FMI Quarterly
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BY STEVAN SIMICH AND NICK SHUBERT

This Quarter:
Supporting Linebackers

Dear Reader:

When you read this, 2005 college football will be a memory and only weeks will remain until Super Bowl XL, to be played in Detroit. So why our focus on linebackers this quarter? Linebackers are behind the main line of scrimmage, giving them a bit of advantage, time-wise. When the play goes into motion, linebackers can begin to analyze the offense. Where's the play developing? Can a runner be stopped before too much yardage is gained? Can the receiver be defended? Can a passing play be intercepted or blocked? Can a defensive penalty be avoided? Key defensive support is the linebacker's role. Stars in the construction industry need plenty of linebackers to make their big plays. Not all the effort of running a business is about landing the big job. A lot of heavy-lifting goes on with the support provided from training, coaching, research, financial stewardship, and many other role-players in the organization and on the project team.

This quarter, we're pleased to bring you an interview that aims to provide a tribute to a fine fellow, Jeff Keeler, who, before dying too young, coached his teammates into a major league organization. We're also bringing you a feature on the value of peer groups illustrated through participant experiences. Torrey Mullen's and Randy Nemchin's feature focuses on implementing a culture of safety in your organization. Then, a timely piece on disaster planning gives you the tools to ready your organization for the next hurricane or disastrous event.

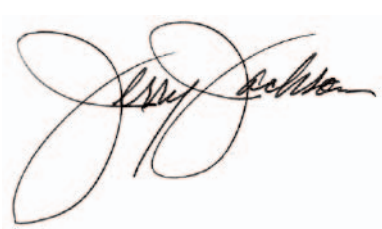
A department and feature on current trends in residential construction introduce a new subject matter area for the *FMI Quarterly*. We hope you will find this information enlightening and useful.

Kelley Chisholm and Torrey Mullen report on their interview with Watson Electrical Construction and reveal the company's successful hiring practices. We've also included in this issue the results of our annual CFO survey. Finally, we offer you a feature on marketing in a down economy as well as Mark Bridger's feature on the economic outlook for utility contractors.

As you take this half-time break in your winter season, use these articles as a playbook for reflection and renewal. We wish you every success in 2006 and, as always, look forward to your comment.

If you would like more information on the topics covered this quarter, or any issue, for that matter, pick up the phone and call FMI in Raleigh, Denver, or Tampa. We aim to build a great future for the construction industry and its leading organizations.

Sincerely,



Jerry Jackson
FMI Quarterly Publisher and Senior Editor

Opposing Viewpoints: Residential Trade Contracting

In this issue, FMI's Scott Hardy provides our opinion piece regarding residential trade contractors. His article helps to introduce our new subject matter area of residential construction for the **FMI Quarterly.** ***As always, if you have an opposing point-of-view, we welcome your submittal. We hope you will find this information enlightening and useful!***

Residential Trade Contracting

By Scott M. Hardy

The residential construction trade segment has experienced a sustained rise in revenues over the past 10 years. The increase in revenues has helped industry trade contractors scale Selling, General & Administrative (S,G&A) expenses, resulting in above-average profits.

Most notably, a class of "super contractors" has emerged in the *new residential sub-segment*, having gained a share in the favorable market through efficiencies, best practices, new capital, and strategic investment.

The *residential after market sub-segment* has always had a few large and well-branded companies selling direct to homeowners. What's new is the dramatic influence home improvement retailers have taken in the channel.

The entire residential construction channel is experiencing considerable channel flux. The sustained demand has allowed companies to leverage their positions in the market, resulting in evolving roles for manufacturers, home improvement retailers, homebuilders, wholesalers, and contractors.

The consolidated share held by Home Depots and Lowe's is 23% of the $500 billion U.S. home improvement market. While this fundamental change in the retail side of residential construction is well-chronicled, Home Depot's and Lowe's fast-developing, installed-sales businesses are not. Collectively, installed sales for the two retailers exceeded $5 billion in 2004.

The consolidated share held by Home Depots and Lowe's is 23% of the $500 billion U.S. home improvement market.

Home Depots and Lowe's appear to be intent on increasing installed sales as quickly as possible. The subcontracting channel for home improvement retailers involves networked local tradesman serving stores for retailers through Sell, Furnish & Install (S,F&I) and Furnish & Install (F&I) programs. For the retailer, the S,F&I or F&I programs *sell customers* to trade contractors. The retailer has virtually no incremental investment in the sale, taking 10% to 20% off the top of the sale. The retailer's customers can one-stop-shop materials and services with outstanding location convenience and count on the backing of the giant retailer for warranty, or credit, as necessary.

Comparative pricing for the homeowner accessing the channel through retailers vs. contracting directly with trade contractors is competitive, and in most trades, price-favorable. Retailer installed sales have not been without their problems; retailers generally acknowledge that they receive more consumer complaints in this segment than any other part of their business. For best-in-class trade contractors, the sales and warranty cost of their businesses is far below the retailer's commission. As a consequence, the retailer's networks include many contractors of lesser market position and managerial ability than best-in-class local contractors.

The installed share gain by Home Depot and Lowe's in the residential after-market construction is developing a unique subcontracting market of companies specializing in servicing stores on a local, regional, and in some cases, national basis. There are currently efforts to consolidate the trade service providers serving home improvement retailers. FMI expects these efforts and others will cause significant consolidation at the trade service level in the near-term. While these Home Depot or Lowe's-centric businesses are difficult to finance, their profit and growth potential are hard to overlook.

The 10 largest builders have doubled their cumulative share over the past 10 years.

The volume and value of new residential construction has defied the expectations of many. The demand for housing has generally exceeded supply, chasing home prices up in many location-sensitive markets.

The 10 largest builders have doubled their cumulative share over the past 10 years. Large home builders generally specialize in the low- to mid-range price product. As the demand in this price range has been particularly brisk, publicly held builders have done well financially over the past five years, increasing operating margin by 4%. While the profits of the large non-public builders are not known, there is reason to believe that similar profit improvements have been developed in these builders as well.

In addition to share gains, the sheer size of the industry's largest builders relative to small and mid-size homebuilders, which are numerous and collectively hold a large share, has resulted in super homebuilders, which have fully evolved business practices in a relatively unsophisticated industry. As a consequence, large builders have extracted margin from the home building channel from manufacturers, distributors, and trade contractors. This exercise of purchasing power has been largely aided by the competitive dynamics of product and service providers, and has ushered in the era of super-sized trade contractors.

For the large builder, the super contractor can meet a substantial portion, or all, of its local requirements. Super-sized trade contractors are distinguished by their relatively high local share in the geographies they serve. The super contractor will typically install many more units in the local market than the largest local builder will build. Since the purchasing of trade services remains the province of local operations, large builders are forced to look to super contractors for local needs. The super contractor's value proposition is generally to meet capacity and cycle time requirements of homebuilders at a competitive price and quality of service. Many super contractors are notable for their ability to command a premium price from builders for their scale, consistent performance, and better transfer of risk than their smaller competitors.

Residential *new* construction has definitely caught the attention of home improvement retailers, pro dealers, and manufacturers.

It can be safely inferred that the Home Depot sees homebuilders as key customers in their future business strategies. Home Depot's pro builder supply operations have grown substantially. The Creative Touch Interiors and Installed Products units of Home Depot cater to homebuilders.

Pro dealers have probably faced more forced change than any other business segment in the residential construction channel. This sector has undergone significant consolidation over the past 10 years. Pro dealers have had a lot of pressure on margins and have had to work hard to eek out efficiencies to remain price competitive. Pro dealers have responded by making themselves more valuable to homebuilders with value engineering, customized staging, and delivery. This has not stopped homebuilders from demanding price transparency from pro dealers, which pro dealers find particularly annoying since the manufacturers are providing the largest homebuilders with this information anyway.

While it might seem that building products manufacturers would be enthralled with the increasing concentration of customers in the historically hyper-fragmented residential construction channel, the customer consolidation has not come without a cost. Home Depot and Lowe's are high maintenance customers to manufacturers. Depending upon the product, Home Depot and Lowe's can be relatively expensive customers, with the manufacturer hoping the volume and degree of customer concentration is worth it. Large home-builders are no picnic either. Few building products have much brand value to homebuilders. There is always a branded or non-branded product alternative for product segment leaders to compete with. As a consequence, market share gains are hard fought for manufacturers, which have to contend with other manufacturers, pro dealers, and large trade contractors for builder product preferences.

U.S. SUPER CONTRACTORS

U.S. residential trade contractors generated $450 billion in revenue in 2004. (See Exhibit 1.) Of this amount, 30% was developed in the aftermarket, and 70% in new construction.

Exhibit 1

U.S. Super Contractors Revenue Generated

	U.S. Put in Place Residential Construction — $ Millions							
	2000	2001	2002	2003	2004	2005 E	2006 P	2007 P
After Market[1]	103,218	102,877	116,352	123,269	136,935	148,046	157,094	169,831
New Construction[2,3]	209,196	220,697	236,779	272,941	314,826	339,230	359,483	384,126
Total	312,414	323,574	353,130	396,210	451,760	487,276	516,577	553,957
Year over Year Growth (YOY)		3.6%	9.1%	12.2%	14.0%	7.9%	6.0%	7.2%
After Market YOY Growth		-0.3%	13.1%	5.9%	11.1%	8.1%	6.1%	8.1%
New Market YOY Growth		5.5%	7.3%	15.3%	15.3%	7.8%	6.0%	6.9%

Notes: [1] *Includes renovation, remodel, and replacement*
[2] *Includes single- and multi-family, detached, and attached*
[3] *Does not include mobile homes and pre-manufactured housing*

Despite the increasing size of virtually all residential trade contractors, the sector remains highly fragmented. Super contractors are highly specialized operators that can dominate a niche within the residential channel in specific geographies. Value propositions are specific to products and services of the niche market. Some of the most notable U.S. residential super contractors, led by Masco with $2.7 billion in revenue in 2004, are listed in Exhibit 2.

Exhibit 2

Notable U.S. Super Contractors

Company	Construction Market	Trade Service	Parent/Owner/ Trading Exchange	Parent Total Sales $ Millions
Masco Contractors Services	New	Insulation, other	Masco Corporation, nyse	12,524
BMC Construction	New	Framing, foundation, plumbing	BMHC, nyse	2,405
Interior Specialists, Inc.	New	Flooring, countertops	KRG Capital Partners	na
Residential Services Group	New, After	Plumbing, mechanical	Centrica plc, lse	15,224
William A. Hazel, Inc.	New	Site work	Hazel Family	–
Creative Touch Interiors	New	Flooring, countertops	The Home Depot, nyse	76,862
Roto-Rooter, Inc.	After	Sewer and drain cleaning	Chemed Corporation, nyse	860
Installed Building Products, Inc.	New	Insulation, other	The Edwards Companies	na
United Subcontractors, Inc.	New	Insulation, other	Windgate Partners	na
Ecker Enterprises, Inc.	New	Drywall, insulation	ESOT	–
American Asphalt & Grading	New	Site work	Code, Hennessy & Simmons	na

Despite their collective low total share of construction, super contractors have concentrated in the insulation market nationally, and are in the process of consolidating the flooring market regionally. BMC has singularly taken a strong position in new home framing, gradually expanding to other shell type services in bundling its offering on a local basis.

MIDDLE-MARKET COMPANIES, CONSOLIDATORS, AND INVESTMENT CAPITAL

The super contractors operate in a competitive market. Primary direct competitors include independent contractors that are large and influential on a local basis. Most of these companies are still managed by founder-owners, which are more than capable of competing with professionally run super contractors in their local markets. These competitors include single- and multi-geography operators with long standing service relationships with local builders, both national production builders building locally, and local and regional builders. The number of residential trade contractors with over $50 million in annual sales has exploded in the new construction segment, with more than 140 trade contractors over $100 million in estimated annual revenue. Most larger residential trade contractors are experiencing extraordinary levels of profit as they economize on S,G&A, and in some cases, improve purchasing economics. It is not uncommon to see these residential middle-market trade contractors generating EBITDA margins from 10% to 18%, which is two to three times composite trade contractor performance averages (with reference to Risk Management Associates, similar reporting services, and inclusive of non-residential trade contractors).

The sheer number of residential trade contractors of size; the potential for large trade contractors to continue to grow as homebuilding and home improvement further consolidate; the oversupplied capital base in the private equity market; and the investment moves of strategic operators have stimulated an unprecedented level of acquisition and recapitalization transactions in the residential trade contractor sector. The level of transactions is unprecedented in that residential trade contractors were virtually unsaleable 10 years ago. To this end, companies with the capital, business systems, and ambition to acquire middle-market companies have an enormous supply of sellers.

VALUING RESIDENTIAL TRADE CONTRACTORS

Mid-size and large residential trade contractor risk is specific to trades, markets, and geographies served. A new residential contractor is different in many respects from an after-market trade contractor. Trade contractors, which provide both new and after-market services, pose an all together different risk profile. The residential outlook is specific to geographies, which are definitely not uniform nationally. The value-add and business economics of various trades varies dramatically, and in some cases, can vary by region based on the types of homes being built or renovated.

While investment risks are specific to new vs. after-market construction, the two markets are inexorably intertwined. The motivation to build or remodel is based on the inventory and condition of both existing and new homes. In fact, the health of new construction has been largely due to the low supply of existing housing meeting homeowner needs, coupled with low new-home inventories, largely due to lengthy entitlement processes and better inventory management practices of homebuilders. The residential market is further nuanced by the interplay of rental and ownership costs.

Homeowner housing expectations have risen due to affordability and a shifting of household priorities. As a consequence, much of the existing housing stock is undersized and under-featured relative to new homes. The average size of a new home has doubled over the past 15 years; the average age of an existing home is 32 years. Kitchens in new homes feature up-to-date appliances, fixtures, and generally high-quality materials. New homes have more bathrooms than in previous years; the average number of bathrooms in the existing housing stock is well below today's household standards. Density and location scarcity have pushed home prices up in urban markets that have robust household formation, job, and income growth. Two income households are a major contributor to price appreciation in these markets, dramatically altering affordability for these households. The outlook for after-market construction is fairly characterized as very positive.

In like manner, the outlook for new home construction is positive as well, despite bubble mania. It is important to note that significant volume in new home, detached housing requires a significant amount of land. For detached housing, many long-standing, relatively big markets will wane from detached built-out, and new geographies will surface, most often extending the sphere of influence of these major urban centers. Fully built-out detached markets will continue to build up, prompting on-going growth in condominium products.

Generally speaking, valuations of both new and after-market residential trade contractors of size are increasing, particularly relative to their non-residential contractor counterparts. Acquisition pricing of non-residential trade contractors has been flat, and activity is slightly down from a historically anemic pace. Residential contractor valuations, however, are constrained by the difficulty of financing the purchase of these companies. After-market contractors are less sensitive to financing limitations, primarily because these contractors do not finance their customers to the degree and in the manner that new construction trade contractors finance homebuilders. New construction trade contracting requires a significant investment in progress receivables and under-billings (costs and earnings in excess of profits, or work in process inventory), both no-noes to most commercial banks. With a limited investment in fixed assets, new residential trade contractors are working capital-centric businesses, with as much as 50% of the working capital assets not easily financed.

The risk rating of mid-size to large trade contractors revolve around the following considerations:

- The size of the sub-segment (trade segment).
- The degree to which the trade offers value in the channel; the degree of influence of the contractor in the trade segment.
- The degree of local trade service concentration.
- The degree to which homebuilders, retailers, and homeowners can bifurcate the sale of material from installation in the trade segment.
- The degree to which larger trade contractors can economize in direct costs, primarily products (and materials). Large residential trade contractors typically pay the same or more for labor than smaller competitors, with more supervision and better benefits.
- The degree to which the contractor can extend its sales opportunities (bundled services) to the same customer. The degree to which the contractor is already trade bundled.
- The degree to which the larger trade contractor can develop economies in S,G&A relative to their smaller competitors, through bundling or geographic extension.
- The aggregate level of cash flow, with annual cash flows over $20 million opening up access to more favorable debt markets.
- The quality of management, particularly when evaluating multi-location operations.

- The degree of market diversification (new detached, new attached, after-market detached and attached, and non-residential construction).
- The geography or geographies served; the degree of geographic diversification.
- Evidence of successful Greenfield and acquisition programming.
- The degree of customer concentration.
- The degree to which current customers are likely to continue to do business with the contractor.
- The expansion potential of the target for replication geographically.
- The cost of growing the contractor's business; normally inexpensive relative to other business profiles such as manufacturers and pro dealers (modest and smooth CAPEX). Cash flow cycles of contractors can vary widely.
- The lending quality of the contractor's working capital and fixed assets.

Valuations are driven by the possibility that a purchase today will increase in value. To this end, the emergence of super contractors is certainly helping drive valuations of middle-market trade contractors. Consolidators can look to these super contractors and private-equity sponsors for exits, with an increasing number of owners using ESOTs to monetize their contractor investments. Home improvement retailers, homebuilders, distributors, and utilities round out exit options for trade contractor investments. ■

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Departments

CONSTRUCTION MATERIALS

The Cement Shortage — Short-Term or Long-Term Situation?

In this edition of *FMI Quarterly*, we debate whether the recent cement shortages that have plagued the U.S. construction industry are here to stay or are a temporary phenomenon. The following are two views of the situation.

THE LONG-TERM VIEW: SHORTAGES WILL BE WITH US FOR THE NEXT FIVE YEARS OR LONGER

For the past two years, certain areas of the country have had cement shortages. The Southeastern and Southwestern sections of the U.S. have experienced the most significant supply constraints. Key reasons for these shortages include:

- Increased demand beyond producers' expectations both in the U.S. and abroad
- Lack of investment into new domestic production facilities
- Global consolidation of the cement industry, which altered the strategies of some producers
- Import tariffs restricting the economic viability of importing cement from Mexico.

U.S. ready-mixed concrete production — the primary user of cement — has experienced dramatic increases in production over the past two years. From 2003 to 2004 ready-mixed production jumped 5%. Preliminary numbers for 2005 suggest that another 5% or more increase could be in the offing for this year as well, which would place ready-mixed concrete production at approximately 440 million cubic yards. Coupled with the significant increase in the U.S., demand is rapidly increasing from Asia, in particular from China. Neither of these demand growth patterns is expected to change, and it has been argued that China's demand could actually increase.

Another key reason for shortages is a simple lack of production capacity. The raw materials required to produce cement are generally plentiful, but few communities are clamoring to build new cement plants. The environmental permitting process often runs three years and is not a "sure thing." Given the difficult permitting environment and the relatively high cost of labor in the U.S., global cement producers prefer to invest in expansion of existing plants in this country rather than build new production facilities. There are a few new plants under construction in the U.S., but none are expected to be in full production within the next year.

The cement industry is highly consolidated with the top 10 producers controlling almost 70% of global capacity. However, recent overtures have placed some of these producers under the merger spotlight. This tends to cause significant capital expenditure decisions to be postponed and producers will maximize profitability when they operate as near 100% capacity as possible. Thus, they are not eager to overbuild the total capacity, which will ultimately lead to lower prices.

The cement industry is highly consolidated with the top 10 producers controlling almost 70% of global capacity.

Perhaps the one variable that may have changed by the time you read this article is a reduction or elimination of tariffs on the import of Mexican cement. The destruction caused by hurricanes Katrina and Rita has created a significant political push to at least suspend the tariffs. With Mexico having surplus cement capacity, it could easily make up some or all of the shortages in the marketplace. This is a global political issue and one that tends to trigger significant debate.

In summary, the arguments are persuasive that the cement shortages will not be over any time soon.

THE SHORT-TERM VIEW: SHORTAGES ARE A TEMPORARY SITUATION THAT WILL BE OVER IN LESS THAN TWO YEARS

Many in the industry believe this is a short-term situation that will have little impact on the construction industry. Proponents of this argument note the following to support their position:

- There is no shortage of the materials required to produce cement
- The cement industry is globalized and has no difficultly attracting capital
- Producers are reacting to the unexpected demand and are taking steps to increase production
- There is a great deal of political pressure to eliminate import tariffs, which will ultimately succeed.

Limestone and shale (or variations thereof) are the primary ingredients used in the manufacture of cement. These materials are plentiful worldwide and, as such, cement is essentially a commodity with its price and availability governed by the rules of supply and demand. What we have witnessed over the past two years was an unexpected jump in demand and a resulting price increase. As a commodity, this will cause producers to want to increase supply, and it is unrealistic to expect the imbalance to continue over the long term.

The cement industry is considered a base industry and has never had significant difficulty attracting capital. Given that increased prices will only increase investment returns, then in theory, more capital will flow towards the industry and be used in the expansion of production.

Probably the biggest reason for the shortages is that producers failed to correctly forecast the actual worldwide demand over the past few years. Cement was not the only industry to miss this forecast as many other building materials such as steel have experienced similar shortages and price increases. As time passes, the demand trends in the Asian markets will become more apparent and producers should again be able to forecast demand with more certainty.

Finally, the biggest argument for this being a short-term situation is that if the import tariffs were dropped on the import of Mexican cement, the supplier shortages would literally be over in just a few months. With surplus production capacity just waiting for such an opportunity, this source of supply will undoubtedly be tapped especially when the level of price increases begins to put a serious pinch on the economic viability of significant capital projects.

In summary, basic economics and political forces will make this cement shortage a relatively short-term phenomenon. Therefore, both sides of this discussion have strong arguments that support their outlook. Only the combination of time and the marketplace will ultimately settle this debate. ■

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RESIDENTIAL CONSTRUCTION

FMI's Residential Construction Practice

FMI Corporation is building on its 50-plus years in the building and construction industry by forming the FMI Residential Practice. The members of this team have been and are currently working with residential builders and their product and service suppliers to develop business strategies and develop and implement operational improvements across the enterprise and supply chain.

Members of FMI's Residential Practice have significant experience in developing innovative strategies and proven processes to improve operations across the spectrum of companies serving the residential market, including product manufacturers, distributors, installers, and homebuilders. Typical engagements for this group include the following:

- Identifying market trends and creating strategies for builders, product manufacturers, distributors, retailers, and installers to grow profitably
- Identifying and eliminating non value-added activities throughout the client's business and supply chain
- Designing the most effective and efficient operational structure for a given organization
- Developing alignment strategies between builders and trade partners (service and product)
- Driving the change-management process necessary to implement new processes and procedures and to eliminate non-value-added activities
- Assisting client companies with implementation of the new operational model
- Proving the economic value of the implementation by tracking and measuring the ongoing deltas from baseline readings.

We understand how critical the future is for the homebuilding industry. As the market continues to mature, top builders will face intense pressure to grow both the top and bottom lines of their operations. Selecting the right areas to develop, the right trends to follow, the right trends to lead, and designing the best strategies, are all decisions that builders and their suppliers will have to face. The FMI team, comprised of industry veterans and subject matter experts, has and will continue to address these issues.

We are adding this residential market-focused department to the *FMI Quarterly* in an effort to help create deep knowledge across the entire residential construction industry. The theme in this issue deals with current trends affecting the residential construction market segment such as demographics, macro-economic conditions, consumer desires, and supply constraints.

Clark Ellis, principal and director of the Residential Practice, and Heather Johnson, business analyst in the Residential Practice, outline these persisting trends and explore the competitive advantages of integrating value-creating activities in their feature article, *Current Trends in Residential Construction*.

Future work from the FMI Residential Practice will illuminate issues underlying trends in the market and will propose strategies for organizations to leverage trends for sustainable, profitable growth. ■

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STRATEGY
Making Your Plan Pay

Assume you have a strategy for running and growing your business for the next two to three years. This would mean you have done the research, examined the competitive landscape, reviewed the state of your operation, and have been sequestered for several days in a room with lots of flip charts, graphs, and PowerPoint to talk about the future direction of your business — one of the single-most important topics you address as a leader. Unfortunately, not all contractors have a strategy, but you do, and it is a good one! You are more than happy to pull it off the shelf and show it to your surety, your banker, and your CPA. Now ask yourself these questions: How is the execution of the plan progressing? How much of the plan has been implemented? Are you limping along and tackling a couple of action items per quarter, or per year; or have you built the supporting execution system to ensure the plan is done?

As arduous as the plan development process is, the execution of the plan is a much taller task with far greater consequences. As companies move through the plan development process and involve their employees in the process in one capacity or another (interviews, surveys, focus groups, etc.) an expectation is created — an expectation that things are going to change. Employees expect their company is finally going to identify a common purpose, channel all of its collective efforts and talents, and become a truly great organization.

A well-executed plan is a beautiful thing, but a plan not executed is merely Monday morning quarterbacking. When we see a quarterback drop back, roll out, and complete a pass to the cutting tight end to score a touchdown, most likely we are watching the results of a well-executed plan. Few individuals and fewer organizations have the luxury of being able to improvise their way to success. What most of us miss, continuing with our football analogy, is the perfectly executed blocking scheme from the offensive line, the blitz pick up by the veteran running back, the double-team drawn by the wide receiver, and all of the technique and skill required of a well-drilled team. Yet, there is much more that went into creating that successful play. There is a whole organization from team owner to practice squad. The play that culminated in a touchdown likely started years earlier with all the work it takes to build a successful team.

STRATEGY SEQUENCE

Putting the sports metaphors aside for a moment, there is a better metaphor to describe the importance of executing a strategic plan, and that is the construction process. Consider the consequences if, after landing a job to build a new $200 million sports arena, you shook hands with the owner and then called your project manager and superintendent and told them to get out there and build it. Sneaker slogans notwithstanding, executing a strategy that will take your company to the next level requires a lot more than "Just do it!"

A construction project cannot, or should not, begin until the site is inspected, permits have been issued, drawings reviewed, materials ordered, and the right people and equipment have been assembled to get the job done. There is a sequence of events that can be mapped on Gantt charts and milestones that have to be met to assure that the project is on schedule. Strategic planning and implementation should also follow a planned sequence of events. The foundation of your execution plan should flow in the following sequence:

1. STRATEGY → **2.** STRUCTURE → **3.** REWARD SYSTEM

Again, we are assuming for this article that there is already a strategic plan, but it is surprising how often we come across companies that are trying to build the structure before they have the plan. Or, more often, a company will design a compensation program before they have either a strategic plan or a structure to implement it. You could equate this scenario to having the MEP trades on site before the site has been excavated. Clearly, the process is out of sequence.

Imagine for a second what the outcome of that play in our football example might have been without the organization behind it. For example, the owner might simply say to the quarterback, "I pay more for touchdowns." If the owner just set out a bonus system for touchdowns scored without first spending the time and money to assemble the right team, there may have been more missed blocks and fewer pass completions needed to get in the end zone, because every play would be an attempt to score a touchdown. In this scenario, coaching, leadership, and the management of the team have effectively been delegated to the compensation program — a philosophy that rarely works.

A question we often hear is how can we put a strategy in place without knowing the structure with which we have to work? In other words, why not structure first, then strategy? Granted, the question is a fair one; however, if you have to "fit" your strategy into your existing structure, the best you can probably hope for is incremental change rather than accelerated growth. While not all strategies require restructuring the company, there is a better chance that the plan will be truly strategic if new ideas do not first have to pass a structural test.

MEASURE IT

In sports, it is clear what to measure: passes completed, total yards gained, first downs, and the score of the game. Serious fans track long lists of statistics, but businesses that attempt that approach usually run into analytical paralysis. Strategic plans are incomplete without measurable objectives. Simply stated, "What gets measured gets done." If the planning team cannot define a single objective for a goal (i.e., how the team will measure the wins and losses for each goal), the goal should be discarded. Simply developing goals sans any way to measure them is a waste of time. Your people are going to focus on the ones they know will be measured.

Strategies need definition if they are to be implemented. Take, for instance, the strategy, "We will become the best contractor in a chosen market or geographic space." How will you know when you have become the "best" contractor? Is the best contractor the same as the largest contractor? Is it the most sought after by a targeted group of customers? Is it the most profitable? What is your time horizon? For the sake of example, we will define the best as the most sought after by a targeted group of customers. Assume a time horizon to achieve the goal is three years, and then measure that periodically against your current position to track progress. With this clear definition, you can begin to outline the measurements you need to track and the strategies you need to execute in order to assure that you are making progress toward this end. In this scenario, your strategies will most likely include a beefed-up business development program — better deployment and integration of marketing, sales, and customer service programs. Your objectives will most likely include market research to analyze buying practices and contractor preferences among your targeted customer group.

STRATEGY EXECUTION — THE FOUNDATION

There are four essential building blocks for executing a strategic plan:

- Clear leadership and direction
- Human capital
- Accountability
- Performance culture

The strategic plan is the primary vehicle driving change in the company, but no change will occur without clear leadership and direction. The strategic plan is a leadership document. It helps to provide a unified direction for the company; more effective communication of goals with employees and customers; a greater focus for the efforts of key managers; and a means of producing a sustainable competitive advantage. Once clear and measurable goals are established, essential parts of the plan must be communicated throughout the company along with specific guidelines for accountability for the success of the plan. All managers must buy in and reinforce the plan on a full-time basis.

Employees on the front line often see a disconnect between what the leadership is saying with regard to its long-term strategy and what the leadership is doing. This disconnect between words and actions can have a disastrous effect on execution ... from company strategy down to daily project execution strategy. The core values that should envelop your firm's strategy and all of its actions must be carried out to every last employee on every project, every day. As leaders, nothing is worse than saying one thing and doing another because your employees will adopt this same philosophy.

