CLARITY

34th Annual Comprehensive Report

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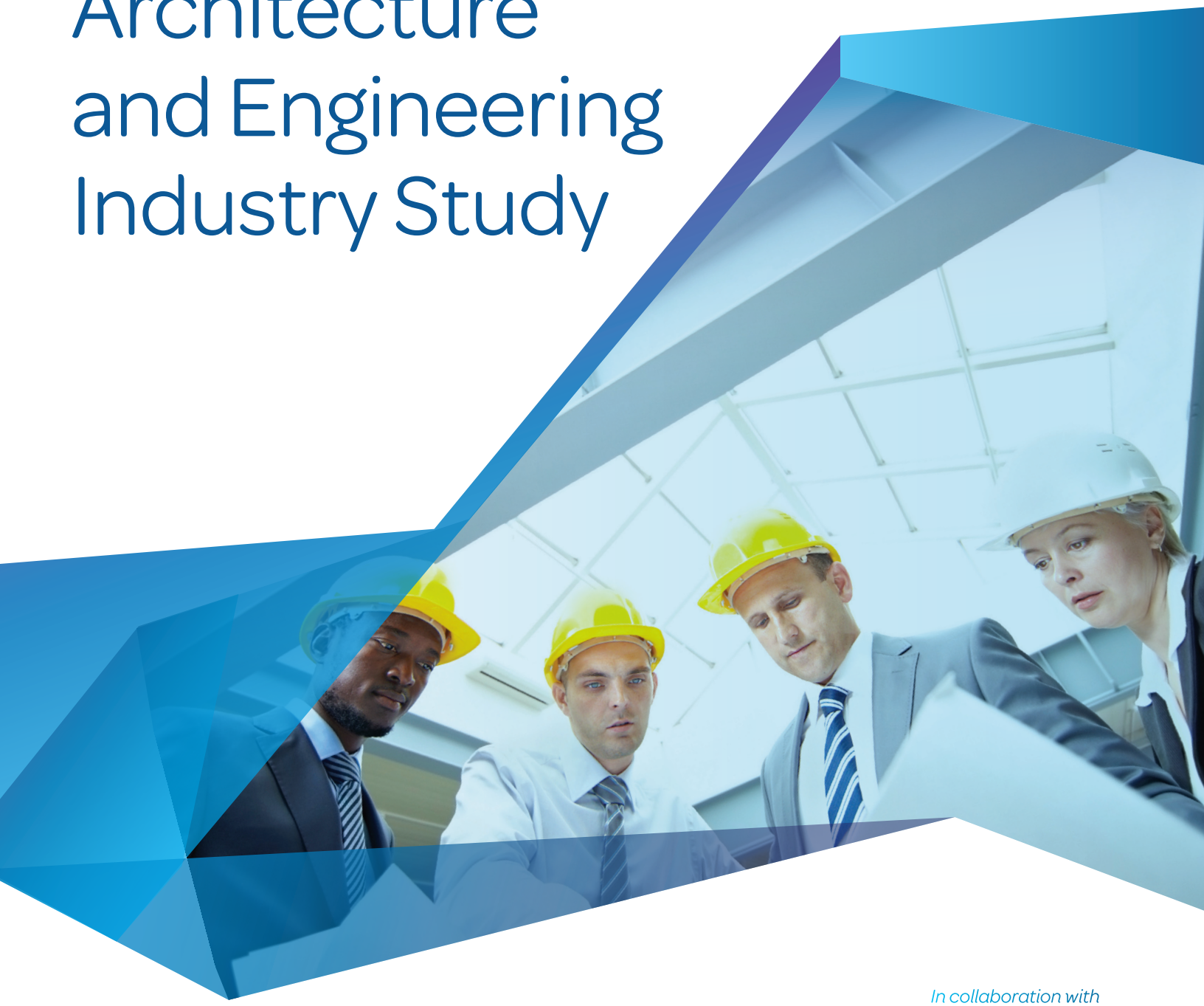
Architecture and Engineering Industry Study



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Do more.

Section 1:

State of the A&E Industry

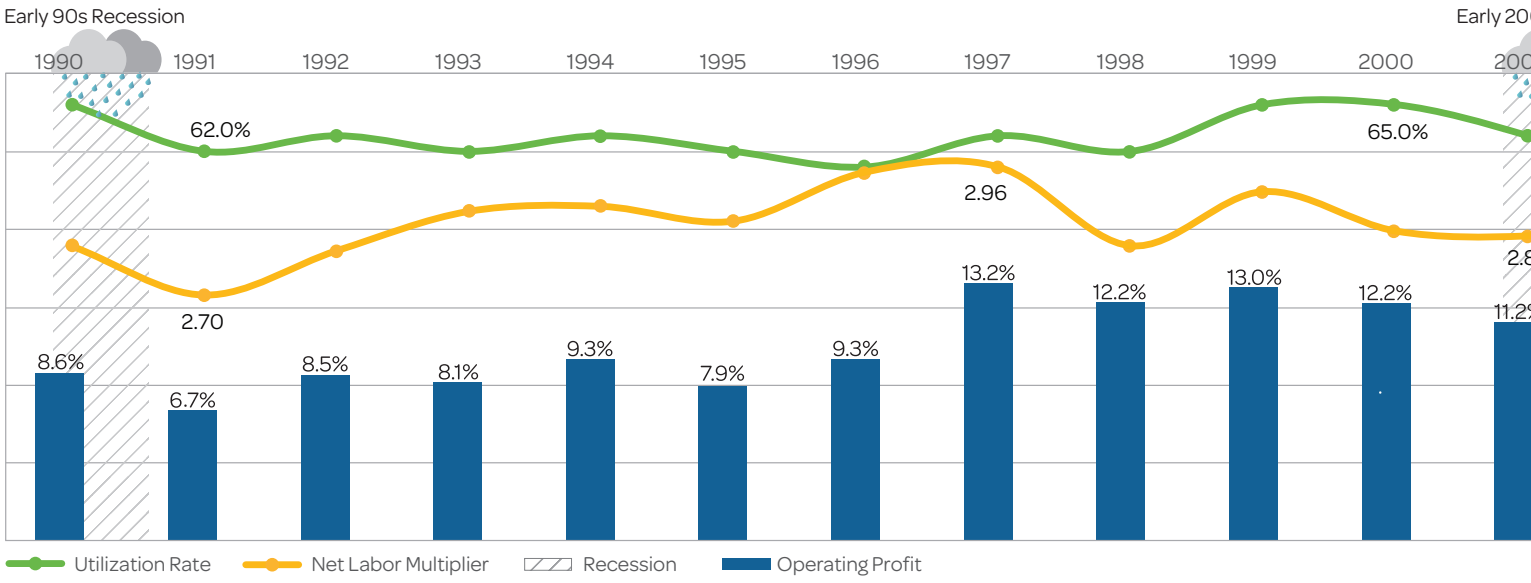
Welcome

In 2007, the U.S. economy and the architecture and engineering industry alike were enjoying some of the greatest economic prosperity of modern times, fueled by a historic rise in property and home values and a global building boom.

But already, rumblings were growing about problems in the so-called sub-prime mortgage market. Many had warned about a housing bubble throughout the entire run-up in home prices, but few outside of the financial industry were prepared for what was about to come. On September 15, 2008, the investment bank Lehman Brothers collapsed, and everyone knew.

The last five years have indeed been a financial roller coaster ride for most A&E firms, but the good news is that many have started the climb back up, which you'll see in results of the 34th edition of the *Deltek Clarity Architecture and Engineering Industry Study.* There are dozens of financial indicators that the industry is improving slowly but steadily, and this report will help firm leaders assess the current conditions and plan for the journey ahead.

Deltek's financial metrics survey is the oldest, longest-running study of its kind, and provides the industry's most comprehensive resource on financial performance and market outlook for A&E firm leaders.



Looking Back—The Great Recession

Unlike past recessions when some markets were hit harder than others, virtually every sector addressed by A&E firms experienced a steep decline during the Great Recession, which officially began in December 2007 and ended in June 2009.

Private development stopped short. Businesses cut all non-critical spending. Big universities put their building plans on hold. Falling tax revenues pinched states and municipalities. With less work to go around, competition between A&E firms increased in every market, lowering fees for everyone, and squeezing out profit. Even Federal stimulus funds, focused on "shovel ready" projects, bypassed most designers. There were mass layoffs, and some companies closed up shop for good. The American Institute of Architects said member firms lost 60,000 payroll jobs—over a quarter of total employment—from 2008 to 2012.

The impact of the recession on the average A&E firm can be seen by looking at key performance indicators, including labor utilization, labor multipliers and operating profit. To begin with, note that the long-term average net profitability (1990–2012) for A&E firms is 10.1%, labor multiplier is 2.90, and utilization is 61.1%.

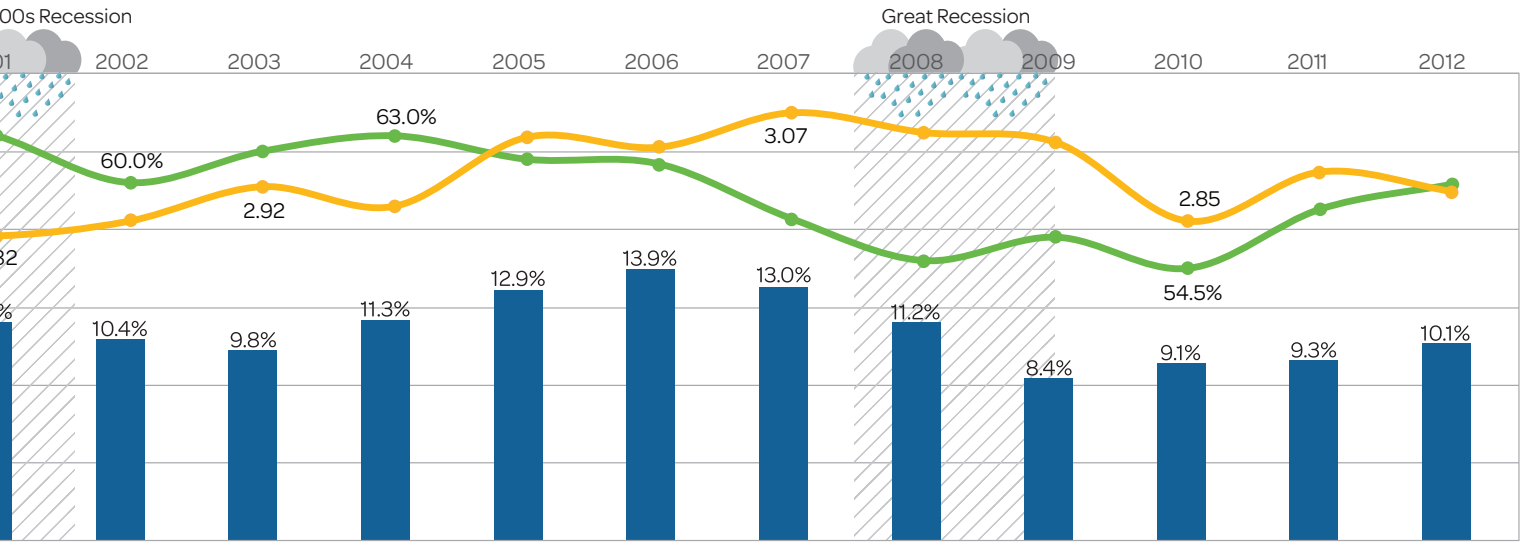
Prior to the late 1990s, profit margins were consistently lower, and since then have generally prevailed higher. Utilization and Labor Multipliers tend to work in opposition; when one goes up the other goes down, except in a recession when they both go down.

Let's look at just profitability for the last three recessions:

Early 90s: In the early 90s recession, profitability bottomed out in the first year after the recession, immediately rebounded, but stayed below the long-term average.

2001 recession: Profitability rose quickly in the late 90s, but had already begun to decline leading into the 2001 recession. It reached its bottom two years after the end of the recession and then quickly peaked three years later in 2006 at 13.9%

Great Recession: By contrast, in the longer-lived Great Recession, profitability was rising as the recession began. It declined rapidly for the 18 months of the event, and bottomed out quickly. It returned slowly, but for a smaller industry, with lower employment and fewer companies.



Source: Deltek Clarity A&E Industry Study 1990–2012

Looking at Today—Key Performance Indicators

And now, over three years later, profits are finally back to their historical norms. In fact, the average A&E firm's financial metrics looked stronger in 2012 than in any year since the recession began.

Utilization is rising. Overhead rates are falling. The average collection period declined, and net revenue per employee is growing. On the balance sheet, the current ratio is up, and debt-to-equity is down.

Of course, many challenges for A&E firms lie ahead: the federal budget sequester and its potential ripple effects in state and local spending, continued uncertainty in the housing market and a looming professional talent shortage just as the economy heats up.

The bottom line: A&E firms are gradually bouncing back from the economic slump and have finally balanced their workload and staffing to manageable numbers. The million-dollar question: Will we continue in a slow recovery pattern for several more years, or does the next boom begin now?

Highlights

- After reaching a decade low in 2009 at 8.4%, Operating Profit rates continued to rise steadily to 10.1% last year.
- Utilization rose in 2012 from 58.3% to 59.9%, and now is up over five percentage points since bottoming out two years ago.
- Overhead Rates dropped by more than 10 percentage points last year from their peak in 2011.
- Net Revenue Per Employee finally began to make up lost ground in 2012, rising to $121,902.

2012 Average	Key Performance Indicators	Three-Year Trend
7.9%	Operating Profit on Total Revenue	
10.1%	Operating Profit on Net Revenue	
59.9%	Utilization Rate	
2.91	Net Labor Multiplier	
1.75	Total Payroll Multiplier	
161.6%	Overhead Rate — Excluding Bonuses	
76	Average Collection Period (Days)	
$121,902	Net Revenue per Employee	
21.8%	Pre-Tax Return on Equity	
2.24	Current Ratio	
65.8%	Contribution Rate	
0.860	Debt to Equity	

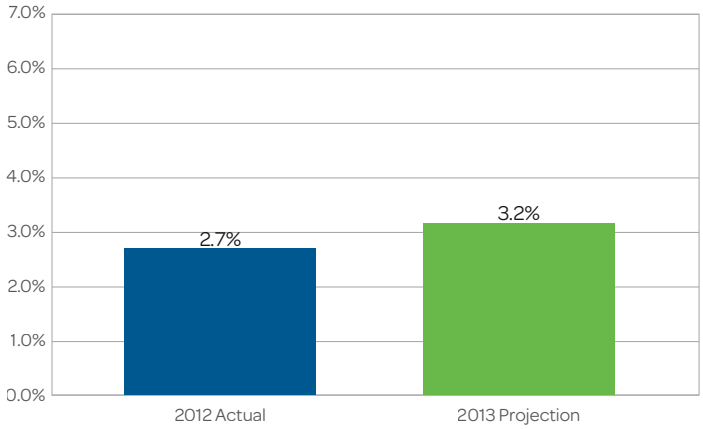
Looking Ahead—A&E Outlook

We've looked at where the industry has been and where it is today, but as every investor has heard many times, "Past performance may not be indicative of future results."

