENGING, FOR SOME

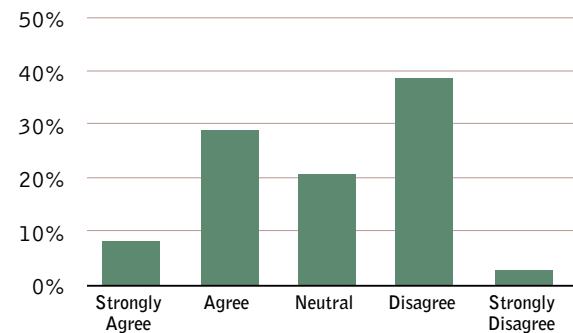
Project Closeout

Previous CMAA/FMI Owners Surveys have reported on the growing importance owners attach to finishing projects right. Anecdotal evidence in recent years suggests that achieving this goal is becoming more difficult. Respondents to related questions on this year’s survey, however, split almost down the middle. Presented with the statement, “Getting a project fully completed is harder today than ever before,”

- 38 percent agree or strongly agree
- 41 percent disagree or strongly disagree

While the bimodal distribution of responses is fascinating in and of itself, it also divides respondent owners into two core groups: those who agree closeout is getting harder and those who do not agree. In addition, another 21 percent neither agreed nor disagreed, providing a baseline to compare the two groups. Looking at how these groups’ experiences and perceptions differ across other questions relating to closeout and commissioning shows that while the current operating environment may not be getting any easier, for some, it is not getting harder (Exhibit 4).

Exhibit 4 Getting a project fully completed is harder today than ever before.

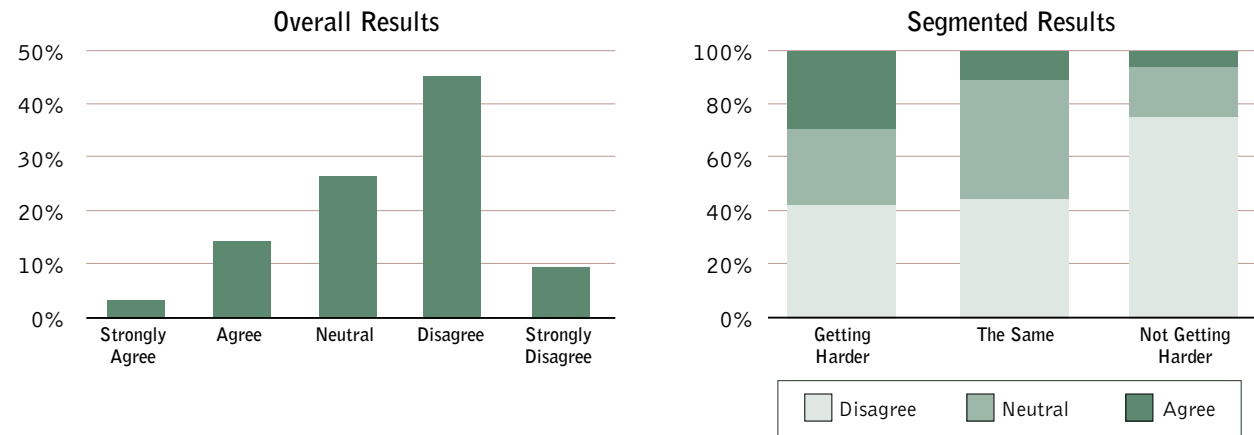


Retainage

Are contractors willing to walk away from retainage amounts rather than do the work necessary to collect them? A survey question sought to determine whether the common practice of retainage, or withholding a specified amount of money from contractor payments, was an adequate strategy for assuring that unfinished work will be completed.

Presented with the statement, “Contractors will often walk away from small retainage amounts rather than do the work required to collect this money,” more than half of respondents (55 percent) either disagreed or strongly disagreed with only 17 percent agreeing or strongly agreeing (Exhibit 5).

Exhibit 5 Contractors walk away from a small retainage rather than do work required to collect.