Ask most CEOs what their most valuable asset is and you will likely hear "our people." Human capital is a recognition of the investment that companies must make to have the right people with the right skills on board to achieve the plan goals. This belief, that people are a firm's most important asset, would certainly suggest that investing substantial resources in your people is the way to prosperity. Your investment will see a much greater return if you implement a strong, ongoing training and development program to grow these people into top performers. This approach also brings the human side into the equation as your company seeks to implement its strategic plan. The skills and experience required of your people to implement your plan should, if your strategic plan is a stretch, require people to do things differently. In other words, you will have to do things differently than "you have always done them." Developing your workforce is the key. Training should not consist of a one-day seminar that you send your people to, expecting them to absorb everything they have heard and apply it to your firm's situation. The development process should consist of an ongoing, consistent reinforcement of your firm's strategy, which ties individual training modules to each specific position within your firm. Project managers should have their own curriculum, superintendents, their own curriculum, etc.

Accountability begins with the right structure, a structure that goes beyond lines connecting boxes on paper. Effective structures have the right people assigned to those boxes on the organizational charts, where everyone understands their roles.

Accountability begins with the right structure, a structure that goes beyond lines connecting boxes on paper. Effective structures have the right people assigned to those boxes on the organizational charts, where everyone understands their roles. And understands where their responsibilities stop and the next in command starts, and vice versa. Following our example of being the most sought after contractor, it would be necessary to determine what is preventing the company from achieving this end. For instance, the company might be constrained by the lack of an effective business development function. Before the search for someone to head up the department begins, there will need to be a description made of the role that person will play. The position description should include the specific objectives for the new business development manager.

The goal of building the right structure to execute the strategic plan is to incorporate measurable goals that will foster a performance culture. Best-of-class companies do not accept industry average as the benchmark. They do not accept the traditional low profit/enormous risk relationship common to the construction industry. They set a clear direction; find and groom great people; and reward top performers. Many firms are willing to settle for good enough with attitudes like, "We'll get it back on the next job." Such an attitude quickly becomes pervasive and infectious.

If your strategic plan works as you hope and expect, what will your organization look like in six months, a year, and two years? Strategic plans always require some investment to implement the goals set out for the company. The point is that money spent to accomplish goals should be treated as an investment, and you should be able to track your return on that investment. If done well, the best place you can invest your money is in your company.

Using our example of adding a new business development department, the hiring of human capital for that department should directly support the strategic plan. That is, they should be tied directly to goals in the plan and those goals should be communicated to the entire firm. If you do not back up your strategic plan with the necessary resources to implement it, then why spend time and resources on the plan in the first place? You will better align your structure with the goals of the plan if everyone sees your tangible commitments to the plan. Imagine the announcement that the company will be entering a new market for construction, say healthcare, and no one is hired, trained, or otherwise prepared to enter that market. Plans that are not tangibly supported by top management quickly become little more than empty promises.

REWARD PERFORMANCE

Reward systems should be set up to support behaviors consistent with strategic plan goals and objectives. If the sequence of strategy, structure, rewards has been followed, then you will already have set out measurements to know your progress toward goals and you will have position descriptions tying roles to strategic plan performance. That information will serve as the basis for your reward system.

A well-designed reward system is a key tool in creating a performance culture, but only if it is set up clearly and fairly.

A well-designed reward system is a key tool in creating a performance culture, but only if it is set up clearly and fairly. The reward system is also an important part of your investment in your strategic plan execution. If the new business development manager meets or exceeds the goal laid out in the strategic plan and position description, he or she gets a bonus. However, this is an oversimplified example describing only one person and one department. A reward system set up to accomplish strategic plan goals must take the view and understand the relationships in the structure between the business development department and the rest of the company. If the preconstruction department improves the accuracy and turn-around time for proposals, the business development manager has a better shot at achieving the objectives for his or her department and the firm has a better shot at achieving its goals. To achieve a company-wide performance culture, the reward system must be broad based and give everyone in the company the opportunity to excel. If the system is built on the investment concept, you create the opportunity to reap a good return on your investment. In essence, most CEOs want their employees to function as an army of entrepreneurs, dedicated to a common cause. The more you invest in this army, the more you align your resources, and the more you reward superior performance, the greater your execution foundation will become.

WHAT IF THE PLAN DOESN'T WORK?

If you execute the plan successfully, you will be able to see things change, and you will be able to measure the results. But what if, after all your best efforts the plan doesn't work? After all the hard work, this sometimes can happen.

Markets can change suddenly, hurricanes can come ashore, key people leave the company, etc. First, because you have devised a system of measurements to track your progress against the goal, you will not have to wait around until year-end closing to know that something isn't working. When you create a culture based on performance, you naturally empower people to think and act like investors working to protect their investments. They have a stake in the outcome.

Second, if the plan isn't working, understand why and work to fix it. The strategic plan is a *working* document, it is not written in stone. Rather than sitting on the shelf collecting dust, your plan should be dog-eared and worn from use. You should periodically review progress with your management team. At the same time, you should update the economic assumptions that projected results were based on. Interest rates will change, customer's capital expenditure budgets will change, and competitors will shift strategies.

Strategic plans that are truly strategic are also challenging to the organization. It is rare that everything happens according to plan. Companies that are striving to be best of class learn from their mistakes and respond to changing circumstances. That's why we say that a mediocre plan well executed is better than a great plan not implemented. Two years from now, that great plan that is unimplemented will be out of date. The mediocre plan that has been implemented well will have been generating results, and updated as needed. Put both a great plan together with a strong execution foundation and imagine how many touchdowns you can score. ■

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Quarterly Interview

A Tribute to Jeff Keeler:
A Winning Coach

Jeff Keeler, Chairman of The Fishel Company, died March 26, 2005, at 64 years old. Jeff was an inspirational leader to his company, a mentor to many, a client and friend of FMI, and a fine fellow. We are enriched by having known him and saddened by his passing. This interview is a testament from three who knew him well. Eric Smith, vice chairman, John Phillips, president, and Rick Keeler, Jeff's son and director of market development.

FMI Quarterly: Tell us a little about the beginning of The Fishel Company. Ken Fishel founded the company in 1936, I believe.

Eric Smith: Like many other contractors, he was looking for work. He had a couple hundred bucks and a pickup truck, so he bid a conduit job up in Cleveland, Ohio, for what was then Ohio Bell. He got the job and started the company. Until about 1967, Ken ran it like a local construction company. He did primarily manholes and conduit systems, a little departure into water lines for a while, some sewer, but he worked primarily for AT&T and Ohio Bell and Indiana Bell. In 1967, Jeff Keeler joined Ken at Fishel, started working in the field and gradually came into the office. It was under Jeff's tutelage and direction that the company became much more than just an Ohio contractor, expanding into Kentucky in the late 60s/early 70s and making a couple of sojourns into Indiana. In terms of significant years, 1967 when Jeff joined was one of the big turning

Scott Keeler, Ken Fishel, Jeff Keeler, Rick Keeler

points because Ken Fishel was struggling with what to do with the company if he couldn't get Dick Fishel and/or Jeff Keeler interested in the business. It was, at that point, a regional company and a seasonal contractor because we pretty much shut down in the wintertime.

FMI Quarterly: If you share that kind of information, can you give us an order of magnitude of what revenues were in 1967 vs. what they were in the zenith of Jeff's tenure?

Eric: In 1967, we were something less than $10 million in revenue and operating in just two states, Ohio and Indiana; and in 2000, our peak year, we were at $265 million, operating in 27 different states.

FMI Quarterly: What is each of your current roles with The Fishel Company?

Eric: I am currently the vice chairman of The Fishel Company, and in that regard, my job is largely a strategic one in nature. I am not involved in the day-to-day stuff except to the extent of reviewing and helping to establish the strategic plan to go forward. I guess my real role is to be coach, sounding board, and in many cases, historian.

John: My role is president and CEO of the company. That involves basically all of the operations of the organization, making sure that we continue to move the organization forward in the way that Jeff wanted it to be run.

Rick Keeler: I am the director of market development.

FMI Quarterly: When did each of you first join the company?

Eric: I joined in June 1979. My first encounter with Jeff was when I was consulting for him in '78 and '79. What enticed me about Jeff at that time was that he was a dreamer; he wanted to be bigger, better, faster, and do more than the company currently did. He wanted to be a major player in this industry.

John: I came aboard in November 1983. I first met Jeff in 1981 as a staff accountant with Deloitte and Touche, which was Deloitte Haskins and Sells. I actually had more interaction with Eric than I did with Jeff. Overall, the organization intrigued me because of the way it was operated. I was a small business specialist with Deloitte at the time and had a number of clients. The way Fishel was run and managed was head and shoulders above any of my other clients. That's what attracted me when Eric offered me the job.

FMI Quarterly: Rick, I won't ask you when you first encountered Jeff, but when did you join the company on a full-time basis?

Rick Keeler: October 3, 1994.

FMI Quarterly: Eric, your first impression of Jeff — you said he was a dreamer — any other first impression of Jeff?

Eric: Actually, I think it would be even more appropriate for me to tell you why I joined Fishel because that really reflected Ken Fishel and Jeff Keeler at the time. As a consultant, I saw a lot of contractors. I watched how they treated their companies like they were personal assets and their personal checkbooks. They never gave a company an opportunity to really be successful because they would bleed it. Working with The Fishel Company, and Jeff in particular, was exactly the opposite. Ken Fishel, Jeff Keeler, and Dick Fishel treated The Fishel Company like it was an investment that had a right to a life of its own. Those aren't my words; those were Ken Fishel's words. They wanted it to be a professional organization, a professional company, and didn't want to kill the golden goose. I thought that was fascinating because it guaranteed The Fishel Company a future. Plus, I just enjoyed being around Jeff Keeler. He was exciting and energetic, a leader and a dreamer.

John Phillips, Eric Smith, Jeff Keeler

FMI Quarterly: There is a strong lesson in that concept of the corporation that I think contributed a great deal to the growth and the success and the magnetism of the company and its people. Thanks for bringing up that point. John, how about your first impression?

John: My first impression of Jeff was a guy that could get things done. He didn't take "no" for an answer. If he had a vision of where he wanted something to go, he was going to get it there. He was going to figure out what he needed to do to get there, and the people that could help him accomplish that goal. So again, when you look at an organization and the leadership of it, Jeff attracted people because of his dynamic personality and his get-it-done attitude. Like Larry the Cable Guy, that "get 'er done" comment really represented how Jeff viewed the world. If he saw something that needed to be done, he made it happen.

FMI Quarterly: This is a tougher question perhaps just because of the sense of loss. What was your last impression of Jeff, John?

John: Both he and Diane [Ed. Jeff's wife] showed a lot of people that dying could be a graceful and an uplifting process. Everything that Jeff did throughout his career and life was magnified, even in death. Looking back, it was a very short process, but a very valuable one for those of us that got to experience it with him. He died with dignity and grace and taught us all a lot of lessons in the way he handled it and the way it occurred.

FMI Quarterly: Eric, do you want to add to that, or just endorse it.

Eric: Yes, John is right. My last impression of Jeff would be a fighter, but that's not fair to him because my real last impression of Jeff was that it wasn't about Jeff, it was about me. In the end, he said, "I love you," and he meant it.

FMI Quarterly: How did Jeff come to be CEO of The Fishel Company? What enabled that? What caused Ken to say, "You're it?"

Eric: He joined the company in 1967, and Dick Fishel didn't join until 1971 or 1972. But going back to what I said earlier about Ken believing that a company has a right to a life of its own, and the right to succeed on its own — Ken had to make a decision. In 1978, he made Jeff Keeler the president and Dick Fishel the executive vice president. Up to that point, Jeff had been the executive vice president. Ken had to make a decision to choose Jeff over his son, and Jeff earned it. It turned out to be a great deal for everybody. It was a great deal for Jeff Keeler because it provided him with an opportunity that he might not have had someplace else. It was a great opportunity for the Fishel family, because it provided someone who was willing to dedicate his life to the success of this company for their betterment, and it was a good deal for the company because we had someone that our company could follow.

FMI Quarterly: I can't estimate the compounding rate required to get from $10 million or so in '67 to $265 million in 2000, but I doubt that it would have been that linear anyway. Tell us a little bit about the transformation of the company under Jeff's leadership because something transformational did occur.

Eric: Yes, it did. When I joined the company, we were really three separate companies. We had Dick Fishel running the Central Ohio area, Columbus; Gene Rogers running the Dayton operation; and Jeff Keeler running the Cincinnati, Louisville, and Kentucky operation. Ken Fishel was the chairman and CEO in those days. He was the referee between the three guys. Then in 1981, Ken marched into the office and said, "I can get a better return on my money if I put it in TWA stock and muni bonds then I can leaving it here at Fishel Company. Come on boys we are going down to the bank, you just bought me out."

Eric: When Ken sold out, one of the things that we had to do was structure the company as a substantially disproportionate redemption, which meant that

Dick Fishel, Ken Fishel, Jeff Keeler

Ken could no longer sit on the board, he really shouldn't have an office in the building, and he couldn't be involved in day-to-day decision making. That left a void. But it was one that Jeff Keeler filled naturally. Soon, Dick and Gene were reporting to Jeff. Had he not done that, the company might have gone on as three separate companies. The other significant year was 1983. That was the year that AT&T, our primary customer, was broken up into seven regional companies and one long distance company. In anticipation of this break-up, and the expected slowdown in telephone work, we had diversified our customer base to include cable TV. We also had diversified geographically to the right-to-work states — Arizona and Texas. Finally, we had decided to take the company union-free. All of a sudden in a period of two short years, we went from a regional union contractor doing telephone work to a semi-national, non-union contractor doing telephone and cable TV work. This was the start of our geographic expansion, which has not stopped since.

One of the things that Jeff believed in, and we still adhere to, is the importance of taking "Fishelized" individuals, teammates who have been with us for a long period of time and have enthusiasm for doing the job right, and put them into our expansion areas.

FMI Quarterly: That changed the scale of things and also changed locations where things were taking place. Jeff described himself as having a passion for what the company did and a love for the people; how did he make that scalable? How did he demonstrate that behavior frequently over a large geography?

Eric: Well, one of the things that Jeff believed in, and we still adhere to, is the importance of taking "Fishelized" individuals, teammates who have been with us for a long period of time and have enthusiasm for doing the job right, and put them into our expansion areas. Jeff spent a good deal of time on the road simply making sure we were living his dream, operating the way he wanted.

John: The other thing that happened in '83, was we instituted a cash profit sharing plan, a plan that still exists. It hasn't changed at all. We share one-third of our profits before taxes with all Teammates who have been with us for one year or more. In that first year, it was one week's pay. We had profit sharing meetings, and Jeff would attend at least half of them, and in the early days, all of them. It gave him an opportunity to get in front of all of the Teammates to share his vision of the company, to share his ideas about where we were headed, and what we were doing. Teammates were able to connect with him. He shook their hands, he looked them in the eyes, he thanked them for their help, and told them what was going to happen the next quarter … that he would be back with another profit sharing check. The other thing that Jeff did was communicate effectively on videotape. He was really a pioneer with that format.

Every year he sent out a videotaped message communicating the vision, the direction for "what's happening" with the company to all of our Teammates. You are not going to find many companies of this size where the top management meets and greets all of the Teammates on a quarterly basis and passes out profit sharing checks. So I think that alone did a great job of getting the message out and pushing it down into the organization.

FMI Quarterly: You call the people at Fishel Teammates. Jeff built a culture of teamwork. Sometimes an incentive compensation scheme can be more divisive than teambuilding, but in your case, it sounds like it did more welding of people together than driving people apart.

Over a long period of time, the goal is to get consistent performance, which we have been able to do. It's worked.

John: It has. The reason it hasn't been divisive is that's it equal across the board. If we have an area that for some reason isn't making money, they still share in the pool the same way.

FMI Quarterly: Are there not rocks thrown at the piece of the company that may be underperforming and that, in effect, dragged the pool down?

John: There have been. Our response is, "We are a TEAM." We expect to fix the underperforming parts and assume they will be contributing some day. This industry goes up and down. You have areas that underperform in some years and overperform in others. Over a long period of time, the goal is to get consistent performance, which we have been able to do. It's worked.

FMI Quarterly: I just heard a "Jeff line" in your response, John. You said, "We are going to fix that," and it was with exactly the same emphasis that Jeff used.

Eric: He's a Jeff product.

FMI Quarterly: Do you recall an undertaking of Jeff's that was a disappointment to him? Something where his golden touch didn't work to his satisfaction?

Eric: Well, I will tell you the most disappointing thing he ever did, but we had to do, was back in 1982. Up to that point, The Fishel Company had never cancelled a contract or failed to complete a contract. In 1982, we cancelled a maintenance contract for Cincinnati Bell Telephone in Cincinnati, Ohio. We didn't want to do that necessarily, but we had to do it because we were in some heavy union negotiations. Without some wage and fringe relief, we could not survive with the Cincinnati Bell contract. He didn't want to do it. And, we tried every way we could to get the unions to give us some wage relief and some help in that contract. But he couldn't sell it to them. In the end, we had to cancel the contract. Jeff took that personally.

Rick: Back to your earlier question, we have Jeff on videotape talking about his greatest disappointment. He didn't like to admit to disappointment or mistakes. But we asked him to talk about our acquisition of Johnson Brothers. We didn't integrate them very well into our culture. Jeff kept trying to make it work, but it never did.

John: The other one that he kept chasing was Cinergy down in Cincinnati, which was an electric and gas utility. They had a requirement, and actually still do, that you had to be a union contractor to work on their property. Jeff's goal was to get that changed. He kept trying to slay that dragon, but never got it done.

FMI Quarterly: I can see that he would. What is your most humorous moment that you recall, John, of your years with Jeff?

John: We were at a Teammate event in Phoenix, Ariz. We brought all of our managers in, and played a scramble golf event. It was a cool, rainy day. My foursome was coming up the 18th hole. We were approaching our second shot, and all of a sudden, we saw Jeff come out of the hotel in his swimming trunks. We hit our shots and walked up saying, "What are you doing?" And Jeff said, "Well, I was playing." Jeff was hitting his shot on the 18th fairway onto the green when his five-iron slipped out of his hand, and went into the lake. Jeff said, "I'm going in to get it." He proceeded to dive to the bottom of the lake, and try to recover his five-iron. That went on for probably 30 minutes. He never did find it, but he tried. That's a good story about Jeff's persistence.

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Rick: One of the other things that I thought was humorous was when we were doing a profit sharing event. We were passing out more money than we had ever passed out in the history of our company, so he was really riding on a high wave. He had done a profit sharing meeting in Phoenix with 600 Teammates, 300 at a time at a movie theatre. Jeff came back to Columbus after being on this wonderful trip passing out all these big checks. He got up to do a cheer as we always do after we pass out profit sharing. He liked to get everybody involved, and he did the "I say, I say, I say yes," cheer. Then, he proceeded to do a high kick. Now this was when he was 60. He kicked his foot so high above his head that we all looked at each other like, "Oh my God, that's got to hurt!" That's just the way he was.

FMI Quarterly: Eric, in the memorial to Jeff that is on the web site (www.teamfishel.com), you describe Jeff as being your friend, your mentor, your leader, and your hero. What made Jeff a hero to you?

Eric: In one sentence: It is someone you trust with your most precious assets. Being a hero is an obligation. It's not something he chose to do; it is something he was chosen to be, for me anyway. He was someone that, as I said in the videotape, I trusted enough to follow into the desert without any water knowing full well that I was going to come back safe and sound. He was beyond being a leader, a mentor. He was, for lack of a better word, a hero.

FMI Quarterly: John, in that same video, you describe Jeff as a head coach, a motivator, and a mentor. You say that he made people better. What was his special skill for making people better? How did he pull that off?

John: As with any good coach, he had the ability to recognize people's special skills and talents, and figure out how to integrate them into his team. And, if he could, he did it. He helped them realize what their talents were, trained them, allowed them to have successes, and allowed them to fail. When they failed, he didn't throw them under the bus or off the bus, but retrained them and gave them additional opportunities. I think that is one of the reasons we have three vice presidents of the company today who started out as laborers in the field. They are homegrown, Fishelized, and know the business from the underground up. Over the years, Jeff allowed them to grow and develop within the team. He saw their skills and brought those skills out … helped them be more than they thought they could be.

As with any good coach, he had the ability to recognize people's special skills and talents, and figure out how to integrate them into his team.

FMI Quarterly: In my limited exposure to Jeff, he always struck me as an incredibly optimistic person.

John and Eric: That's an understatement.

FMI Quarterly: He had great confidence in outcomes and that could be contagious, I guess you could say.

John: Well, it is. Sometimes people take the attitude, "So I just lost some money on a job, but The Fishel Company is a big outfit, they've got a lot of money. I'm not going to worry about it." On the contrary, Fishel Teammates did not want to disappoint Jeff. Randy Blair is a great example. He had a job in Oklahoma at the time that was the largest single job on which we lost money — $1.2 million. It was just a disaster! There were a lot of people within the organization, and outside the organization, that wondered how Randy kept his job after losing that much money. Jeff said, "You know, we just made a million dollar training investment in this guy, and I'm not going to send him down the road and lose that investment. I'm going to allow him to earn that back." Those are the kind of things that Jeff did in dealing with people. They respected him for it.

Eric: I want to piggyback on John's comment for just a second. The one thing about Jeff, that you don't see too often, was that he didn't have a problem giving people an opportunity to fail, and by failure, learn from their mistakes and use it to be more successful in the future. That never bothered him.

He didn't have a problem giving people an opportunity to fail, and by failure, learn from their mistakes and use it to be more successful in the future.

FMI Quarterly: Remarkable. Rick, a hardball question: How difficult was it for you being the boss' son?

Rick: Well, he was more of a coach than a boss. It is still very difficult to be a coach's son whether it is on an athletic team or part of a company. Growing up, Dad was the coach of our basketball, baseball, and football teams. He was a real athlete himself. He strived to be the best, and likewise he expected my brother, Scott, and I to do our best at whatever we chose to do. But, he was a bit of a perfectionist, so we sat the bench; we were examples for a lot of people. (laughter) I think he constantly tried to toughen us up so that we could take hard knocks and be ready for whatever life threw at us.

FMI Quarterly: For what it is worth, my father was my little league coach, and I rode the bench just about all the time. Same underlying motivation; he was a great competitor himself and a real perfectionist as well.

Rick: To answer part A of your question, his advice to both Scott and me was to never wear your owner's hat. He made sure that we didn't act like owners. He had us both start in the ditch to learn the business from the underground up, just like he did. He wanted us to earn every step that we made.

FMI Quarterly: Jeff has been a role model for lots of people both in his living and, I think, in his dying. Could you comment on that?

Rick: There is no doubt in my mind or anyone's mind that Jeff was a leader. He was always in the front leading others, and, in that sense, he was a role model. He did that through our church, through the community, throughout the Young Presidents' Organization, and throughout contractor organizations. He had a silent motto, which was to meet everybody because he believed he could learn something new from every person he met.

FMI Quarterly: Eric or John?

Eric: Jeff, in living, and in his death, I think, lived life right. He was always giving, caring, and honest. To use a cliché, he would do the right thing even if nobody was watching. I'm not sure if he cheated in golf: do you guys know?

John and Rick: No, never!

Eric: He was a bit of a Boy Scout. I think Jeff had higher standards for himself than he expected out of other people, but he was optimistic enough to think that there were other people that shared his same standards.

Diane and Jeff Keeler at Team Fishel 60th Anniversary

FMI Quarterly: Jeff's wife, Diane, has been an anchor in his life. How does Diane who is now Chairman, see the future of The Fishel Company without Jeff?

John: I think she and Jeff did a good job of getting a management team in place that they were comfortable could take the company into the future and run it the way she and Jeff wanted it to be run. Diane sees great opportunities for the future of the company. She intends to allow the team that is in place to continue to run the company, using the Board of Advisors as a sounding board. Jeff left some big shoes to fill, but he has trained us all very well in what needs to be done to carry that ball forward into the future. Diane is going to allow us to do that. Diane understands that The Fishel Company today is a well-managed and professionally-run business. We are working together to make sure that we all understand our roles and responsibilities to ensure our future success.

FMI Quarterly: Jeff was 38 years with the company and 64-years-old at his passing. How would Jeff like to be remembered?

Eric: I think Jeff would simply like to be remembered as someone who made a difference that was permanent and wasn't illusionary or transitory. From my perspective, he did leave a difference that was permanent. He left the world better than he found it.

FMI Quarterly: Eloquently put. Rick or John?

Rick: Again, I would go back to the coach analogy. My dad always wanted to be a coach. He was the coach of Team Fishel. A short story about changing our brand: Jeff always had tight control of our marketing and branding. When I moved back to Columbus in 2000 to become the Director of Marketing, I was like the little kid trying to mess with the sandcastle that he had built. He didn't want anybody changing it. It was exactly the way he wanted it. I finally figured out that he had created the internal brand, "Team Fishel." What I could do was turn that outward and make it our external brand. We finally agreed to put Team Fishel on all of our trucks, and over the next several years it transformed into what it is today. That's our tribute to him.

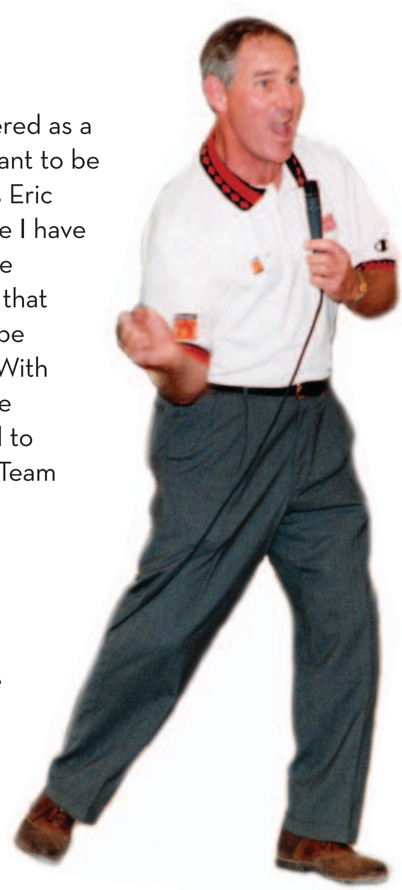
FMI Quarterly: John, last word?

John: I think Jeff would want to be remembered as a guy who made a difference. He would also want to be remembered for his honesty and integrity. As Eric said, his values were higher than anybody else I have ever met. But I also think he would want to be remembered by the Team Fishel that he left: that it could go forward without him; continue to be successful with longevity and staying power. With many contractors, when a guy of Jeff's stature leaves, the organization crumbles. He wanted to ensure that there was a long-term future for Team Fishel and everybody involved.

FMI Quarterly: Guys, thank you very much.

Eric: We are honored that you think enough of Jeff to think that this is important because we certainly do.

FMI Quarterly: Eric, they don't make a lot of people like him, and we do want to create a memory. Thank you very much. ■



Jeff Keeler Doing "I Say Yes" Project Sharing Cheer

Safety Costs, Planning Pays! How to Get in Step With Training

An organizational culture for training doesn't just shuttle employees through safety and other types of training; it changes the way the whole organization thinks and feels about safety.

By Torrey Mullen and Randy Nemchin

This article focuses on the underlying foundation of effective training, whether safety training or other types. That foundation is an organizational culture that reinforces and values training. Similar to an iceberg, the consequences of a lack of safety training are as obvious as that portion of an iceberg above the waterline.

However, a culture for training remains "beneath the surface" despite its ultimate importance in supporting all aspects of employee training and development. An organizational culture for training doesn't just shuttle employees through safety and other types of training; it changes the way the whole organization thinks and feels about safety, the importance of professionally and personally developing each and every employee, and the ultimate behavior of those employees. (See Exhibit 1.)

According to the Occupational Safety and Health Administration (OSHA), the construction industry is one of the most dangerous industries for workers in the U.S. (See Exhibit 2.) In 2003, the industry suffered 1,131 fatalities. The Bureau of Labor Statistics has estimated that the median number of days lost due to recuperation time from injuries

Strong foundations
build better structures.

Exhibit 1

An Underlying Foundation of Effective Training

Exhibit 2

Construction Industry Safety Statistics

Number of Nonfatal Workplace Injuries – 1997	Median Number of Days Away From Work Per Injury	Yearly Lost Work Days Due to Workplace Injuries
37,667	8	**301,336**

sustained at a construction site is eight days, and one-fourth of workers that sustained injuries from a fall were away from work 31 days or more. In 1997, the number of nonfatal workplace injuries involving days away from work was 37,667. This means that each year the construction industry loses more than 300,000 days of work from employees due to workplace injuries.

Injuries in the construction industry are not isolated to workers. A joint study conducted by the American National Standards Institute and the American Society of Safety Engineers found in the years spanning 1997 to 2002, 55,000 members of the public, including city inspectors, homebuyers, and tenants, sustained injuries related to construction sites. A focus on safety can help alleviate many of these risks, as well as increase productivity, decrease delays due to accidents, reduce workers' compensation premiums, and serve as a marketing tool as more and more owners and construction personnel are continuing to demand safety.

