

Best practices of the best workplaces

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The CE News Best Civil Engineering Firms To Work For 2007

According to numerous industry surveys, recruiting and retaining high quality employees is the leading challenge of firms practicing civil engineering today. Those firms that strive to create atmospheres where staff can flourish, feel respected, and grow are having an easier time meeting this incredible challenge. CE News hosts the Best Civil Engineering Firms To Work For list annually to honor those firms that are creating the best work environment they can and give them an advantage over their peer firms. What's more, firms that apply for the list tell us each year what a worthwhile process it is to complete the questionnaire and execute the required Employee Satisfaction Survey, as they learn about best practices that other firms are using to succeed and essentially critique their own firms.

Some might say that those best practices are different for a small, mid-sized, or large firm, while others are universal. CE News is pleased this year to have represented by our top three firms a large, mid-sized, and small firm (in that order). This feat proves that, while a large firm might have some advantages over a small firm and vice versa, firms of any size can provide staff with stellar work environments.

However, since some job seekers prefer firms of a particular size, we instituted firm-size rankings a few years ago. In addition to assisting job seekers, the firm-size rankings help firms market their honors. So the results presented here are four-fold, including the overall ranking and three firm-size rankings. All firms on the firm-size ranking lists are on the overall list as well, and are in the same relative order.

Check out the [overall rankings](#), the [small](#), [medium](#), and [large](#) firm-size rankings, and the best practices being employed by the top three firms. Who knows, maybe you'll pick up a few ideas to improve your workplace today!

Participants

This year, 145 firms applied for the Best Civil Engineering Firms To Work For. As with any program such as this, there is an ebb and flow of participants from year-to-year. Eighty-one firms that participated in 2006 did not apply this year, including 11 of the top 50. However, we had 69 newcomers, including 12 firms that ranked in the top 50. Six firms that applied but didn't make the list in 2006 are ranked this year.

The participating firms ranged in size from 8 employees to more than 5,000. The age of firms covers a wide span as well: the youngest to apply has been in practice for only 4 years and the oldest for more than 100 years.

It's interesting to understand the make-up of the participating firms, while also shining light on some interesting statistics about the industry in general. Private ownership is the most common ownership structure for participants again this year. In fact, 103 firms (71 percent) that applied are privately owned, with a median number of nine private owners per firm. All but five firms that applied have a personnel/human resources department or dedicated personnel/human resources staff.

Most firms reported an average annual gross revenue growth rate during the past three fiscal years of between 10 percent and 20 percent. The majority indicated a net pre-tax, pre-bonus profit/loss margin of 10 percent to 14.9 percent.

The cultures at the firms that applied are as diverse as the employees working in the civil engineering industry. When asked to "rank the three most prevalent characteristics of your firm's culture or personality," most firms described themselves as "client focused" by a significant margin (see Table 1). The least common response was "high-tech." Comparing the aggregated results of the 2007 participants to those that participated in 2005, we see that the most significant change is a 5-percent increase in firms describing themselves as "focused on integrity" and "family atmosphere."

Table 1: How participating firms describe their culture or personality, 2005 vs. 2007

Characteristics	2005	2007
Client-focused	83%	86%
Team-oriented, collaborative	65%	66%
Focused on integrity	52%	56%
Family atmosphere	28%	33%
Entrepreneurial	18%	16%
Flexible	18%	14%
Caring/philanthropic/compassionate	11%	12%
Fun	9%	10%
Supportive of individual desires	6%	7%
Respectful	7%	3%
Prideful	4%	1%
High-tech	1%	1%

Equally as diverse are the programs, practices, benefits, and general philosophies of the firms that applied. For example, some highly prized benefits by some professionals are rare: only 3 percent of the firms pay all employees on maternity leave all or a portion of their salary during all or a portion of their leave, and a mere 32 percent offer domestic partner benefits.

Meanwhile, some firm programs are becoming more plentiful than in years past. For example, 80 percent of firms that applied compensate current employees for referring candidates. While the referral benefits range dramatically, 53 percent of these firms provide a monetary reward that varies depending on the position that the candidate is suited. The median minimum amount is \$500, and the median maximum amount is \$3,000. The in-depth descriptions of the top three firms exemplify some of the remarkable workplace practices in our industry.

The process

Executing the contest for the seventh time this year, the process did not change remarkably from last year. Following is a description of the contest process.