While the overall response skews largely toward disagreement, there are differences when looking at the response of the two groups: those who agree that closeout is getting harder, and those who do not agree that closeout is getting harder. The ‘Getting Harder’ group was more inclined to also agree with the statement that contractors are willing to walk away from small

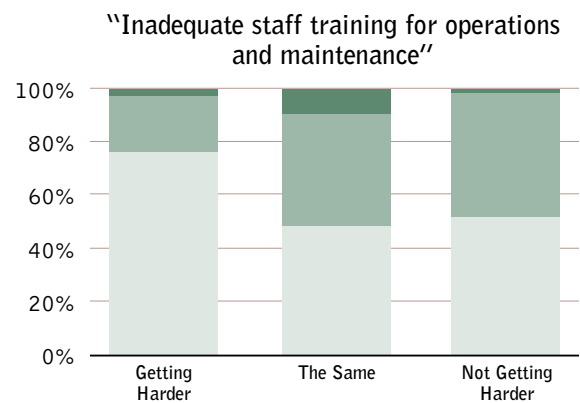
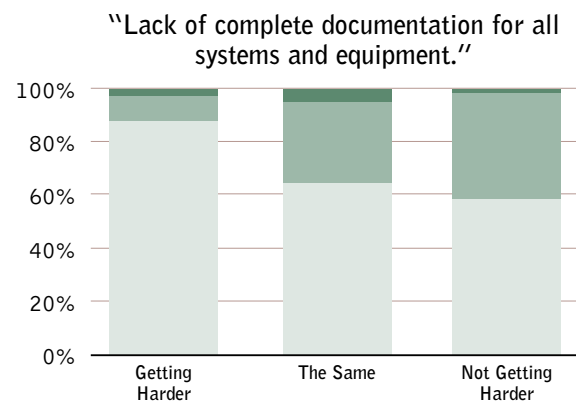
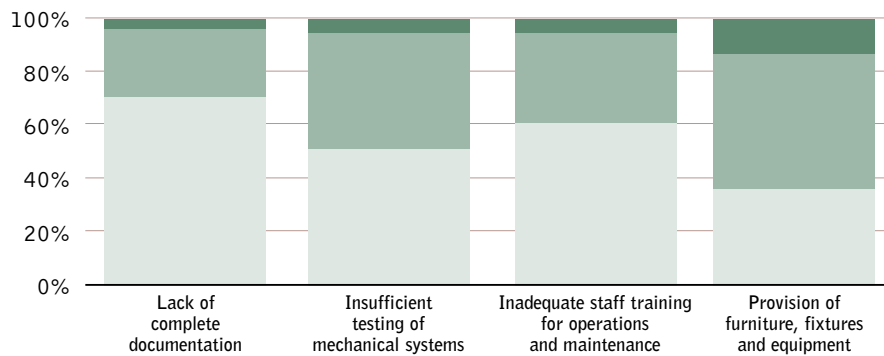
retainage amounts when compared to the ‘Not Getting Harder’ group. While 31 percent of the former agreed and 42 percent disagreed that contractors are willing to walk away from small retainage amounts, only 8 percent of the latter agreed, and an overwhelming 73 percent disagreed with the same statement (Exhibit 5).

Commissioning

Looking at specific project commissioning issues, the two issues that owners report struggling with most regularly are complete documentation and inadequate staff training for operations and maintenance, with respondents experiencing these either frequently or sometimes 70 percent and 50 percent, respectively (Exhibit 6).

Comparing the different groups’ responses to this question again reveals stark differences. Of the “Getting Harder” group, fully 87 percent said they frequently or sometimes encounter problems with documentation, and 75 percent reported frequently or sometimes experiencing issues related to adequacy of staff training. In the “Not Getting Harder” group 41 percent and 47 percent, respectively, said they rarely or never encounter these problems (Exhibit 6).

Exhibit 6 Challenges With Project Commissioning



Time to Adapt

The current environment may not be getting any easier, but it is at least not getting harder for some construction program owners. Variations between the two respondent groups identified in this year’s survey stand as evidence that the distinction is real. While responses to the survey are unable to answer the question of how an owner moves from one group to the other, it stands as a sign that there is a better way out there, and it is in the best interests of our industry to identify that way and adapt.