Now that you have read the statistics, what are the implications for your company? The reason for what went wrong — the lack of an organizational culture of training — is the catalyst for change. One of the most compelling reasons for the development of an organizational culture focused on training is the positive impact it can have on a company's bottom line. In researching this topic, we reviewed 50 accidents involving fatalities and injuries on OSHA's Fatal Facts web site (http://www.osha.gov/OshDoc/toc_FatalFacts.html). The number of companies that had an appropriate training plan in place was 10. What does this tell us? Does it say that not enough organizations are concerned about safety and training? Perhaps, but it could also tell us that not enough organizations have a sufficient training plan for safety or for many other subjects.

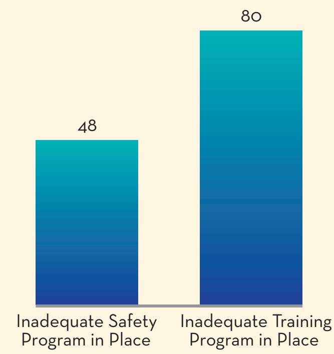
> "What we plan we build." — *Conte Vittorio Alfieri (1749–1803) Italian playwright*

As reported on OSHA's web site, 24 or 48% of the 50 fatal accidents summarized occurred in companies that did not have a safety program in place, and 40 or 80% occurred in companies that did not offer training or education programs. (See Exhibit 3.) Construction accidents cost the industry $10 to $25 billion each year, yet the average cost of a safety program is estimated at 2.5% to 4% of direct labor costs, or 8% of payroll. With the aid of safety programs and practices, the industry could see reductions in the rate of accidents as high as 30%.

Exhibit 3

OSHA Reported Fatal Accidents

Percentage of fatal accidents



Why does this matter? Partly because workers' compensation coverage is mandatory, and costs of insurance and additional coverage are extremely high in today's insurance market. Costs of coverage are calculated for many companies utilizing the Experience Modification Rate (EMR). EMR is a statistic that considers a three-year rolling average of accident frequency and severity. An organization's EMR takes into account the ratio of actual losses to expected losses; thus, an EMR of 1.0 means the frequency and severity of actual losses equaled the expected losses. A value of 1.0 is considered average, and anything above that value incurs a premium surcharge. The range of EMR values is generally 0.5 to 2.0, and a value of 0.6 is typically considered a very good rating. The EMR gives greater weight to loss frequency than to loss severity, and thus, it may be regarded as a reflection of the safety culture of an organization.

In addition to insurance costs and the well-being of employees, companies should be concerned about their reputation, potential litigation, compliance with OSHA requirements, and maintaining profitability. A solid training plan is one way companies can minimize potential losses and aid in the investment of its people. Many companies strive to improve safety for their workers by requiring their participation in safety and training programs.

Investing in people, the most important part of the organization, will result in a more efficient workforce, a safer work environment, and a more skilled work team. Providing employees with meaning and purpose, aiding employee development, providing training opportunities, and providing a supportive environment are keys to gaining employee commitment. Employee development plans offer opportunities and benefits to an employee, oftentimes resulting in the long-term commitment of these employees to the organization. Employee commitment to the organization, in turn, increases employee performance and retention. A survey conducted by the Corporate Leadership Council in 2004 determined that increased employee commitment resulted in a 57% increase of discretionary effort and an 87% reduction in probability of turnover. Organizations gain commitment from employees by investing in them through training and development initiatives, and see real benefits in performance and retention as a result.

Opportunities for training and development are also one of the most important predictors of employee performance. Not only does training show employees their value to the organization, but training also increases skill levels, which helps an employee to perform better on the job. A study conducted by the University of

Florida's School of Building Construction found that providing craft training to electrical contractors and sprinkler fitters increased productivity up to 42% and decreased turnover and absenteeism up to 50%. The study clearly showed that participating organizations profited from their training investment, as can any organization willing to invest appropriately in the training and development of their employees.

According to the Bureau of National Affairs, the average annual turnover rate for all U.S. industries is approximately 12%. However, some contractors have turnover rates reaching 80% or higher, especially among craft workers. The loss of workers costs time and money; therefore, retaining the organization's existing workers becomes a matter of bottom-line impact. According to the U.S. Department of Labor, annual expenditures for recruiting, training, and administrative costs associated with employee turnover cost U.S. companies more than $140 billion. Every time an employee leaves an organization that organization must pay to recruit, interview, select, hire, reorient, and train new replacements, which can reach up to 2.5 times the annual salary of the exiting employee. This means that replacing an employee with annual pay of $40,000 will cost the organization approximately $100,000. In the construction industry, employee turnover is especially problematic because of the inexperience of new employees and consequent safety risks.

According to the U.S. Department of Labor, annual expenditures for recruiting, training, and administrative costs associated with employee turnover cost U.S. companies more than $140 billion.

How do leading organizations retain workers longer? While money can be an important factor in recruiting and retention, many employees prefer work environments that acknowledge the employee's value and potential, and support their development. The right kinds of workers are attracted to organizations that have learning cultures, where their values are consistent with the core of the company. An employee's self-worth is derived from how they are treated and considered. An environment where individuals receive recurrent training, sound planning, and positive reinforcement is one where learning employees thrive.

Instilling a training culture decreases chances for an injury or fatality. Such a culture can also increase employee commitment, performance, and retention. Review the internal processes within your company and reevaluate your organization's culture and training plan. When creating a training plan, consider top-down buy-in, definitive policies, practical solutions, and solid leadership. Organizations with viable training plans and a means to carry out their strategies are the ones who succeed in reaching their goals.

Creating a training plan will assist your organization in becoming a leading construction organization. The task may seem expensive and time-consuming, but the reward is enormous. With some effort and support, these five easy steps can serve as a beginning to your new culture of success.

Step 1. Perform a needs analysis.
Step 2. Define education and training requirements.
Step 3. Develop objectives.
Step 4. Plan, develop, and validate.
Step 5. Conduct and evaluate.

The process begins with a thorough review of company policies, procedures, and operating plans. A comprehensive review can determine potential gaps in safety and education requirements. Understanding these gaps will provide an outline for developing objectives and planning for the creation of appropriate education and training programs. Next, assess the needs of the individuals, whether through testing or through surveying employee needs as seen by their supervisors. Using both organizational and workforce gaps, you can design your training program with complete organizational standards, tuned to the needs of your existing workforce. Testing your plan in the workplace is the next logical step. Finally, after validating your plan and your training materials, perform ongoing training and obtain feedback for evaluation purposes. As your training and subsequent supervision reinforces the behaviors that successful employees need within your company, you will begin to build a culture biased toward continual training in your company. It costs … yet it pays and pays big.

Implementing an effective training plan will play an integral part in your organization's success. With a focus on safety, an effective training plan should:

- Reduce workers' compensation premiums
- Reduce potential for injuries
- Increase employee retention
- Increase employee performance
- Increase employee commitment
- Produce more knowledgeable, more efficient work crews
- Yield safer work environments.

A training plan won't prevent accidents, but a well-implemented plan will certainly reduce both the frequency and severity of those accidents. A culture biased toward training will build a much more successful company over time. ■

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Survival Marketing 101 — Marketing in a Down Economy

Companies should not stop marketing altogether in an economic downturn, but allocate spending resources to drive business and generate profits in the near term.

By Angela Tallman

Economic conditions are cyclical. Economists tell us that after long running economic expansion there will always be recessionary periods. The average economic boom or expansion period lasts for about 50 months while recessionary phases average 10 months. Savvy business owners will use these cycle shifts as an opportunity to reevaluate their market position and increase their footholds within their targeted markets.

During these periods of economic tightening, many companies react in a defensive mode; they cut all costs that represent discretionary expense to include all marketing and business development activities. In effect, the company shuts down from a growth perspective. Any new plans for business line extensions are shelved. All innovation benefiting from research and development activities cease. Potential corporate growth strategies and acquisitions go away completely. Companies tend to retreat away from their guiding force — their business plan.

A critical success factor for construction company leaders lies in monitoring the current economic conditions and proactively navigating their business into a favorable position, capturing their share of the market during these periods.

Success = Opportunity + Preparation

Monitor economic trends and analyze business cycles. Study what others have done to come out way ahead of their competitors at the other end of the tunnel. There is invaluable information to be gleaned from studying the "lessons learned" after previous downturns — such as how other companies sourced short-term opportunities and turned them into long-term growth markets.

BIG CUTS — LITTLE VALUE TO YOUR CUSTOMERS

There is always a benefit to maintaining strong fiscal health and exercising responsible, sound management policies. While aggressive cuts in spending typically provide some immediate relief to the bottom line, they often have very detrimental effects on long-term business operations, profitability, and ultimately, to the revenue stream — your customers. In cutting the lifeblood of the company — your ability to attract new customers, penetrate new markets, cultivate new business relationships — you are limiting your ability to achieve long-term success.

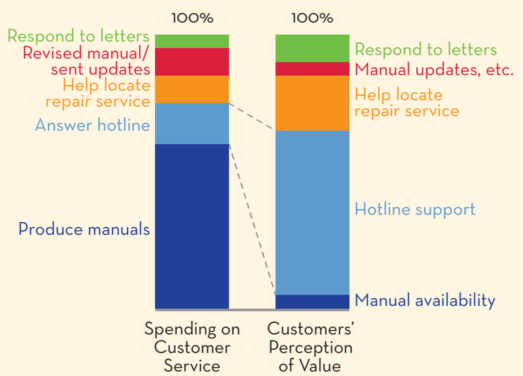
How a company communicates with its customers creates a perceived value. That perceived value relates directly to your level of service to that customer. As economic conditions change, customer preferences also change. Once a marketing standard is established, then eliminated due to budgetary constraints resulting from a downturn, this translates into a poor quality/poor value statement to your customers, falsely or otherwise. Exhibit 1 illustrates the cost-value gap associated with a changing economic environment for a major electronics company.

Cutting back during a downturn is like throwing away your investment. Maintenance today costs much less than rebuilding tomorrow.

Robert Wilson
Award-Winning Business Writer and Speaker

As you can see from this example, there is a clear disconnect between what this company "believes" provides value to their customers along with the amount of money being spent supporting these activities, and the actual need and perceived value realized by their customers. This is where a number of companies make their mistake. They throw solutions at a problem, *or what they think is the problem*, without having a clear understanding of their market, the needs of their target customers, or even a level of expectation for their customer's response. They completely miss the mark by spending "extraneous" dollars with little or no benefit. This results in the belief that marketing dollars are a waste and can be eliminated.

Exhibit 1
Cost-Value Gap



Source: Accenture Analysis

RESULTS SPEAK FOR THEMSELVES

Over the years a number of studies have analyzed behavioral patterns of companies that endured economic slowdowns through the key recessionary periods in our history. The Buchen Advertising study, which began in 1947, tracked corporate performance as a correlation between corporate expenditures and sales trends before, during, and after four significant recessionary periods — the recessions of 1949 and 1954, as well as 1958 and 1961. The bottom-line results showed that sales and profits dropped without exception for those companies that made cuts or eliminated marketing and advertising activities. What was more telling, however, was that these revenue and profit lags continued throughout the recovery period.

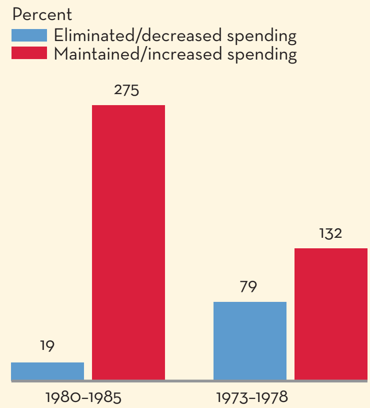
The American Press and Meldrum & Fewsmith study that monitored performance during the 1970 and 1974 to 1975 recessions, showed that companies with aggressive marketing and advertising not only increased sales but also increased profits. The study showed conclusively that "sales and profits can be maintained and increased in recession years and in the years immediately following by those who are willing to maintain an aggressive marketing posture, while others adopt the philosophy of cutting back on promotional efforts when sales appear to be harder to get."

McGraw-Hill Research conducted two separate studies — one during the 1974 recession analyzing 468 industrial companies, the other during the 1981 to 1982 recession analyzing 600 industrial companies in 16 different industries — all with similar results. (See Exhibit 2.) Firms that increased or maintained their marketing spending had significantly higher sales growth, both during the recession and for three to five years following.

The evidence overwhelmingly supports the notion that cutting marketing and business development spending during times of an economic downturn is bad for a company's ability both to endure the downturn and to prosper on the other side. The results drive the point that in a fluctuating economy, there is huge opportunity to not only weather the storm, but also to come out of it in a significantly better place.

If you are marketing during times of growth and opportunity in your market, care must be taken to ensure your message is not getting lost in the clutter of other marketing efforts being forged by your competitors. During market dips, your competitors have undoubtedly cut their spending for marketing and business development. This is your opportunity to penetrate new markets, source new customers, and develop new business opportunities by clearly articulating a value statement that customers will recognize and appreciate. (See Exhibit 3.) This can only happen, however, if you have a fully developed and implementable marketing and business development plan.

Exhibit 2
Recession Spending



Source: McGraw-Hill research

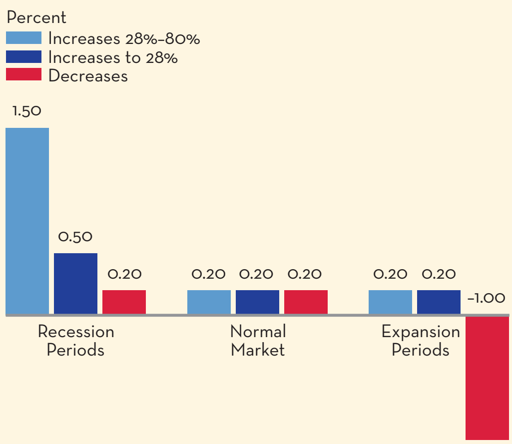
This means making minor changes in an existing business plan for many companies. For others, it means a complete overhaul and reinvention of your corporate identity. What is meant for most, however, is a thorough look at the current plan; strategically identifying markets, segments, and customers to pursue; and then proactively cultivate that business. Companies that wait on the sidelines for opportunities to discover them typically get left behind.

SHOULD I START MARKETING?

The construction industry has been somewhat reactionary throughout its history. Projects become available. Contractors then bid the projects. Through some sort of selection process, the contract is awarded, and the fun begins. So, what if there was another way to learn about available projects, bid them successfully, and win work more frequently? That "way" is called executing against a targeted marketing and business development plan.

You might be saying to yourself, "I am a construction company. What does marketing have to do with my business? What does this mean to me? Does this mean I should begin advertising?" The answer to these questions is that marketing has everything to do with your business — when implemented flawlessly, seamlessly, effectively, and efficiently. Marketing does not have to be an elaborate and comprehensive, four-color advertising campaign, or a collection of glossy collateral material. Marketing is about the *approach* you take to identifying opportunities within the market you serve. It is about understanding your core strengths and the value your products, or services, provide. It is about understanding the needs of your market, understanding what drives decision-making and expansion, knowing who your target customers are in the segments you target, and how to source new opportunities and win business.

Exhibit 3
Media Advertising Expenditures Effect on Market Share



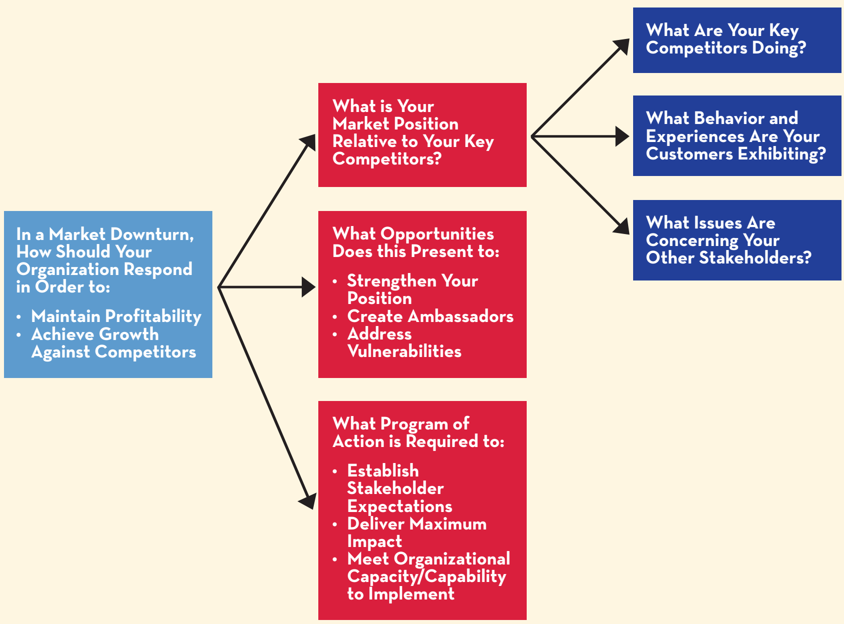
Many effective communications vehicles exist that you can use with your customers. The trick is to gather enough knowledge to clearly identify the markets you want to serve, the segments in which you want to operate, and target the customers that you want to attract. Then you must carefully craft your marketing message and communicate it in the way your customers want to receive it.

There are things that you should proactively be doing in your company to evaluate your market position and determine your next strategic moves. Exhibit 4 depicts some valuable questions your organization might want to ask in an uncertain market.

As you evaluate your plan for dealing with uncertainty, can you answer

Exhibit 4

Focused Strategic Response to Market Uncertainty



Source: Graeme Chip, FAMI CPM, "Responding to Tougher Times," April 2005, Webinar

"yes" to the following questions?

- Are you executing against your plan?
- Are you known for what you do well?
- Do you have a marketing database plan and have you maintained relationships within the market segments you want to play in?
- Do you have a business development plan that allows you to source and pursue new opportunities and prospects?
- Have you evaluated your cost cuts and ensured they will not preclude future growth?
- Have you communicated changes in strategy or operations to key constituents, including customers, employees, and investors?

REVIEW YOUR EXISTING STRATEGY: *Are You Executing Against Your Plan?*

Reviewing your existing strategy typically involves a thorough evaluation of the mission and vision for your organization. The mission of your company tends to be static, based on core values within your company. Goals and objectives are the benchmark measurements that tell you how effective you are in achieving your mission. These tend to be fluid and evolve with the growth and direction of your company, yet they are also durable in that they do not typically change each year. Ask yourself, "Has my environment changed, internally, externally, or both? How might environmental factors affect my ability to succeed?" It might be time to revisit your business strategy and objectives.

Effectively and Proactively Manage Growth

The one thing successful businesses want to do is GROW! Even in a soft market, companies want to maintain their market positioning and achieve some level of growth. The first recommended action is to compare your current level of performance against your existing plan. Have you been managing and executing against a strategic plan? Do you know if you are on target? Are you growing at a significant rate? Do you have adequate resiliency in your plan to overcome obstacles that a downturn might represent? What are your contingency plans? Can your organization absorb rapid growth?

Successful companies can measure growth using a number of metrics: sales dollar volume, profitability, number of jobs won, number of jobs completed, even "on time" measurements can tell you how effectively and efficiently you complete work. *Managing* growth, however, involves a more complex set of tools. You must understand your existing customers — what are their hot buttons, how do they perceive value? You must be a competitive force in the market. Your competitors must recognize that you are a factor to consider when they are bidding against you. You must be poised and positioned to respond to new market trends or complementary market segments. You must be constantly searching for additional business opportunities that may fall outside your core competencies. And, successfully growing companies must be effective in at least three or more of the following:

- Penetrating existing customers more deeply
- Taking business from competitors
- Targeting rapidly growing segments
- Invading adjacent markets
- Entering new lines of business.

Customer loyalty is critical in a downturn. The relationships you forge today are the ones that are the most pivotal in contributing to your future success.

This growth model focuses on expanding your core business, which is one of the most effective ways for established businesses to increase their profits. Customer loyalty is critical in a downturn. The relationships you forge today are the ones that are the most pivotal in contributing to your future success. There is truth in the old adage, "it's all in who you know." During a downturn, the relationships you have will be the trusted sources you need to seek out and pursue new opportunities.

We have examined the effects on businesses that eliminate marketing and business development spending during a downturn. This is a key opportunity to take business from your competitors by increasing the market awareness of your product or service. Undoubtedly, your competitors are cutting their expenditures on market development activities. Customers in your market will be looking for emerging players who are proactively focusing on new business opportunities and new market relationships. This is your time to leverage your strengths and seize those opportunities.

Analyze and Redefine Your Value Proposition

In an economic slowdown, it is important for a company to examine their core competencies, whether they are target customers that will purchase your product or service, and whether there is potential for long-term market growth. A redefinition of your business may open up more opportunities than before. The key in strengthening your organization is to combine competence with opportunities in the marketplace to achieve a competitive advantage in the targeted industry.

Value propositions are concise statements of what you provide to a customer and the definition of the value they will gain. That is where your core competencies come in. Your company will have a single or a few key value propositions for each group of customers. They will be included in your marketing collateral and proposals. Value propositions represent the selling message that your company takes to the market.

The best value propositions are short and attention getting. Here is a formula you can use to create your value propositions (VP):

VP = What you offer + for who + benefit gained

While one construction company might offer low costs for public owners of educational facilities in K–12, another might provide the curb appeal of a design-build solution for a boarding school seeking to keep up with the Choate's and Lawrenceville's of the private school market. A trade contractor might build a value proposition based upon availability "when you need us," while another might pursue a marketplace using their skills in value-engineering as a design-build alliance partner. In all of these cases, value propositions gain legs only if they are promises backed up by the core competencies of the company itself. Simply hawking an untrue premise will only guarantee customer dissatisfaction and a quick exit from any target market.

Your offer needs to set your organization apart from competitors if the value proposition is going to add value and provide your company with a strong platform to sell on value.

Adopt an Inward Focus

In recent years, a strong focus on efficiency and in productivity gains has resulted in many companies that are now much more efficient. Gains in operational efficiency have made organizations more competitive and profitable, but this has not led to a guaranteed increase in corporate growth. Simply being operationally efficient is no guarantee of a sustained, competitive advantage.

Once you complete a strategy and value proposition analysis, you should turn your attention inward to evaluate internal systems and processes. This is a key opportunity to gain process improvement and efficiency. Look at how your organization is growing or changing. Even better, forecast how your organization will change or shift in a downturn. Will your current processes and systems support your business operations? Are your internal procedures following industry best practices?

Consider some of the following:

- Can you audit your processes, be it estimating, procurement, operations, or cash management?
- Do you really know the cost of doing business with each of your customers?
- Do you get accurate management information that enables you to make informed decisions?
- Are your existing processes still necessary?

Become Market-Driven/Customer-Centric

In challenging times, organizations must immediately increase their emphasis on cultivating relationships and getting business. This usually suggests a shift in responsibilities for many into a customer-centric, market-driven sales approach. Evaluate your team members in terms of their contribution and realign the responsibilities of key personnel — including, perhaps, the addition of specialized employees designated to achieve specific goals and objectives. Hiring specialists may seem counter-intuitive during downturns, but when do you need periods of greatest individual productivity? During lean times, when every payroll dollar has to yield even more results.

During a downturn, the most important thing you can do is to keep your eyes on existing customers. While you should always show your appreciation for your customers, tough times are the time to fully understand their needs as they pertain to a downturn. What shifts are they making internally? How are the changing economic conditions affecting their operations? What can you do to bring more value to your relationship? Remember, your best customers represent the best opportunity for your competition, as well.

Train and Empower Your Employees

A downturn makes the biggest impact to your organization on your employees. Negative thinking, stemming from fear of the unknown, can spread poison. Cost-cutting measures are associated with both loss of jobs and loss of programs or spending. Ultimately, this gloom-and-doom attitude affects the most important aspect of your operations — business development.

Your biggest opportunities for providing a positive view of the future lies in providing a compelling vision and strategic action to seize market opportunity. The best way to keep morale high and leverage your organizational strengths is to invest in their future and growth. Corporate leaders need to re-energize employees in these challenging times. They need to get people to focus on the ultimate goal, on the marketplace, the customers, the competitors, and the industry.

MARKET DIFFERENTIATION: *Are You Known For What You Do Well?*

There are two basic ways to compete. You can be the cost leader or you can differentiate. Can you differentiate your offering vs. those of your competitors based on uniqueness or must you compete based on cost? If your answer was a "yes" to being unique, is your offering more compelling to customers? Does your value proposition provide clear reasons for why customers should buy your product rather than that of your competitors?

> **If you can only compete on price, you should re-evaluate your strategic positioning and priorities.**

The overall goal of any differentiation strategy is clear. It is an attempt to stand out in a unique way to customers and demonstrate that you have something of value to offer that your competitor does not. There are many different ideas about how to define a company's point of differentiation, but whatever it is, it must be valuable, difficult to copy, credible, compelling, and sustainable. Another key point is that a differentiation strategy must be a central part of the organization's overall business strategy, its positioning, and its branding.

Market differentiation is about establishing your market presence based on your core competencies and values rather than price. If you can only compete on price, you should re-evaluate your strategic positioning and priorities. Playing the low-price game for too long leads to low quality and low value. Therefore, while we all encounter the price game periodically, you should be able to differentiate your product based on the one thing you can do flawlessly, *every time* with every customer. Construction companies can differentiate on a number of different levels, including scheduling, estimating expertise, quality of work delivered, your close-out process, or even documented level of customer satisfaction. The key is to find that one thing that separates you from your competition and leverage it with new and existing customers. But, once you establish your differentiating trademark, you must perform to the standards you establish every time, and you must be able to prove it to your customers. Document your differentiation with newspaper clippings, awards won, documented customer satisfaction surveys, and customer testimonials.

Be Creative and Innovative in Your Approach

When there is an economic downturn, there is less demand for your product or service in your market. To remain competitive, companies must implement a strategy to establish their products or services as a unique offering in the marketplace. What makes this implementation unusually challenging is that it must be done with tight resources. Companies need to have creative and innovative ways of marketing and selling their products or services without increasing their cost. Companies typically must rely on the creative resources of its staff as to how to promote their services in the marketplace. This is achieved through creative publicity strategies that provide educational and beneficial information for the public. The best use of publicity strategies is in the press. Cultivate relationships in the press by developing a comprehensive publicity campaign utilizing press releases communicating key project wins, announcements of awards given, active participation with local charities and fundraisers, and participation in local community events. You can also create "sticky eyeballs" with the distribution of hats and logo-wear. Every time you give a hat or t-shirt to a client, also give them one in a smaller, child's size, generating twice the advertising impressions.

PROACTIVE MARKET SELECTION: *Have you maintained relationships within the market segments you want to play in?*

In selecting target segments, choose those where the firm already has a toehold, but the current share is relatively low; competitors are weak and not likely to retaliate quickly; the size of the segment's profit pool is still large; and where incremental efforts and investments will lead to disproportionate payoffs. You will find that an economic slowdown is an opportunity to acquire high-quality assets or businesses, which may be poorly managed by existing management groups.

Focus on the Brand

Some people argue that branding is not as important to producers of more complex items and services. But, in many ways branding is a key way to differentiate your product or service. A brand must have a central vision to serve as the core of the brand. A brand must have the same understanding among all stakeholders to be effective. Brand imagery and personality encourage active mental participation among customers. The brand vision or identity tends to go beyond the product. Three principles for building a brand are:

- Develop a favorable association
- Make the association readily accessible in the customer's mind
- Focus on the company's unique point of difference that is both easy to remember and consistently reinforced in all brand messages.

It is critical that a brand message be consistent through all levels of your organization.

Branding establishes familiarity and familiarity helps create trust. It is the reason you are "remembered." Branding is an important tool for organizations to communicate their strengths and benefits. It is critical that a brand message be consistent through all levels of your organization. Your brand is your most valuable corporate asset and should be protected.

The use of logos is typically one of the most effective and recognizable means of branding your product or service. Careful placement of your logo can drive brand awareness and acceptance, so when a customer sees your logo, it conveys the ideals you establish as synonymous with your brand. A great example of this concerns a company that produced a number of golf shirts with their logos on them. A lot of companies produce golf shirts and give them to clients as a gift of appreciation. To save money, this particular company purchased a number of white shirts and had their logos applied in red thread, even though their corporate identity colors were not red or white. Once the shirts were washed, the shirts turned pink — conveying the quality was not there and reflecting poorly on the company.

TARGETED MARKETING AND BUSINESS DEVELOPMENT PLAN: *Do you have a business development plan that allows you to source and pursue new opportunities and prospects?*

Define New Market Opportunities, Seek Them Out, and Monitor Your Progress

In general, segmentation strategies work best in industries with the following characteristics: frequent customer interactions/purchases; high level of expertise needed to guide purchasing and problem resolution; multiple products and services purchased by customers; products that provide convenience, create simplicity, or reduce risk; products that are learning-intensive and require substantial customer service and support after sale.

Companies should concentrate their efforts on identifying segments and customers that fit within their core competencies. However, in identifying new segments and new customers, it is important to reward existing customers by maintaining their value proposition.

Look at the areas where needs are not being met for customers in your market.

The critical success factors for sourcing new segments and new customers are to:

- Identify, source, and pursue good segment and customer targets.
- Track progress and communicate successes — internally and externally.
- Keep the pipeline full — monitor and update the prospect list continuously.
- Find your niche and exploit it.

By using this method, customer segmentation becomes an opportunity to tailor your product or services to meet the needs of your most profitable customers. Segmentation allows an organization to understand their market conditions, make existing customers happier, and attract new customers. Look at the areas where needs are not being met for customers in your market. This can become the most effective way to differentiate yourself in a manner leading to more opportunities in your pipeline and ultimately, higher profits.