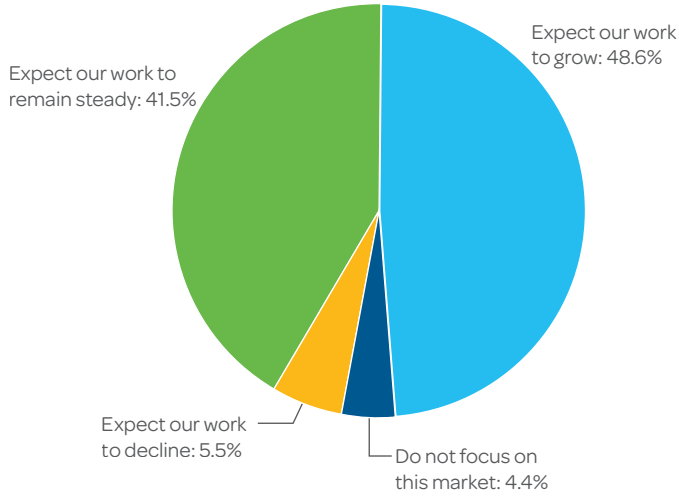
What's next for A&E firms? We asked participants a series of questions about their forecast, outlook on markets and strategies for success:

- Revenue growth projections for 2013 are slightly higher than the actual 2012 growth rate, showing continued cautious optimism for this year.
- The highest market growth expectations are in the private sector—nearly half expect their private sector work to grow in the next 18 months. While less than half of participants say they focus on the residential market, nearly all of those expect steady or growing work.
- Nearly three quarters of participants say "green" projects are a source of work for them. A third of those, led by Architecture firms, call it a "major" source. Meanwhile, the percentage of firms who said international work would be very important or critical has declined each year since 2009.
- Nearly 80% of participants said they expect to make technology investments in the near future, with a little over 60% planning to spend on information management, and nearly half in design and documentation.

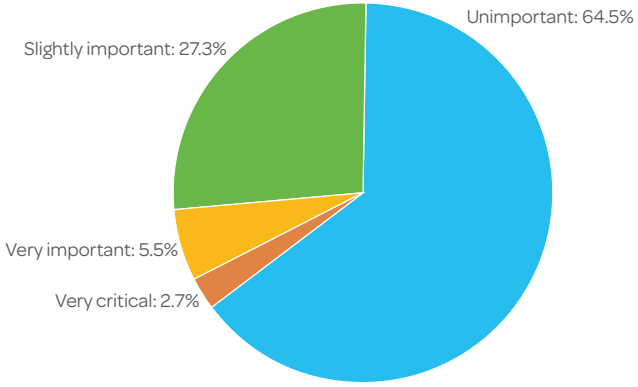
2013 Total Revenue Growth Forecast



Highest Market Growth Expectations Are for the Private Sector



Waning Importance of International Business in the Next 18 Months



Inside High Performing Firms

To achieve more, you can't set your goal to "average." We singled out the most efficient and profitable firms in the study and looked at them across each metric to see what makes them different.

We started with firms that have a Net Labor Multiplier of 3.0 or higher and an Operating Profit rate of 15% or higher (pre-tax, pre-bonus on net revenues). About 20% of the study participants made the cut.

High Performing firms by definition are more profitable and have higher multipliers. They also have higher utilization and higher revenue per employee. Their average overhead rate, on the other hand, is virtually the same as other firms.

Here are a few other distinctions of High Performers:

- High Performers negotiate mostly fixed fee contracts that have higher risk and higher reward. By managing projects effectively they earn higher rewards.
- High Performers have an Average Collection Period that is 10 days shorter than other firms. Clearly, they manage their accounts receivable and cash flow more effectively.
- High Performers have stronger balance sheets, based on high profitability. They are in a better position to aggressively pursue new opportunities, including new projects, new people and new markets.
- High Performers pay over four times as much in per-employee bonuses and have a staff turnover rate three points lower than other firms.

What's our takeaway from High Performers? Now more than ever, A&E firms need to continue to focus on negotiating higher contract fees and more effective project management to improve productivity statistics over the next few years. After five years of pressure, overhead cuts have reached the point of diminishing returns. In the "new normal," firm leaders need fast, continuous financial insight that will give them the confidence to take on greater risks, manage all their processes from marketing to project delivery more efficiently, and achieve greater rewards.

High Performers	Key Performance Indicators	All Other Firms
▲ 25.0%	Operating Profit	8.4%
▲ 3.43	Net Labor Multiplier	2.86
▲ 60.4%	Utilization Rate	59.5%
▲ 161.8%	Overhead Rate	161.2%
▲ $144,133	Net Revenue Per Employee	$116,888
▲ 3.06	Current Ratio	2.19
▼ 9.7%	Employee Turnover	12.7%
▲ $9,603	Bonuses Per Employee	$2,209

About the Study

A total of 203 U.S. and Canadian Architecture and Engineering firms completed our online survey in February and March, 2013. Their responses were aggregated with prior year Clarity study data to analyze trends.

Firm type

We use the term **Architecture & Engineering (A&E)** to refer to *all* Architecture, Engineering and allied design firms included in the study.

We also break out two broad segments for comparison:

Engineering (E) or **Engineering/Architecture (E/A)** firms are either pure consulting engineering firms or engineering dominant firms that also provide architectural services. E/A firms are also known in the industry as "big E, little A" firms.

Architecture (A) and **Architecture/Engineering (A/E)** firms are either pure architectural design firms or architecture dominant firms that also provide engineering services. A/E firms (not to be confused with A&E, which refers to *all* design firms) are also known in the industry as "big A, little E" firms.

Of the survey participants, 59% were Engineering or E/A firms, 34% were Architecture or A/E firms, and 7% were other types of allied design or consulting firms, including landscape architecture and environmental consulting.

Firm size

45% of participants were from small firms (1–50 employees), 42% were from mid-sized firms (51–250 employees), and 13% were from large firms (251+ employees).

High Performers

We defined High Performers as firms with a Net Labor Multiplier of 3.0 or higher and an Operating Profit rate of 15% or higher (pre-tax, pre-bonus on net revenue).

Study Notes

For average we used the median, which is the middle of the data set—half the firms are higher and half are lower. Top Quarter and Bottom Quarter refer to the top and bottom quartiles—25% of firms were equal to or higher than the top value, 25% were equal to or lower than the bottom value, and 50% fall between the two.

Learn More

At the end of the report are comprehensive tables including all the metrics from this section, as well as many others.

Section 2:

Key Performance Indicators

Introduction

In this section, we dig into the metrics derived from an A&E firm's profit and loss statement—the key operating statistics in running a business.

For each metric, we show the 2012 average for all participants, range of responses, a 2011 to 2012 comparison, and graphs to contrast responses by firm type, by firm size, and for High Performer versus all other firms. Where possible, we also provide a 10-year graph of the metric, including a two-year moving average trend line, to give the current results more context.

At the end of the report are comprehensive tables including all the metrics from this section, as well as many others that there wasn't room to cover in detail.

In our discussion, we will point out selected highlights, but we also encourage readers to use the data for their own analysis.

Key Data Points

- After reaching a decade low in 2009 at 8.4%, Operating Profit rates continued to rise steadily to 10.1% last year.
- Utilization rose in 2012 from 58.3% to 59.9%, and now is up over five percentage points since bottoming out two years ago.
- Over the past three years, the Net Labor Multiplier has been relatively flat, fluctuating between 2.85 and 2.95.
- Overhead Rates dropped by more than 10 percentage points last year from their peak in 2011.
- Net Revenue Per Employee finally began to make up lost ground in 2012, rising to $121,902.
- The average Staff Growth rate increased from 2.7% to 3.3% between 2011 and 2012.
- The average Employee Turnover rate declined from 13.8% to 11.8% between 2011 and 2012.

Operating Profit on Net Revenue

2012 AVERAGE
10.1%

	2012	2011
Top Quarter	17.2%	16.3%
Average	10.1%	9.3%
Bottom Quarter	5.2%	3.0%

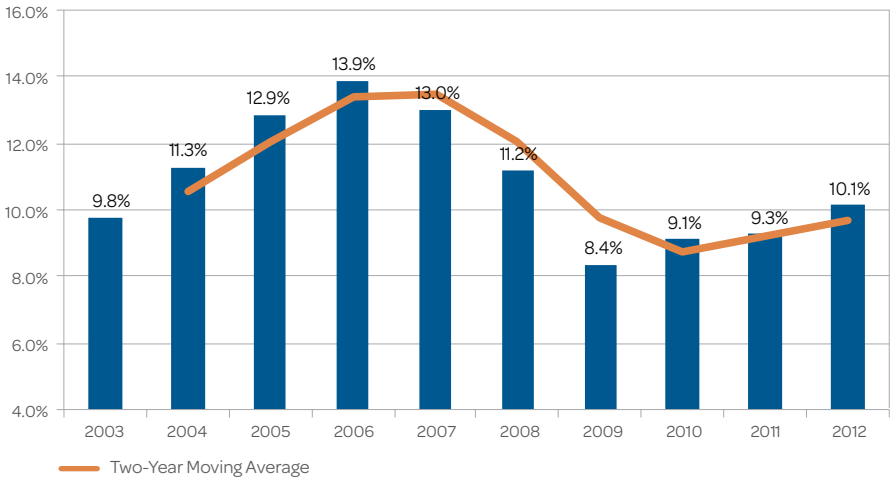
Analysis

Operating Profit (pre-tax, pre-bonus) on Net Revenue is the generally preferred measure for an A&E firm's profit rate, because it omits pass-through revenue from the top line and taxes and discretionary distributions from the bottom line.

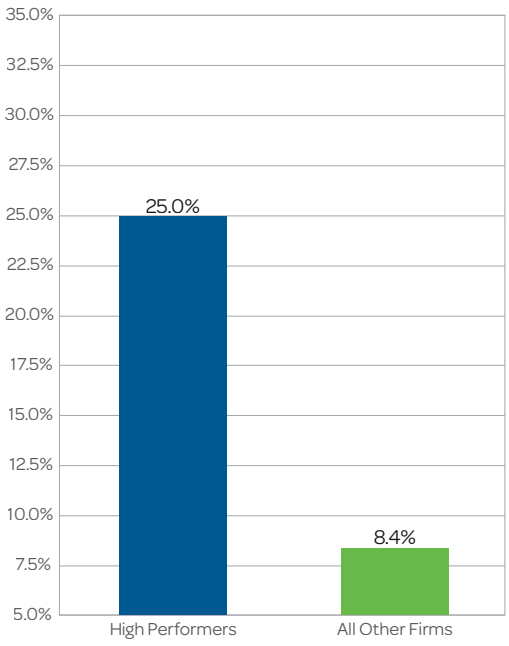
After reaching a decade low in 2009 at 8.34%, Operating Profit rates continued to rise steadily to 10.1% last year. Firms serving the private sector had higher profits. Mid-sized firms continued to be more profitable than their smaller or larger counterparts. And the highest performing firms in the survey pointed the way to what is possible, with a 25% profit margin.

Operating Profit on Net Revenue is calculated by dividing pre-tax, pre-distribution profit by Net Revenue (total revenue minus consultants and other direct expenses, both billable and non-billable), and multiplying by 100.

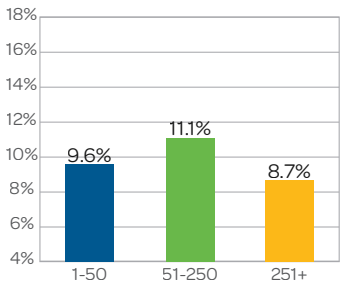
Ten-Year Trend



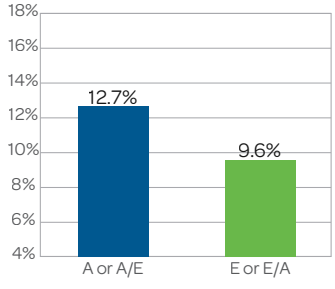
2012 High Performers vs. Other Firms



2012 by Firm Size



2012 by Firm Type



Operating Profit on Total Revenue

2012 AVERAGE

7.9%

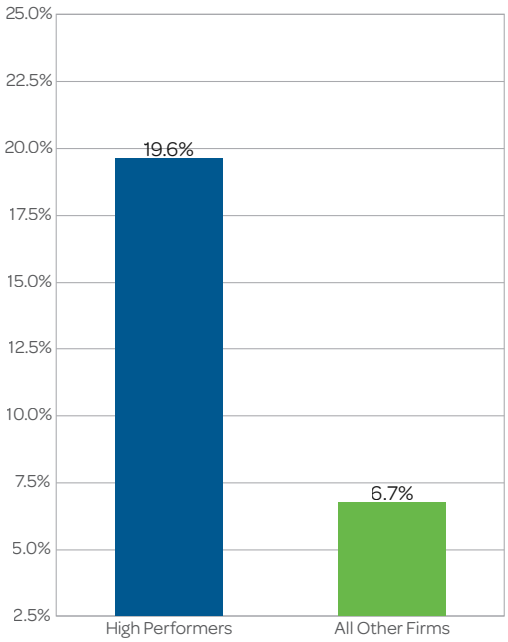
	2012	2011
Top Quarter	14.0%	14.1%
Average	7.9%	7.4%
Bottom Quarter	3.9%	2.2%

Analysis

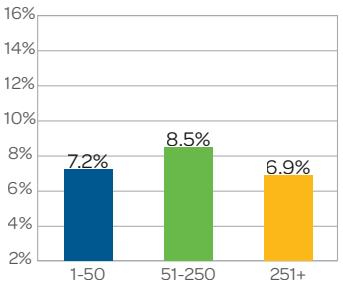
The Operating Profit rate on Total Revenue is an alternate way to look at an A&E firm's profitability. Operating Profit on Total Revenue reached a ten-year low in 2009 at 6.6%, but climbed back to 7.9% in 2012. Mid-sized firms were a little more profitable, and of course High Performers were significantly more profitable.

