

a any dia mandria any amin'ny a Aline amin'ny am

TABLE OF CONTENTS

Executive Summ y Highlights	2 3
i u ti Changes in Owner Staffing Restrictions in Hiring Changes in Document and Service Quality	4 4 5
 e ix i i Sources of Future Staff Collaboration and Degree of Integration Lean Construction Techniques General Question Responses 	6 6 8 9
 ect e ive y Sy tem Construction Execution Tactics Management Process of Construction Tactics Contracting and Pricing Method Tactics 	10 10 12 12
em ic	13
c u i	13

c l\e eme t

This Eleventh Annual Survey of Ownersspossible only through the leadership provided by Construction Management Association of America (CMAA). In addition, special thanks go to the owner members of CMAA, Construction Users Roundtable (CURT), Council of Educational Facility Planners International (CEFPI), Construction Owners Association of America (COAA), effetern Council of Construction Consumers (WCCC), Construction Industry Institute (CII), North Central Electric Association (NCEA), Society of American Military Engineers (SAME), Gas Technology Institute (GTI) and Health Facility Institute (HFI). Consulting, technology and other service providers to the AEC industry, including AutoDesk, CDP Inc., Contax LLC, e-Builder, Meridian Systems 2 and Textura, supported the distribution of the survey request to their custon Owistribution of the s n

EXECUTIVE SUMMARY

ÒThe only man I know who behaves sensibly is my tailor; he takes my measurements anew each time he sees r The rest go on with their old measurements and expect me to fit heepoge Bernard Shaw

Certainly, the current economic climate is one in which the construction industry must take new measurements if it expects to quickly recover. It is often said that the only constant is change. But that does not could about change, which is at least as common and is often meaningless if not misleading. It is time to measure anew.

The FMI/CMAA 11th Annual Owners Surveys been conducted in an atmosphere of considerable disagreement over whether the national economy is recovering and if so, how quickly. A major federal infusion of stimulus funding in 2009Đ2010 was meant to soften the impact of the recession, as well as accelerate the recovery through investment in infrastructure and other resources. Fear of a double-dip recession exists while talk of further stimulus spending, specifically for infrastructure, is inciting optimism. We can assume the construction economy will recover eventually Đ perhaps this year, perhaps next. But what then? What fundamental things will have changed in our business that will not Òget back to normal?Ó

Understanding the fundamental change is what the Owners Mayr set out to measure. In general, survey questions fell into these boad aeas:

Deglee of staffing change, document quality changes, service quality changes, and other disruptions.

Timing of future rehiring and spending increases.

Perceptions describing how owners have evolved in the last 24 months and what it means for the industry. Shifts in project delivery system and procurement.

Owners response to the economic conditions will profoundly affect their ability to plan, design, procure and manage projects effectively. Based upon the significant staffing reductions reported, owners will increasingly face a choice: Scale back their capital design and construction activities (at the risk of componising mission), risk suboptimal outcomes as **es**ult of staf overwork, or find additional resources outside of their organization. This last choice offers service providers who have aggressively positioned themselves, rather than waiting for a call for help, a unique opportunity to fill staff and expertise gaps for owners.

More than 300 owners responded to the survey and provided extensive qualitative comments on the trends and conditions they perceive in the construction industry. A sampling of these comments illustrates the most widely service impressions about the industry as it emerges from recession:

ÒOwner organizations have downsized too much and cannot adequately staff significant project workloads.Ó ÒThe industry is trying to do more with less.Ó

HIGHLIGHTS

Owners have taken drastic steps to reduce staff and expense.

A variety of means were reported including attrition (38 percent), layoffs (32 percent), early retirements (19 percent) and mandated unpaid time off (11 percent).

More than 50 percent of owners dramatically cut their head count in the last two years. Eighteen percent reduced staff by more than 20 percent.

OwnersÕ hiring plans are Òfrozen.Ó

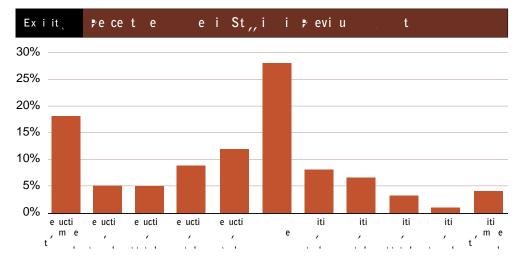
DISRUPTION

Readers of this report will recognize that the last two years have been highly disruptive to construction industry participants: owners, CM firms, contractors and vendors or suppliers of all types. This disruption has many faces, including job loss, importance of price, importance of scope management, project finance challenges, project delivery system shifts and the like. Relative to job loss in the U.S., construction industry statistics describing the shedding of 2 million construction jobs are well-known. What is less well-known is the impact on design and construction departments within large owners in North America and globally.

e i l∖ e St"i

The responses to the 11th annual study show that more than 70 percent of owners experienced some level of significant staffing change in the previous 24 months. The degree of reduction in some instances is very troubling that 1, 18 percent of owners report reducing staff by greater than 20 percent, and an additional 31 percent of owners report staff reductions of

between 1 percent and 20 percent. Thirty-eight percent of owner staff reductions occur through attrition, 32 percent through layoffs, 19 percent through early retirement and 11 percent through mandated unpaid time off.



eticti i i i

The degree of disruption to the construction industry will continue for some time and while there are many owners that would like to hire, multiple restrictions exist Exhibit 2):

- 30 percent report a hiring freeze.
- 28 pecent of owners eport that no funds are available.
- 9 percent cannot find or are unable to attract what they consider qualified staff.
- 5 percent report other restrictions, ranging from pending mergers to government or regulatory mandates preventing hiring.
- 4 percent are priced out of the market due to uncompetitive salary and benefit offerings.