Exhibit 5
Value Chain Interaction

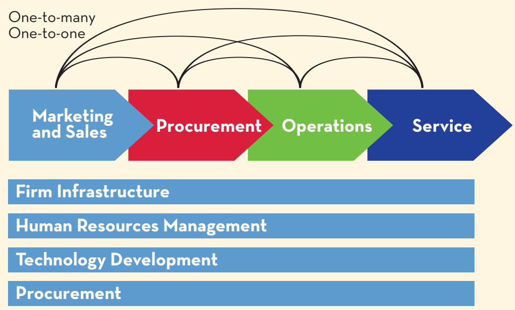
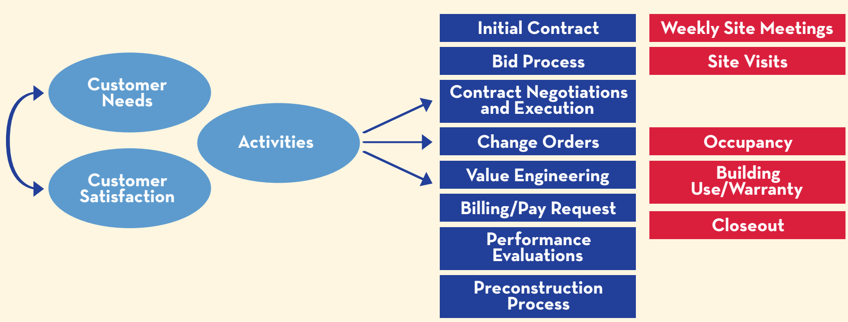


Exhibit 6
Construction Core Competence Value Chain



Analyze Your Value Chain

As you refine your market strategy, you should also evaluate your value chain. The value chain is the sum of all activities that add utility to the customer. A linkage occurs whenever one activity affects other activities in the chain. To optimize a value chain, the linkages must be well coordinated. Parts of the value chain will be internal to the company, while others will come from suppliers, distributors, and other channel partners.

Since value is a perception by customers, it is subjective and cannot be easily defined. A critical part of delivering value is identifying what your customers perceive as a value-add to them. In construction, value is usually delivered in the form of a cost savings, delivery earlier than scheduled, or in an intangible level of service to the customer.

To analyze your organization's value chain first you must identify the elements that constitute value in your firm. (See Exhibit 5.) Then you need to understand the possible interaction patterns among the value chain components, or how information is disseminated between the different players. (See Exhibit 6.) Interaction patterns can include one-to-one, one-to-many, many-to-one, or many-to-many. A significant part of understanding the interaction patterns is then to develop integration touch points where information and value can be inserted.

During an economic slowdown, if you are not deriving the maximum benefits from your value chain, your need for deconstruction and reconstruction is greater. Available opportunities are in shorter supply, and only those companies that excel in terms of cost and differentiation, manage to grow their share of customers during these periods.

To build market power rapidly during an economic slowdown, a firm will need to have the assets and capabilities required to offer solutions unmatched by competitors. In order to enter into a new business area, the firm will need to build or acquire marketing assets, such as customer database, brands, distribution network, after-sales service network, etc. and execute well with existing strategic assets.

Financial Analysis: *Have you evaluated your cost cuts and ensured they will not preclude future growth?*

In anticipation of a downturn ahead, most companies need to improve their efficiency overall. Tough times often call for tough decisions. This may mean eliminating unprofitable ventures or lines of business. Companies must explore creative approaches to streamlining their organizational structure and internal processes, facilitating better decision making as well as eliminating duplication. They must fully utilize human talents that are available and deploy them to where they provide the most return.

In making cost cuts, a company should not make these decisions hastily. A company must evaluate and recognize the difference between good and bad costs. Good costs are those expenditures made to make money and are considered to be strategic. These costs tend to relate directly to marketing and business development activities, and include:

- Sales
- Advertising
- Direct marketing
- Quality-and-value-for-money improvements
- R&D and innovation
- Hiring new, specialized employees
- Investing in expansion.

Companies must explore creative approaches to streamlining their organizational structure and internal processes, facilitating better decision making as well as eliminating duplication.

Amass Financial Reserves

Smart company owners do not wait for a crisis to start managing cash flow. Since cash flow is the lifeblood of an organization, strategic management of cash flow should be the most important role an organization focuses on in preparation for an economic slowdown. But, this does not mean a company should stop spending altogether — just allocate spending resources to further drive business and generate profits and revenue in the near term.

Consider Competitor Acquisitions

Companies that plan to make entries into new market segments will find a period of economic slowdown an opportunity to make a low-cost rapid entry into the market. Competitive companies may adopt a defensive strategy and divest, or sell their businesses, or components of their business that do not represent core competency. This may open up opportunities to acquire market presence by acquiring high-quality assets and businesses at a comparatively low price.

Having an effective business development strategy provides you the tools to proactively evaluate your market and your customers, and target the opportunities where you can differentiate and bring value — no matter what economic conditions are present. Keep in mind that in a downturn situation the old colloquialism, *"If it ain't broke, don't fix it"* does not apply in every situation. Proactive analysis of market conditions and the impact on the players in your market is a critical part in understanding what shortcomings exist and how you can effectively fill the needs of your customers. The numerous market studies that have been conducted in post-downturn economies have proven that over the course of the downturn, companies that pursue aggressive strategic marketing campaigns exploit and refine their capabilities; successfully source and identify new opportunities, filling the unfulfilled needs of the market; and ultimately succeed with a high degree of probability on the other side of the downturn. ■

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The Economic Outlook for Utility Contractors

While FMI's economic outlook for utility contractors is mixed, overall construction spending will grow in all segments forecast through 2009.

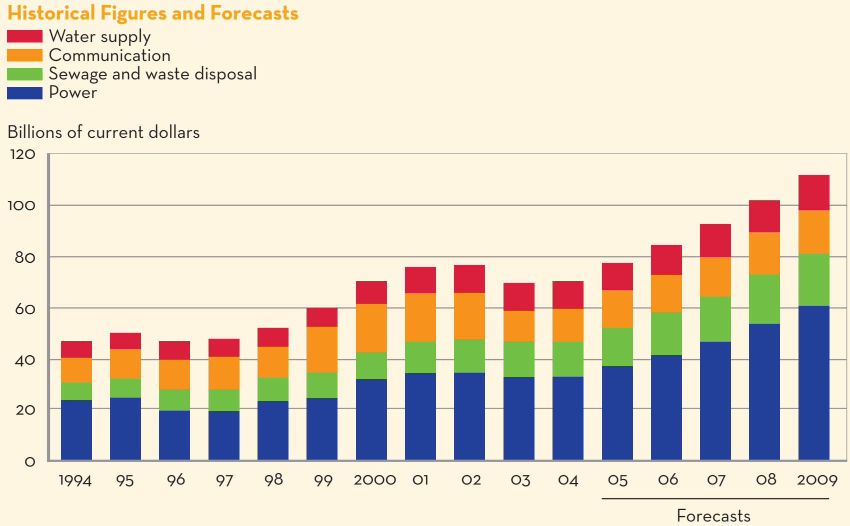
By Mark Bridgers, Stevan Simich, and Ted Reynolds

The economic outlook for utility contractors is mixed. Power-related segments will see dramatic increases in construction spending; telecommunications spending will experience modest growth across the country with selected geographies experiencing strong growth; and water/wastewater and sewer will exhibit more modest growth due to constraints in available funding.

Demand for capital spending in all three segments is strong due to both the demand for services and the age of infrastructure. Despite desperate need and frequent failing grades from the annual American Society of Civil Engineers' infrastructure studies, upgrades to this infrastructure will remain incomplete due to a lack of available funding. Water/wastewater and sewer are especially hard hit. Overall, construction spending will grow in all segments forecast through 2009. (See Exhibit 1.)

Contractors operating in the energy sectors will experience the greatest opportunities due in part to the passage of the Energy Policy Act of 2005, helping to boost capital spending. Large-scale capital investment in power infrastructure has been flat or declining since 2000 due to regulatory and post-Enron attention. Much spending since that point was redirected as operations and maintenance efforts within many utilities.

Exhibit 1
Utility Construction Put-in-Place
Historical Figures and Forecasts



Source: Building permits, construction put-in-place, and trade sources. FMI prepared forecasts for 2005–09

U.S. power markets require new capacity additions to match demand driven by population growth, population migration, and residential construction market growth. The bill provides multiple incentives for additional power generation to feed energy demand that ultimately creates transmission and distribution construction. Coal-fired plants, nuclear power plants, and natural gas lines are the big winners for tax incentives, which will encourage additional capital spending. Alternative energy will experience $2.75 billion in tax incentives; however, the measure requiring 10% of all energy generation from alternative sources failed. The bill repeals portions of the Public Utilities Holding Company Act of 1935 that restricted industry mergers and foreign investment. In addition, the repeal opens the door for energy company consolidation and potentially significant capital investment to take advantage of economies of scale and infrastructure asset optimization. This activity is expected to stimulate construction of new gas and electric transmission systems to achieve operational performance improvement and is supported through a series of tax and depreciation-related incentives.

The water/wastewater and sewer market will see modest spending growth due to a highly fragmented marketplace, municipal and/or political influences, and aging infrastructure, demanding solutions beyond the means of many system owners. Of the 16,000 sewer and waste systems across the nation providing wastewater services, many were predominately built between 1950 and the 1970s or even earlier and are beyond their useful life expectancy. Since 1972, the federal government has pumped $72 billion into the construction of publicly owned sewage treatment facilities, and the systems that serve them, in part, due to the passage of the Clean Water Act. Population migration and growth as well as the residential construction boom place additional strain on strapped systems. In areas of the country where growth has threatened to outstrip the water supply, unusual challenges have emerged where recent water restrictions and conservation efforts in some western states have proven too effective.

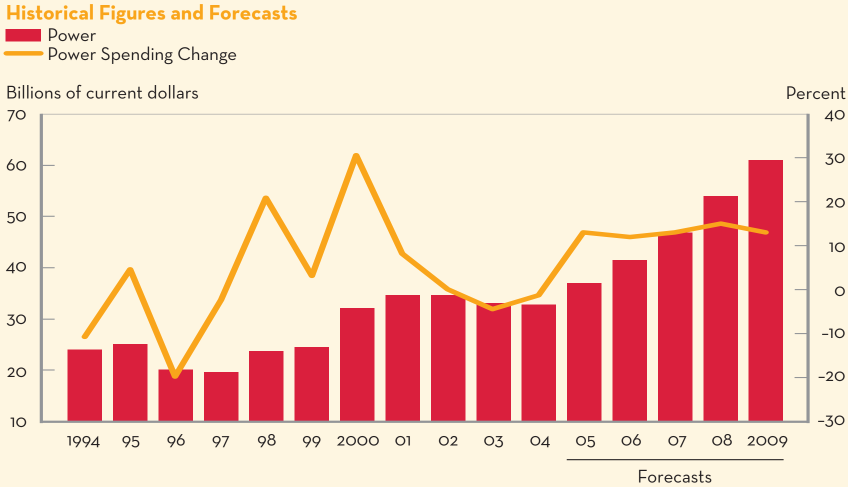
These utilities have lost revenue, forcing staffing changes or requests for increased rates to cover system operation costs. The solutions to this challenge are not pleasant for most system operators. For design and construction firms, there is significant potential if methods for funding the necessary construction can be resolved.

The telecommunication markets are experiencing pockets of rapid growth after construction spending fell off a cliff in 2001. Nationwide, FMI expects the recent increases in construction spending will again cool off after 2005/2006. One resource, the National Cable Television Association estimates that the efforts to install new or replace existing lines with fiber are approximately 90% complete as of year-end 2004.[1] Segments experiencing more rapid growth over the last two years relate to wireless broadband and efforts to finish the fiber-based infrastructure to homes and businesses. As this work is concluding, we do not yet see a spark for a significant increase in spending, but enhancements to the performance of existing infrastructure will continue to garner attention and construction spending.

POWER CONSTRUCTION FORECAST

Construction spending in the power market is expected to exhibit the fastest growth rate of the three utility segments studied. FMI estimates, shown in Exhibit 2,

Exhibit 2
Power Construction Put-in-Place Historical Figures and Forecasts



Source: Building permits, construction put-in-place, and trade sources. FMI prepared forecasts for 2005-09

show the U.S. power industry construction put-in-place for 2004 at $32.8 billion. Spending is expected to grow 24% from 2004 to $41.5 billion in 2006. Year over year growth will hover between 12% and 15% through 2009. Within power construction, there are three main components: generation, transmission, and distribution. Much of the short-term rapid growth in spending will come from the generation component. Distribution's growth is largely a function of housing starts and any rehabilitative or replacement construction necessary to support system integrity. Its growth rate is expected to continue. Transmission is more problematic to forecast as there are regulatory and other barriers, including who will fund this construction that remain unresolved. The recent passage of the U.S. energy bill will provide a portion of the spark, accelerating the growth projected.

There are approximately $14.5 billion in tax incentives available from this bill that will be paid out over 10 years. Local Gas Distribution Companies (LDC) and electric utilities specifically have access to $1 billion and $1.24 billion respectively for tax breaks to shorten the depreciation schedules for transmission and distribution lines. This change in depreciation schedule should introduce greater flexibility in decisions to undertake capital spending, and the non-cash nature of this expense should result in additional incentive to undertake construction.

Power producers utilizing nuclear energy have numerous incentives for both the construction of new facilities as well as the decommissioning of aged plants. Companies retrofitting or developing new coal-fired power production plants will benefit from $1.6 billion in tax credits for "clean coal" investments. A nine-year Clean Coal Power Initiative will be funded by an additional $1.8 billion with the intent to reduce emission levels to that of natural gas. Tax credits for solar, wind, landfill gas, and trash combustion technology of $2.75 billion will benefit renewable energy producers.

The Department of Energy expects electrical energy demand to grow from 3,481 billion kilowatt hours in 2003 to 5,220 billion kilowatt hours in 2025.

The growth in generation is driven by demand. The Department of Energy (DOE) expects electrical energy demand to grow from 3,481 billion kilowatt hours in 2003 to 5,220 billion kilowatt hours in 2025. The annual electricity sales growth rate during that period is projected to average 1.6% in the residential sector, 2.5% in the commercial sector, and 1.3% in the industrial sector. The DOE estimates that 43 gigawatts of inefficient capacity will be retired with an estimated 281 gigawatts of new capacity brought on line by 2025. Demographic trends, migration patterns, and population growth are driving this change. The Southeast and the West will see the greatest capacity additions due to their rapid population growth. The DOE estimates that the Southeast will account for 30% of total energy demands in 2025, and it will require a similar share of new capacity additions. The West accounts for 20% of the nation's capacity and will bring on line 25% of the additional capacity. These two regions are expected to predominantly bring coal-fired generation and renewable energy generation on line. A total of 87 gigawatts of coal-fired capacity will be brought on line, and the Southwest and the West will account for 31 and 35 gigawatts respectively. All of this generated power has to get to consumers through transmission and ultimately distribution systems, which will benefit from upgrade over the coming decade.

In terms of renewable energy, the Southeast is expected to bring on line slightly more than four gigawatts of new renewable energy generation, and the West is expected to bring on line five gigawatts of a total of 15 gigawatts across the nation.[2] State programs are the key drivers of alternative energy, and we expect growth, even though Congress failed to pass a measure that would require energy producers to source a minimum of 10% of its energy from alternative generation. Alternative energy biomass, wind, and geothermal are the fastest growing sources of renewable energy. Both wind and biomass sources of energy are expected to triple in billion kilowatt hours in output by 2025. Geothermal is expected to double in output. This renewable energy presents unique construction challenges as these sites are frequently not located where the population is and any power generated must be transported. The opportunity for unusual, difficult, or other challenging projects will exist, presenting opportunity for firms to pursue work that will likely have fewer competitors chasing it.

Both wind and biomass sources of energy are expected to triple in billion kilowatt hours in output by 2025. Geothermal is expected to double in output.

Natural-gas storage, transmission, and distribution will all see increases in construction spending. Natural-gas pipeline construction expenditures are projected to double from $1.3 billion in 2005 to $2.7 billion in 2006 and $3.1 billion in 2007, according to a report released last month by the Energy Information Administration. The liquefied-natural-gas (LNG) market will drive the growth.[3] (See Exhibit 3.) Sempra Energy currently has proposals in Alabama, California, and Texas for LNG-related facilities. The proposed Texas plant, for example, would process 1.5 billion cubic feet a day of LNG. Depending on LNG-facility permitting and potential increase of demand for

Exhibit 3

Pipeline Expansion by Region

Millions of current dollars

Region	2004		2005*		2006*		2007*	
	Projects	$ Millions	Projects	$ Millions	Projects	$ Millions	Projects	$ Millions
Central	10	550	6	391	5	595	8	333
Midwest	3	90	6	103	3	51	1	30
Northeast	8	543	5	74	10	1,038	8	599
Southeast	3	136	2	240	3	34	10	428
Southwest	11	465	13	539	14	955	5	338
West	5	242	1	31	1	50	4	1,429
U.S. Total	**40**	**2,026**	**33**	**1,378**	**36**	**2,723**	**36**	**3,157**

* *Estimates*

Source: Energy Information Administration; Powers, Michael E. Demand for Gas Will Drive Big Capital Investment. ENR July 18, 2005

cleaner fuel, this gas will have to be transported to other locations, which will again demand the construction of infrastructure. By 2007, clean-burning, natural-gas fired plants are expected to surpass nuclear power in U.S. utilization. Many of these units will be introduced to help meet the demands of urban renewal as housing and commercial buildings are refurbished. Natural-gas fired power production requires the building of infrastructure to get the gas to the facility, which is frequently located close to where the power demand originates. These lines are high pressure, highly engineered, expensive to construct, and frequently in urban settings. The opportunity for utility contractors to demonstrate skills in successfully completing this type of construction will offer both margin and revenue growth potential over the next five years.

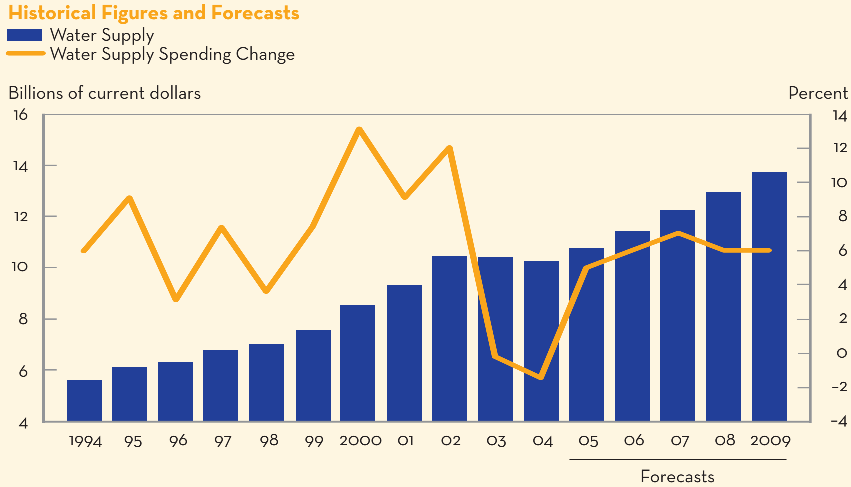
WATER SUPPLY FORECAST

Aging and inferior infrastructure, environmental regulations, and rapid population increases are the key drivers of the water supply market. The Environmental Protection Agency (EPA) predicts $277 billion is necessary over the next 20 years to repair or replace aging pipes and related equipment. *The Clean Water and Drinking Water Infrastructure Gap Analysis* describes a potential 20-year funding gap for drinking water capital and operations and maintenance costs, ranging from $45 billion to $263 billion, with capital needs alone reaching $161 billion. Proposed cuts by the Bush administration only worsen the outlook for states to keep up with the water infrastructure and Clean Water Act requirements. Nationwide, the cost of water has increased between 100% and 400% in the last 10 years depending on the region of the country. This increase in water rates is directly related to serving customers farther and farther out on the system, and as water usage grows, even relatively wet areas of the country on the Eastern Seaboard and Northeast are facing challenges. The predictions sound dire, but this market continues to demonstrate modest growth rates. The demand for construction far exceeds the financial capacity to fund it, and until this issue is resolved, there are no dramatic growth projections in this type of construction.

FMI forecasts growth of 6% in 2006 and 7% in 2007 for the water-related markets described in Exhibit 4. Total forecasted water supply construction will total $10.8 billion in 2005 and will increase to $13.7 billion by 2009. The passage of

Exhibit 4

Water Supply Construction Put-in-Place Historical Figures and Forecasts

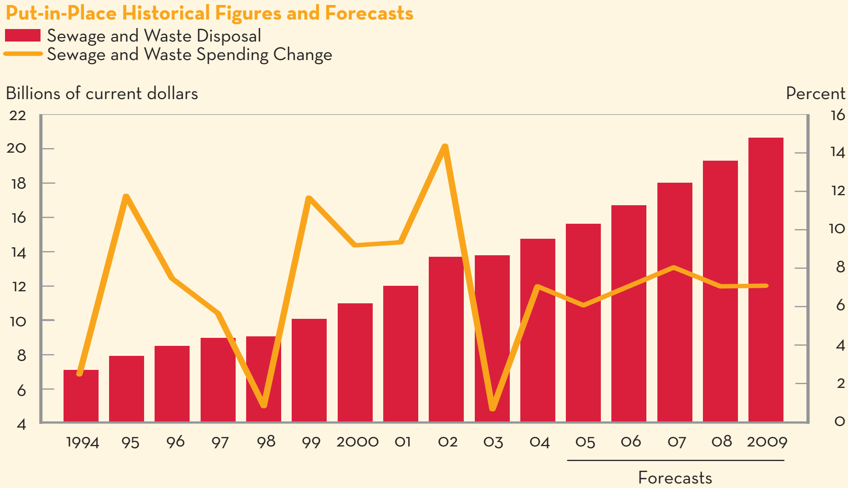


Source: Building permits, construction put-in-place, and trade sources. FMI prepared forecasts for 2005-09

adequate funding at the federal level and a mechanism to fund this infrastructure at the local level is desperately needed to update the water and wastewater infrastructure across the nation. The Bush administration has proposed a 33% reduction in federal funding for fiscal year 2006 reducing this figure to $850 million. This funding level is widely seen as inadequate for the estimated needs of $10 to $20 billion forecasted to upgrade existing infrastructure over the next 20 years and stands at approximately 10% of the total estimated national requirement.

Across the nation, there are 75,000 national drinking water systems serving 297 million people in the U.S. It is estimated that an $11 billion shortfall exists in order to replace existing water systems to reach federal water regulation requirements. The Senate Environmental and Public Works Committee Water Infrastructure Financing Act of 2002 provided funding for the drinking water through a State Revolving Fund (SRF) of approximately $15 billion. Unfortunately, only 8% to 10% of the funding has been distributed to large metropolitan systems that have the oldest systems in the greatest need of upgrade. Utility construction spending growth will continue to fall below demand due to this lack of funding, but the sourcing of work and the buyers of services will remain highly fragmented and locally influenced. Small- to medium-sized contractors will remain highly competitive for this type of work and only lose this positioning when large projects are undertaken that stretch the internal capacity for these utilities to manage it or that stretch the local community to supply the necessary construction labor or expertise.

Exhibit 5
Sewage and Water Disposal Construction Put-in-Place Historical Figures and Forecasts



Source: Building permits, construction put-in-place, and trade sources. FMI prepared forecasts for 2005-09

SEWAGE & WASTE DISPOSAL FORECAST

Despite challenges, including increased regulation and aging infrastructure, the sewage and waste disposal segment will see growth of 7% in 2006 and 8% in 2007. (See Exhibit 5.) The continued driver that will result in the prioritization of potential work in this segment will include the Total Maximum Daily Loading (TMDL) established and updated by the EPA. The TMDL measures the amount of pollutants that these aging systems can expel into clean bodies of water and will continue to influence the prioritization of work. The Clean Water State Revolving Fund (CWSRF) is just one financial resource that will fund projects implementing or amending their TMDL. Nationally, the CWSRF issued more than 9,000 loans since its inception in 1988 and has in excess of $34 billion in assets. The CWSRF currently supports funding of more than $3 billion worth of water-quality projects annually.

In 2005, FMI estimates approximately $15.5 billion was spent on put-in-place construction, which will rise to between 7% and 8% per year until reaching $20.6 billion in 2009. This growth in spending, while healthy, is inadequate. Some findings from other industry research include:

- The EPA estimates demonstrate a national investment need of more than $390 billion over the next 20 years to replace existing systems and build new systems to meet growing demand.
- The Water Infrastructure Network, a group of water and wastewater providers and engineers, estimate an annual investment need of $12 billion for all sewer treatment facilities.
- An EPA gap analysis describes a growing annual funding gap for wastewater between $13 billion and $37 billion.
- A similar Congressional Budget Office (CBO) gap analysis also describes a similar capital construction demand range.

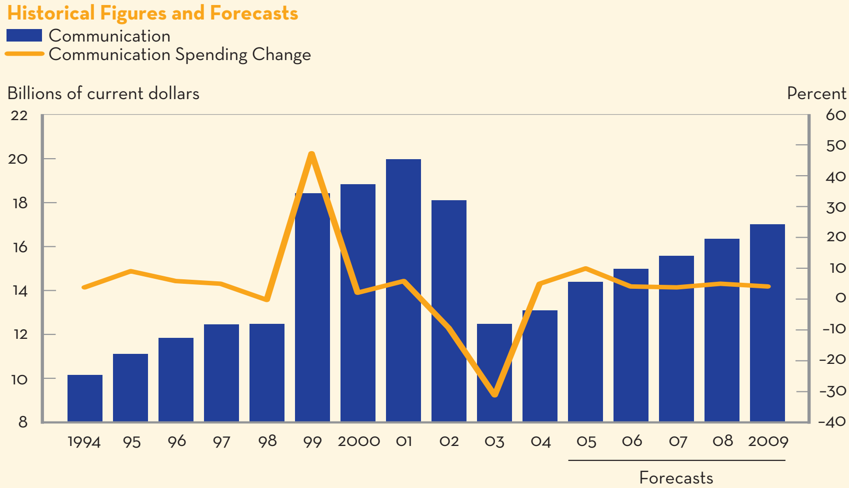
All research conducted supports a conclusion of significant capital spending shortfall vs. demand. Federal funding from 1995 to 2004, which makes up less than 10% of the total spend was steady, ranging between $1.2 and $1.35 billion annually. Unfortunately, 2005 saw the first federal wastewater-funding cut in eight years, resulting in only $1.1 billion being made available. The current administration has proposed further cuts in spending for fiscal year 2006 with the current appropriation calling for only $730 million, a reduction of 33% from fiscal year 2005.

TELECOMMUNICATIONS

The telecommunications market has experienced larger swings in construction spending than nearly any market. These swings have ranged from a 47% increase in one year to a -31% reduction in another year. The dramatic reduction between 2002 and 2003 left many contractors poorly positioned with excessive equipment and other resources that had predominately been employed in telecommunications construction. There will be no return to the glory days, but modest growth is fueling more optimism in this market segment. FMI's forecasts in Exhibit 6 describe telecommunications construction spending growing at 4% a year from 2006 through 2009. In 2005, construction spending of $14.5 billion shows an increase of 10% from the prior year. Spending will remain relatively flat through 2009, reaching $17 billion.

Exhibit 6

Communication Construction Put-in-Place Historical Figures and Forecasts



Source: Building permits, construction put-in-place, and trade sources. FMI prepared forecasts for 2005-09

The competition for Fiber to the Home and the provision of broadband services will continue to put debt-sensitive Baby Bell companies in a challenging position. Competition from incumbents, such as Verizon and Sprint will continue. Cable companies such as Comcast will remain strong with the integration of Voice over Internet Protocol (VoIP) phone service. As of third quarter 2004, 2.7 million people subscribed to cable telephone services. By 2010, it is expected that 11.5 million people will subscribe to VoIP services. This growth has historically pushed more spending, resulting in more than $100 billion being spent since 1996 to turn cable's hybrid fiber-coaxial infrastructure into a robust service providing Video-On Demand, digital cable, VoIP phone service, and high-speed internet access. In November 2004, the Federal Communications Commission (FCC) found that VoIP was not subject to traditional state regulation. Cable companies now face different regulatory and taxation rules from phone companies, which results in different competitive advantage for these firms who are now competing against each other. This has served as a significant threat to regional telephone companies' phone service offerings and customer base, especially as cable technologies are much faster than DSL technology services provided by many telephone companies. The bundled services from cable companies are better positioned to leverage the use of phone, internet, cable, and e-mail into a single system and a single bill.[4]

Wi-Fi, fixed wireless, and satellite technologies will continue to gain market share and visibility as demand for wireless-communication access expands in use. Wireless communication use in the U.S. has increased from 55.3 million subscribers in 1997 to 194 million subscribers in 2005. Today, more than half of the U.S. population has access to wireless communication services. Fixed-line voice telephone service is still the predominant form of voice communication due to quality and dependability. Yet, competition and quality of wireless and VoIP technology is rapidly growing at highly competitive rates. Although growth in wireless and VoIP application has accelerated in the last year, total market share over the long-term may stall due to quality and reliability perceptions.[5]

Wireless communication use in the U.S. has increased from 55.3 million subscribers in 1997 to 194 million subscribers in 2005.