Operating Profit on Total Revenue is calculated by dividing pre-tax, pre-distribution profit by Total Revenue, then multiplying by 100.

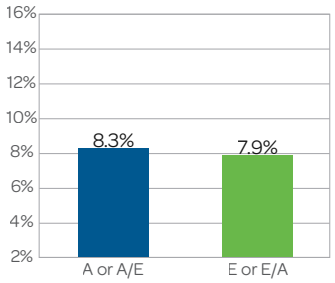
2012 High Performers vs. Other Firms



2012 by Firm Size



2012 by Firm Type



Contribution Rate

2012 AVERAGE

65.8%

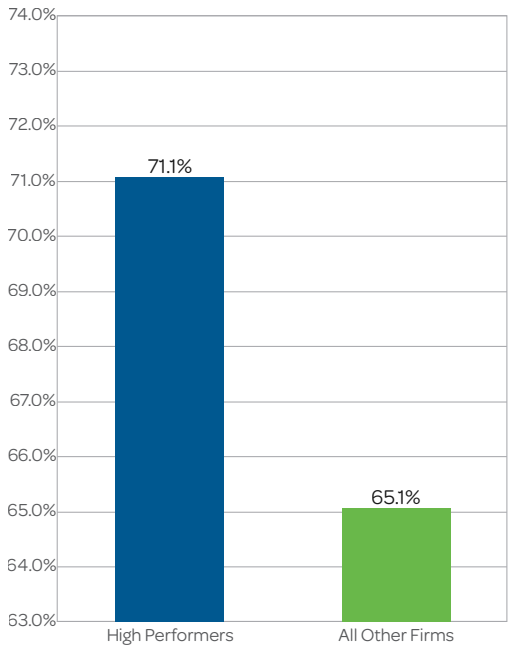
	2012	2011
Top Quarter	69.3%	70.1%
Average	65.8%	66.0%
Bottom Quarter	63.3%	63.5%

Analysis

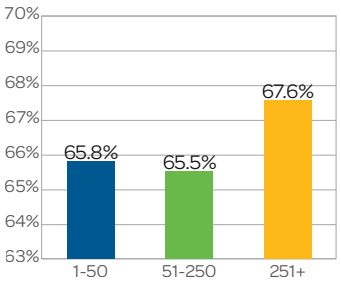
The Contribution Rate is the portion of each dollar of Net Revenue remaining after all direct project costs (both labor and expenses) are covered. It has hovered between 65% and 66% over the last three years. High Performers have an average Contribution Rate that is five percentage points higher than the norm. Contribution Rates are slightly higher in larger firms and in Architecture and A/E firms.

The Contribution Rate is calculated by dividing Gross Profit (Net Revenue minus Direct Labor and other Direct Expenses) by Net Revenue, then multiplying by 100.

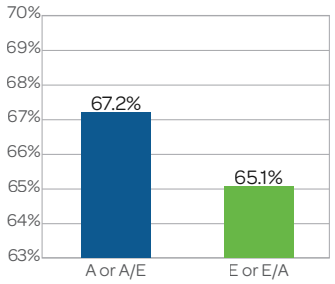
2012 High Performers vs. Other Firms



2012 by Firm Size



2012 by Firm Type



Utilization Rate

2012 AVERAGE

59.9%

	2012	2011
Top Quarter	65.2%	62.9%
Average	59.9%	58.3%
Bottom Quarter	55.0%	53.2%

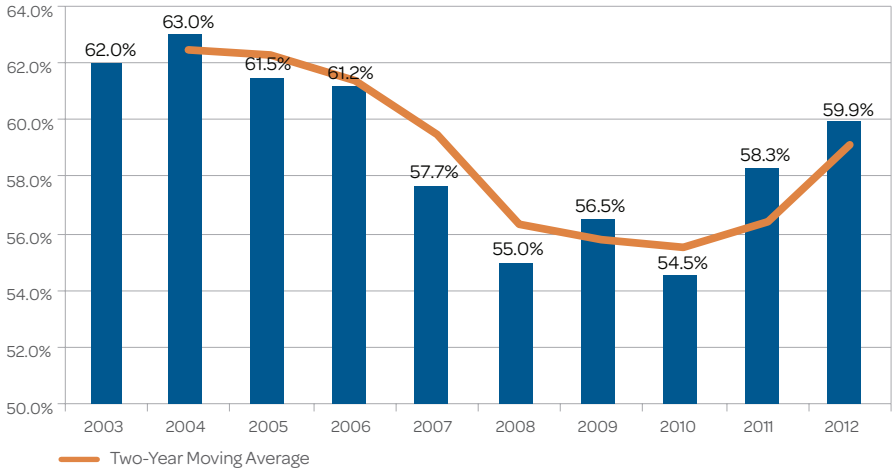
Analysis

The Utilization Rate (also known as Chargeability) measures the percentage of total staff labor charged to projects. Although some A&E firms track utilization on hours or remove vacation, holiday, sick and other paid time off, measuring by dollars and including paid time off shows the clearest picture of labor cost utilization, and has become the industry standard.

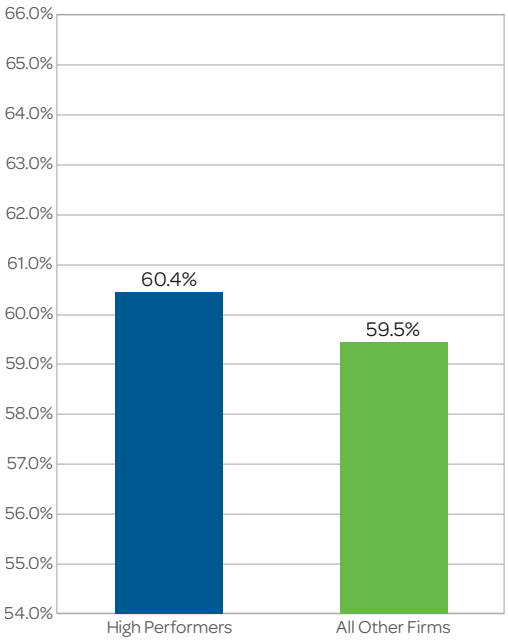
Utilization rose in 2012 from 58.3% to 59.9%, and is now up over five percentage points since bottoming out two years ago. There is still room for improvement—it was at 63% in 2004. The survey did not find dramatic differences in utilization by firm size or type.

The Utilization Rate is calculated by dividing the cost of Direct Labor (labor charged to projects) by the total labor cost of the firm, and multiplying by l00.

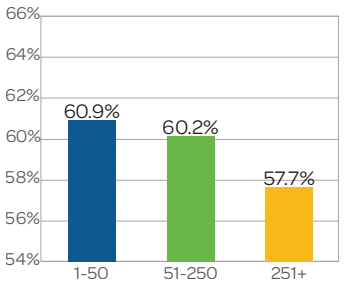
Ten-Year Trend



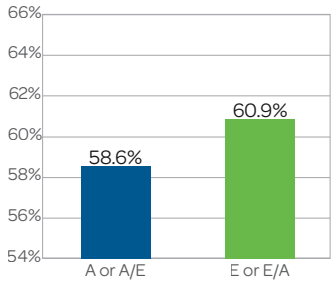
2012 High Performers vs. Other Firms



2012 by Firm Size



2012 by Firm Type



Net Labor Multiplier

2012 AVERAGE
2.91

	2012	2011
Top Quarter	3.23	3.36
Average	2.91	2.95
Bottom Quarter	2.73	2.74

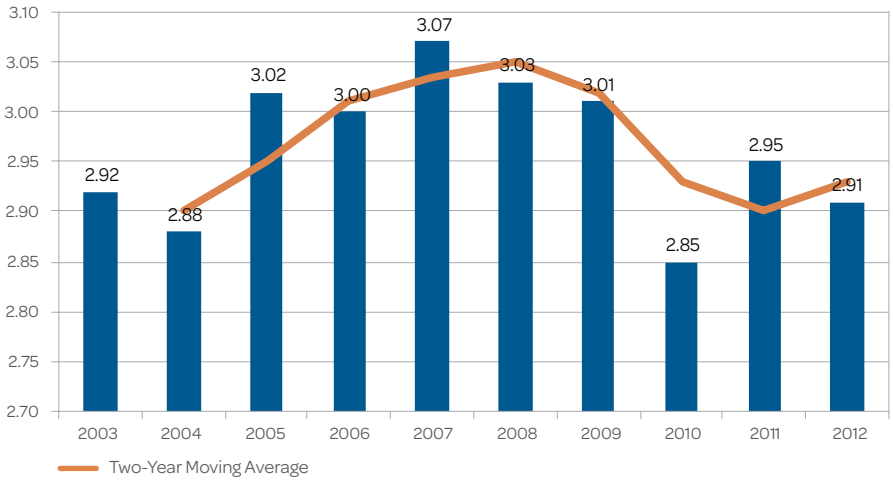
Analysis

The Net Labor Multiplier is a measure of the actual mark-up on labor costs. It should not be confused with the "Target Multiplier," which is a firm's goal (but not actual) for labor mark-up.

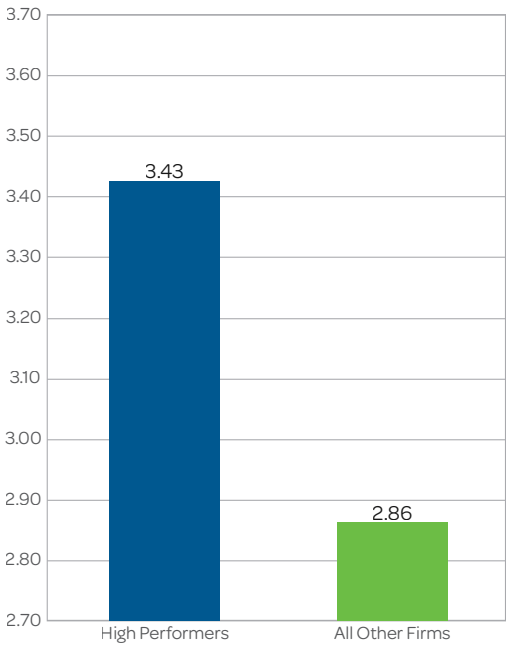
Over the past three years, the Net Labor Multiplier has been relatively flat, fluctuating between 2.85 and 2.95. Larger firms had higher multipliers than small or mid-sized firms, but for all firms,v competitive pressures on fees are helping to keep multipliers down. The expectation is that this pressure will continue, causing firms to focus on executing more efficiently.

The Net Labor Multiplier is calculated by dividing Net Revenue by Direct Labor, the cost of labor charged to projects.

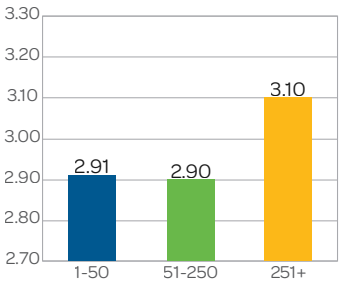
Ten-Year Trend



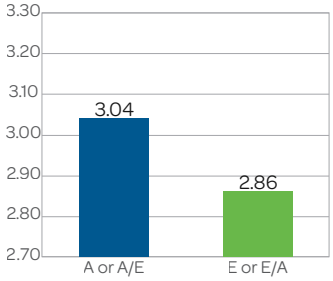
2012 High Performers vs. Other Firms



2012 by Firm Size



2012 by Firm Type



Total Payroll Multiplier

2012 AVERAGE

1.75

	2012	2011
Top Quarter	1.92	1.86
Average	1.75	1.74
Bottom Quarter	1.62	1.62

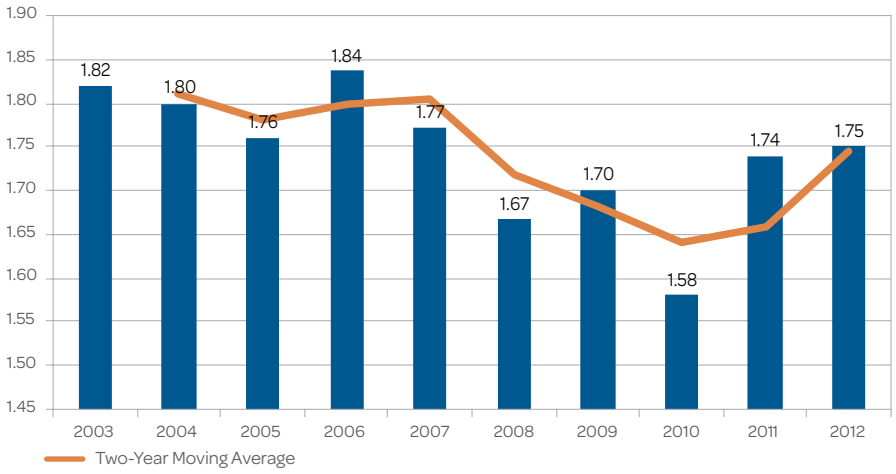
Analysis

Total Payroll Multiplier is perhaps the most consistent single indicator of an A&E firm's operating performance. By combining Utilization and the Net Labor Multiplier, it cancels out the push and pull between those ratios and shows how efficiently a firm converts labor to revenue.

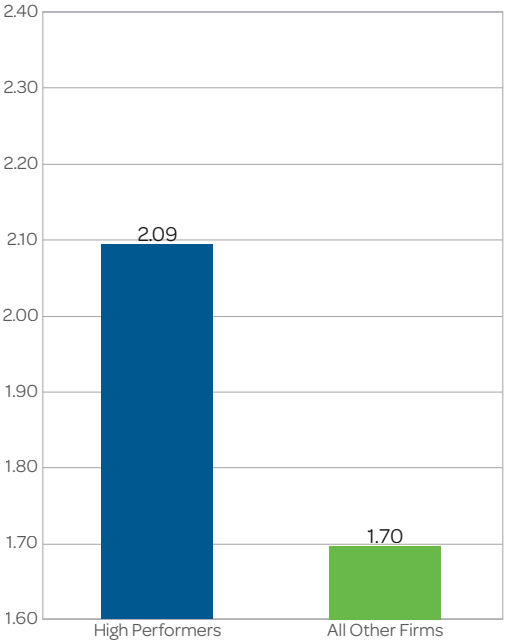
The average Total Payroll Multiplier stayed near 1.80 during the favorable climate of the mid-2000s, but sank as low as 1.58 during the recession. In 2011 and 2012, it returned to form as firms improved Utilization. Those with higher than average Total Payroll Multipliers included High Performers, small firms, Architecture and A/E firms and firms that focus on the private sector.