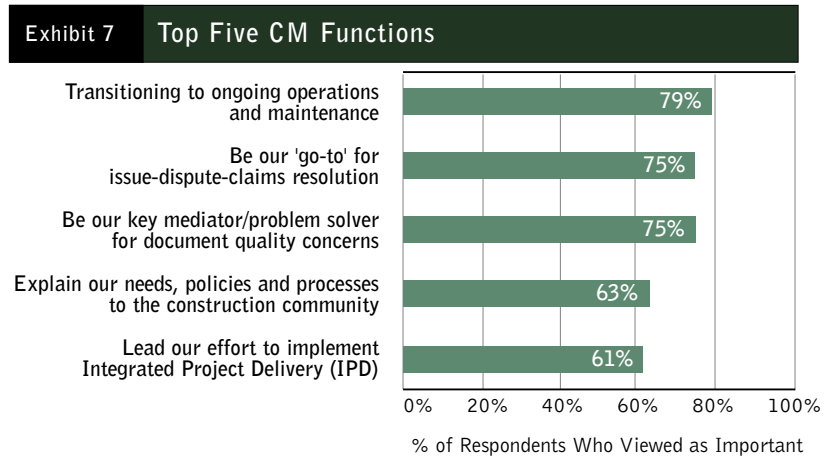
AN EVOLVING VIEW OF PROJECT EXECUTION

Needs and Expectations

Perhaps the most surprising finding from the 2011 Owners Survey is that “Transitioning to ongoing operations and maintenance” now ranks, for the first time, as the most important area in which owners expect their CMs to make major contributions. Transitioning to ongoing operations and maintenance was cited as an important or very important CM function by 79 percent of all respondents, including more than one-third (34 percent) who said this function was very important for the CM (Exhibit 7).

The next two functions, each with 75 percent of respondents listing them as either important or very important, were the more traditional CM tasks “Be our key mediator/problem solver for document quality concerns” and “be our ‘go-to’ for issue-dispute-claims resolution.”

Along with commissioning, document quality and issues/disputes resolution, the following CM job functions rounded out the top five:



- “Explain our needs, policies and processes to the construction community.”
- “Lead our effort to implement Integrated Project Delivery (IPD).”

Over the last several years, the “correct” approach to IPD has been the subject of considerable debate in the industry, focusing mainly on exactly these issues: Who should lead the process, and how should project participants apportion risk in an IPD project? Ultimately, the decision of these questions rests with owners, whose primary concern is completing a project on time and budget with the desired level of quality and a minimum of stress.

That owners are increasingly expecting their CMs to lead IPD is a clear indication of opportunity for the most capable and forward-thinking service providers. Both the 2009 and 2010 Owners Surveys portrayed owners taking a more holistic approach to their projects and programs: In 2009, this finding arose in the context of increased outsourcing and reliance on technology as an enabler of collaboration; in 2010, the backdrop was an owner community coping with significant, and perhaps permanent, a reduction of in-house resources.