Despite the growth in users, the long-term outlook is cloudy for large capital investment in traditional cable or fiber-based communications infrastructure. Future capital investments will be directed toward non-construction spending such as hardware and software and upgrades rather than complete systems upgrades. Additionally, new technology will be used to further leverage current infrastructure to keep up with the use of web and office applications on handheld devices, requiring service providers to update technology to process large data exchanges. Contractors providing traditional construction services to this market should look at their local marketplace for indicators of where this type of construction is headed as it will be different for different regions of the country.

CONCLUSIONS AND IMPLICATIONS

Population growth and aging infrastructure will drive opportunities for utility contractors operating in the segments of power, water/wastewater and sewer, and telecommunications. Demographic growth trends are one of the main drivers of this type of construction, and all contractors in these segments should clearly understand the long-term implications to their business. Demand for construction services in these markets is unparalleled, yet funding challenges will restrict the amount of capital spending put-in-place. Overall, this entire market is expected to exhibit reasonable growth with geographic pockets of activity demonstrating high growth. In addition, there will be more opportunities for construction service providers to offer value-added services and escape the highly competitive bid markets, which are all too common for this type of construction. One example that has the potential for the supply of value-added services by contractors is the use of alternative financing vehicles like public-private partnerships. These vehicles allow local municipalities to secure financing for infrastructure without the traditional requirements to sell bonds or raise taxes. These efforts will introduce a different procurement approach for construction services due to the nature of the financing for infrastructure projects. Contractors offering services to various types of utilities are positioned in a market poised for growth, with significant untapped demand for construction services, and in a market where local and medium-sized contractors are highly competitive. ■

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[1] National Cable & Telecommunications Association (NCTA), *2004 Year-End Industry Overview*, pg 4. Downloaded from the WWW on August 5, 2005. http://www.ncta.com/pdf_files/NCTAYearEndOverview04.pdf

[2] RedNova/Knight Ridder. *Energy Bill Passed; Measure to Have Little Effect on Gas Prices*. August 1, 2005 http://www.rednova.com/news/science/193569/correction_energy_bill_passed_measure_to_have_little_effect_on/

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Disaster Preparation and Recovery

While no one can predict the magnitude or timing of an event, contractors should engage in proper planning during preparation and sound execution in recovery.

By Gregg M. Schoppman

The devastation left in the wake of the increased frequency and intensity of hurricanes and severe tropical weather targeting the Southeastern United States has had an indelible effect on the psyche of the region's inhabitants as well as an equally astonishing impact to the nation's economic state. More importantly, the effect of natural phenomena such as Hurricane Katrina provide a curious insight into the United States' general state of readiness and particularly private industry's ability to plan, react, and respond to other types of disaster scenarios.

Tragic events such as 9/11 serve as an ominous reminder that fabricated terror plots lack the predictability of menacing tropical weather and demonstrate the need for sound planning and execution. Terms such as "hunker down" and "Ground Zero" occupy the vernacular of our country's populace. The human element often occupies center stage; their suffering and hardship are top stories in every media outlet. The effect on the business community is substantial, as well. The staggering figures associated with property damage pale in comparison to the respective costs of recovery and reconstruction. While a pending boom to the construction industry in the impacted areas might be expected, industries and businesses carefully consider their options in rebuilding as part of their long-term strategy. Businesses that choose to rebuild should develop a new perspective on preparing for and reacting to potential disasters in the future.

Construction firms are not immune to effects of disasters.

Construction firms are not immune to effects of disasters. First, firms must consider the psychological and economic impacts on its associates. In many cases, associates are displaced or temporarily relocated. In extreme cases, they return to damaged or destroyed homes, making the recovery process even more challenging. Second, firms must contend with their own property losses. Offices and all of the associated components such as computers, furniture, and critical legal documents are often unrecoverable after a deluge of severe winds and flooding. Furthermore, expensive assets such as equipment and materials integral to the construction process are also rendered useless. Finally, the projects, in varied degrees of construction, are often decimated. The effects of water and wind damage on an incomplete structure are amplified. Builder's risk insurance provides some level of protection to contractors and owners. However, in many coastal or low-lying areas, builder's risk carries a steep premium that many contractors and owners are unable to absorb. Regardless of the event, dealing with such tragedy is not something to be taken lightly nor is it something that can be rectified in short order. Dealing with disaster scenarios requires two fundamental phases: Preparation and Recovery.

A STRATEGIC PERSPECTIVE ON DISASTER PLANNING

Catastrophic events as a whole rarely offer the luxury of comprehensive planning; the uncertainty surrounding their origination drive fear and initial chaos. In the case of hurricanes, victims are granted a small window of opportunity, mainly used for minimal preparation and evacuation. Tornadoes, landslides, earthquakes, and terror attacks all strike with little warning and their swath of destruction is highly unpredictable. Often, victims' level of preparedness can be inversely correlated with the fatality rate and property loss. Disaster readiness does not begin during the event. Preparation is a carefully thought-out component of a firm's strategic plan. Regardless of whether a contractor is in an earthquake- or a hurricane-prone geographic region, a contractor should consider how it would operate in the event of a disaster as well as how it would recover.

It is unfortunate that an article of this nature must incorporate how a firm would contend with a terrorist attack amongst the spectrum of potential risks in an already risky industry. Yet, contractors that regularly perform work in federal buildings and military installations as well as those who perform work internationally now must incorporate a disaster readiness plan into their corporate strategy. As we look at the ruins left after the destruction of the Murrah Federal Building in Oklahoma, the World Trade Center, and most recently, the Superdome in New Orleans, engineers continue to refine their designs and incorporate stronger and more advanced materials to compensate for extraordinary forces outside of normal consideration. For example, following Hurricane Andrew, Florida building officials examined and revised the building code to reflect stricter guidelines associated with building envelope designs (i.e. wind loads, uplift forces, etc.) While building codes are constantly refined to protect structures and its inhabitants after projects are complete, there are few guidelines to help contractors in appropriate disaster readiness planning and protection of uncompleted projects.

Disaster planning, in general, has added another dimension to a contractor's ability to win new work and be profitable. Pricing work requires careful consideration and appropriate risk analyses. In much the same fashion that insurance companies assess risk in their customers, construction firms need to develop sound practices surrounding the evaluation of projects in disaster-prone areas and those susceptible to being targeted for potential attack. In many cases, firms that are native to hurricane/earthquake activity and firms that operate in highly sensitive government areas understand these risks. Firms that do not carefully develop an appropriate margin strategy according to seasonality and risk exposure often experience profit erosion due to falling productivity and unexpected material and equipment losses. Additionally, new firms entering foreign markets and geographic regions tend to overlook these threats out of ignorance. Risk analysis is an integral part of the bid process in contracting organizations seeking significant profit margins.

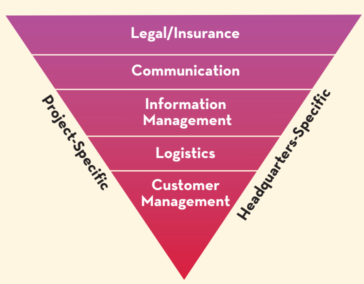
In much the same fashion that insurance companies assess risk in their customers, construction firms need to develop sound practices surrounding the evaluation of projects in disaster-prone areas and those susceptible to being targeted for potential attack.

All too often, the concept of disaster readiness comes up after an event has already occurred. While no contracting firm can afford to manage their business consumed with fear, incorporation of a solid disaster readiness plan into the organization's fabric will avoid dangerous guesswork at the critical time during and immediately after an event. Exhibit 1 illustrates the fundamental framework for developing a disaster readiness plan.

As noted, Preparation and Recovery are the two fundamental phases of a disaster recovery plan. Each of these phases provides the guidelines for project-specific disaster needs as well as those needs specific to the firm's main headquarters. Clear processes will help dictate how a firm manages key business units in the event of a disaster.

Exhibit 1
Fundamental Disaster Framework

Exhibit 2
Preparation Elements



PREPARATION

As with any good construction project, success in adequately dealing with an emergency can be anticipated in the level of planning and preparation. Within the scope of preparation, several areas must be considered that have a significant affect on the business. Furthermore, establishing a process flow for the preparation process allows the most time-sensitive issues to be addressed first. Such a process flow defines the way the remaining steps of the process will be executed. Critical areas to be considered are illustrated in Exhibit 2.

Legal/Insurance Analysis

A firm should always have a clear understanding of its liabilities. Projects will vary by their terms and conditions as well as the responsibilities as it relates to management during crises. In addition to senior leadership's knowledge of the contracts, project managers and field supervision should also understand their firm's exposure. Managers should understand the fundamentals of the firm's policy as well as anything specific to their project such as:

- Deductibles and builder's risk/general liabilities limitations
- Customer responsibilities and obligations
- Contractor responsibilities and obligations
- Owner Disaster Readiness Plans instituted and generated by the customer
- Site-specific conditions and potential hazards (i.e. floodplain, coastal wind, erosion susceptibility, etc.)
- Security obligations and liabilities.

Similarly, a firm should keep current copies of all corporate policies and lease agreements. More often than not, policy discrepancies are discovered after an event has occurred. For example, many contractors have discovered lapses in their general liability coverage as well as their builder's risk policy as hurricanes lurk offshore. In most cases, insurance firms will not address these issues within a certain window of the storm reaching landfall. This exclusion may have the effect of placing the financial onus of incomplete construction projects on the contractor. Sound preventive maintenance is provided through examining both a firm's general liability on a monthly basis and an individual project's terms periodically.

Communications/Responsibilities

Before a firm can appropriately respond to an emergency, clear lines of communication and responsibility should be established. It is important that a firm be able to answer specific questions about their projects and headquarters:

- In the event of a disaster, who is the gatekeeper for all communication? Through whom should communications be routed?
- How will communications be conducted if traditional forms of communication (i.e. telephone, e-mail, etc.) are inoperable?
- Who will be the responsible party for each job site in transmitting critical information about evacuation, site preparation, etc.?
- Who will declare a site or office "safe" after the event has passed?
- Who will be responsible for each department's or site's critical information and documentation?
- Once the event has passed, where will the firm's teams meet and at what frequency?

The fundamental rationale behind this line of questioning is to answer the questions of "What/Where/How/When will we operate during and after the event?" By developing a list of questions such as these, the firm can develop associated processes. In all cases, it is important to emphasize that the care and well-being of the firm's associates and families should be paramount. This includes the emotional well-being of the people insofar as possible. By instilling this level of proactive planning in the preparation process, all associates can react to their personal needs first and consult the disaster readiness plan to eliminate any guesswork.

Information Management

Construction firms are a veritable storehouse of plans, specifications, as-builts, permits, and contracts. In addition to the extreme amounts of "paper," electronic media provides yet another form of project documentation. However, both are equally susceptible to wind, water, and fire damage. Both, if lost, present the firm with an enormous liability. A firm should examine their exposure prior to an event as well as during a predictable event through reflection such as this:

Preventive Discussion Before and During an Event:

- Are files centrally organized in a room devoid of windows and potential hazards?
- Are electronic files and servers stationed in a central point within the main office?
- How are the job trailers organized? What critical information is stored on location that if lost, would be a liability to the firm?
- Has consideration been given to remote storage and safekeeping?
- Where does electronic file redundancy exist? Are such records exposed to the same natural disasters as the original files?

During a Predicted Event:

- Can all laptops and tape drives/ bulk storage devices be stored remotely or by their user in a safe location?
- Are mandatory backups made of all personal electronic files, with remote redundancy of the backups?
- Have steps been taken to protect critical documents and equipment in case there is a breach (i.e. sandbags, tarps, etc.)?
- Who will be responsible for all important documents that can be readily transported safely (i.e. licenses, policies, open contracts, lease agreements, pertinent financial records, etc.)?
- After an event, what is the plan for re-establishing office communications and other infrastructure?

Property is secondary to every associate's life and well-being. In many cases, routine procedures such as backing up office files provide added security. Ultimately, it is important to examine the process governing internal document control to discover areas of exposure.

Logistics

Not every firm has an abundance of mission-critical equipment and materials. Even if the firm's fleet consists of several vehicles for field superintendents, it is important to establish a plan for their usage before, during, and after an event. Contractors with large equipment fleets need to ask themselves several key questions, including:

- In the event of a disaster, is the equipment best stored at the home office, on a specific job site, or spread across several locations to limit liability?
- What methods are available to move a large fleet within a short period of time?
- Who will be responsible for all equipment maintenance and repair during periods of extended usage or dormancy during an event?
- What logistical considerations should be given to accomplishing maintenance and repairs under unusual circumstances?

Material intensive firms such as mechanical and electrical contractors need to conduct a similar review of their inventory and develop a strategy for protecting it in the event of a disaster. While many materials may fall in the category of "just in time" and be received directly from suppliers, others such as wire, sheet metal, copper, conduit, and small devices are typically stored in-house. Often material warehouses lack the security and structural integrity of a hardened facility. Does this present a liability to the firm? What happens if a disaster such as an earthquake strikes the main office/warehouse but not the job site? How will the job be furnished with critical materials to maintain project schedules?

Similar discussions should occur on every job site that is in a "high risk" area. Specific procedures should become routine at the end of each day and week, providing some level of predictability. A firm heavily engaged in vertical construction should have procedures governing cranes, buck hoists, and trash chutes. A site contractor should have procedures to protect its fleet as well as use it to tactically protect a site from flooding, erosion, and wind-borne damage. While rental companies may have their own rules and guidelines for governing protection and use of their assets, these rules exist to protect their own interests. The goal of the logistics element of the preparation phase is to protect the firm's assets and enable quick mobilization in the recovery phase.

Specific procedures should become routine at the end of each day and week, providing some level of predictability.

In addition to proper equipment management, job sites should also implement strict guidelines for job-site cleanliness and general storage. Storm events characterized by strong winds have the propensity to hurl small and large missiles, creating an even more dangerous situation. Missiles in the form of lumber, small tools, and even temporary sanitation structures only exacerbate damage caused by high-energy events such as wind and explosions. Most contractors have a regular job-site cleanliness policy, but do these procedures address such questions as:

- How are materials stored on site? Are materials bundled to prevent their use as missiles?
- If an unplanned event were to occur, what would be the damage from small and large missiles?
- Does each job site have a specific policy governing the frequency of cleaning?
- Is someone responsible for inspecting stored materials and the integrity of job-site assets?
- How are temporary devices such as trailers, dumpsters, and sanitary facilities located? On weekends or non-working time, are such items stored and protected?

Lastly, the strategic placement of equipment also serves an interest above simply protecting investments. Locating equipment in proximity to customers and job sites allows for quick mobilization to job sites and use in recovery/restoration operations. Opportunistic thinking after an event provides extraordinary business development potential, when performed ethically and with dignity.

Incorporating regular discussion of disaster readiness in progress meetings demonstrates proactive project management. In addition, helping to shape a customer's expectations bolsters their confidence in your firm's ability to meet a challenge.

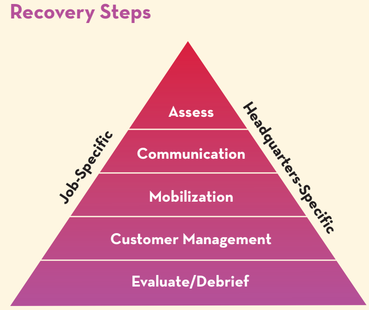
Customer Management

Preparation would be incomplete without consideration of the firm's customers. Having addressed all the internal elements of the disaster preparation plan, a firm can engage their customers' needs. Incorporating regular discussion of disaster readiness in progress meetings demonstrates proactive project management. In addition, helping to shape a customer's expectations bolsters their confidence in your firm's ability to meet a challenge. Furthermore, a contractor's use of their abilities and equipment to help a customer save their own property is not only considerate but an excellent marketing device. Many customers and clients lack the facilities to prepare their site effectively for an impending disaster. By being prepared internally through the elements detailed above, a contractor has the time to assist and create a positive image and ultimately a satisfied customer.

RECOVERY

The time after an event has occurred is characterized by chaos and disorder. Emotions run high and decisions are made spontaneously to adjust in a dynamic environment. Preparation is similar to a fire drill — the event may never occur, but careful planning assures a firm has an established routine. Recovery is measured by the effectiveness and execution of the preparation elements. Regardless of the plan, there is a certain level of unpredictability associated with a disaster. Depending on the magnitude of the event, each element of the plan should be dynamic enough to compensate for unknown or unforeseen conditions. After the event passes, it is important to begin the recovery process expeditiously. Exhibit 3 depicts the chronological steps involved in the recovery process.

Exhibit 3
Recovery Steps



Assessment

After a disaster event has occurred, it is important to determine the level of damage sustained as well as its impact on internal and external operations. Electricity and water may not be in service. Transportation routes may be blocked or damaged. Associates may be displaced or relocated. Assessment provides a framework for moving forward through the recovery phase:

- Are all employees and their families safe and accounted for?
- What is the level of damage at the main office? Are utilities operable? What contingencies are in place if utilities and traditional communication lines are inoperable?
- Should the firm mobilize into separate satellite offices?
- What is the state of each job site?
- How should the firm sequence the recovery to best accommodate the associates, the firm, and its customers?

The firm should begin documenting the damage associated with any disaster. Assuming an area is safe and cleared by applicable emergency personnel, the contractor should document the extent of the damage through written reports, photographs, and video. This will not only assist insurance officials in their processing of claims, but it will also document the state of the firm's projects. After normal operations are resumed, there will be expectations about a project's schedule and budget. By creating a storyboard of the disaster and its impact, a firm avoids challenging discussions and often cumbersome litigious situations arising from schedule delays and budget overruns. When documenting a disaster area consider the following:

- What is the extent of damage to the site?
- What is the damage to materials stored on site?
- What is the extent of the damage to the potential transportation routes to the site?
- Is there damage to areas that are not visible to the human eye? Have there been breaches in the building shell that could allow for mold propagation and other organic growth? What is the extent of visible mold intrusion throughout the remaining structure?
- What is the damage to materials off site, in the possession of the contractor and subcontractors/suppliers?
- When reviewing the CPM schedule after the disaster, was consideration given to adjusting the schedule for the disaster event delay as well as to the remobilization, demolition, and reconstruction?
- What necessary steps will be required by the customer's insurance and financial entities before construction can recommence?

Communication is taken for granted in normal day-to-day operations, but its loss is compounded by the heavy reliance we place upon the Internet, faxes, and two-way communication.

Communication

In many situations, the communication and assessment phase can be conducted in parallel. The premise behind the communications element is to determine the best course of reestablishing channels internally and externally. Phones are often inoperable after such disasters as hurricanes and earthquakes. Two-way communication channels may be operating but are often overloaded by emergency-personnel use. How will the firm execute the recovery plan? Is the communication plan developed in the preparation phase feasible under the current conditions? Is the point of contact accessible, or is a contingency plan necessary? All of these questions should be considered in the communication and assessment phase. Communication is taken for granted in normal day-to-day operations, but its loss is compounded by the heavy reliance we place upon the Internet, faxes, and two-way communication. While the initial communication channels may be rudimentary, quick use of what is available helps create a sense of normalcy for the firm.

It is also important to establish communications with other vital agencies, including the firm's insurance company, bonding company, and other financial institutions that are critical to the firm. One person should be charged with maintaining a current list of contacts and initiating communication as soon as possible. With the assessment complete, the firms can expedite the arduous process of processing claims and ultimately reconstructing projects and offices.

Mobilization

Once areas have been deemed safe, it is important to remobilize quickly and efficiently. Remobilization provides additional challenges, including:

- How will equipment be transported to specific locations?
- Is the current equipment being used correctly for such operations as demolition?
- What additional equipment will be required? Who will furnish this equipment?
- What are the sourcing options for fuels, lubrications, and other vital fluids?
- How will domestic water, power, and sanitary facilities be provided?
- What subcontractors and suppliers will be most affected by the event? Are certain subcontractors and suppliers unable to meet their contractual obligations?

After examining the damage wrought by Hurricanes Andrew and Katrina, many businesses, regardless of the industry, were incapable of reopening, voluntarily or involuntarily. Once again, mobilization, much like the other elements of the disaster recovery plan centers around a precious resource — a firm's people. Without people, businesses cannot operate, especially trade contractors who are highly labor intensive. Therefore, it is necessary to examine the plight of the individual employee and solve labor dilemmas creatively. In short, individuals are motivated by their immediate needs and current state. In the aftermath of a disaster, the firm's goals and interests are often secondary to finding food and shelter. In what capacity can the firm assist its employees to help drive internal recovery? Many firms gain loyalty and develop a familial atmosphere more from what they do in times of need rather than what they do during everyday operations.

Customer Management

Marketing and customer management are often not considered immediately after an event. Fear of appearing too opportunistic or being viewed as unethical and greedy slows response to customers. However, addressing customers' needs after a firm has organized itself demonstrates a continued proactive customer-service instinct. Below are sample questions that demonstrate an affinity for the customers' interests:

- In what capacity can the firm help the customers' businesses? What assets are capable of helping a customer?
- What format or delivery mechanism will provide the greatest value and inform the customer of the project's current state?
- However unorthodox, what can the firm do to facilitate expeditious recovery for the customer?

Keep in mind, as customers focus inward on their associates and business, their focus is drawn away from future construction opportunities. By assisting them in their operations in the short-term, contractors may influence customers' planning and operation in the long-term. Pundits would argue there is little value in managing customers who commoditize the selection of contractors. Regardless of the contractual arrangements, assisting a customer during a time of need naturally helps create stronger relationships. Gracious expressions of aid and generosity are not often forgotten and may even generate loyalty amongst the most hardened customers.

Evaluate/Debrief

With the passing of the event and the restoration in progress, examine what successes and failures occurred because of the firm's disaster readiness plan. Within the randomness and volatile environment a disaster creates, a plan's strength and integrity are tested. Because of the nature of a disaster, firms are rarely granted trial runs. Organizations such as FEMA and NOAA routinely scrutinize their performance in an effort to improve processes and procedures in the event of another catastrophic event.

Conducting a post-mortem on the firm's preparation, recovery planning, and responsiveness is similar to analyzing the firm's closed projects. Below is a brief series of questions used to determine the effectiveness of the firm's disaster readiness plan execution and their subsequent recovery:

- How did the associates fair? Were there specific scenarios among the associates of the firm from which the firm could learn?
- In general, what are the "lessons learned" about the firm's current process and procedures with respect to disaster preparation and recovery?
- Were job sites effectively prepared? Was the level of damage limited by the level of the preparation?
- Were documents and other information systems safe and undamaged?
- Did the communication process work? What were the impediments?
- What was the impact to applicable insurance and builder's risk policies? Will adjustments need to be made to future contracts, pricing, and bids?
- What effect did the event have on the labor supply in the area?
- What are the short- and long-term effects to transportation routes, material sourcing, subcontractor workloads, etc.?
- What technical insight was drawn from the impact to worksites and associated temporary and permanent construction?
- What are the short- and long-term effects on customers and future work?
- What critical decisions need to be made with respect to continued operations in disaster-prone markets and areas?

The final question may answer everything for a contractor. Many firms are lured to areas because of the perceived abundance of construction opportunities. For example, contractors have long viewed the coastline of Florida as a limitless pipeline of work. However, residents and contractors alike have seen the calamitous and ruinous effects of exposure to devastating weather phenomena. Ultimately, the firm must question whether it cannot only absorb the effects of such exposure on a frequent basis but also continue to be profitable before, during, and after any type of catastrophic event.

The construction industry deals daily with many challenges rarely seen in other industries.

CONCLUSION

The construction industry deals daily with many challenges rarely seen in other industries. Sales and operations can be adversely affected by any number of factors external to the firm that few other businesses encounter. The effects of disasters such as earthquakes, hurricanes, and terrorist attacks cast an ominous shadow over individuals and businesses. Scientists, researchers, and investigators all seek answers to why an event occurs, what motivates such events, and how loss of life and property can be prevented. While no one can predict the magnitude or timing of an event, contractors should engage in proper planning during preparation and sound execution in recovery to provide firms some level of security in an insecure world. ■

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Peer Group Stories Reveal Lessons Learned

In this article, five company Presidents/CEOs share their experience and success with peer groups.

By Rick Dutmer

Peer groups are an organized assembly of non-competing like firms. General; mechanical; electrical; specialty; heavy/highway and civil contractors; site work, underground, and utility contractors; and integrated highway contractors meet with other contracting companies of their relative size, type of work, and number of employees, markets served.

These groups provide a unique forum for construction industry leaders to compare notes on techniques of managing similar organizations. Members learn new ideas and identify opportunities for efficiency. These ideas frequently result in significant dollar savings to the member.

Their experiences reveal the significant benefit these groups often have.

JOE MCKEE, PRESIDENT, PARIC CORPORATION

Peer groups are a great way to benchmark Paric — a chance to see what is actually possible when we dream big. We can look at CFMA statistics all day, but when we heard a peer in our same situation had reached certain goals, we realized our goals might be more attainable than we originally thought. We can relay that enthusiasm and a real life company example to our team. The peer group has taught me, “Don’t be afraid to dream big.”

My peer group acts as a board of directors to Paric. New ideas from the members have allowed Paric to improve our processes, thereby increasing margins.

In the audit process, the peer group asked me certain questions about the closing of a branch office, which led me to face the reality of the situation. I closed that branch office and still believe it was a necessary and financially wise decision.

BRAD DIMEO, PRESIDENT, DIMEO AND STEVE RUTLEDGE, EXECUTIVE VICE PRESIDENT, DIMEO

The benefits of the peer group have been tremendous for our organization as a whole and for us individually. For years, we felt that we needed to broaden our industry perspective since we only knew the Dimeo way. As we all know, this industry is not one to share "trade secrets" with the competition so there certainly were no opportunities available in our backyard to support growing our knowledge base. The group definitely operates with a mindset that everything within one's organization is open to all other members. This includes everything from detailed company financials to employee compensation; from management systems to human resource procedures; and everything and anything else, that one member can share with the group to help enhance the other's business operations.

If one embraces the concept that no one company does everything right, but a group of successful companies collectively do a lot of things right, the peer group is an excellent environment to share ideas among members that will enhance the business operations of each member of the group.

If one embraces the concept that no one company does everything right, but a group of successful companies collectively do a lot of things right, the peer group is an excellent environment to share ideas among members that will enhance the business operations of each member of the group.

Dimeo has specifically benefited from our participation in our peer group over the past two years by:

- The opportunity to gain great insight into how to successfully manage our way through a large revenue growth curve, which has included a significant influx of new hires.
- Exposure to a great estimating system — On Screen Takeoff — which has enhanced our preconstruction services by greatly improving our communication methods. OST has also served as a big "hook" in presentations that has helped to convince owners that we bring all the

tools to provide greater value to their project.
- Providing input into the best means to orient new employees into the organization. It rings a lot clearer when you hear a peer tell you their experience and where they fell short, and it allows you to benefit directly from their lessons learned.
- Understanding the detailed organizational structure of each peer and how we can reset our organization to more effectively manage our operation.
- Motivating us to create our strategic plan for the future. A number of our peers strongly advocated the benefits of the process and identified this process as a must-do action item.
- Gaining a much better understanding of employee compensation structures and the level of importance that a firm must hold in its key employees. We have moved forward with developing a key employee deferred compensation plan that should assist in long-term retention of our key players.

Our group of seven successful firms provides the environment to share how certain aspects of the business are being managed, and out of this, each individual firm comes away with a listing of tried and true best practices to enhance their business operation.

Additionally, each peer is able to provide insight into their means and methods of identifying opportunities to improve the bottom line. These items include things like Subguard.

The audit process that is currently ongoing by our peer group is extremely beneficial in two very different ways. First, it is a tremendous opportunity for a firm to have multiple CEOs/COOs/Presidents looking deeply into the inner workings of your organization and identifying the strengths and weaknesses that they see. Second, as you participate in the audit of a peer's company it makes you think about your operation from a completely different perspective.

The exposure we've had through our peer group with other Owners/CEO/COOs brings tremendous exposure and insight into leadership, management styles, and ownership issues that supports long-term planning initiatives.

While it is difficult to quantify in dollars the value that we have realized from the peer group, it is easy to say that we are a much better organization as a result of our participation in our group. We have a much better perspective on the challenges that everyone faces day-to-day in this business, and we have been drawn out of our little box as result of the insight that we have been provided into the inner workings of some very successful organizations.

In my opinion, there is no better way to improve your organization than to participate in a national peer group if you are a regionally-based construction company. Without the exposure you gain from interacting with individuals that are living the same everyday challenges you are, you are limiting your organization's growth and long-term improvement. It is just clearer when you are hearing it from a peer vs. reading it in a book.

JEFF FOREST, VICE PRESIDENT/CHIEF OPERATING OFFICER, WINTER PARK CONSTRUCTION

Winter Park Construction (WPC) has benefited from our participation in a peer group in the following ways:

- One of the most beneficial outcomes from being involved in a peer group is the relationships that I have developed with the other members. The value of these relationships comes from not only the social contact but from the ability to combine the knowledge of six other companies to help create a better business environment for WPC as well as sharing the knowledge gained with other contractors to improve our industry. The trust and friendships that have developed allow for an open, honest, and free-flowing conduit of information.
- The information gleamed from hearing the other members talk about their business issues, whether it be financial, marketing, or operational matters, and the solutions they developed from the group's input, are invaluable. There is a saying that goes something like, "We will not live long enough to make all the mistakes so we might as well learn from other people's mistakes." The peer group allows me to do this. Sharing not only our troubles but our best practices, successes, and celebrations has been priceless.
- The personal growth that comes from listening and sharing best practices is another key benefit and immensely valuable. Having the ability to share ideas relating to the many challenges associated with this business and to tap the experience of Presidents, COOs, and other senior staff of some of the top companies in the industry has allowed me to improve my skills as a business person beyond measure.
- The measurable benefits of the peer group are felt at the financial level. The sharing of insurance, accounting, estimating, human resources, and operational knowledge has easily led to tens of thousands in bottom-line savings. The most current example deals with savings in our general liability insurance and insurance premiums from information that allowed us to better negotiate our policies.
- The sharing of staffing models, job descriptions, and organizational structures has changed the way we staff our projects. Most recently, we added the project engineer position in the company, which has improved the efficiency and information flow on projects, reducing problems and adding to the bottom-line. This addition would not have come about as quickly had we not been encouraged to do so by the group.