The Total Payroll Multiplier can be calculated by multiplying Utilization by Net Labor Multiplier, or by dividing Net Revenue by Total Labor.

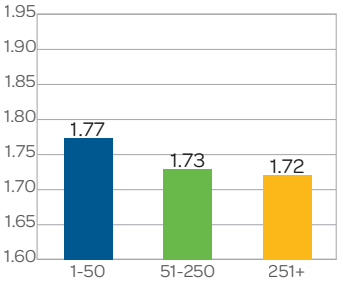
Ten-Year Trend



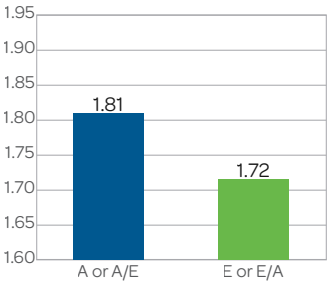
2012 High Performers vs. Other Firms



2012 by Firm Size



2012 by Firm Type



Overhead Rate

2012 AVERAGE
161.6%

	2012	2011
Top Quarter	185.4%	193.0%
Average	161.6%	172.5%
Bottom Quarter	137.2%	141.5%

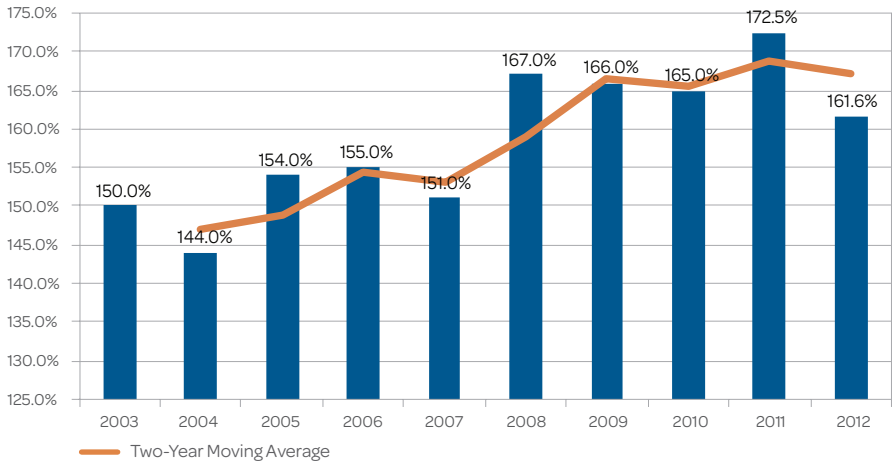
Analysis

The Overhead Rate (excluding bonuses) shows the relationship of a firm's non-chargeable costs—including non-billable professional time, facility costs and corporate expenses—to Direct Labor.

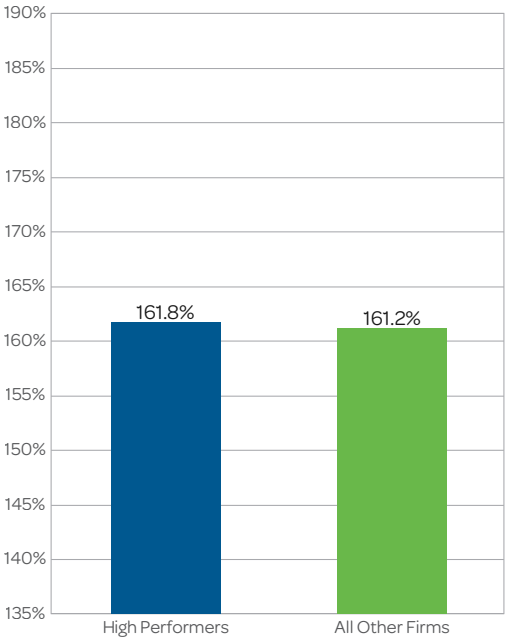
Overhead Rates dropped by more than 10 percentage points last year from their peak in 2011. Overhead is now at the lowest rate since the recession began. The key drivers here are rising Utilization, which decreases labor charged to Overhead, and a continued focus on cost control. Based on historical trends, there is room for the Overhead Rate to decline even further, primarily through improved utilization as the economy improves. Small firms and Engineering and E/A firms did the best at keeping Overhead Rates low.

The Overhead Rate is calculated by dividing Total Overhead (before distributions) by Total Direct Labor Expense, times 100.

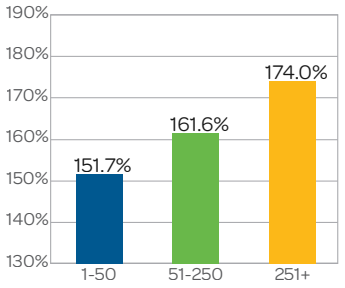
Ten-Year Trend



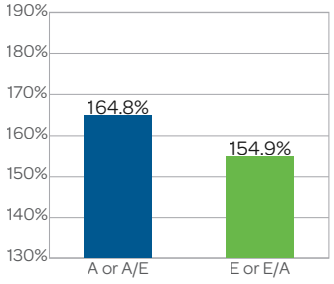
2012 High Performers vs. Other Firms



2012 by Firm Size



2012 by Firm Type



Net Revenue Per Employee

2012 AVERAGE

$121,902

	2012	2011
Top Quarter	$138,626	$132,825
Average	$121,902	$113,377
Bottom Quarter	$104,815	$99,015

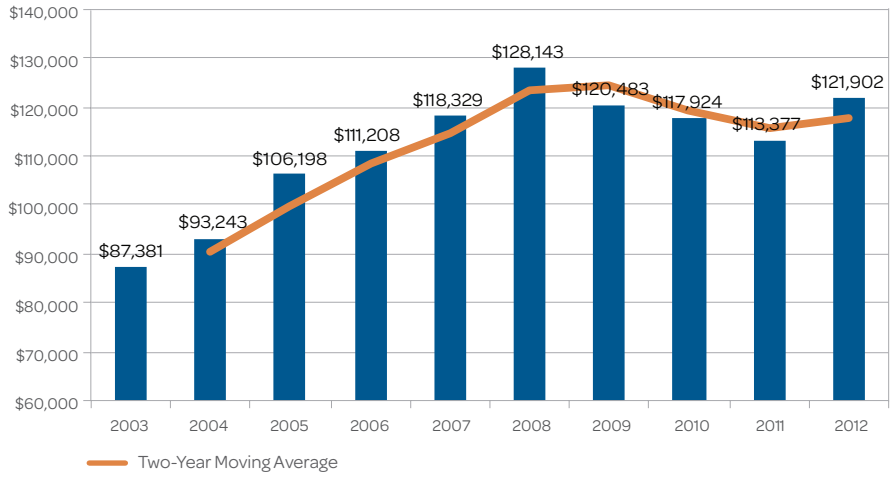
Analysis

Net Revenue Per Employee can be an excellent indicator of a firm's operating performance. High Performing firms almost always have higher revenue per employee, the result of negotiating higher fees, controlling labor expenses and pushing higher Utilization. This number generally rises over time with inflation.

After rising rapidly from 2003 to 2008 to a high of $128,143, Net Revenue Per Employee declined for three years to $113,377 and then finally began to make up lost ground in 2012, rising to $121,902. High Performing firms generated over 20% higher revenue per employee. Large and mid-sized firms reported higher Revenue Per Employee than small firms, although they also had higher Overhead rates.

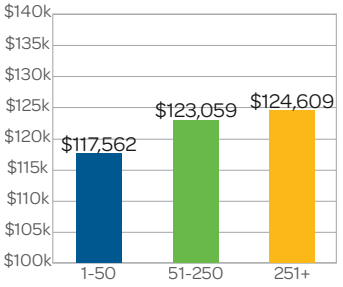
Net Revenue Per Employee is calculated by dividing annual Net Revenue by the average total number of employees during the year, including principals.

Ten-Year Trend

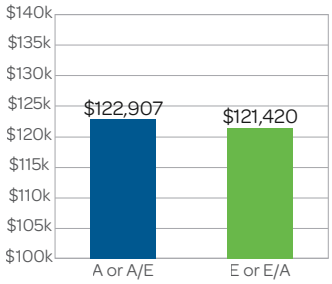


2012 High Performers vs. Other Firms

2012 by Firm Size



2012 by Firm Type



Staff Growth or Decline

2012 AVERAGE
3.3%

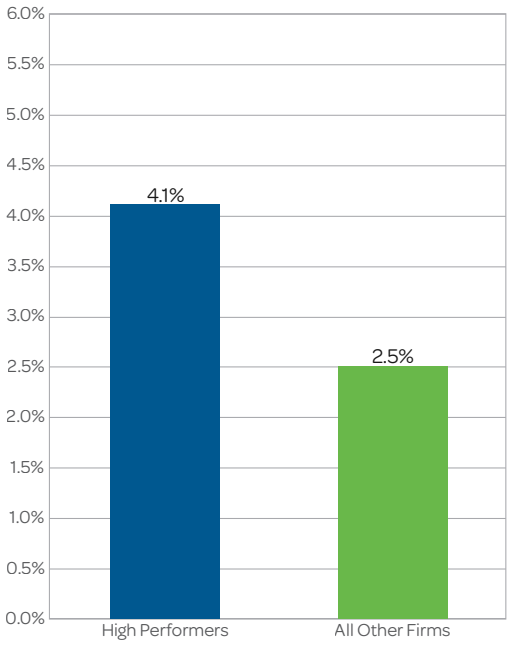
	2012	2011
Top Quarter	10.0%	11.3%
Average	3.3%	2.7%
Bottom Quarter	(2.3%)	(5.2%)

Analysis

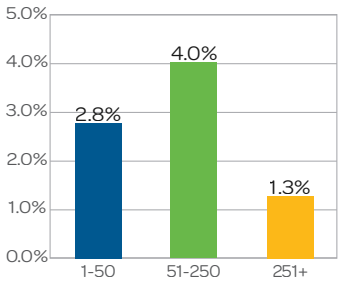
The average rate of Staff Growth increased from 2.7% to 3.3% between 2011 and 2012. High Performers, Architecture and A/E firms and mid-sized firms expanded their staff at the fastest rate, while large firms grew at the slowest rate. Overall, in 2012, 57% of firms increased headcount, 11% had no change, and 32% declined.

Staff Growth is calculated by subtracting the end of year headcount from the start of year headcount, dividing the result by the start of year headcount, and multiplying by l00.

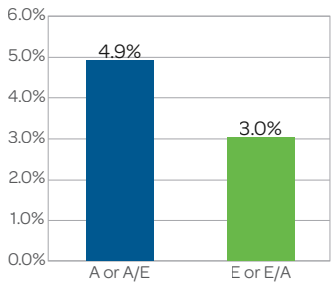
2012 High Performers vs. Other Firms



2012 by Firm Size



2012 by Firm Type



Employee Turnover

2012 AVERAGE
11.8%

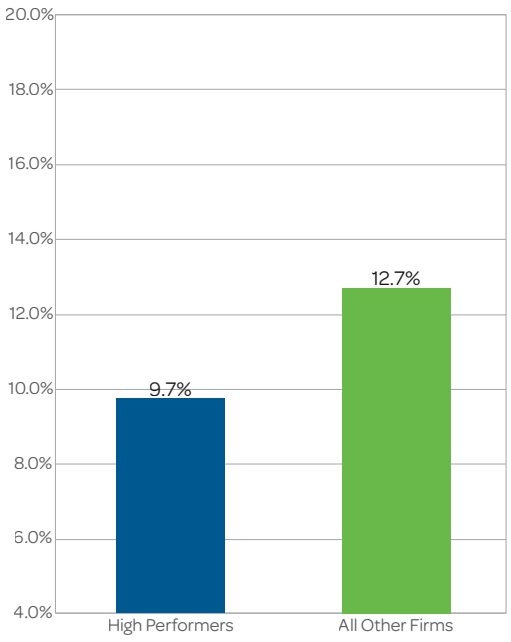
	2012	2011
Top Quarter	19.2%	22.0%
Average	11.8%	13.8%
Bottom Quarter	5.8%	6.7%

Analysis

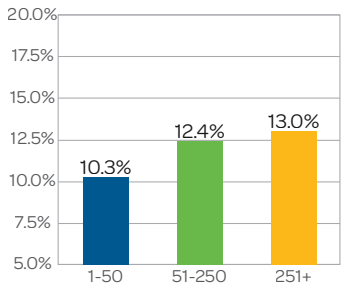
Turnover is the rate at which an A&E firm loses employees, whether voluntary or involuntary. Employee Turnover is costly in terms of lost productivity, management time, wasted training dollars, recruiting fees and more. The average Turnover rate declined from 13.8% to 11.8% between 2011 and 2012. High Performing firms did a better job in 2012 at retaining employees, with a Turnover rate three percentage points lower than all other firms. Larger firms have higher Turnover than their smaller counterparts.

Annual turnover is calculated by dividing the number of employees leaving during the year by the average number of employees during the year.

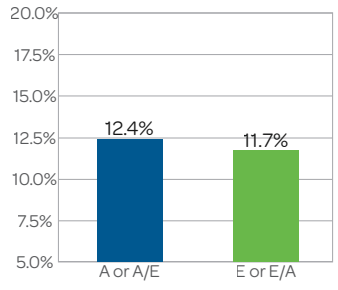
2012 High Performers vs. Other Firms



2012 by Firm Size



2012 by Firm Type



Section 3:

The Balance Sheet

Introduction

In this section, we continue with a deep dive into the most critical A&E financial metrics, focusing now on financial ratios from the Balance Sheet.

In the Appendix at the back of the report are comprehensive tables, including all the metrics from this section and more.

In the analysis, we will point out selected highlights, but we also encourage readers to use the data to answer their own questions.

Key Data Points

- After over five years of sub-par profitability, the average firm's Current Ratio has declined, but is currently in an acceptable range.
- Debt to Equity rose quickly during the recession, peaking at 1.150 in 2011, then dropped by 25% in 2012.
- The average A&E firm was carrying six months of Backlog at the end of 2012.
- The Average Collection Period, at 76 days, is still above historic averages.
- Return on Equity rates have recovered strongly from their 2009 low of 10.7 to 21.8% in 2012, which is in the pre-recession range.