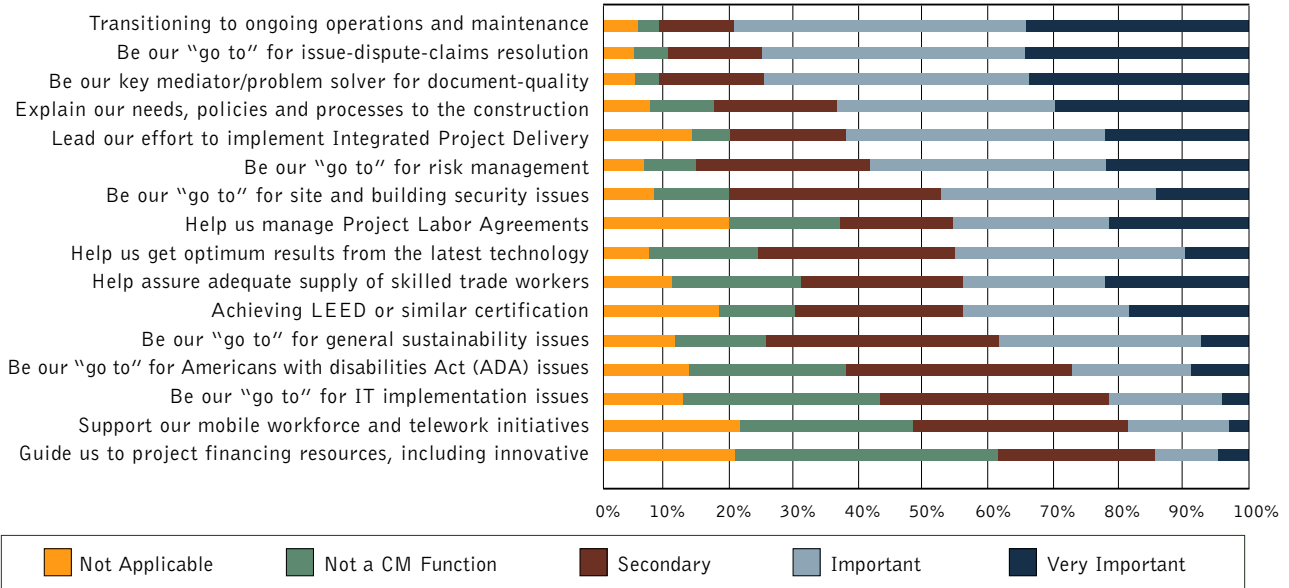
The overall strategic conclusion from these three surveys, seen together, is clear:

With regard to the delivery of capital projects, owners demand leadership and expect their CMs to provide it.

The lowest-rated areas were the following:

- “Guide us to project financing resources, including innovative financing,” with only 47 percent responding that it is a CM function, of which only 17% rate it as either important or very important.
- “Be our ‘go-to’ for IT implementation issues,” with only 56 percent responding it is a CM function, of which only 20% rate it as either important or very important.
- “Support our mobile workforce and telework initiatives,” with only 52 percent responding it is a CM function, of which only 19% rate it as either important or very important.

Exhibit 8 Owners' Needs/Expectations of CM Function



CM Expertise

A separate question asked owners what level of capability they needed and/or expected of their CMs in the same 16 functional areas. The basis for this question is the assumption that owners may expect CMs to be knowledgeable in a wider range of areas than those that are actually most critical to their job performance.

The findings of this question align very tightly with the previous data, insofar as transitioning to ongoing operations and maintenance, together with dispute resolution, topped the list of areas in which owners expect either expertise or "thorough working knowledge."

Some additional nuance is gained by breaking out the percentages of the two high-end responses, expertise and thorough working knowledge. The following are the five highest-rated areas overall:

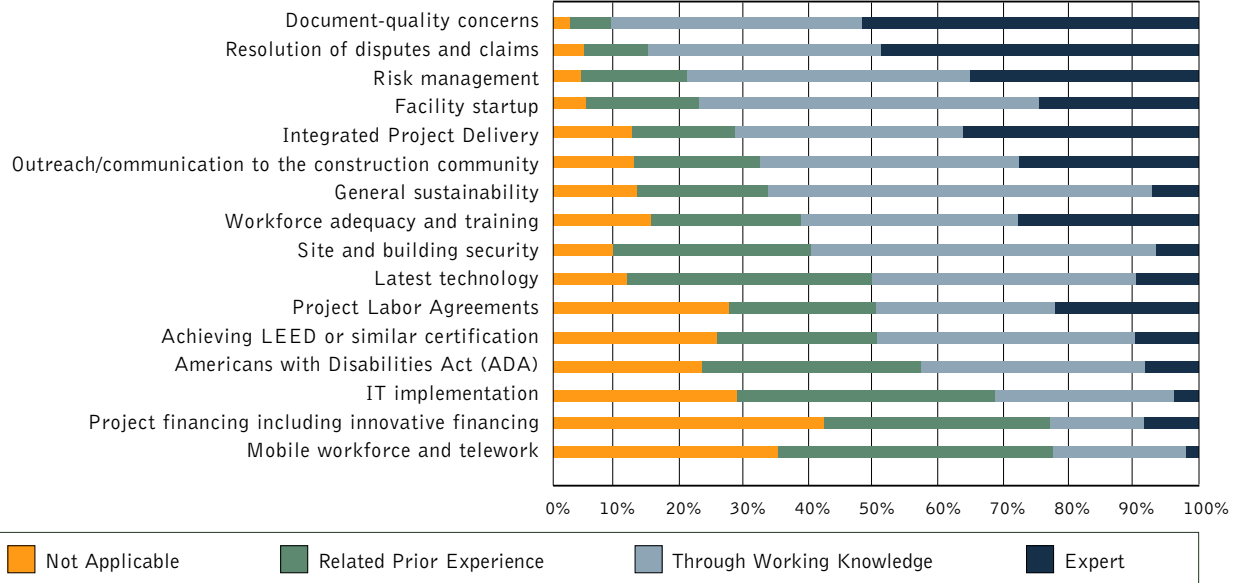
Exhibit 9 CM Expertise Expectations

Top Five	Expert	Thorough Working Knowledge	Combined Response
Document-quality concerns	52%	38%	90%
Resolution of disputes and claims	49%	36%	85%
Risk management	35%	44%	79%
Facility startup	25%	53%	77%
Integrated Project Delivery	36%	35%	72%

In Exhibit 9, note the drop-off in the expertise requirement among the top five areas between dispute and issue resolution (49 percent) and the remaining three. For the transitioning function, although fewer owners expect expertise, 77 percent

of respondents still expect at least thorough working knowledge. One interpretation of this data is that owners expect CMs to "manage," that is, to lead a team that will include real experts in a variety of subject areas. The areas in which full expertise is expected of the CM seem to be ones that would traditionally be identified as core CM functions, resolving document-quality concerns and handling disputes.

Exhibit 10 Owners' Expectations of CM Expertise



BID PROTEST EXPERIENCES

The 2011 Owners Survey concluded with a series of questions aimed specifically at public sector owners, who made up more than half of the respondent universe. These questions are related to those that elicited owners' experiences of lower-than-expected bids, together with their willingness to depart from their usual procurement policies to seize opportunities presented by these low bids.

For the statement, "We are receiving more bid protests than we did four years ago," fully 65 percent either disagree or strongly disagree, while only 35 percent of respondents agree or strongly agree (Exhibit 11).

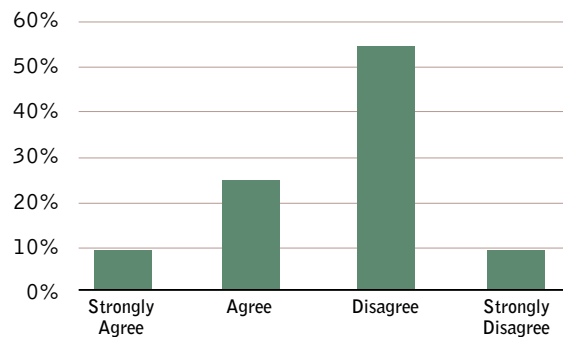
The next statement was "More of the protests we receive today are frivolous than was the case in 2007." Again, there was a striking difference in response, with 60 percent disagreeing or strongly disagreeing compared to only 39 percent who agreed or strongly agreed.

Over two-thirds of respondents (70 percent) disagreed or strongly disagreed with the statement, "Our projects have been negatively affected by our need to manage bid protests."

As to the grounds put forward for protests, owners reported that they sometimes or frequently encountered the following:

- "We were just as qualified as the firm selected and our bid was lower." 55 percent
- "We were the low bidder and were not selected." 50 percent
- "The bid documents were structured to favor certain firms over others." 35 percent

Exhibit 11 We are receiving more bid protests than we did four years ago (2007)



RESPONDENT DEMOGRAPHICS

The CMAA/FMI 12th Annual Survey of Owners had 119 owner respondents. The two largest respondent groups by type of owner were publicly traded stock corporations, representing 22 percent of respondents, followed closely by federal/national agencies, representing 21 percent of respondents. In total, public and quasi-public organizations accounted for 51 percent of respondents.