Overall, we as a company and me personally could not be happier with our involvement in our peer group, and I look forward to continuing to not only share and receive valuable information, but adding and maintaining some fantastic friendships.

JEFF EHRET, PRESIDENT, THE PENTA BUILDING GROUP

Because of our participation in a peer group, Penta's processes, procedures, recruiting, staffing, and organizational structures have all been streamlined.

We have benefited from the peer group process by:

- Exposing us to industry software — Penta collected insights from members on what has worked and what has not and made informed software decisions based on this input from our peers.
- Expanding our business horizons and creating awareness for Penta to start thinking about our own management/owner-succession plan. We asked ourselves: What will the organizational chart look like five years from now? Where are the holes going to be?
- Helping us to network in the construction business. At our level (CEO/President), you have no one to consult with in confidence. The peer group is non-competitive by design, and we are able to bounce ideas off one another. There is an understood confidentiality of company information. Additionally, a peer member from our group introduced Penta to one of their clients and now Penta and the client have a contractual relationship in Penta's geographic region.
- Learning what not to do. You hear the mistakes made by others and you learn. You hear the "hot" liability/contract issues, and you learn.
- Sharing knowledge with your own team. At Penta's senior management meeting, I shared tips learned at my peer group meetings, and since then, our managers have embarked on new initiatives using comparison spreadsheets from the meetings.

We've successfully grown from $0 to $300 million in sales over five years.

Penta has grown as a result of our experience with peer groups. We've successfully grown from $0 to $300 million in sales over five years, and with the insights of our peer group member companies, we've been able to protect margins throughout this growth. This process has positively impacted our bottom line.

In the audit process, we learned we should develop a strategic plan. This was not even on our radar screen, but the idea came highly recommended by our peers so we moved forward. Three partners and a committee of 13 people jointly tapped into company resources and created six, very specific and quantifiable goals. Action plans were created for each goal, with measurable results. "If you don't have goals, you don't know when you've crossed the finish line."

JOHN HUNZINGER, PRESIDENT, HUNZINGER CONSTRUCTION COMPANY[1]

Are you willing to take your clothes off and get in the shower with us? I always ask this rhetorically to other contractors considering joining the peer group I began almost a decade ago.

The peer group consists of eight contractors from across the country.

I first began exploring the idea of developing a network of like-minded contractors about 10 years ago when I spent some time with a successful mechanical contractor. At the end of the day together, I asked the owner what was the one thing that made the most positive impact on his organization, and he said, "The peer group." When I heard that, I knew it was something to pursue.

The members of my peer group must sign a non-compete, non-disclosure, will-not-hire document that assures confidentiality in all conversations.

I wanted to be part of a no-holds barred peer review group that could help improve our company. The members of my peer group must sign a non-compete, non-disclosure, will-not-hire document that assures confidentiality in all conversations. This document is our bylaws, and we think it is very important to get your expectations and ground rules in writing. We also have a requirement that all members must participate in every session.

While the culture is to maintain confidentiality, the intent is to have companies be very open and forthright about their businesses. The agreement requires the utmost in confidentiality, but it stops short of banning any member from adapting ideas learned from other contractors during the audit process.

The primary purpose of the group is to have non-competing peers audit each other's operations at all levels, then critique what they have found. It's a complete review of the company's financials, operations, human resources, training, safety, and resumes and actions of key staff members.

Two peer-group members team up to interview employees in the firm being audited. Employees are encouraged to be very open with the auditors and are assured their comments will be kept confidential. It's amazing how perceptive the auditors are, given the short time. They really get a pulse of the business climate and what's important to success.

Our group aims to complete one company audit each quarter. Each time around we include other disciplines in our organizations to be a part of the process. We have covered financial, safety, and operations areas, bringing in key people from our companies for the week of on-site auditing.

We see these people developing interesting relationships through these meetings. For example, our safety people were able to share how we set up and conduct our

Working with contractors from across the country can help spot a trend before it hits another member's market.

Hunzinger Construction University series to train our employees and customers. Another contractor shared how they rig pallets so they can be safely lifted onto scaffolds. Two contractors that use the same accounting system are working together to adapt an estimating package that works better with it. It's serendipitous when we visit — we never know what we'll find that can help us in our business. Working with contractors from across the country can help spot a trend before it hits another member's market.

Mold remediation is a good example. One contractor in the South shared the problems they were having with mold. We looked at our operation and refined our processes to avoid mold problems.

As the audit teams move through the companies the second time, the easy fixes have already been put in place and the impact seen from those projects has been quickly realized.

This process can chop years off the learning curve. In the past, we have talked about purchasing issues and lien laws. Seeing how others administer contracts can be extremely beneficial. The business refinements make this very worthwhile. ■

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[1] Parts of this were reprinted with permission from Construction Purchasing.

Current Trends in Residential Construction

Numerous trends and factors continue to influence the residential construction sector. Factors affecting the overall housing demand include demographics, economics, consumer desires, and supply constraints.

By Heather Johnson and Clark Ellis

Residential construction accounts for the largest put-in-place value of any category in the United States. The combination of new single-family, new multi-family, and residential improvements totaled $552 billion in 2004, 55% of total construction value in the United States.

Forecast to show robust growth through 2009, the residential sector will be a significant driver for overall construction and the economy at large (See Exhibits 1 and 2). Residential construction traditionally leads commercial, healthcare, and school development, but the lag between these different types of construction has continued to shrink as developers, both residential and non-residential, attempt to meet consumer demands for available infrastructure and support services in a timely fashion. The result is rapid growth in mixed use developments — residential and non-residential — both in urban high-rise buildings and suburban planned self-contained developments. And in some areas, re-investment in the retail and restaurant sectors in urban and suburban zones has led to major residential "reconstruction" efforts as old stagnant neighborhoods are transformed into new, hip centers of activity. The sector is likely to become progressively more integrated with these non-residential categories in the future as developers and major builders on both the residential and non-residential side look to serve their customers better and sustain profitable growth.

Exhibit 1

Construction Put-in-Place Estimated for the U.S.

Percent

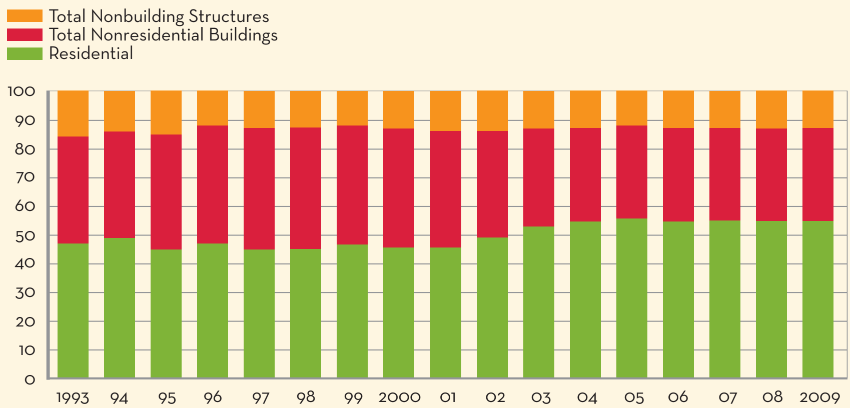
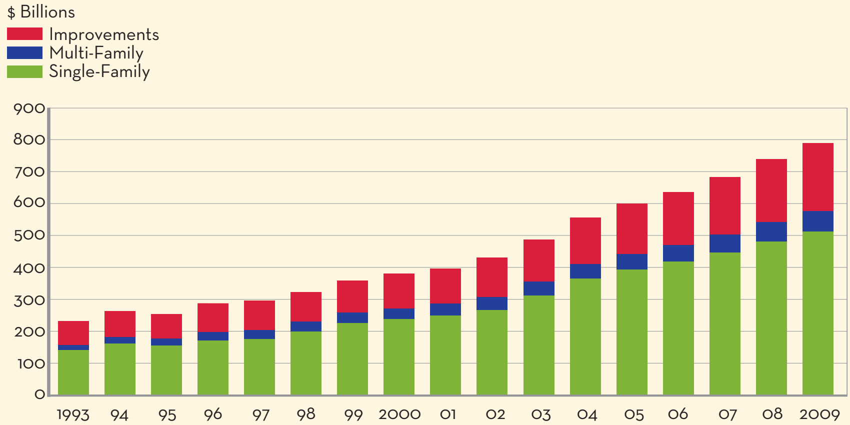


Exhibit 2

Residential Construction Put-in-Place Estimated for U.S.

$ Billions



Numerous trends and factors continue to influence the residential construction sector. Factors affecting the overall housing demand include demographics, economics, consumer desires, and supply constraints. In this article, we will outline these persisting trends and explore the competitive advantages of integrating value-creating activities across the residential supply chain.

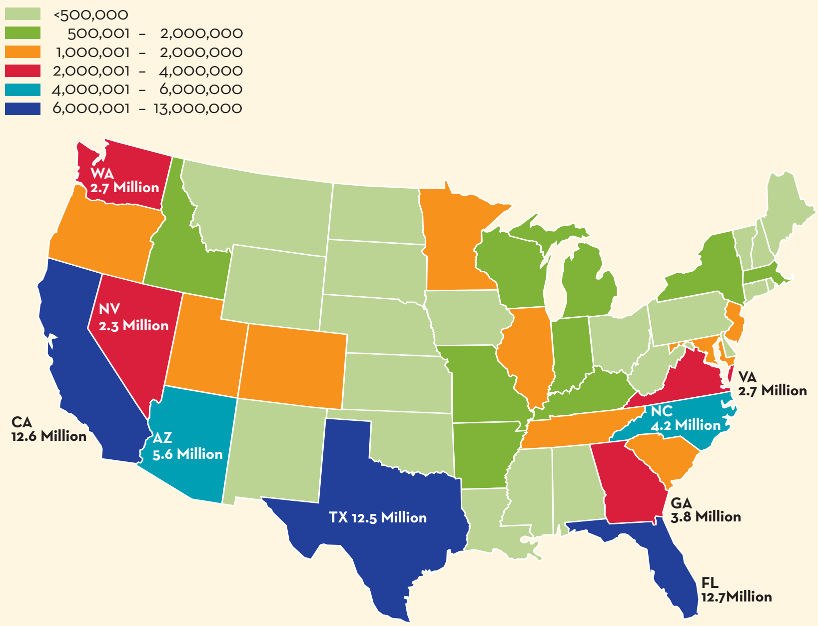
DEMOGRAPHIC TRENDS

According to the U.S. Census Bureau, the U.S. population is expected to increase from 282 million in 2000 to 309 million by 2010. As the population continues to grow, the demand for new housing will continue to increase as well. Additionally, within the growth context, demographic changes in different regions of the country drive dramatically different housing needs, and these regions will experience dramatically different results (see Exhibit 3). Some areas, particularly the Southwest and California, will continue to experience explosive overall growth, including higher than overall growth rates of minorities. These areas, along with Florida and Texas, are expected to experience higher than average growth in the

Exhibit 3

Change in Population — 2000-2030

Absolute numbers



55 and older age group. The combination of growth at both ends of the age scale will stretch educational and healthcare resources — with local and state governments struggling to keep pace. Residential developers and builders will be left to find solutions, partnering with one another and with local and municipal authorities to ensure the appropriate level of services are available to their planned communities.

Aging Population

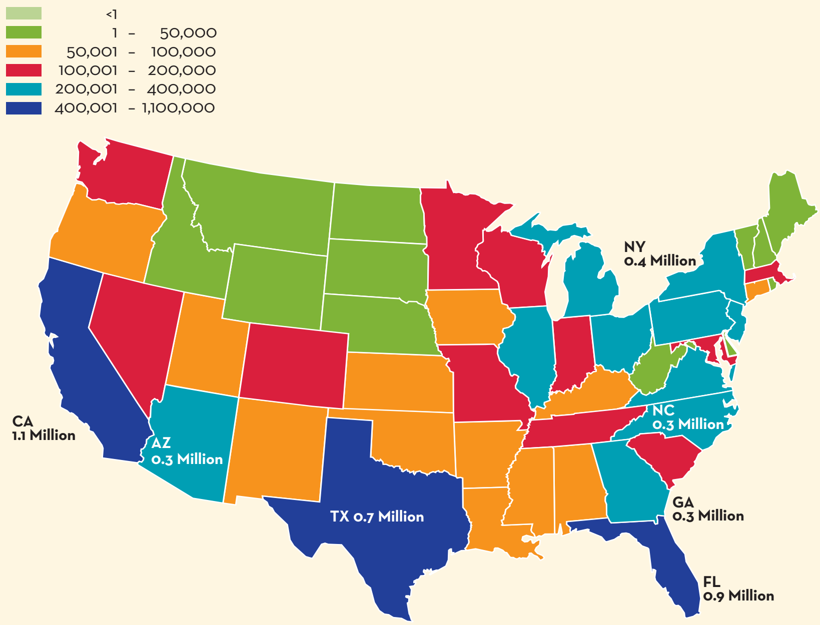
As the largest generation cohort in the U.S. continues to age, baby boomers will continue to play a significant role in homebuilding demands. The size and obtained wealth of this generation have driven the demand for move-up homes, high-end home improvements, and second homes. According to the NAHB Senior Housing Council, the development of age-qualified retirement communities has also increased demand for multi-family condominiums. Unprecedented growth in the high value, high margin move-up market also continues to be driven by baby boomers who have the money and the desire to move to larger and/or more luxurious homes.

The impact of this trend is significant, particularly as the population continues to age. A good way to illustrate the impact of this trend is to compare two of the top 10 builders in the country. Beazer, whose sales are heavily weighted towards starter and first move-up segments, averages close to $220K per closing. At the other end

Exhibit 4

Change in Age Groups 45-64 Year Olds – 2005-2010

Absolute numbers



of the scale, Toll Brothers, receives more than 60% of its closings from second move-up and beyond and averages approximately $550K per closing. Many of the buyers in the hot markets of the Southwest, Florida, and California are second move-ups and beyond. As shown in Exhibits 4 and 5, these markets have experienced the greatest population change for the 45 to 64 age group.

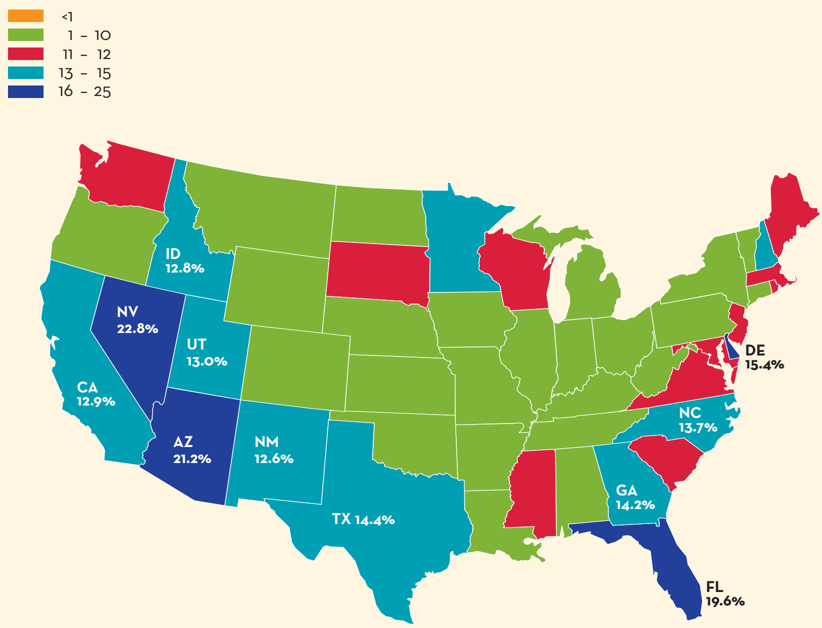
Research also indicates that a significant number of baby boomers will opt to invest in their current homes instead of moving to retirement communities. This trend will drive a significant amount of remodeling and renovation volume as baby boomers seek to enrich and enlarge their living spaces. This factor should continue to push the luxury-products market higher and increase the value of construction put-in-place per square foot of construction performed. Also, as others in the baby boom generation move from older homes all over the country to retirement communities in the Southwest, Florida, and California, the homes they leave behind will be ripe for improvement by new, presumably younger, owners. This trend indicates that areas like the Boston-Washington corridor in the Northeast, the Chicago-land area, and the Twin Cities, will continue to see very strong growth in aftermarket construction in the coming years.

In addition to purchasing move-up homes and investing in high-end home improvements, research indicates a growth trend in the second-home market. This market is expected to remain strong for many more years due to strong demand from the baby boomers. In a study conducted by the National Association of Realtors (NAR), the results indicate 2004 was a record year for purchasing second homes. Sales rose 16.3% from 2003 to 2.82 million units. Of this total, 1.80 million

Exhibit 5

Change in Age Group 45–64 Year Olds – 2005-2010

Percent



sales represented investment homes, while the remaining 1.02 million units sold represented vacation homes.

In a 2004 update of NAR's *Profile of Second Homes*, the median age of second homebuyers was found to be 47, in comparison to 32 for first-time buyers. These results support the impact baby boomers are having on this segment of the residential real estate market. Diversification of portfolio investments is the most frequently cited reason for purchasing a second home. Baby boomers are also motivated to purchase vacation homes that support their "upgraded" lifestyle preferences. Motivations for making such investments include utilizing the second home as a family or personal retreat and as a primary residence following retirement.

Immigration

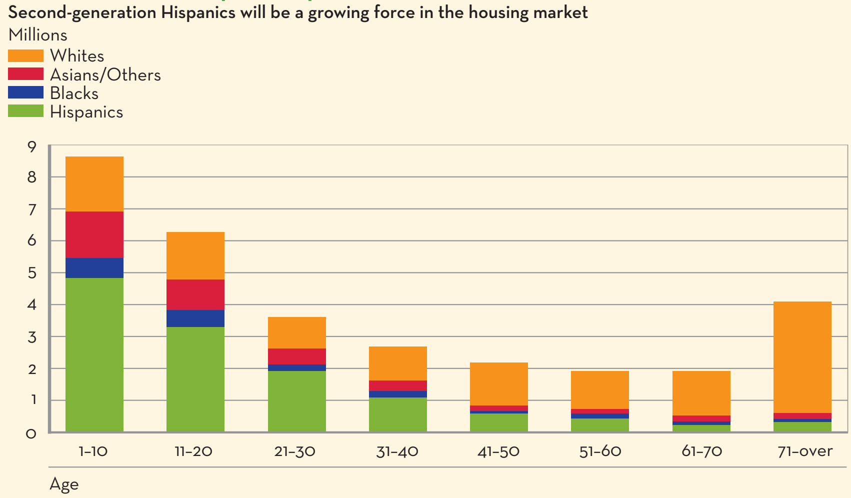
The number of second-generation Americans, particularly Hispanic Americans, will continue to impact housing demand as a significant number of these individuals are entering the home-buying market. Between 2000 and 2020, the Hispanic population is expected to account for 46% of the total U.S. population growth, increasing by 25.1 million, from 35.3 million to 60.4 million (Pew Hispanic Center). During this same period, the Hispanic population will increase from 12.5% to 18.0% of the total U.S. population.

In the *State of the Nation's Housing* 2005 report released by The Joint Center for Housing Studies of Harvard University (JCHS), the number of Hispanics entering the home-buying market represents nearly half of the total second generation Americans age 40 years and under (see Exhibit 6). Considering the

Exhibit 6

Second-Generation Hispanics Population Growth

Second-generation Hispanics will be a growing force in the housing market



size of the second-generation Hispanic population, demand will continue to increase for first-time homes, apartments, and condominiums.

Nontraditional Families and Single-Person Homeowners

An increase in non-traditional family compositions and single-person homeowners is also driving demand in the residential market, specifically, multi-family housing, townhouses, and condominiums in urban areas. In the aforementioned research conducted by the JCHS, the percentage of "traditional" family households headed by married couples with children fell 10% between 1980 and 2000, while the number of households headed by single parents and grandparents raising grandchildren has continued to increase. Without the influx of immigrants, a greater percentage drop in the share of traditional households would have occurred. This research also indicated the number of single-person households reached 26.5 million in 2000, a result of more couples waiting to marry and have children; higher divorce rates; and decreasing remarriage rates. In addition, as many women are waiting to get married or choosing not to get married at all, they too are representing a greater proportion of single-person households than ever before. One-third of the growth in homeowners since 1994 consists of households headed by unmarried women with or without children.

The percentage of "traditional" family households headed by married couples with children fell 10% between 1980 and 2000.

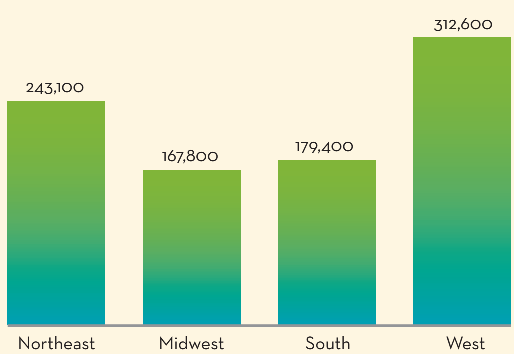
Understanding the needs of non-traditional homebuyers in comparison to the housing needs and preferences of what is considered to be a traditional family composition can give a significant competitive advantage to all members of the residential supply chain. Demographic shifts in the homebuyer profile suggest a need for builders to revaluate the design, marketing, and sales strategies used to sell homes to nontraditional homebuyers. Builders with the ability to develop customized marketing and sales strategies toward these individuals will be able to gain a competitive advantage and improve their profitability in a residential housing market that will continue to grow.

ECONOMIC TRENDS

Various economic factors have affected the residential housing market including housing appreciation and mortgage rates. According to the Office of Housing Enterprise Oversight (OFHEO), the average price of homes in the U.S. had an annual increase of 13.4% from second quarter 2004 through second quarter 2005. In a September press release, OFHEO reported the most significant annual price growth occurred in Nevada and Arizona with increases of 28.1% and 27.8%, respectively. In NAR's August issue of *Real Estate Insights*, the researchers reported the results from the second-quarter metro area home price report, which indicated that 67 of the MSA's recorded a double-digit annual increase in the sales price for existing single-family homes. These results also indicate regional differences are occurring throughout the U.S. in terms of price appreciation (see Exhibit 7). The West saw the greatest increase in median home price for single-family homes between second quarter 2004 and second quarter 2005 (19.5%). The Northeast, Midwest, and South saw increases of 13.1%, 12.1%, and 5.7%, respectively. Despite the rising costs of homes, the availability of low interest loans is expected to allow homebuilding to continue growing strong.

According to Freddie Mac's Primary Mortgage Market Survey℠, the average interest rate for a 30-year fixed-rate mortgage is 5.74%. While the current trend of historically low interest rates is expected to continue, the underlying default risk of the current crop of mortgages has increased significantly due to the penetration of adjustable rate mortgages and interest-only mortgages. Low rates coupled with the increase in these higher risk debt instruments have made home ownership accessible to a larger portion of the population than at any other time in U.S. history. While there are undeniable benefits to this trend — sustained high volume of starts and record profits for homebuilders — some analysts

Exhibit 7
Metropolitan Area Home Prices — 2Q2005
$ Thousands



Source: NAR Research

New homebuyers reportedly have a significant preference for the incorporation of higher quality features into the home, whether as part of the base price or additional cost, as opposed to an increase in square footage for their homes.

are beginning to question the long-term viability of a significant number of the new homeowners. A sharp increase in interest rates or a leveling off of property values could expose a large number of homeowners as over-extended — leading to foreclosures and price reductions across many currently hot markets.

CONSUMER TRENDS

According to data from the latest survey conducted by NAHB, new homebuyers reportedly have a significant preference for the incorporation of higher quality features into the home, whether as part of the base price or additional cost, as opposed to an increase in square footage for their homes. When asked to choose between purchasing a larger home with fewer amenities or a smaller home with higher quality amenities, 63% of the home-owners surveyed reported they would opt for the smaller house with higher quality products. Survey results indicated homebuyers want to purchase homes with upscale features, including kitchens with walk-in pantries and specialized storage space; bathrooms with linen closets, shower enclosures, and exhaust fans; master bedrooms with greater space; and higher ceilings for the aesthetic benefits.

In addition to consumer preferences, builders must also understand what factors are associated with a homebuyer's level of satisfaction. According to the 2005 *New-Home Builder Customer Satisfaction Study* published by J.D. Power and Associates, 10 factors were found to drive the overall satisfaction for a homebuyer (see Exhibit 8). In order of percent contribution to overall satisfaction, these factors include builder's warranty/customer service, home readiness, builder's sales staff, construction manager, quality of workmanship/materials, price/value, physical design elements, builder's design center, recreational facilities, and location.

Exhibit 8

Factors Driving Satisfaction for Home Buyers

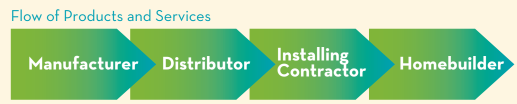
Factor	Factor Weight
Builder's Warranty/Customer Service	20%
Home Readiness	16%
Builder's Sales Staff	14%
Construction Manager	13%
Quality of Workmanship/Materials	13%
Price/Value	8%
Physical Design Elements	6%
Builder's Design Center	4%
Recreational Facilities	3%
Location	2%

SUPPLY CONSTRAINTS AND INDUSTRY PROFITABILITY

The increase in cost of inputs caused by supply constraints is an ongoing trend faced by building products manufacturers and builders. As prices increase for steel, petroleum, cement, and wood products, building products manufacturers are under extreme pressure to reduce costs. In addition to increased costs, pressures exist from direct competitors and substitute products, which are preventing many manufacturers from being able to achieve a recovery on the price side. The competitive pressures associated with this trend can have an impact on industry profitability.

Exhibit 9

Channel Structure Across Residential Supply Chain



Remaining profitable in an industry affected by numerous demand factors and trends requires an understanding of the channel structure across the entire residential supply chain (see Exhibit 9). The residential supply chain consists of a network of manufacturers and service providers who are linked together though a flow of materials, services, information, and money. It is in this complex network that opportunities exist to decrease inefficiency, increase profitability, and provide value to a homebuyer. A competitive advantage will be given to those companies with the ability to actively manage all supply chain activities with both upstream suppliers and downstream customers. ■

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Homegrown Success: An Interview with Watson Electrical

FMI recently spoke with Watson Electrical to learn about their recruitment practices, career development program, and the retention of their employees.

By Kelley Chisholm and Torrey Mullen

Employee development and career progression are two of the best predictors of employee retention. With fewer workers attracted to the construction industry, and fewer workers available in the job market in general, many organizations are finding increased competition for their employees.

According to the U.S. Department of Labor, during the period from September 2003 to August 2004, the construction industry faced employee turnover rates of 68.5%, on average. Many employees no longer value job security as they once did, opting instead for companies that offer a clear path to career advancement and learning opportunities.

Most workers, especially young ones, have a strong desire to feel like they play an important role in the company, and prefer to be challenged in their work. These employees enjoy greater responsibilities, training opportunities, and the chance to advance their careers within the company. Fulfillment of these needs, in turn, leads employees to commit to the company for the long-term. In addition, companies that support employee development and continuous-learning systems sustain their own business goals and competitive advantages.

Losing employees to competition or turnover can be costly; thus, many companies have developed sophisticated recruitment practices, employee development programs, and career progression plans that encourage workers to remain with the company for the length of their work careers. One such company is

Their programs not only produce highly skilled workers, but also provide Watson with homegrown leadership and a clear succession plan.

Watson Electrical, an electrical construction company based in Wilson, N.C. Watson's philosophy is to hire for the long-term, and they support this philosophy by committing to developing their employees and offering them advancement opportunities. Their programs not only produce highly skilled workers, but also provide Watson with homegrown leadership and a clear succession plan.

FMI recently spoke with David Garren, vice president of human resources; Lloyd Evans, hiring and training administrator, eastern divisions; Mike Watkins, hiring and training administrator, western divisions; and Dawn Tant, supervisor of apprenticeship, to learn more about Watson's recruitment practices, their career development progression program, and the retention of their employees. FMI also spoke with Dale Boykin, an apprentice who has worked at Watson for four and a half years, to gain his perspective on Watson's apprenticeship program and employee development practices.

FMI Quarterly: How would you describe your recruitment philosophy and strategies?

David: Obviously, we're recruiting for the long-term. There are some construction companies that recruit for specific jobs, but we're recruiting for careers. Our goal in most of our divisions is not only to have work today but to have a backlog for future work. We're usually talking with potential recruits and applicants about making a career here. One of our first philosophies and strategies is long-term employment, or making a career at Watson and staying here for life.