Current Ratio

2012 AVERAGE

2.24

	2012	2011
Top Quarter	3.72	2.50
Average	2.24	1.92
Bottom Quarter	1.69	1.56

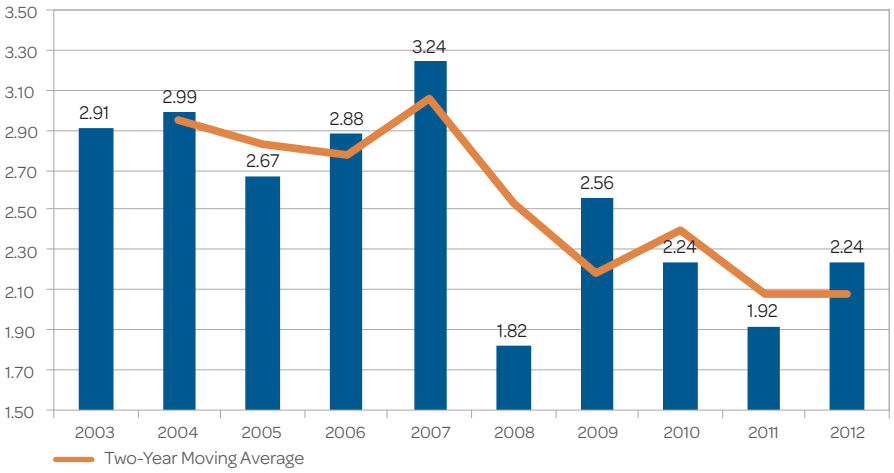
Analysis

The Current Ratio (also known as working capital ratio) measures liquidity and is used to gauge a company's ability to meet its short-term obligations. Higher is better. Bankers traditionally prefer this number to be above 1.5, and in today's climate, perhaps even higher.

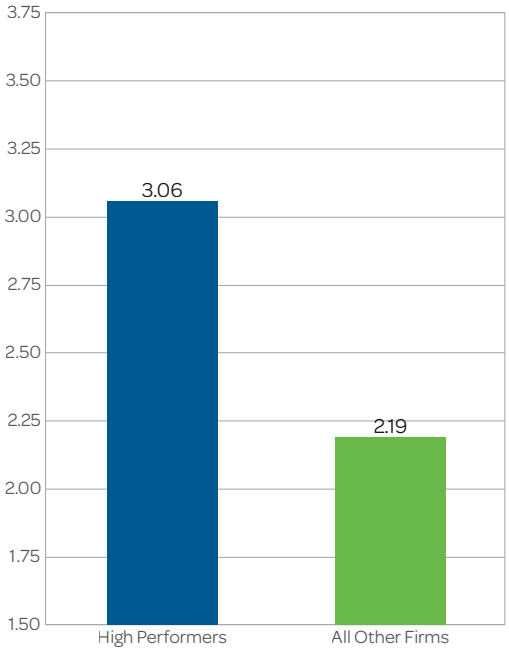
After over five years of sub-par profitability, the average firm's Current Ratio has declined, but is currently in an acceptable range. High Performers enjoy greater short-term liquidity. Average liquidity declined in mid-sized and larger firms. Keep in mind that the Current Ratio can always be distorted by old A/R or inflated Work in Process that may need to be written off.

The Current Ratio is calculated by dividing Current Assets (cash and near cash assets) by Current Liabilities (those due in one year or less).

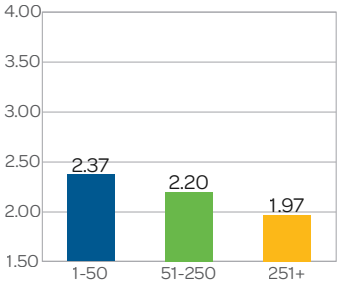
Ten-Year Trend



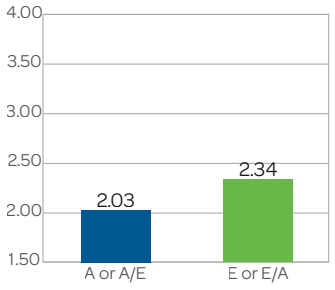
2012 High Performers vs. Other Firms



2012 by Firm Size



2012 by Firm Type



Debt to Equity Ratio

2012 AVERAGE
0.87

	2012	2011
Top Quarter	1.97	2.68
Average	0.87	1.15
Bottom Quarter	0.30	0.24

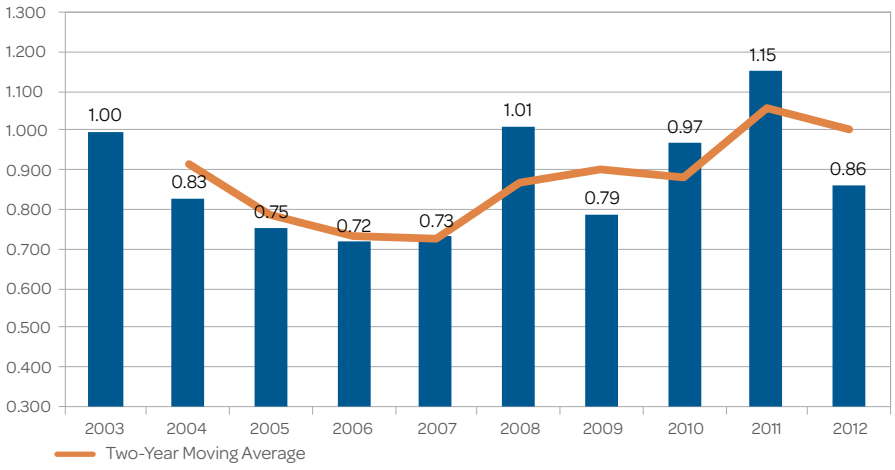
Analysis

Debt to Equity is a measure of a company's financial leverage. There is no hard and fast rule on what is a good or bad Debt to Equity ratio. It depends on a host of factors, but in uncertain times A&E firm leaders are generally averse to debt.

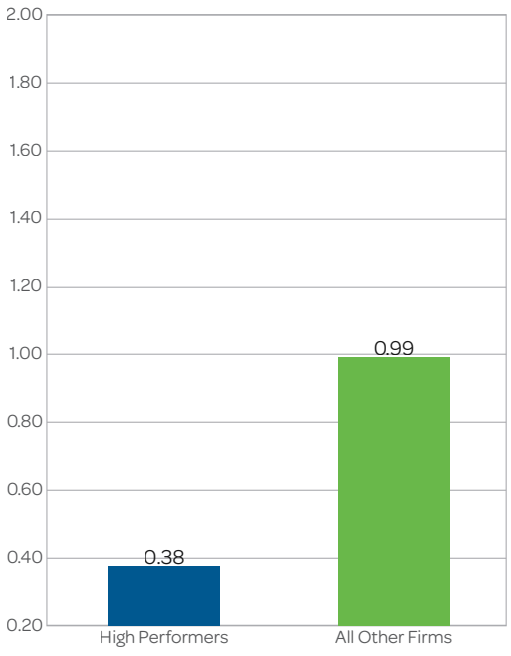
Debt to Equity declined for the average firm throughout the boom of the 2000s, then spiked during the recession, peaking at 1.15 in 2011, before dropping by 25% in 2012. This seems to be a consequence of higher profitability or the choice to pay down debt rather than distribute profits in employee bonuses or owner distributions. In addition, the continuing tight lending environment makes it hard for firms to increase leverage.

The Debt to Equity ratio is calculated by dividing Total Liabilities by Stockholders' Equity.

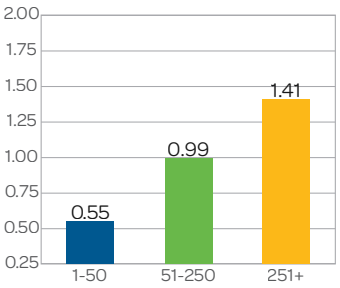
Ten-Year Trend



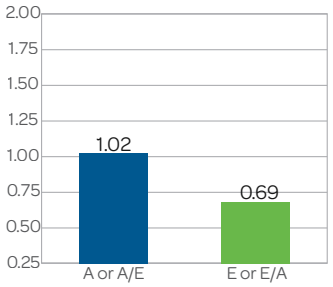
2012 High Performers vs. Other Firms



2012 by Firm Size



2012 by Firm Type



Backlog

2012 AVERAGE

6 months

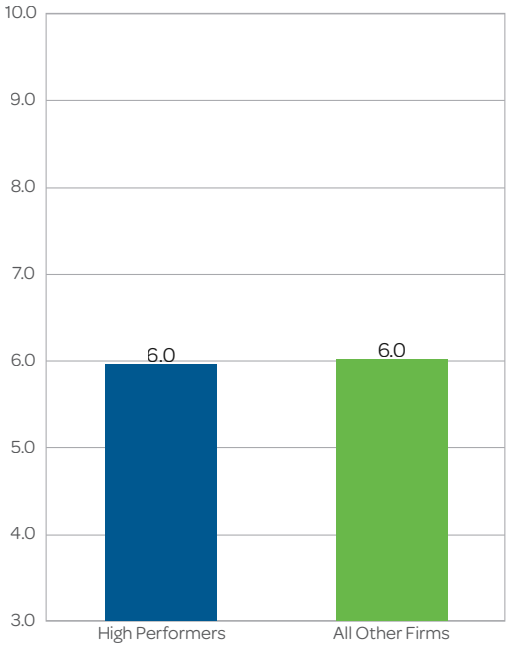
	2012	2011
Top Quarter	9.7	9.0
Average	6.0	5.3
Bottom Quarter	3.1	1.7

Analysis

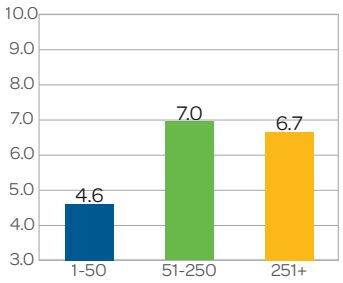
Backlog is the total dollar value of projects under contract minus job-to-date revenue from those projects. Backlog months indicate how many months a firm can operate at its current run rate, assuming it sells no new projects. The average A&E firm carries six months of Backlog, with the average mid-sized and larger firms enjoying bigger Backlogs than small firms. Backlogs did grow slightly in 2012.

Backlog in months is calculated by dividing Backlog dollars by annual Total Revenue, times 12.

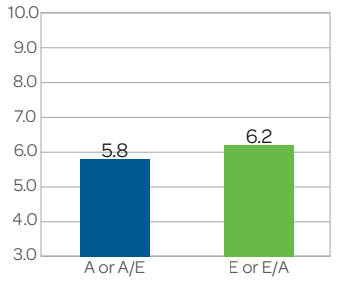
2012 High Performers vs. Other Firms



2012 by Firm Size



2012 by Firm Type



Average Collection Period

2012 AVERAGE

76 Days

	2012	2011
Top Quarter	98	102
Average	76	87
Bottom Quarter	60	71

Analysis

The Average Collection Period is the length of time it takes to collect Accounts Receivable (A/R) from your clients, from the time invoice is entered into A/R to when it is credited against A/R.

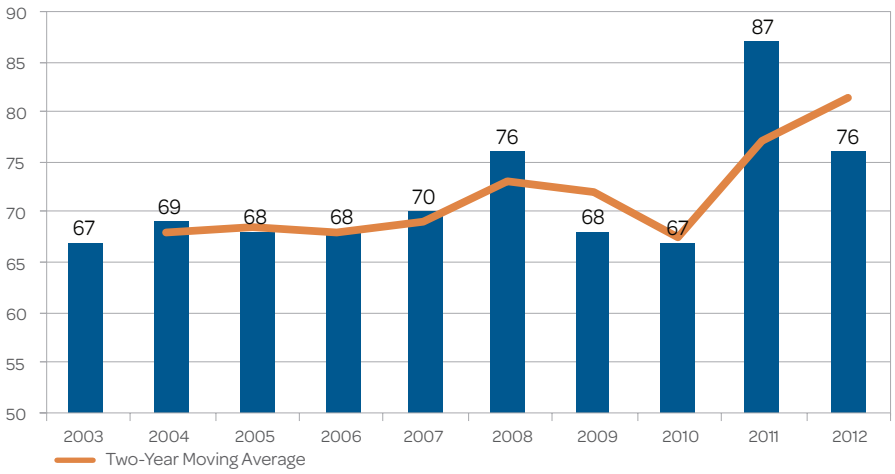
Collections slowed in 2008 and again in 2011, and are still above their historic averages. In 2012, across all sizes and types of firms, the Average Collection Period was in the 70s. For half of all firms, it is between 60 and 98 days.

The high level of average collection days can be attributed to A&E firms being eager to accept work, even when the client may be less credit worthy. Also, economic conditions often tend to slow the payment cycle.

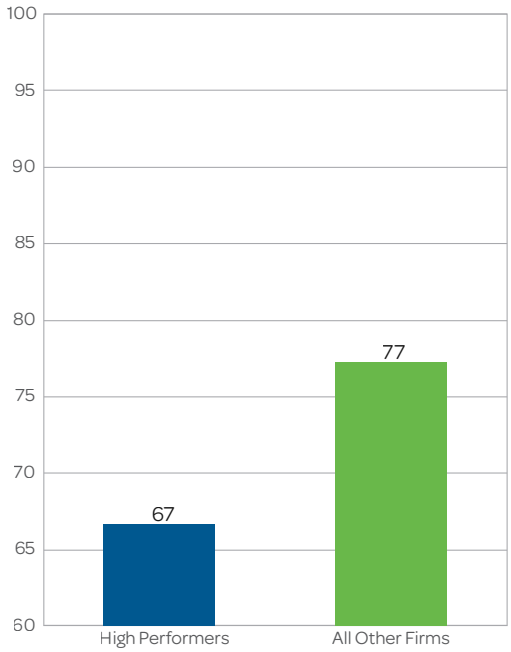
High Performing firms have an Average Collection Period 10 days shorter than other firms. To put this in perspective, for an A&E firm with $10 million in annual revenues, 10 days represents nearly $275,000 in cash. Improved collections can lower a firm's leverage ratios as well.

The Average Collection Period is calculated by dividing Accounts Receivable by annual Total Revenue, times 365.