Typically, job creation is the harbinger of economic

PHOENIX RISING

The story of the phoenix is one of rebirth. The construction industry, and more importantly, the owners or buyers of construction services that lead it, are already reporting some promising signs of improvement:

- Fifteen percent of owners have increased staff over the previous 24 months by more than 5 peteretribile 1).
- Forty-two percent of owners began in 2010 or will start in 2011 to rehire staff lost in the previous 24 mon Exhibit 3).
- Staff augmentation options abound for the 28 percent of owners who report that they do not ever anticipate rehiring staff lost in the previous 24 months D they are still reporting significant capital spends and will need engineers, managers and the like to continue effective execution of their workExhibit 3).
- Twenty-three percent of respondents report an improvement in design document quality, and 25 percent reported an improvement in construction drawing quality Exhibit 4).
- Twenty-eight percent report improvement in construction management services, and 44 percent report an improvement in construction execution Exhibit 4).

S u ce , utu e St "

Perhaps the best indicators of industry health are willingness, budget and approach to support hiring. Fourteen percent of owners anticipate challenges in finding new state ither due to etirements or competition, while 29 percent expect normal staffing challenges and opportunities (khibit 5). A total of 56 percent anticipate being forced to use an alternative approach to hiring, including retentions beyond retirement, hiring junior staff, use of part-time staff and hiring from competitors, designers, CM firms or construction service providers.

ti eee, te ti

FMI and CMAA ae true believers that both collaboration and integration yield significant improvements in capital construction performance. In the 2006 owners study, this performance improvement ranged from 3-6 percent across the management cost of the total capital spend.

FMI/CMAA Eleventh Annual Survey of Owners

7

τ . ο

Pre-Design

-

Design Des Planning & M & Mgmt.

Designuctio.14286 T467 gsanning & Mgmt.

e e

> . ب

> > -

Internal staff & Design or processes engineering activities

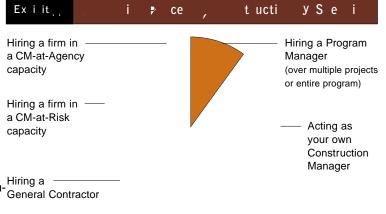
Materials or equipment procurement &

| 11 |

emet 🖻 ce 🔶 tucti ctic

Owners describing the management process for design and construction indicated the vast majority (73 percent) are hiring a firm to provide services and support, while 27 percent report acting as their own construction manager. In 2007 most of the firms acting as their own construction manager were very large organizations with highly sophisticated internal staff. Today the practice is much more widespread and the frequency of owners acting as their own construction manager is up 6 percent from 2007, likely due to economic conditions.

Additional shifts in management approach show 18 percent of owners hiring a construction manager in a CM-at-risk capacity Đ down from 21 percent in 2007. In FMIÕs opinion, this is primarily a result of owners using internal staff in this CM capacity rather than hiring a firm. The current result is similar to that reported in 2005? Owners use both CM-agency and program management for 10 percent of their spending. Program management use has doubled since 2007 Đ likely due to the economic climate and staff reductionsExhibit 11).



t cti 👂 ici et ctic

Exhibit 12 details the contracting appraches most fequently implemented by owners. The sults demonstrate that the majority of owner spending is contracted using either a low-bid or select-bid approx. In 2007 the select-bid approxed was utilized 7 percent more frequently and low-bid was used less frequently by a similar percentage. Economic conditions are a driver for the increased use in low-

bid in FMIÕs opinion. Negotiate techniques (28 perent) have no changed since 2007. All owner typ show increased use of low-bid as selection method.

> State or Provincial Agency Quasi-public

ABOUT FMI

FMI is the largest provider of management consulting, investment banking and research to the engineering and construction industry. We work in all segments of the industry providing clients with value-added business solutions, including:

- Strategy Development
- Market Research and Business Development
- Leadership and Talent Development
- Project and Process Improvement
- Mergers, Acquisitions and Financial Consulting

Founded by Dr. Emol A. Fails in 1953, FMI has professionals in offices across the U.S. FMI delivers innovative, customized solutions to contractors; constrain materials producers; manufacturers and suppliers of building materials and equipment; owners and developers; engineers and architects; utilities; and construction industry trade associations. FMI is an advisor you can count on to build and maintain a successful business, from your leadership to your site managers.

Raleigh-Headquarters

5171 Glenwood Avenue Suite 200 Raleigh, NC 27612 P.O. Box 31108 Raleigh, NC 27622 T 919.787.8400 F 919.785.9320

Denver

210 University Boulevard Suite 800 Denver CO 80206 T 303.377.4740 F 303.398.7291

Phoenix

5080 N. 40th Street Suite 245 Phoenix, AZ 85018 T 602.381.8108 F 602.381.8228

Tampa

308 South Boulevard Tampa, FL 33606 T 813.636.1364 F 813.636.9601

www.fminet.com