FMI Quarterly: Where are you concentrating your recruiting efforts?

David and Mike: We're talking to nearby high schools, technical schools, community colleges, and four-year colleges, such as East Carolina University. We go to selected colleges and universities that offer courses or programs in project management, and we'll work with students who are getting ready to graduate and potentially find a home for them here. We're also recruiting people who are in the military getting ready to come out. We just set up job fairs at Seymour Johnson, Fort Bragg, and Camp Lejeune.

FMI Quarterly: Tell us about your career progression program at Watson.

David: Like any other construction company, we're faced with the pressures of finding skilled craft. An article in the Raleigh *News and Observer* just last week included comments by the Department of Labor about how many more employers are establishing apprenticeship programs in response to the pressures of finding skilled construction workers. In some cases, there is an advantage to taking someone who doesn't know anything about construction and training them.

Mike: We make our potential recruits aware of our apprenticeship program when we visit the community colleges, four-year colleges, and technical schools.

David: We are pushing the apprenticeship program. One of the things that Mike and Lloyd do is a standard orientation; we are letting our new employees know on day one about Watson's commitment to training, and our programs. It is important for new employees to know that we have these programs available.

FMI Quarterly: How long are the apprenticeships?

David: They last four years, including a total of 8,000 hours on the job.

Mike: Looking at the career paths, we hire all different levels and types of people. What the career path (see exhibit 1 on page 110) depicts is that no matter where an individual comes into the company, that individual can still jump onto the career path and fulfill whatever position he or she may want.

David: After employees come out of the apprenticeships, the next level is the Construction Management Training Program. CMT is another four-year program. Through this program, individuals will first spend time in a warehouse or a combination of warehouse and field experience. Next, they will spend some time in estimating and marketing. Finally, they end up going down a path of either supervision or project management. This doesn't mean, however, that upon exiting the program they are project managers, it just means that they've received training to be in the project management career path.

FMI Quarterly: How many people are currently in the apprenticeship program?

David: About 85 to 90.

FMI Quarterly: How many people are currently in the CMT program?

David: Right now we have four people in the program. One of the things we're really excited about is that we just had our CMT program certified by the Department of Labor, just like our apprenticeship program. The Department of Labor calls the program "Master Craftsman." We are now in the process of re-rolling out the CMT program. We hope some of the next round of graduates from the apprenticeship program will move on to the CMT program.

FMI Quarterly: How many apprentices go into the CMT program?

David: We've just linked them in the past year so one will act as a stepping stone to the other. There's not been that linkage in the past. Even after an individual has graduated from the apprenticeship program, there's still an application and interview process for the CMT program.

Dawn: Three out of the four people currently in the CMT program went through the apprenticeship process.

FMI Quarterly: What are you looking for when individuals apply to the CMT program?

David: We're looking for potential supervisors or project managers.

FMI Quarterly: Tell us about the training the apprentices receive.

David: We use the curricula from the National Center for Construction Education and Research (NCCER).

Mike: By 1990, a number of the large construction companies were providing their own training to their employees. Yet, none of the training was standard across organizations, so the companies decided to pool together their training materials and resources using the Associated Builders and Contractors (ABC) as a medium. Together, they formed the Construction Education Foundation. The ABC managed it, and then in 1995, the ABC turned it over, and the NCCER was formed as a not-for-profit foundation. It's blossomed over the past 10 years, and they now provide standard curricula for the trades, which are used all over the world and in several different languages. They also have developed project manager academies and supervisor academies, which are tied in with Clemson University. They've partnered with Clemson, the University of Florida, and Arizona State University, and through them they run these academies. These particular universities have undergraduate degrees in construction management. Here in North Carolina, the vocational high schools and the community colleges use these curricula.

David: The curricula are well-known and wide-spread.

Founded in 1935, Watson Electrical Construction Company is one of the Southeast's leading electrical construction and service contractors offering comprehensive world-class service throughout the Carolinas and Virginia. Headquartered in Wilson, N.C., Watson Electrical operates 10 local divisions throughout their service area. Their turnkey electrical construction services range from pre-construction planning to facility construction to ongoing maintenance. Their construction capabilities include electrical construction, security and life safety, and communications.

Watson has won numerous awards, most recently the ABC of the Carolinas *Subcontractor of the Year Award*; the AGC *Safety Award*; ABC's *Safety Training and Evaluation Process Award*, and N.C. Department of Labor's *Outstanding Apprenticeship Program Award* for 2005, just to name a few.

FMI Quarterly: How does this benefit Watson, besides not having to develop your own courses?

Mike: Well, here's one example. Our apprentice who won the N.C. Department of Labor's Fourth Year Outstanding Apprentice Award came from a high school near Charlotte, N.C., that used NCCER's curricula. We also have two other apprentices from the same school, one of whom won the N.C. Department of Labor's First Year Outstanding Apprentice Award. This past summer we arranged with Alamance Community College, Fayetteville Technical Community College, and Cape Fear Community College to start apprenticeship classes to support the apprenticeship program, not only for us, but for the electrical apprenticeship programs in the area. They'll be using NCCER curricula, which they have used in the past.

FMI Quarterly: Are your employees going directly to these community colleges?

Mike: Yes, the classes are at the colleges.

David: And they are held at night.

Mike: They register with the college, but they don't receive college credit.

David: Basically, their instructors are teaching these courses to our apprentices. We, along with other contractors, get together and determine what we want them to teach. So if we have the need, they're willing to set up the class, and then we send our people to it.

FMI Quarterly: Are you paying 100% of the tuition?

Mike: It's on a reimbursement basis.

David: Eventually, yes, but to make sure that they have some "skin in the game," the students pay for it as they go. When they complete the four-year program, then we reimburse them. So when all is said and done, yes, we pay for it. This way if they leave in the middle of the game, we have not lost training investment dollars.

David: In terms of recruiting, with the schools all using the same educational material, we are recruiting people that are familiar with it through high school, technical colleges, or even through other employers. We wind up getting people in our program that have either received this training with us from ground zero or are coming through the door with the material. It's advantageous for us to stay with this curriculum for that reason. Also, the material is heavy on the national electrical code, which is important to us, because our projects are built according to that code.

Mike: Another advantage is that the NCCER has their own national registry in Gainesville, Fla., where all of the completed modules are maintained. So if we hire an employee that was in an apprenticeship program in California, and he says he has finished two years, we can request a transcript from NCCER and give credit for what has been completed. It's a standardized curriculum that is taught the same way across the country as well as some overseas locations. That's the beauty of it.

FMI Quarterly: Do you have any input in the curricula?

David: There are advisory councils and much of the industry does give input.

Mike: The curricula are formed by industry. The NCCER has subject matter experts from the industry who create and update the curricula. It's a continuous process.

FMI Quarterly: Let's talk about the actual training. You mentioned sending your employees to the classroom. Is there an online component as well?

David: We do have a couple of divisions that don't have classroom training available so their training is self-paced at home, not electronic. It's what we call independent study.

Mike: They are mentored by training supervisors, who are certified craft instructors in their division.

David: Regardless if they are taking courses in the classroom or at home, they have supervisors that are certified instructors who are working with them. Each month they have a performance evaluation, not only to show that they have gained knowledge by learning the material, but that they can actually perform the work like they're supposed to. The evaluation is a detailed process where they have to learn the material, show it on paper by taking tests, and then perform the work correctly, before they can progress to the next monthly module.

FMI Quarterly: What is the success rate of people passing each module the first time?

David: It's fairly high. I would say 90% or greater. Few retests have to be completed.

FMI Quarterly: What do you think leads to this success rate?

David: I think the success is a direct result of the mentoring in place. The employees have someone they can talk to and ask questions. The mentors can show them how to apply what they have learned, and the employees can demonstrate what they are learning. I think this is a huge contribution to the success of the program. It's one thing to say, "Yeah, I know how to do it. I took a test and don't have to do anything else." Then you struggle when you try to do the work. However, it is a totally different thing to be required to learn the material and then perform it.

I think the 90% success rate is all because of the craft instructor mentors.

I think the 90% success rate is all because of the craft instructor mentors.

FMI Quarterly: Is the mentoring process a formal one?

David: We are moving to a more formal process.

FMI Quarterly: Do the mentors go through training to become mentors?

Mike: They have to go through the NCCER certified craft instructor program, which is a 16-hour course. We have task evaluators that just evaluate performance of certain tasks, and they have to complete a half-day to a day long training session.

FMI Quarterly: Is the mentoring performed one-on-one?

David: Not always. Mentors may be responsible for more than one apprentice — in some divisions it may be up to eight. The on-the-job training (OJT) hours are broken down into categories, and some apprentices may need more hours in one category than they need in another. The other thing that the supervisor must do is expose them to the work, and satisfy the work hours that they need for a specific category.

Mike: OJT parallels the classroom training. According to the N.C. Department of Labor's register of apprenticeship standards, you must have 650 hours of classroom training that parallels the 8,000 hours of on-the-job training. It's based on the training philosophy that it is inefficient to teach someone a knowledge-based skill if they're not going to use it until six months later.

FMI Quarterly: How has your career progression program, including training, had an impact on retention?

David: If you look at our turnover rate, after one year of service, it's in single digits. If we can keep our employees for one year, we pretty much have them for life, which is what we want.

FMI Quarterly: What's the average tenure of your employees?

David: Probably 10 years. Lloyd, hiring and training administrator for the eastern divisions, has been here 37 years. Dawn, supervisor of apprenticeships, has been here for 33.

Lloyd: I went through the apprenticeship program, too.

FMI Quarterly: How many women go through the apprenticeship program?

Dawn: Well, the percentage is a lot lower with women simply because there are not many women in construction, but there have been two or three women that have completed the program in the last few years.

David: One of our current CMT's is a woman, and she is a graduate of our apprenticeship program. She's currently in the estimating part of CMT.

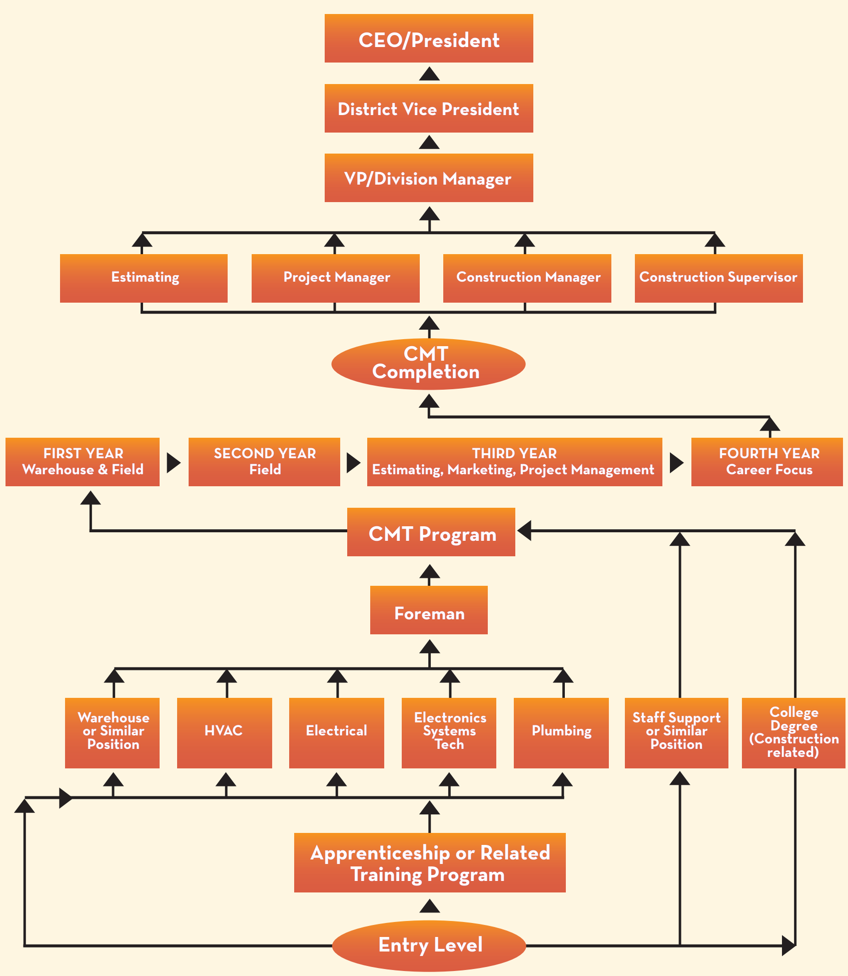
FMI Quarterly: If someone is hired with a four-year construction-related degree, do they have to go through the apprenticeship program as well?

David: No. We have an option for these individuals to do the classroom work only. So they don't have to go through the program, but we encourage them to because there's a lot to be said for having some field experience.

FMI Quarterly: How are Watson's future leaders selected?

Exhibit 1

Watson Electrical Career Path



David: In addition to what's on the career progression chart (see exhibit 1), we have what we call PMWs, which are "potential managers of Watson." After someone has gone through the apprenticeship and CMT programs, and participated in some of the project manager academy work, we start evaluating the "cream of that crop" as potential managers. We start exposing them to financial statements and cost and productivity, and we start gearing them down a path of potentially becoming a division manager. In fact, the last couple of promotions came from that PMW list.

FMI Quarterly: Do you have a formal succession plan in place?

David: We are currently in the process of creating one.

FMI Quarterly: Watson has participated in numerous apprenticeship contests over the years, both internally as a company, and on the statewide level, and won many awards. How do you prepare for these?

Lloyd: We have our own internal contests, and our apprentices work with their training supervisors within their divisions. The apprentices in the third stage of their apprenticeships and above are able to participate in our company's contest. They're actually building booths and installing panel boxes, light outlets, wiring, conduit, etc.

David: They're doing a combination of residential and commercial work. It's an entire project that lasts four hours.

Lloyd: They also have to take an hour-long test that is composed of 50 questions based on the National Electric Code. In the meantime, the projects are being judged on quality, productivity, and correct installation.

David: There are point values for the various criteria. The top three apprentices move on to the state contest.

FMI Quarterly: How has participating in the statewide contests had an impact back in the workplace?

David: Definitely pride and quality result from these contests. You're proud to have won and proud that the employees in the contest have won. We put out a lot of information to the press about the contest to foster this pride part of it so that our employees want to do the best job they can. All of this serves to increase quality and productivity. We let them know before the contest that this is exactly like working on a project for one of our customers. They have a time schedule, they need to do it safely, they need to build a quality project, and they need to be productive and complete things in a given time frame. It's just like working for a client.

Dawn: I spoke with one of the training supervisors about the contest, and he said it gave the apprentices the opportunity to see a project through from start to finish. Normally when they're on the job site, they are working on wiring or one part of the project, and they move from one place to another. With these contests they have a blueprint, all of their inventory, and they get to see the project from beginning to end.

David: We recently received the Outstanding Apprenticeship Program Award for 2005 from the N.C. Department of Labor this past May.

FMI also spoke with Dale Boykin, who started his career at Watson as a high school apprentice in the 11th grade. Dale has only a few more hours left before he completes the apprenticeship program. He's already passed his journeyman's test, and he has that license. Dale was the recipient of the N.C. Department of Labor's Outstanding Fourth Year Apprentice Award in 2005. He also came in eighth place last year in the N.C. State Fair's Electrical Apprentice competition and is planning to compete again this year.

FMI Quarterly: Dale, what attracted you to Watson Electrical?

Dale: The first thing that attracted me to Watson was Roger Rucker, a former senior supervisor, who came to my high school to recruit for their apprenticeship program. I thought about it and decided I was really interested because I wanted to further my education in electrical work.

FMI Quarterly: What has been the best part of the apprenticeship program?

Dale: The best part of the program for me is taking information that I've learned in the classroom two nights a week, with the hands-on training, and applying it to the job. That has helped me to gain the foremen and supervisors' trust in my work.

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FMI Quarterly: How important are the training supervisors/mentors to the learning process?

Dale: I think they are very important. They keep you up-to-date on everything, and if you make a wrong step then they're there to help you correct your mistakes.

FMI Quarterly: Do you feel that the program has an impact on making a lifelong career at Watson, not only for yourself but also your peers?

Dale: Yes, if you can make it through the four-year apprenticeship program, then you've pretty much decided that you're going for a career here at Watson.

FMI Quarterly: Would you recommend the program to others?

Dale: Definitely. I'd be interested in actually doing some recruiting as well.

FMI Quarterly: Is there anything you would do to improve or change the program?

Dale: The only improvement I can think of is the on-the-job training. If the foremen had the ability to take more time from their busy work schedules to work with the apprentices that would be an improvement.

I took back the initiative to do better work. I take more pride in my work, and I want to make sure it's done right the first time, and in the best time.

FMI Quarterly: How do you feel this would be beneficial?

Dale: It would give the apprentices a better understanding of what they're supposed to do and how to do it, instead of them making mistakes and learning the hard way.

FMI Quarterly: Congratulations on winning N.C. Department of Labor's Outstanding Fourth Year Apprenticeship Award for 2005. You also participated in the electrical apprentice competition at the N.C. State Fair. Tell us about preparing for the competition.

Dale: To prepare for the competition, I would come into the shop, and Gary, my training supervisor, worked with me on the test questions and made sure I knew how to use my code book. He had me bending pipe to prepare me for the bends and the conduit [part of the contest]. He spent time trying to explain how the contest would go. It really meant a lot, and really helped me to prepare.

FMI Quarterly: How much time did you spend preparing for the contest?

Dale: I spent close to a week getting ready for it.

FMI Quarterly: Were you surprised to win?

Dale: Yes, I was. It was a real relief. I really felt that I had done an excellent job — it's kind of hard to explain.

FMI Quarterly: How many of you were competing?

Dale: I'm not exactly sure, but it seems to me there were 30 of us.

FMI Quarterly: What did you carry back to the job site from the experience?

Dale: I took back the initiative to do better work. I take more pride in my work, and I want to make sure it's done right the first time, and in the best time.

FMI Quarterly: Did winning the award impact the other people you work with?

Dale: Yes, it did. Everyone seems to look at me as if even though I'm young, I'm efficient and competing in contests and winning. I believe that people are really looking up to me.

FMI Quarterly: Have you had any chances to mentor anyone else?

Dale: Not really, but I've had a helper that worked with me in residential, and I just recently moved back into commercial work. I asked for him to move with me so I'd be able to show him how to do more things. I'm trying to teach him as much as possible.

FMI Quarterly: What are your next career steps?

Dale: I'd like to further my experience within Watson, and move up the ladder.

FMI Quarterly: So is the CMT program the next step for you?

Dale: Yes, it is. Watson has an outstanding apprenticeship program. It really gives you the know-how and the experience to do your job, and to do it correctly.

Many studies have been conducted on how much employee turnover costs a company, and the figures vary from an average of 25% of an employee's salary, to as high as 2.5 times the salary. When calculating what employee turnover actually costs your company, a number of factors must be taken into consideration, such as severance packages for the departing employee; lost productivity; overtime for remaining employees until a new person is hired; recruiting expenses; time spent reviewing applications; conducting interviews and background checks; and orientation and training costs. All of these costs add up and impact your company's bottom line.

Watson Electrical clearly communicates their career progression plans and employee development opportunities for employees, a key reason why Watson has been so successful in recruiting and retaining top talent.

We wish to thank David, Mike, Lloyd, Dawn, and Dale for spending their time with us. ■

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Survey Reveals CFOs Expect Favorable Change in 2006

The coming year promises to be a time of economic transition. The use of alternative materials, savvy financial management, and clear business strategies will be critical.

By Stevan Simich and Nick Shubert

Construction industry financial executives are increasingly optimistic about the future, according to a recent FMI survey. These results update the findings of FMI's 2004 survey of financial executives in the construction industry. The majority of respondents expressed concern about the rising cost of oil and materials, but survey responses indicate companies are taking adversity in stride, and preparing for a favorable year in 2006. As one would expect, the impact of hurricane Katrina will also create new considerations for contractors.

KEY SURVEY FINDINGS

Contractors expect to realize benefits from market forces such as a strengthening national economy and increased public spending. Rising interest rates and increasing energy and materials prices from hurricanes Katrina, Rita, and Wilma will temper some of the national economic growth. General economic conditions are an overriding concern, while labor trends are expected to be increasingly worrisome moving into 2006.

Market and Economy. CFOs are collectively more positive about the state of the national construction economy in 2005 vs. that in 2004. Responding financial executives believe that in 2006 the construction market will expand when compared to the expectations expressed in last year's survey.

Financial Concerns. Growing revenues in 2005 influenced contractors to slightly increase their credit availability, credit requirements, and bonding capacity. Most of the contractors surveyed believe their 2006 revenues will surpass 2005 figures. Over the last year, respondents indicated that bank-required financial covenants have remained mostly stable.

Mergers and Acquisitions. The state of the economy has had little impact on the merger plans for most respondents. The majority of the respondents indicated that acquisitions were more appealing than mergers or selling to another company. Valuations have changed only somewhat, if at all. This year's survey indicated that of the 18 respondents who acquired firms acquired an average of 2.2 companies. This is slightly lower than last year's average of 2.4 firms acquired in the last five years.

RESEARCH DESIGN

FMI contacted 546 CFOs and other senior financial managers for the second-annual Construction CFO Survey. FMI circulated the requests for participation by mail, fax, and e-mail in July and August 2005. The survey closed on September 20, 2005, with 13% of respondents completing the survey through an internet link to an online version of the questionnaire. Respondents represented companies from across the nation. The internally developed contact list included many of *ENR*'s Top 400 Contractors.

RESPONDENT DEMOGRAPHICS

Greater Response from Larger Companies. The 2005 survey elicited a greater response from large companies than did the 2004 survey. Yet, the majority of the respondents still represented mid-sized companies with 48% of respondents reporting revenues of $100 million to $499 million — up from 41% last year. Only 19% of respondents represented companies with annual revenues under $99 million compared to 54% of the respondents last year. This year, 14% of the respondents reported revenues between $500 million and $5 billion. Last year, only 5% of the respondents reported revenues in this range.

Location. This year respondents represented companies with 2005 operations in all 50 states, with 81% of respondents having operations in more than one state. Exhibit 1 demonstrates the states served by respondents.

Type of Company. All of this year's respondents represented privately held firms.

2004 Revenues. Sixty-seven percent of the respondents' annual revenues were between $100 million and $499 million. Small- and large-revenue companies comprised roughly proportionate segments of the responding contractors. (See Exhibit 2.)

Market Sectors. The respondents to this year's survey reported significant operations (representing more than 20% of their total revenue) in all of the 16 specific markets listed on the questionnaire. The top five markets in which respondents reported significant operations were General Building, 19.9%; Healthcare, 12.5%; Education, 10.2%; Public Buildings, 8.8%; and Manufacturing, 7.9%. (See Exhibit 3.)

While only two-thirds of last year's respondents expected to see increased revenue this year, nearly three-quarters of this year's respondents expect to see their revenues grow in the coming year.

ECONOMIC OUTLOOK

Most financial managers rate the U.S. construction economy as stronger-than-average. Eighty-two percent of respondents rated the domestic construction economy as stronger-than average over the past six months, with 6% indicating an extremely strong rating. This suggests a positive overall trend in the construction market when contrasted with last year, when 89% of respondents rated the domestic construction economy as average. (See Exhibit 4.)

Further expansion in the U.S. construction economy is expected. Sixty-six percent of the financial executives expect that the domestic construction economy will expand in the coming year. Fifty-eight percent expect that the growth will be somewhat moderate, while 8% believe that the construction market will see more rapid growth. Overall, the respondents are more optimistic about the outlook for the domestic construction economy as compared to last year, when only 58% of the 2004 respondents expected to see any expansion.

Revenue growth is expected. While only two-thirds of last year's respondents expected to see increased revenue this year, nearly three-quarters of this year's respondents expect to see their revenues grow in the coming year. (See Exhibits 5 and 6.)

Contractors are making changes in accordance with positive expectations. Over the past six months, contractors have made strategic changes to beef-up operations and capitalize on expected market expansion. (See Exhibit 7.)

The most common changes that respondents mentioned were:

- Investment in new technology
- Increased staffing
- New cost-reduction programs
- Modifications to employee benefit plans
- Expansion into new markets
- Increased spending on sales and marketing.

Other changes that respondents mentioned include:

- Updating fleet equipment
- Divestiture of non-core divisions
- Identification of alternative resource suppliers and low cost, resource-purchase options
- Modified bidding to account for increased fuel prices.

Contractors' financial concerns have changed in the last year. This year, respondents are most concerned with the impacts of materials costs, energy costs, and general economic conditions. Last year, respondents' top three financial concerns were general economic conditions, the cost of insurance, and the cost of materials.

The rising costs of materials and climbing fuel prices have made a lasting impression on this year's respondents — these issues have now surpassed concerns about general economic conditions, and are more important to contractors than previous concerns about insurance costs. For 97% of the respondents, the cost of materials was listed as a significant concern, with 69% of those respondents reporting that materials costs are a very significant concern. Likewise, 95% of the respondents listed energy costs as a significant concern, with 63% of those respondents describing energy costs as a very significant concern. (See Exhibit 8.)

The economy is still the financial factor that has the greatest impact on contractors. Only 44% of contractors indicated that economic strengthening and weakening have the greatest impact on their business, compared with 59% last year. However, economic conditions are still the most significant factor in financial success, according to the survey. Proactive financial and project leadership will be vital in coming months as rising costs and competitive markets necessitate careful bidding, planning, and execution to ensure project profitability, regardless of economic conditions. (See Exhibit 9.)

FINANCING

This year, broad economic concerns have dictated gradual, continued, and incremental interest rate increases — from a half-century low of 1% in June 2004, to 3.62% in September 2005. Some of these concerns, such as rising oil and energy prices, the uncertainty surrounding the war in Iraq, and the new growth concerns caused by hurricane Katrina, will all likely continue to affect national macro economic policies in the coming year. The potential for inflation seems to outweigh concerns over stalled growth at the Federal Reserve, and given the revised 3.75% short-term interest rate target, further increases in the federal funds rates are likely to balance inflation.[1]

Credit availability has been largely stable, with some contractors seeing moderate increases. Over the last year, the majority of contractors, 64%, reported that lenders had not changed their credit availability over the last year. Additionally, 34% reported increased credit availability, with only two respondents reporting a decrease. These responses indicate a positive trend over the last year, with banks maintaining an optimistic overall economic outlook, and confidence in the construction market. (See Exhibit 10.)

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Financial covenants have not changed for most contractors. Liabilities covenants were unchanged for 90% of respondents, with 4% reporting decreases and 6% reporting increases. Similarly, debt covenants remained the same for 89% of respondents, with 9% reporting increases, and only one respondent reporting a significant decrease. Slightly more change was reported for net worth covenants, which increased for 13% of respondents and remained the same for 86%, with only one contractor reporting a significant decrease. (See Exhibit 11.)

Many contractors expect financing requirements to increase somewhat. While 56% of the respondents reported that their financing requirements would stay the same, 36% believed that they would be seeking more financing in the coming year. Given that 66% of contractors expect that the construction economy will grow in the coming year, and approximately three-quarters expect revenue growth, respondents seem to be expressing a willingness to accept more bank debt to finance the growth that they see in the near future. Only about 8% of the contractors surveyed expect to reduce their financing requirements in the next 12 months. (See Exhibit 12.)

Many contractors expect bonding capacity will increase. While 53% of the contractors surveyed expect their bonding capacity to stay the same in the coming year, 46% reported that they expect their bonding capacity to increase. This expectation is logical in light of the respondents' belief that revenues will increase and that the construction economy is experiencing growth. (See Exhibit 13.)

MERGERS AND ACQUISITIONS

One-fourth of the contractors surveyed acquired a firm in the last five years. This year, 18 of the surveyed contractors acquired 40 firms. The average acquisition rate was 2.22 firms for each acquiring respondent. Last year's survey results show 31 surveyed contractors acquired 71 companies for an acquisition ratio of 2.29. The maximum number of acquisitions decreased from eight to five. (See Exhibit 14.)

For 2005, of the 18 contractors who reported at least one acquisition within the last five years, 12 reported that they expect to acquire at least one more firm in the next five years. Last year, the same ratio was 20 of the 31 acquiring firms. Thus, this year's respondents were not involved in the same high-volume consolidation activity reported last year, but a similar percentage of firms have recently completed acquisitions, and those who have are still optimistic about future acquisition prospects.

A greater percentage of contractors reported a trend of increased valuations. While last year's survey showed that 52% of respondents believed that construction company valuations were decreasing in the preceding five years, this year's respondents were more optimistic. This year, 38% of respondents indicated that they believe valuations have increased in the last five years, while 25% believe that they have not changed in that time-period. In contrast to last year, only 36% believe that valuations have decreased in the last five years. (See Exhibit 15.)

This shifting perception is indicative of a growing economy and optimism held by companies looking to expand into new markets or acquire new capabilities. Market conditions, increased interest in consolidation opportunities, and merger and acquisition activity are driving higher valuations.

Contractors report that recent mergers and acquisitions have been generally successful. This year, the participating contractors reported a slightly higher level of satisfaction with their most recent merger or acquisition than was reported last year. In all three of the evaluated categories — overall integration, management transition, and cultural transition — most of the contractors indicated that their most recent merger or acquisition was successful to very successful.