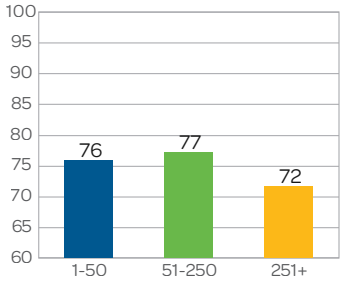
Ten-Year Trend



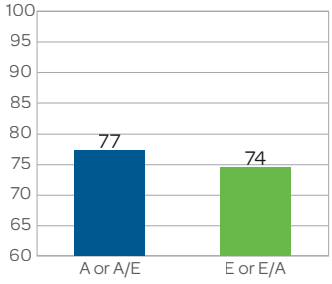
2012 High Performers vs. Other Firms



2012 by Firm Size



2012 by Firm Type



Working Capital Per Employee

2012 AVERAGE

$26,953

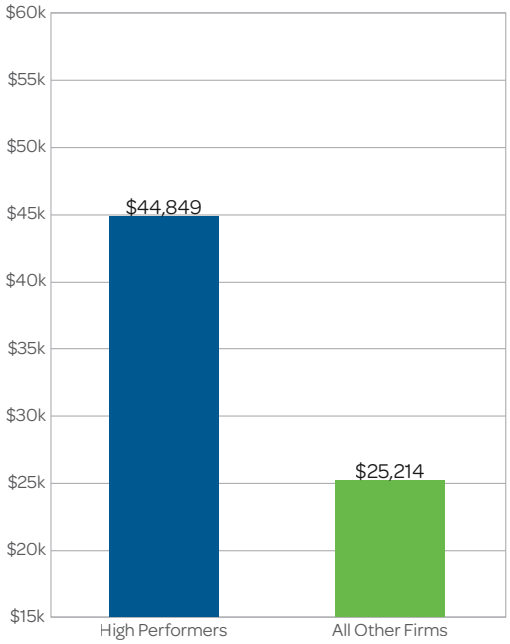
	2012	2011
Top Quarter	$39,363	$36,990
Average	$26,953	$24,111
Bottom Quarter	$17,837	$16,111

Analysis

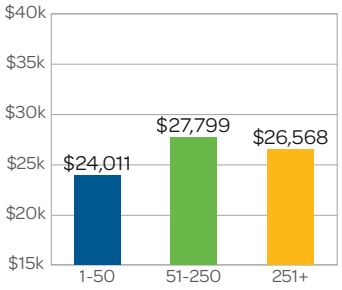
Working Capital Per Employee is another liquidity measure that shows the ability of an A&E firm to meet its short-term obligations and continue operations without borrowing additional cash. The average rose from 2011 to 2012 by approximately 12%. High Performers have an 80% higher Working Capital Per Employee than other firms. Pound for pound, mid-sized and larger firms also have more Working Capital.

Working Capital Per Employee is calculated by the formula Current Assets minus Current Liabilities, divided by the current number of employees.

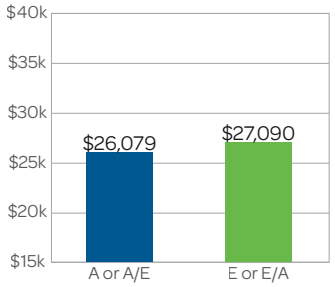
2012 High Performers vs. Other Firms



2012 by Firm Size



2012 by Firm Type



Return on Equity

2012 AVERAGE
21.8%

	2012	2011
Top Quarter	49.7%	47.4%
Average	21.8%	19.7%
Bottom Quarter	4.8%	3.0%

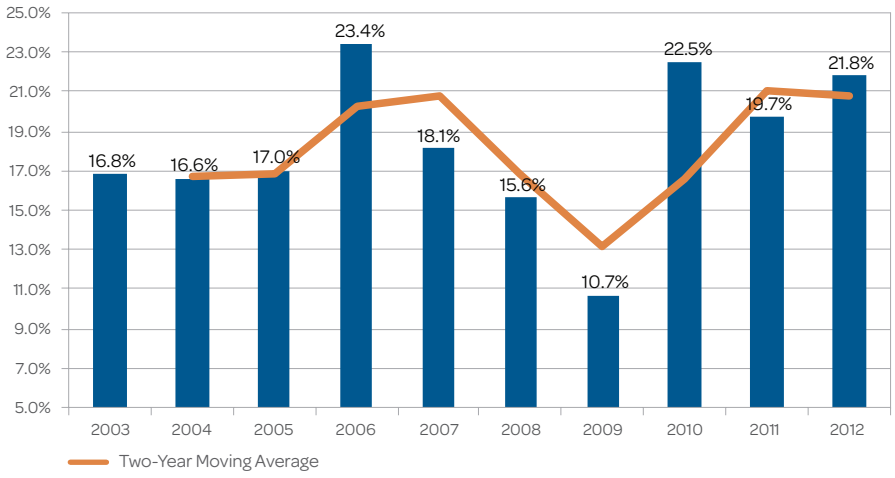
Analysis

Return on Equity (ROE) measures the potential reward of an ownership interest in a firm. We use after-bonus, pre-tax income to calculate it. It's primarily of use for comparative financial analysis.

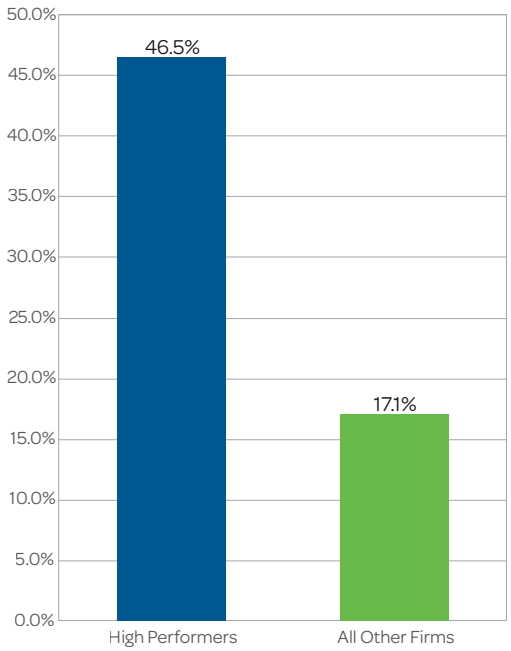
ROE has recovered strongly from its 2009 low of 10.7%, and is now back to pre-recession rates. ROE generally follows the results for Operating Profit. For example, High Performers have an average ROE nearly three times higher than other firms. In an exception to this rule, the average small firm has a ROE twice that of the average large firm, even though its Operating Profit rate was about the same. When firms choose to use bonuses rather than dividends to distribute profits—perhaps to avoid double taxation—it may also distort the ROE picture.

Return on Equity is calculated by dividing Pre-Tax Income (Operating Profit less bonuses, interest, and other income or expenses) by Stockholders' Equity, times 100.

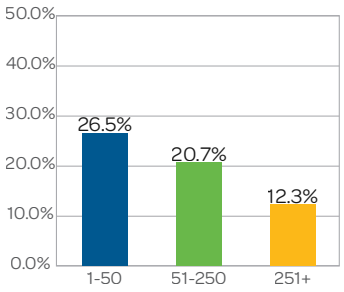
Ten-Year Trend



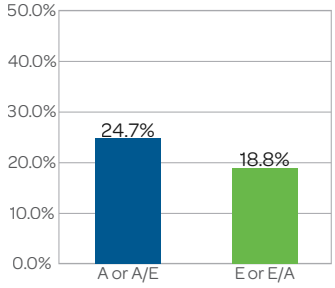
2012 High Performers vs. Other Firms



2012 by Firm Size



2012 by Firm Type



Total Assets Per Employee

2012 AVERAGE
$61,028

	2012	2011
Top Quarter	$78,248	$80,020
Average	$61,028	$62,498
Bottom Quarter	$47,093	$51,142

Analysis
Mid-sized and larger firms had significantly higher Assets Per Employee than small firms.

Total Assets Per Employee is calculated by dividing Total Assets, both short-term and long-term, by the current number of employees.

Total Liabilities Per Employee

2012 AVERAGE
$26,751

	2012	2011
Top Quarter	$43,950	$50,425
Average	$26,751	$32,467
Bottom Quarter	$14,500	$11,266

Analysis
Architecture and A/E firms have 45% higher average Liabilities Per Employee than Engineering and E/A firms, perhaps due to a greater use of subconsultants. As with Assets, the Total Liabilities Per Employee are much higher in larger firms than small ones. High Performers had lower Liabilities than other firms.

Total Liabilities Per Employee is calculated by dividing Total Liabilities, both short-term and long-term, by the current number of employees.

Total Equity Per Employee

2012 AVERAGE
$27,805

	2012	2011
Top Quarter	$43,173	$39,764
Average	$27,805	$26,220
Bottom Quarter	$16,594	$14,092

Analysis
Equity Per Employee rose slightly in 2012. Consistent with their higher profitability and stronger balance sheets, High Performing firms had a 75% higher Equity Per Employee than other firms.

Total Equity Per Employee is calculated by dividing Stockholders' Equity by the current number of employees.

Section 4:

A&E Outlook and Strategies

Introduction

What's next for A&E firms? We asked them to look into the future and tell us where they believe future growth will come from in addition to what they are doing to optimize their business. Participants estimated their 2013 revenues and 18-month workload for four different markets—private sector, public sector, institutional and residential. They also reported on their technology investment plans and outlook for green building and international projects.

Key Data Points

- Revenue growth projections for 2013 were slightly higher than the actual 2012 growth rate, rising from 2.7% to 3.2%.
- Study participants have the highest expectations for the private sector market. Nearly half expect their private sector work to grow.
- Less than half of participants said they focused on the residential market, but nearly all of those expected steady or growing work.
- Nearly three quarters of participants say "green" projects are a source of work for them, with a third of those calling it a "major source."
- The percentage of firms who said international work would be very important or critical has declined each year since 2009.
- Nearly 80% of participants expect to make technology investments in the near future, with a little over 60% planning to spend on information management, and nearly half in design and documentation.

2013 Total Revenue Forecast

AVERAGE
3.2%

	2013 Projection	2012 Actual Change
Top Quarter	10.8%	13.6%
Average	3.2%	2.7%
Bottom Quarter	(1.2%)	(4.2%)

Analysis

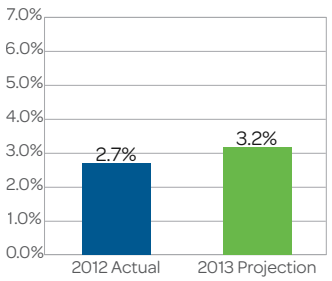
We asked participants to estimate their 2013 Total Revenue, and compared it to 2012 revenue. Then we compared this to the actual growth rate for 2012.

Revenue growth projections for 2013 were slightly higher than the actual 2012 growth rate, rising from 2.7% to 3.2%. This is consistent with the trend of slow, steady improvement found in most of the key performance indicators. Interestingly, the cutoff for the top 25% of responses did drop from 13.6% to 10.8%, perhaps showing that after the last five years of challenging times there is still caution to the optimism. However, at the same time,' the bottom 25% level rose from negative 4.2% to negative 1.2%.

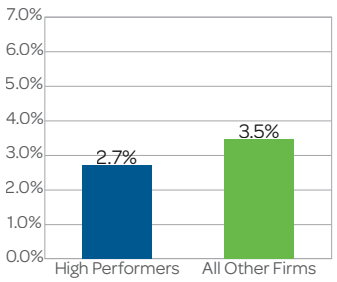
Also noteworthy is that High Performing firms had a lower average growth projection than other firms. Small firms had the lowest growth projection at a mere 1.3%. Mid-sized and larger firms were above average.

Finally, we should point out that the 2012 growth rate was calculated only for participants who provided both 2011 and 2012 data in the study, which was a smaller group with a different composition.

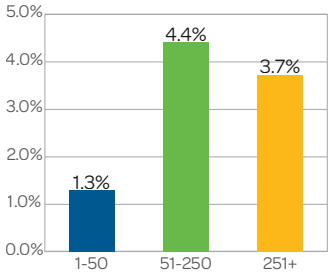
All Firms



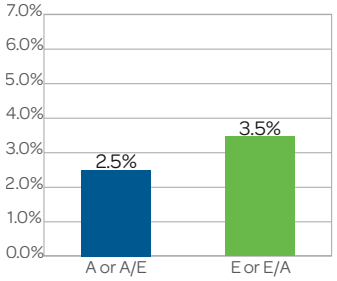
2012 High Performers



2012 by Firm Size



2012 by Firm Type



Outlook: Market Positions

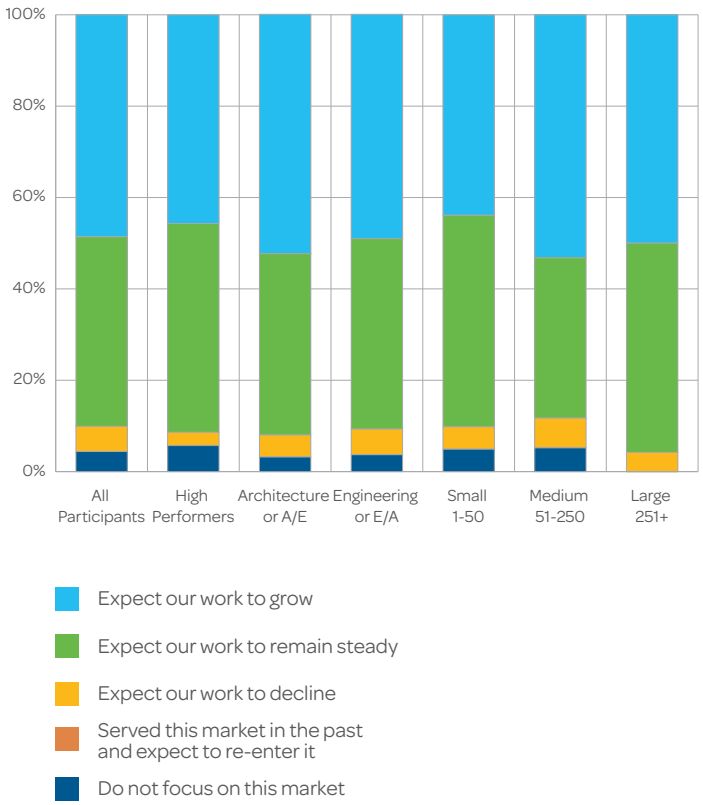
We asked: Which best describes your firm's market position in the next 18 months for public infrastructure, institutional, private sector and residential?