CE News announced in January that applications were being accepted and posted the application form (known as the Corporate Survey) online. Firms responded to the questions and returned the application. Next, the firms launched an Employee Satisfaction Survey to their staff. Firms were told to achieve a minimum 20-percent response rate for the anonymous survey.

Next, our staff graded the Corporate and Employee Satisfaction Surveys, which make up the two equally-weighted components of the grading process, for all firms, and determined a raw score for each component. (The method used to determine the raw scores is described below.) We used the standard deviation and mean to distribute the firms' scores for each component, which gave more weight to firms that scored well outside of the average. We used the sum of the distributed scores for both components to rank the firms. The top 50 firms and five honorable mentions will be honored.

The top three firms made it to the final round. The judging panel members re-ranked these firms based on their best judgment. We tallied the judges' results to establish the ranking order of the top three firms.

Finally, firm-size rankings were developed by categorizing the firms on the overall ranking list by size and keeping the same relative order.

To determine the raw scores used to rank the contestants, the Corporate and Employee Satisfaction Surveys are evaluated objectively in the following manner:

Corporate Survey—Our staff graded the Corporate Survey (CS) for all competing firms. Most questions on the Corporate Survey were graded using one of two methods. The first type compared a firm's response with the median response of the contestant pool. If a firm met or exceeded the median, then a point(s) was awarded. For example, the median voluntary turnover rate for all the firms that entered the contest was 9 percent. Therefore, if a firm had a 9 percent or lower turnover rate, it earned points; firms with a turnover rate higher than 9 percent did not earn any points. Questions deemed to quantify more important aspects about firms were worth more points than those questions indicating less important information about firms. For some particularly important questions, bonus points were awarded if a firm met or exceeded the third quartile (75th percentile) of all firms.

The second method simply awarded a point(s) if a benefit was offered or if the affirmative response to a question was given. For example, if a firm offers a flexible medical spending account to staff, it earned points; likewise, if a firm said it has a non-discriminatory culture regarding age, gender, race, and religion, it earned points. More important attributes were worth more points; for example, hosting a company picnic annually wasn't worth as many points as beating the average voluntary turnover rate.

Questions were arranged by categories, including culture, benefits, performance/recognition, compensation, professional development, recruiting and retention, and general.

Employee Satisfaction Survey—All of the non-narrative Employee Satisfaction Survey (ESS) questions were graded (other than the demographic questions) using a method that compared, for each question, a firm's average positive response to the average positive response of the contestant pool (referred to as the Benchmark). For example, employees were asked to respond on a scale of 1 to 6, where 1 is the most undesirable response and 6 is the most desirable response, how well their firm provided a team environment. For each firm, we calculated the percentage of respondents who responded with a 5 or a 6, and compared it to the percentage of respondents overall who responded with a 5 or a 6 to this question (the Benchmark). If a firm met or exceeded the Benchmark, it earned a point for the question. Additionally, bonus points were provided for firms that met or exceeded the 90th percentile on certain questions, which are the most telling/important of those asked in the ESS.

Questions were arranged by categories, including culture, benefits, performance/ recognition, compensation, professional development, recruiting and retention, and general. For each firm, the total points earned for each category were normalized so that each category had a total of 10 points. This step helped to account for the fact that there were many more graded questions in some categories than others and that some categories' questions weren't necessarily as important as others with fewer questions. Next, a unique weighting factor was applied to each category's normalized point total. The weighting factors are based on data collected from the 2004 Employee Satisfaction Survey conducted for the Best Civil Engineering Firm To Work For Contest. We asked many questions about what was important to the employees of civil engineering firms so that we could better determine how to weight types of questions in the future, rather than going by assumptions. For example, we learned that employees believe that a firm's culture is more important than its professional development programs. More than 12,000 employees' responses were incorporated into these findings. Finally, the sum of the weighted total points for each category was determined; this was the total raw score for the ESS component of the overall score.

Finally, the mean and standard deviation were used in combination with the CS scores to rank the firms. This puts the ESS and the CS on a level playing field for determining the final ranks. (Otherwise the CS may seem worth more than the ESS, or vice versa, if the point ranges aren't similar.)

The Judging Panel

Tim Cooper

Senior vice president, employee benefits consultant for JBL&K Risk Services of Portland, Ore.

Larry Gard, Ph.D.

Senior consultant with Gard Executive Consulting, LLC of Chicago

Carol A. Metzner

President of The Metzner Group, LLC of Myersville, Md.

Michael Zmugg

Consultant with ZweigWhite, headquartered in Chicago