The respondents represent a broad distribution across market segments. Infrastructure represents the most represented vertical with 34 percent of respondents. This was followed by commercial/office/vertical building projects with 29 percent of respondents. Institutional building (16 percent) and energy projects (10 percent) were also significantly represented.

Exhibit 12 Respondents by Organization Type

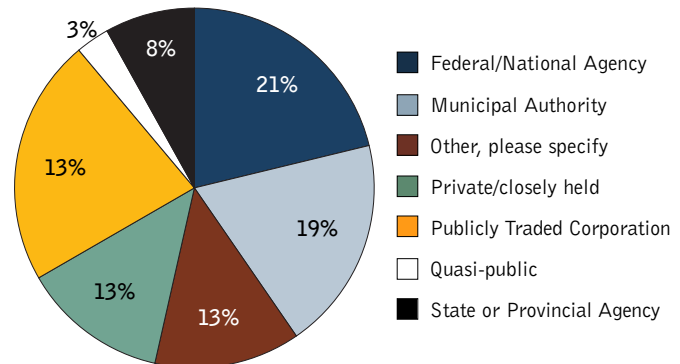
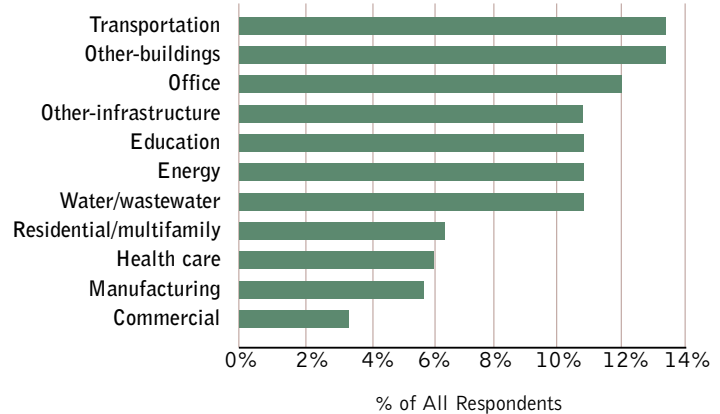


Exhibit 13 Respondents by Industry



CONCLUSION

The 12th Annual CMAA/FMI Survey of Owners provides an opportunity to step back, look up and reflect on the evolution of the construction industry through what is changing and what is staying the same. It adds to a series of CMAA/FMI studies that have revealed a strong trend among owners to view their projects and programs more comprehensively, and to expect more from the service providers they retain to support these activities.

In some key areas, this trend has created opportunities for CM practitioners and firms. As was noted in the 10th Annual Survey of Owners, construction program owners are increasingly looking to outsource a variety of functions throughout the industry, most notably in the transition to ongoing operations and maintenance. In other areas, however, owners see less opportunity for CMs to make significant contributions. Perhaps the most striking example in today's capital constrained environment is innovative project financing.

Looking to the future, the path to success for CMs requires adapting vigorously and creatively to owners as they seek a more complete range of services as well as higher knowledge and competence across not just more subject areas, but in the areas where owners expect the most significant contribution from the CM function. A recovering national economy, insofar as it may boost overall construction activity, will place an added premium on delivering these values.

PARTIAL LIST OF PARTICIPANTS

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San Francisco Bay Area Rapid Transit
MTA New York City Transit
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About CMAA

The Construction Management Association of America is North America's only organization dedicated exclusively to the interests of professional Construction and Program Management.

The Association was formed in 1982. Current membership is more than 8,200, including individual CM/PM practitioners, corporate members, and construction owners in both public and private sectors, along with academic and associate members. CMAA has 28 regional chapters.

CMAA presents two national gatherings annually: The Owners Leadership Forum in the spring, and the National Conference & Trade Show in the fall. Additional events such as topical workshops and "best practices summits" are scheduled each year.

The Construction Manager Certification Institute (CMCI), a subsidiary of CMAA, administers the Certified Construction Manager program, which has been accredited by the American National Standards Institute.

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