Participants' responses give insight into the expected growth and decline for each of the four markets. They also showed the market focus and mix for different types and sizes of A&E firms, High Performers versus other firms, and so on.

	Expect our work to grow	Expect our work to remain steady	Expect our work to decline	Expect to re-enter this market	Do not focus on this market
Public Infrastructure	31.1%	36.1%	6.6%	0.5%	25.7%
Institutional	31.7%	43.7%	5.5%	0.0%	19.1%
Private Sector	48.6%	41.5%	5.5%	0.0%	4.4%
Residential	14.2%	26.8%	4.4%	1.6%	53.0%

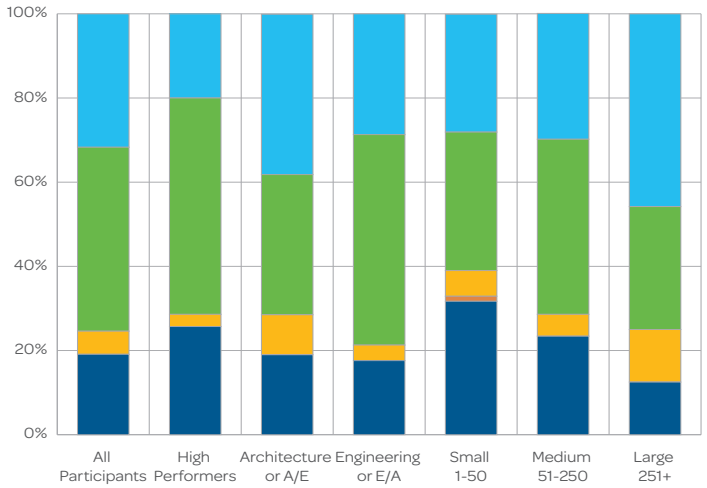
Private Sector

Study participants have the highest expectations for the private sector market. It's a market nearly every A&E firm is involved in to some degree, and nearly half expect their private sector work to grow. The outlook for private sector work was fairly consistent across all types and sizes of firm.



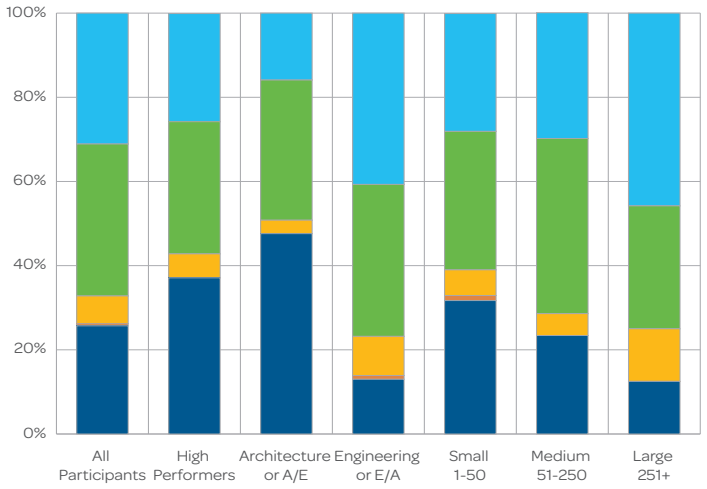
Institutional

Large firms were split on the institutional market, with 41.7% projecting growth—more than small and mid-sized firms—but 12.5% expecting their institutional work to decline. More Architects than Engineers expected growth in this market, but slightly more also expected a decline. High Performing firms, on the other hand, did not anticipate as much growth from the institutional market as other firms, and slightly fewer of the High Performers focused on it.



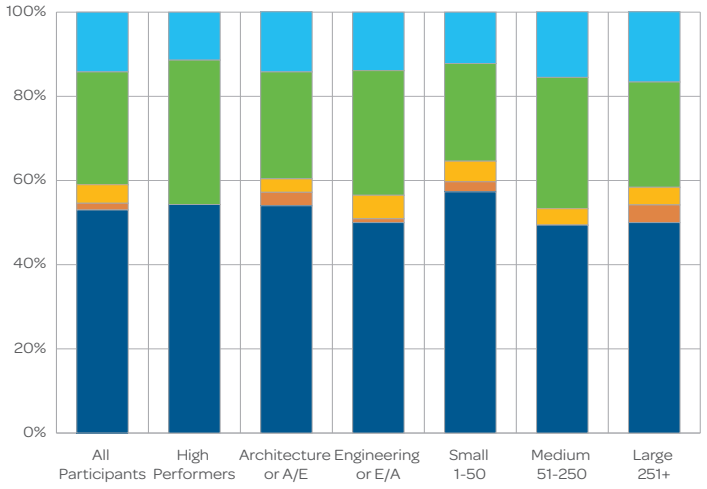
Public Infrastructure

In the public sector, the highest expectations were from Engineers and large firms—40.7% of Engineers and 45.8% of large firms anticipated growth in this market vs. 31% of all participants. High Performers were less likely to focus on this market.



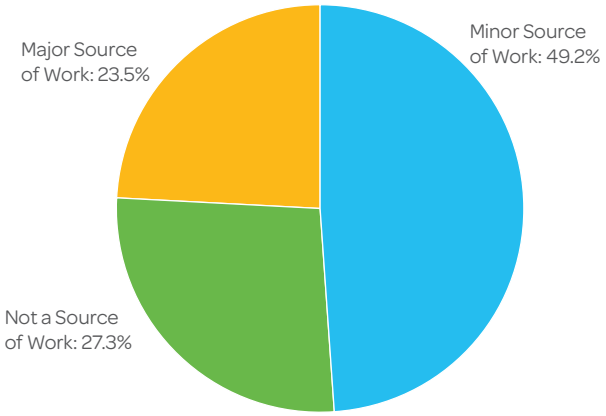
Residential

Less than half of participants focused on the residential market, but that was more than we reported in last year's survey, perhaps showing the beginning of a recovery in this market. Of those that do serve the residential market, the great majority expected steady or growing work. Interestingly, it was one of the only markets that a number of firms indicated they planned to re-enter.



Outlook: Green Building

All Participants	
Major source of work	23.5%
Minor source of work	49.2%
Not a source of work	27.3%



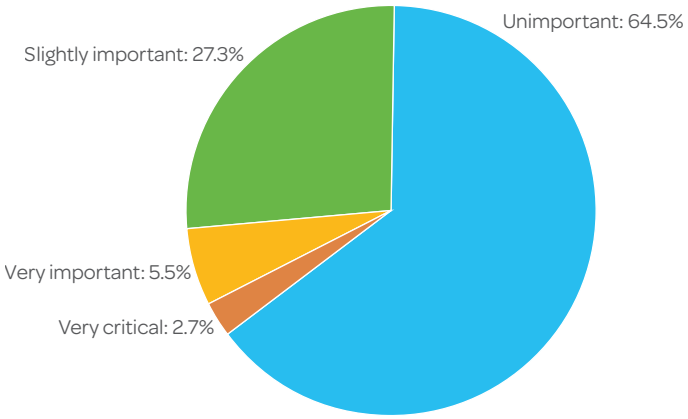
We asked: How much of your work in the near future do you foresee will be driven by retrofitting and rehabilitating existing buildings to adhere to current standards and green principles?

Nearly three quarters of participants say green projects are a source of work for them, with a third of those calling it a major source. The results are very similar to what we found in the last edition of the survey.

Not surprisingly, Architecture and A/E firms were much more likely to be counting on green building. Nearly 95% say it is a source of work, including 38% who are calling it a *major* source of work, which is a bit higher than last year. High Performing firms are slightly more likely to be bullish on green building.

Outlook: International Business

All Participants	
Unimportant	64.5%
Slightly Important	27.3%
Very Important	5.50%
Very Critical	2.7%



We asked: How important will international business be to your firm in the next 18 months?

A&E firms seem to be cooling on their outlook for international business, based on response to this question since 2009. The percentage of firms who said international work would be very important or critical declined each year since 2009.

While international work has consistently been more important to large firms than small and mid-sized firms, this year the number of larger firms labeling international work very important or critical fell sharply, while more firms said it was only slightly important.

High Performing firms were more likely than other firms to rate international business as very important or critical. There was no significant difference by firm type.

Technology Investments

All Participants	
Information Management	62.8%
Design & Documentation	49.7%
Not anticipating investment in technology	20.2%

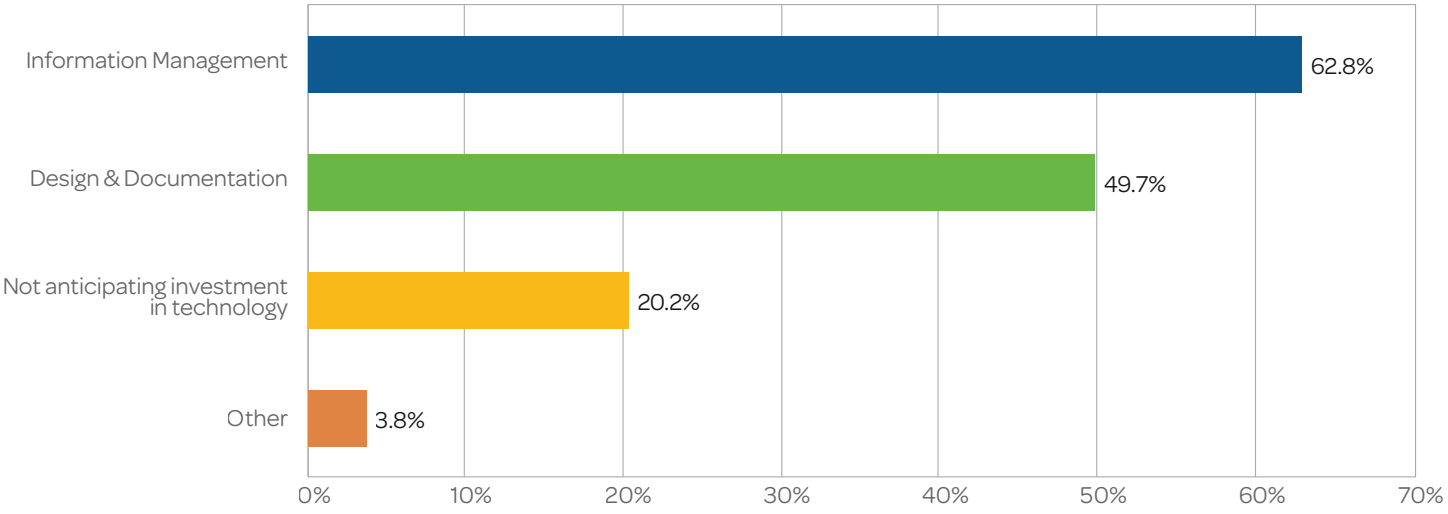
We asked: In which areas of technology do you expect to invest in the coming 18 months?

We let participants tell us if they were planning technology investments in the next 18 months and if so, in which of two categories: 1) Design & documentation, including CADD, BIM, engineering analysis and other tools related to design work, and 2) Information management systems, including CRM, financial management, project management, business intelligence and mobile tools. Participants were allowed to choose both, so the percentages total more than 100%.

Nearly 80% of participants expect to make technology investments in the near future, with a little over 60% planning to spend on information management, and nearly half in design and documentation.

A few contrasts were apparent in the participant segments. Large and mid-sized firms are more likely to plan investments than small firms. High Performing firms are focused more on information management and less on design and documentation than other firms. More Architecture and A/E firms plan design and documentation spending than do Engineering and E/A firms.

Technology Investments in the Next 18 Months



Strategies: Factors in Proposals

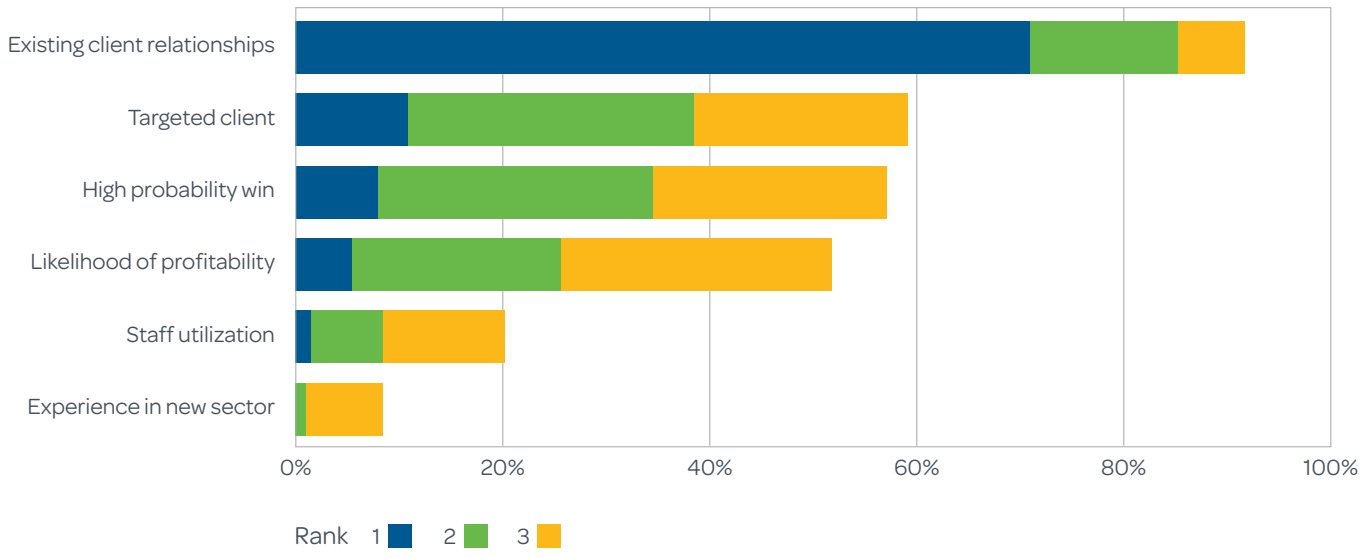
We asked: Which three factors influence you the most when deciding whether to propose on a project?

Existing client relationships far and away have the greatest influence on A&E firms' project pursuit decisions. This choice received the highest combined ranking, as well as the most top rankings. The combined ranking is the percentage of participants who ranked it first, second, or third.

Surprisingly, few firms rank staff Utilization as an important factor, and gaining experience in a new sector ranked last.