In 2005, 96% of the contractors reported that the overall integration of the most recent merger or acquisition was neutral to very successful as compared to 91% in 2004. Similarly, 96% of the contractors reported a neutral to very successful management transition with their most recent merger, and 87% indicated that the associated cultural transition was neutral to very successful. Last year's cultural and management transitions were reported as being only 81% and 82% neutral-to-very successful, respectively. Beyond economic differences between 2004 and 2005, the demographic shift in survey respondents may explain the slight increases in satisfaction. Larger companies generally have greater resources and experience in integrating new

Over 5% are considering selling their business to another company in the coming five years.

companies into their existing businesses. (See Exhibit 16.)

In 2005, 43% of the contractors reported that they are considering some form of a transaction; the contractors have an increasingly optimistic view of the upcoming merger and acquisition climate. In addition, over 5% are considering selling their business to another company in the coming five years. A stronger economy influenced half of the respondents in their decision to sell. Other respondents noted that their M&A plans have not changed since last year. One respondent pointed to an owner-exit strategy as the reason for wanting to sell the company. Comparatively, last year, only one-third of the respondents were interested in merger or acquisition activity of any kind, including selling their business. (See Exhibit 17.)

Like last year, contractors reported that entry into new markets and geographic expansion are their primary merger and acquisition motivators. The ability to expand their service areas is also an important factor for contractors contemplating a merger or acquisition of new firms. (See Exhibit 18.)

Nearly all respondents indicated that their merger and acquisition plans for the upcoming year had not been affected by the state of the economy. With almost 93% of the respondents indicating that the state of the economy has had no effect on their merger and acquisition plans, it is clear that potential economic woes such as the expected economic loss due to hurricane damage, and rising energy and materials prices, have had no serious effect on contractors' growth plans for the future. Senior FMI executives have noted that many construction companies are building significant backlogs comparable to 1999 levels. FMI estimates show demand for nonresidential building construction is expected to grow 8% annually through 2009. (See Exhibit 19.)

The top five M&A targets of interest are Commercial/Institutional, Healthcare, Corporate Facilities, and Industrial Facilities. Last year, respondents ranked choices very differently. Other (non-specified options) ranked first, followed by Power/Utilities, Manufacturing, Residential, and Healthcare. (See Exhibit 20.)

FMI's 2006 construction put-in-place estimates show that the nation's largest construction markets by volume are Education at $86.6 billion, Commercial/Institutional at $77 billion, and Corporate Facilities at $50.8 billion. Healthcare ranked fourth with $35.7 billion in construction revenues.

The three fastest growing markets are Lodging, Corporate Facilities, and Manufacturing. These markets are expected to grow 10% between 2005 and 2006. Commercial construction is expected to grow 9% and Education is expected to grow 8% from 2005 to 2006. Looking forward to 2009, Education construction is expected to be the fastest growing and largest construction segment with a growth rate of 12% and an annual volume of nearly $120 billion in construction.

Contractors are considering merging with, and acquiring larger firms. Last year, the most common size, by revenue, for a potential merger or acquisition target was $5 to $10 million. This year, more than 59% of the respondents were interested in firms with yearly revenues between $10 and $50 million. The increase in target size between 2004 and 2005 is mostly attributed to the majority of respondents being in the $100 to $499 annual revenue range. Companies in this range have greater financial resources and broader management teams capable of integrating larger construction companies. Also significant, is the nearly 19% of contractors who reported they would consider merging with a firm with yearly revenue over $50 million; last year, only 5% of the respondents would consider merging with, or acquiring, a firm that size. (See Exhibit 21.)

The use of alternative materials, savvy financial management, and clear business strategies will be critical to the health and success of contractors going forward.

The coming year will be a time of economic transition. The country will continue to adjust to the psychological and economic ripples created by hurricanes Katrina, Rita, and Wilma. Public markets may see dramatic shifts in spending as the government works to adjust budgets to cover the costs of the disasters and the ongoing war in Iraq. Reconstruction efforts in Gulf Coast regions will provide tremendous opportunity for contractors. Yet with the opportunity will come increased costs for materials. The impact will be felt in all regions of the country. The cost of materials will only be compounded by the cost of energy needed to transport materials, construction crews, and equipment. Further, international construction demand and growth will push materials costs to new levels, further straining the supply in the U.S. The use of alternative materials, savvy financial management, and clear business strategies will be critical to the health and success of contractors going forward. ■

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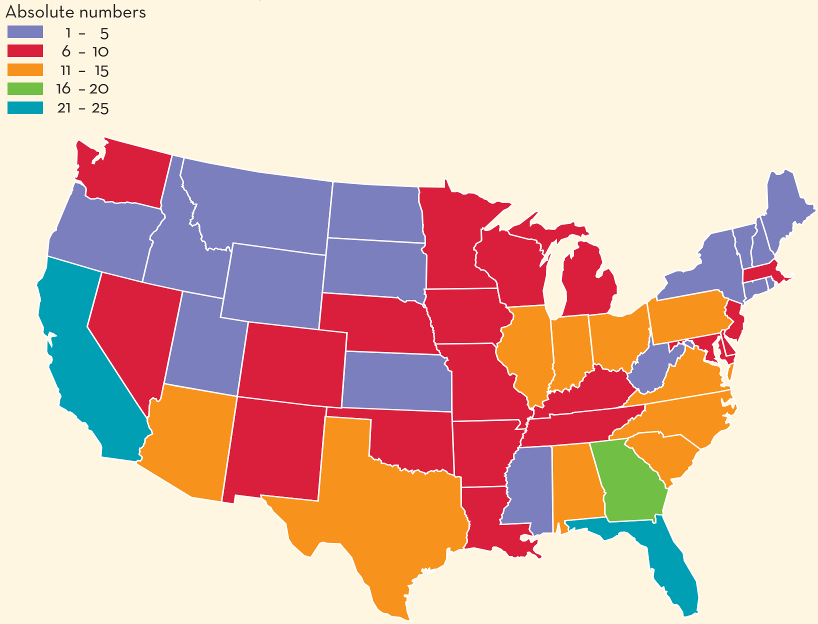
[1] Ip, Greg. "Fed Keeps Focus On Inflation and Raises Rate." *The Wall Street Journal*, 21-SEP-2005.

Exhibit 1

States Served by Respondents

Number of Contractors with Projects per State

Absolute numbers

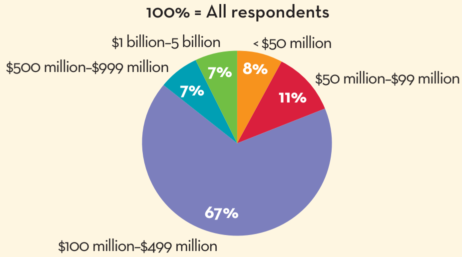


Source: 2005 Construction Industry Productivity Survey conducted by FMI

Exhibit 2

2004 Revenues

100% = All respondents



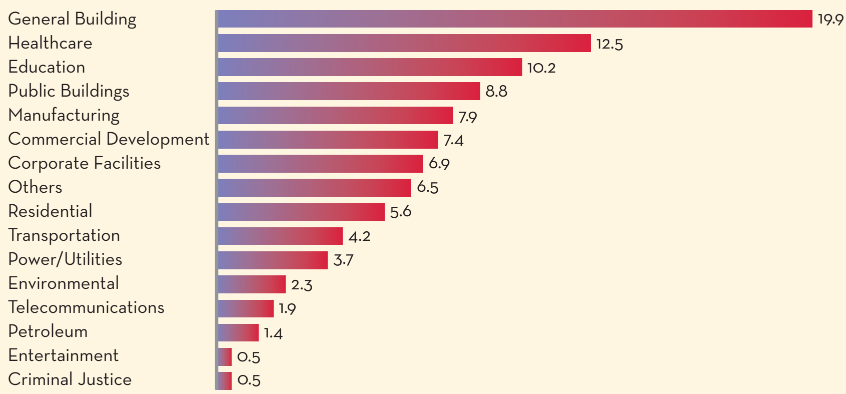
Source: 2005 Construction Industry Productivity Survey conducted by FMI

Exhibit 3

Market Sectors

Markets which account for 20% or more of the company's annual revenue

Percent



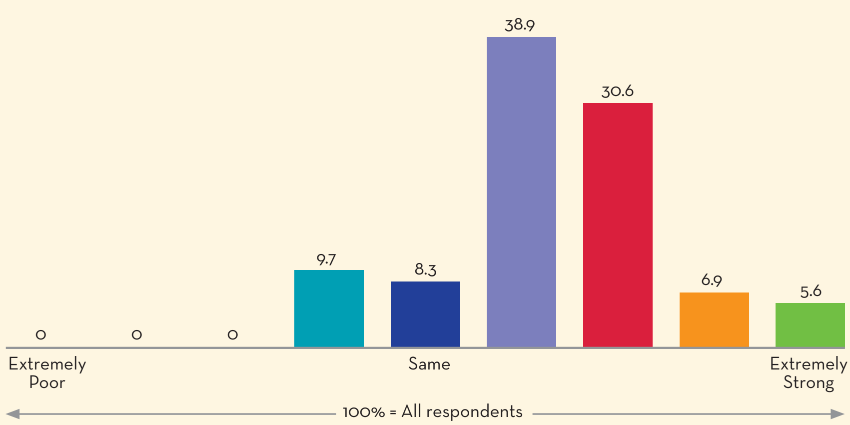
Source: 2005 Construction Industry Productivity Survey conducted by FMI

Exhibit 4

Economy Strength

How would you rate the current state of the U.S. construction economy during the past 6 months?

Percent



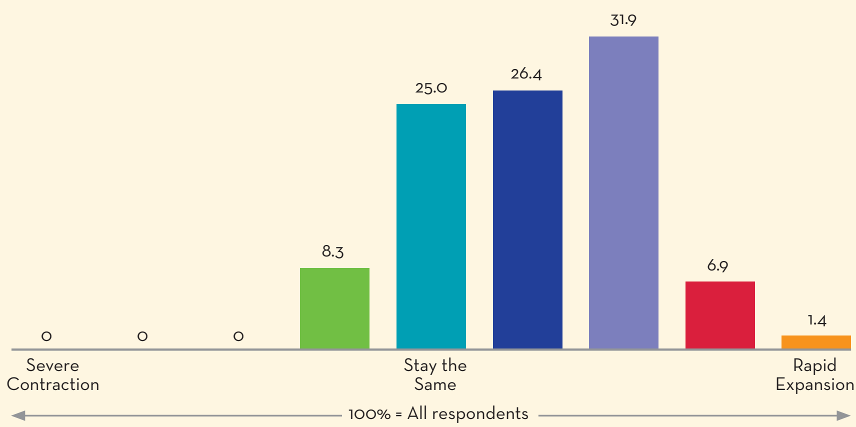
Source: 2005 Construction Industry Productivity Survey conducted by FMI

Exhibit 5

Market Expansion

During the next 12 months, do you expect the U.S. construction economy to expand, contract, or stay about the same as it is currently?

Percent



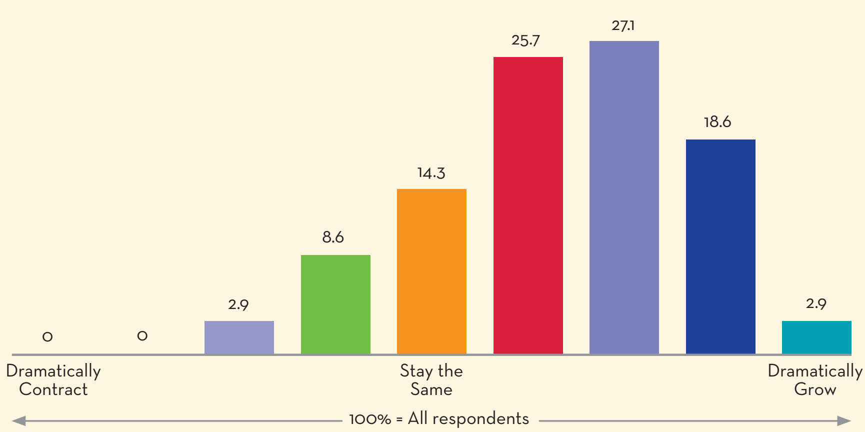
Source: 2005 Construction Industry Productivity Survey conducted by FMI

Exhibit 6

Revenue Growth

Compared to last year, do you expect your company's revenues to grow, contract, or stay the same in the next 12 months?

Percent



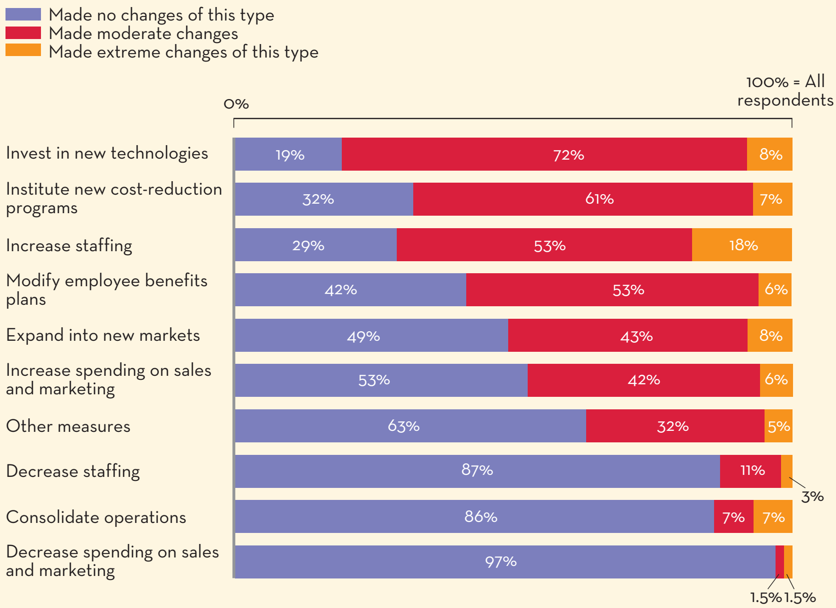
Source: 2005 Construction Industry Productivity Survey conducted by FMI

Exhibit 7

Effects of Economic Conditions

Due to the economic conditions you have experienced in the past 6 months, what kind of changes, if any, have you made in the following areas?

Percent



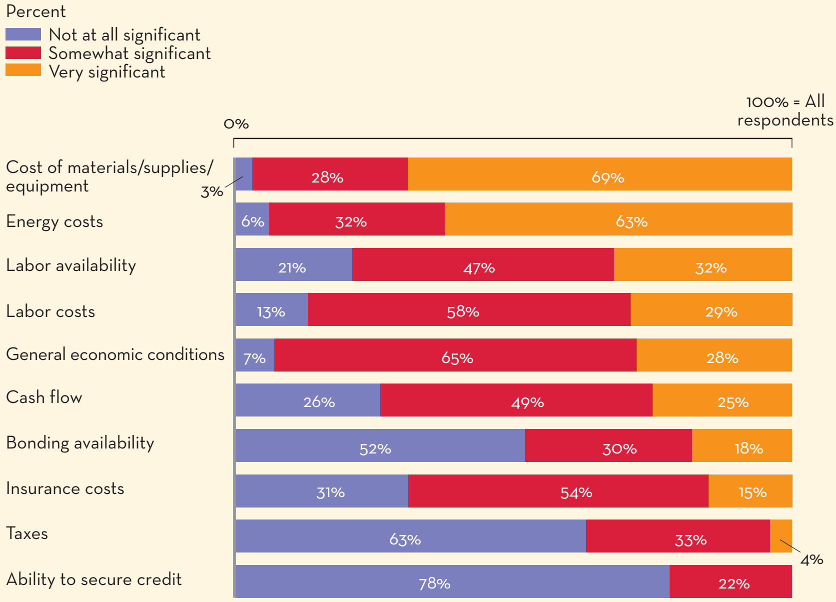
Source: 2005 Construction Industry Productivity Survey conducted by FMI

Exhibit 8

Contractors' Top Financial Concerns

What do you believe will be your most significant financial concerns during the next 12 months?

Percent

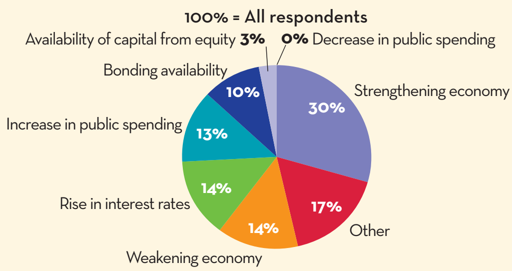


Source: 2005 Construction Industry Productivity Survey conducted by FMI

Exhibit 9

Financial Factors Affecting Contractors

Of the following, what do you believe will have the greatest impact on your business?



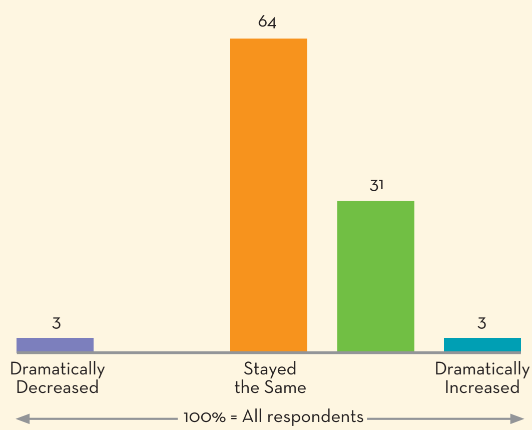
Source: 2005 Construction Industry Productivity Survey conducted by FMI

Exhibit 10

Credit Availability

Have your lenders changed your net credit availability from last year (excluding normal extension of routine credit)?

Percent



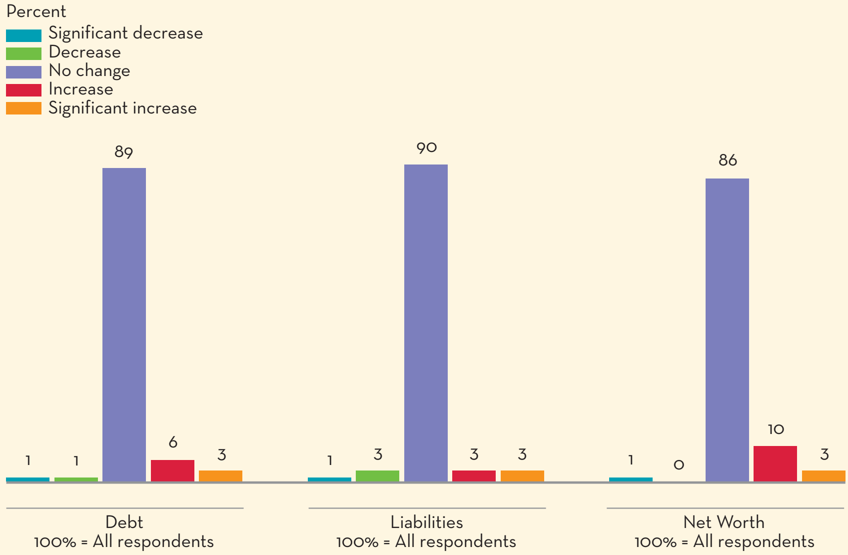
Source: 2005 Construction Industry Productivity Survey conducted by FMI

Exhibit 11

Financial Covenants

Overall, have your lenders changed any of the following financial covenants for your business in the last year?

Percent



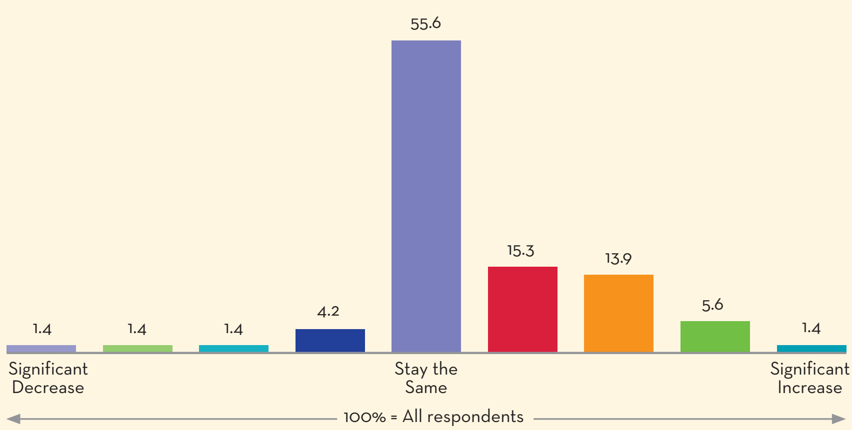
Source: 2005 Construction Industry Productivity Survey conducted by FMI

Exhibit 12

Financing Requirements

Do you expect your company's financing requirements to increase, decrease, or stay the same in the next 12 months?

Percent



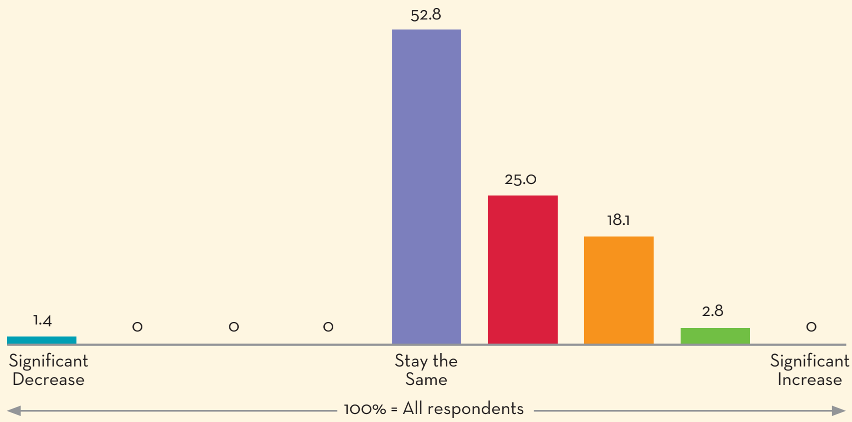
Source: 2005 Construction Industry Productivity Survey conducted by FMI

Exhibit 13

Bonding Capacity

How do you expect your bonding capacity to change over the next 12 months?

Percent

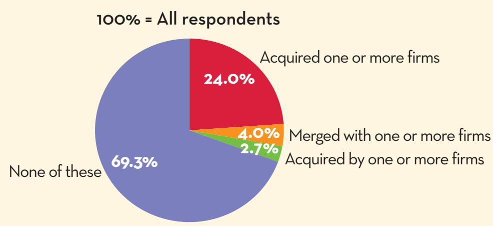


Source: 2005 Construction Industry Productivity Survey conducted by FMI

Exhibit 14

Firm Acquisition

Which of the following M&A activities did you conduct during the last five years (since January 2000)?



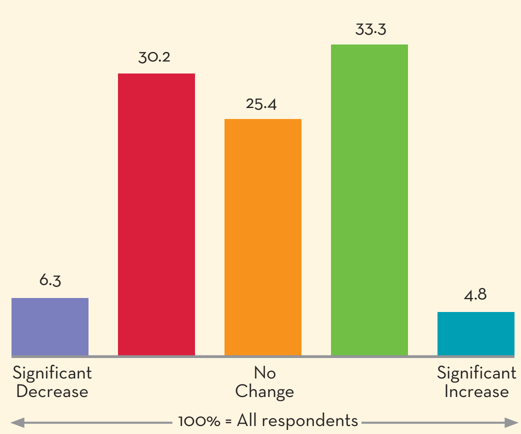
Source: 2005 Construction Industry Productivity Survey conducted by FMI

Exhibit 15

Company's Valuation

Do you believe valuations of construction companies have generally increased or decreased since 2000?

Percent



Source: 2005 Construction Industry Productivity Survey conducted by FMI

Exhibit 16

Title?

How successful would you consider your most recent merger or acquisition to be in achieving its strategic goals/objectives in the following areas?

Percent

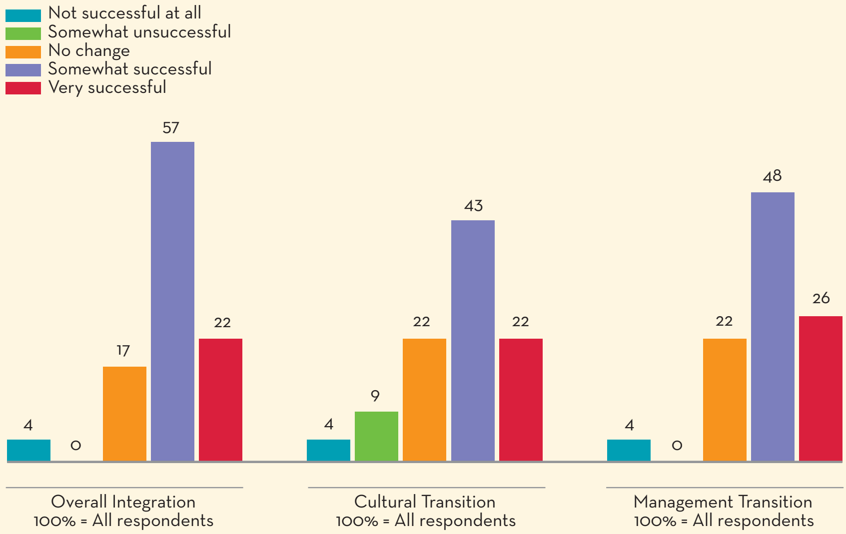
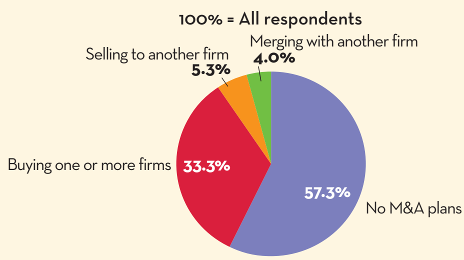


Exhibit 17

Company Transactions

Is your firm considering any of the following over the next five years?

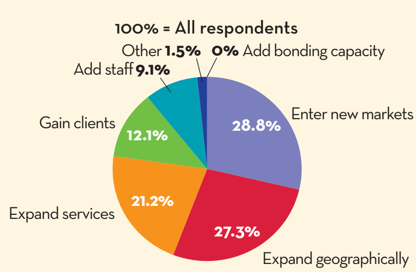


Source: 2005 Construction Industry Productivity Survey conducted by FMI

Exhibit 18

Reasons for Acquisitions

Choose the top 3 reasons you are considering buying or merging with another firm.

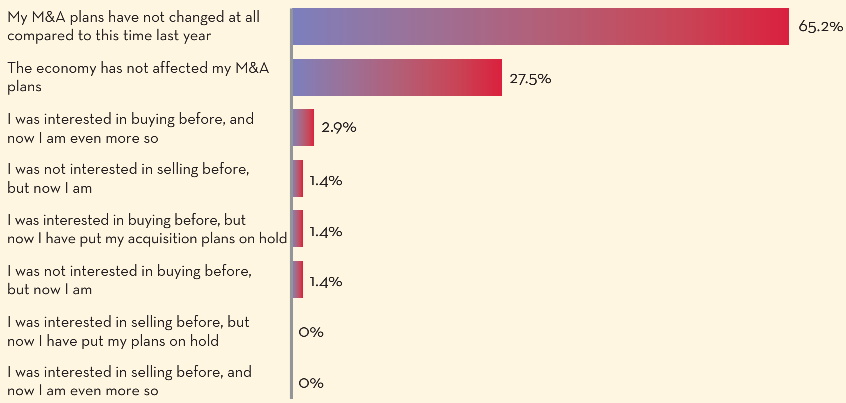


Source: 2005 Construction Industry Productivity Survey conducted by FMI

Exhibit 19

Effect of Economy on Mergers and Acquisitions

Compared to last year, how has the state of the economy affected your M&A plans for this year?



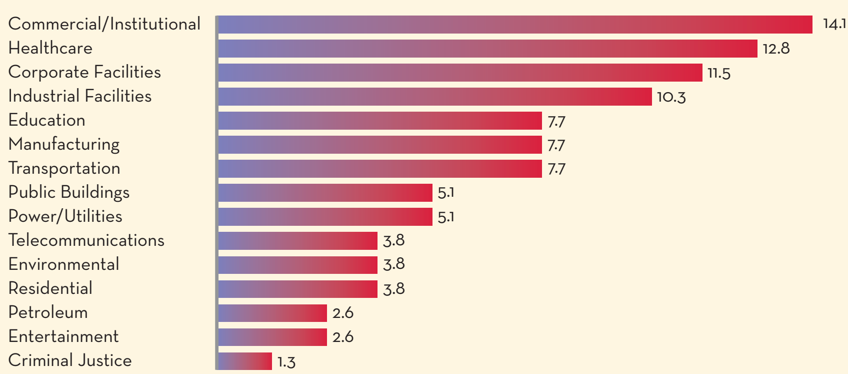
Source: 2005 Construction Industry Productivity Survey conducted by FMI

Exhibit 20

Favored Merger and Acquisition Targets

What type of construction firm would best meet your merger or acquisition objectives?

Percent



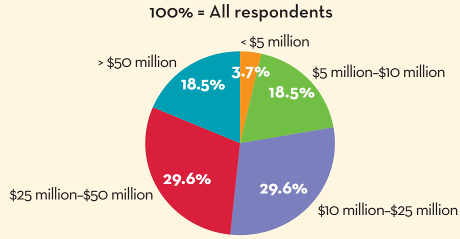
Source: 2005 Construction Industry Productivity Survey conducted by FMI

Exhibit 21

Revenue Ranges Most Appealing to Potential Acquirers

By revenue, what size firm would you consider?

100% = All respondents



Source: 2005 Construction Industry Productivity Survey conducted by FMI

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