All Participants	Combined	Top Rank
Existing client relationships	91.6%	73.5%
Targeted client	59.1%	11.2%
High probability win	57.1%	8.2%
Likelihood of profitability	51.7%	5.6%
Staff Utilization	20.2%	1.5%
Experience in new sector	8.4%	0.0%

Factors Influencing Project Proposal



Strategies: Success Factors

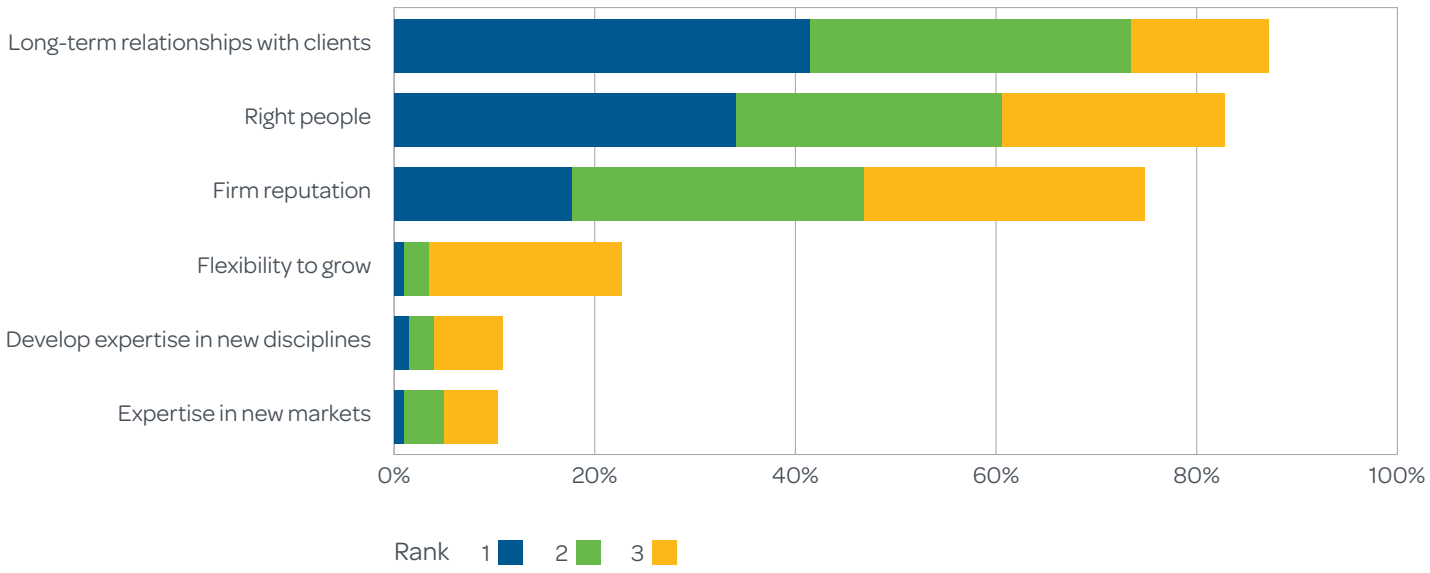
We asked: Please rank the top three of the following factors, in order of importance to the success of your firm.

In keeping with responses to the prior question, long-term client relationships were the leading success factor, though other factors also ranked highly, including having the right people and maintaining the firm's reputation.

Just as gaining experience in a new sector does not factor into firms' go/no-go decisions, participants did not give much weight to expanding into new disciplines or markets.

All Participants	Combined	Top Rank
Long-term relationships with clients	87.2%	42.9%
Right people	82.8%	35.2%
Firm reputation	74.9%	18.4%
Flexibility to grow	22.7%	1.0%
Develop expertise in new disciplines	10.8%	1.5%
Expertise in new markets	10.4%	1.0%

Factors Important to Firms' Success



2012 Statistics at a Glance

	All Participants	High Performers	All Other Firms
KEY PERFORMANCE INDICATORS			
Operating Profit Rate (on Net Revenues)	10.1%	25.0%	8.3%
Operating Profit Rate (on Total Revenues)	7.9%	19.6%	6.7%
Contribution Rate	65.8%	71.1%	65.1%
Utilization Rate	59.9%	60.4%	59.5%
Utilization Rate w/o VHS	65.5%	68.5%	64.8%
Net Labor Multiplier	2.91	3.43	2.86
Total Payroll Multiplier	1.75	2.09	1.70
Overhead Rate w/o Bonuses	161.6%	161.8%	161.2%
Overhead Rate w/ Bonuses	175.7%	188.5%	171.8%
Average Collection Period (Days A/R)	76	67	77
Months Backlog	6.0	6.0	6.0
Backlog—Beginning of Year Per Employee	$81,883	$79,788	$82,375
Backlog—End of Year Per Employee	$83,500	$89,704	$80,357
Marketing Expense (non-labor, % of Total Revenue)	0.90%	0.60%	1.00%
Staff Growth	3.3%	4.1%	2.5%
Employee Turnover	11.8%	9.7%	12.7%
2013 Total Revenue Forecast % Change	3.2%	2.7%	3.5%

	All Participants	High Performers	All Other Firms
BALANCE SHEET RATIOS			
Current Ratio	2.24	3.06	2.19
Debt to Equity Ratio	0.87	0.38	0.99
Working Capital per Employee	$26,953	$44,849	$25,214
Fixed Assets Per Employee	$6,491	$5,167	$7,053
Total Assets Per Employee	$61,028	$73,904	$59,126
Total Liabilities Per Employee	$26,751	$21,215	$27,905
Total Equity Per Employee	$27,805	$47,394	$26,718
Pre-Tax Return on Assets	10.7%	28.4%	8.7%
Pre-Tax Return on Equity	21.8%	46.5%	17.1%
Pre-Tax Return on Invested Capital	18.6%	52.6%	12.2%
Pre-Tax Return on Working Capital	23.1%	50.0%	19.4%

Small 1–50	Medium 51–250	Large 251+	Architecture or A/E	Engineering or E/A
9.6%	11.1%	8.7%	12.7%	9.6%
7.2%	8.5%	6.9%	8.3%	7.9%
65.8%	65.5%	67.6%	67.2%	65.1%
60.9%	60.2%	57.7%	58.6%	60.9%
65.8%	65.8%	64.0%	65.0%	66.8%
2.91	2.90	3.10	3.04	2.86
1.77	1.73	1.72	1.81	1.72
151.7%	161.6%	174.0%	164.8%	154.9%
167.6%	177.0%	191.0%	182.7%	171.4%
76	77	72	77	74
4.6	7.0	6.7	5.8	6.2
$55,134	$85,348	$83,174	$92,151	$79,788
$58,927	$95,206	$85,581	$92,265	$80,988
0.80%	0.90%	1.10%	1.00%	0.80%
2.8%	4.0%	1.3%	4.9%	3.0%
10.3%	12.4%	13.0%	12.4%	11.7%
1.3%	4.40%	3.7%	2.5%	3.5%

Small 1–50	Medium 51–250	Large 251+	Architecture or A/E	Engineering or E/A
2.37	2.20	1.97	2.03	2.34
0.55	0.99	1.41	1.02	0.69
$24,011	$27,799	$26,568	$26,079	$27,090
$5,024	$7,452	$12,240	$6,565	$6,563
$50,407	$64,576	$71,558	$63,441	$58,899
$18,333	$31,759	$41,194	$33,336	$22,880
$26,363	$28,915	$27,567	$27,512	$28,488
15.4%	10.0%	7.1%	11.0%	10.5%
26.5%	20.7%	12.3%	24.7%	18.8%
26.5%	18.4%	11.4%	18.7%	18.5%
26.1%	19.3%	14.8%	27.4%	22.2%

INCOME STATEMENT DETAIL (PER EMPLOYEE)	All Participants	High Performers	All Other Firms
TOTAL REVENUE			
Total Revenue	$149,624	$181,932	$142,197
DIRECT EXPENSES			
Consultants	$20,007	$21,091	$19,996
Bad Debt	$225	$0	$327
All Other Direct Expenses	$5,515	$5,768	$5,497
Total Direct Expenses	$29,186	$35,859	$27,604
NET REVENUE			
Net Revenue	$121,902	$144,133	$117,484
DIRECT LABOR			
Direct Labor	$40,935	$41,228	$40,767
INDIRECT LABOR			
Vacation, Holiday, Sick & Personal	$6,976	$7,235	$6,833
Marketing	$4,700	$3,469	$5,223
All Other Indirect Labor	$16,034	$15,294	$16,388
Total Indirect Labor	$26,741	$25,491	$27,037
LABOR-RELATED EXPENSES			
Statutory Taxes	$5,750	$5,956	$5,698
Workers' Comp	$286	$304	$284
Group Health, Life, Etc.	$5,058	$5,000	$5,111
401(k) Match, Pension Plan, Etc.	$2,064	$2,762	$1,939
All Other Labor-Related Expenses	$214	$270	$190
Total Other Labor-Related Expenses	$13,890	$15,323	$13,552
OTHER STAFF EXPENSES			
Temporary Help	$20	$20	$19
Professional Licenses, Registrations, Dues, Etc.	$425	$383	$436
Conference & Continuing Educ. Registrations & Fees	$374	$338	$379
Travel & Meals (Non-Project, Non-Marketing)	$530	$426	$551
All Other Staff-Related Expenses	$253	$332	$230
Total Other Staff Expenses	$1,903	$1,865	$1,904
MARKETING EXPENSES (NON-LABOR)			
Marketing Printing & Reproductions	$117	$106	$121
Conference/Convention Exhibits & Materials	$100	$92	$103
Marketing Travel	$189	$127	$200
Marketing Meals & Entertainment	$159	$126	$191
Website Development & Maintenance	$1	$9	$0
All Other Marketing Expenses	$498	$536	$469
Total Marketing Expenses	$1,421	$1,497	$1,397

Note: Account categories may not add up precisely because these are median values for the aggregate of all firms.

Small 1–50	Medium 51–250	Large 251+	Architecture or A/E	Engineering or E/A
$138,239	$159,224	$152,732	$187,376	$140,420
$19,549	$19,947	$21,687	$49,610	$15,151
$57	$344	$304	$495	$74
$3,930	$5,843	$6,372	$5,592	$5,119
$27,192	$29,829	$31,164	$59,389	$23,100
$117,562	$123,059	$124,609	$122,907	$121,420
$38,360	$42,138	$40,772	$40,120	$41,528
$6,466	$7,481	$7,513	$6,674	$7,080
$4,002	$5,455	$4,507	$6,897	$4,223
$15,521	$16,148	$17,734	$15,253	$16,577
$25,268	$26,598	$30,082	$27,768	$25,997
$5,381	$5,890	$5,920	$5,887	$5,717
$284	$284	$344	$286	$293
$4,992	$4,805	$6,114	$4,796	$5,653
$1,970	$2,181	$2,144	$1,834	$2,204
$138	$364	$109	$386	$160
$13,881	$13,777	$14,651	$13,154	$14,727
$0	$36	$54	$29	$0
$436	$437	$378	$477	$408
$301	$463	$402	$281	$437
$359	$594	$1,155	$532	$486
$230	$253	$639	$270	$245
$1,524	$1,987	$2,827	$1,830	$1,943
$91	$121	$253	$187	$91
$45	$104	$243	$163	$88
$83	$219	$670	$257	$121
$91	$207	$335	$141	$180
$17	$0	$0	$24	$0
$367	$601	$423	$1,141	$364
$1,287	$1,508	$1,561	$1,842	$1,141

INCOME STATEMENT DETAIL (PER EMPLOYEE)	All Participants	High Performers	All Other Firms
FACILITY EXPENSES			
Rent	$5,600	$5,430	$5,786
Non-Computer FF&E, Including Rentals & Leases	$456	$360	$486
Telephone, Internet & Other Communication Expenses	$1,098	$989	$1,148
Autos, Trucks, Field Equip., Etc.	$591	$595	$586
Computer Software, Hardware & Supplies	$1,767	$1,973	$1,708
Office Supplies	$700	$621	$703
Depreciation & Amortization	$1,926	$1,628	$1,973
All Other Facility Expenses	$890	$1,061	$807
Total Facility Expenses	$13,017	$13,404	$12,929
CORPORATE EXPENSES			
Professional Liability Insurance	$1,305	$1,362	$1,292
General & Other Liability Insurance	$350	$326	$354
Accounting, Legal & Other Professional Services	$1,023	$1,012	$1,027
Other Business Licenses & Taxes	$207	$203	$208
All Other Corporate Expenses	$804	$851	$800
Total Corporate Expenses	$4,632	$3,873	$4,658
TOTAL OVERHEAD			
Total Overhead Expenses	$63,915	$63,211	$63,953
OPERATING PROFIT			
Operating Profit (Loss)	$11,992	$37,974	$9,283
INTEREST, BONUS, OTHER			
Interest—Net	$164	$11	$208
Bonuses	$3,340	$9,603	$2,209
PRE-TAX INCOME			
Pre-Tax Income (Loss)	$6,604	$22,442	$5,319
TAXES			
State & Provincial Taxes	$0	$3	$0
Federal Taxes	$0	$0	$0
Total Taxes	$0	$92	$0
NET PROFIT			
Net Profit (Loss)	$5,729	$19,322	$5,044

Note: Account categories may not add up precisely because these are median values for the aggregate of all firms.

Small 1–50	Medium 51–250	Large 251+	Architecture or A/E	Engineering or E/A
$5,212	$5,983	$6,180	$5,983	$5,450
$377	$456	$527	$327	$518
$1,000	$1,125	$1,123	$1,150	$1,070
$552	$449	$1,003	$98	$822
$1,575	$1,816	$1,808	$1,980	$1,642
$704	$649	$781	$684	$687
$1,576	$1,973	$2,177	$2,252	$1,778
$964	$823	$890	$1,000	$823
$11,947	$13,399	$13,576	$13,631	$12,729
$1,493	$1,337	$982	$1,444	$1,292
$322	$411	$324	$272	$400
$787	$1,128	$1,145	$1,295	$908
$250	$145	$247	$250	$164
$791	$850	$637	$875	$622
$4,614	$4,508	$5,134	$4,632	$4,508
$61,391	$65,615	$67,854	$65,276	$63,211
$10,856	$13,654	$10,439	$16,075	$10,937
$84	$171	$183	$78	$183
$2,743	$4,402	$3,052	$3,340	$3,429
$6,694	$6,429	$5,685	$7,282	$5,952
$0	$0	$125	$0	$0
$0	$0	$137	$0	$0
$0	$6	$462	$4	$0
$6,476	$5,476	$3,676	$6,553	$5,491

Index

Deltek Profile

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