While U.S. engineering firm leaders remain optimistic about business prospects over the coming year, their confidence is fraying at the edges, according to the fourth quarter (Q4) ACEC Engineering Business Index (EBI).

The Q4 EBI, conducted December 11-30, of 215 engineering firm leaders, produced a composite score of 66.5—still strongly positive but a decline from the 68.8 score in the Q3 survey and the 68.9 in Q2.

EBI is a diffusion index, which charts the health of the engineering industry by consolidating senior leadership responses on market and firm performance into a single number. Any number above 50 indicates expansion.

**Bullish on Current Market**

Respondents are very positive about the current state of the engineering market, compared to a year ago, with the score climbing from 77.5 (Q3) to 79.7 (Q4). Almost seven in ten respondents (69.2 percent) say the market is better today. Looking forward 12 months, though, their enthusiasm is somewhat tempered, with the score dropping from 74.3 (Q3) to a still impressive 72.2 (Q4).
Lower market expectations are contributing to lower profit projections for the coming year, with the score falling from 70.3 (Q3) to 67.9 (Q4). When asked to forecast profitability three years from now, the score fell from 71.8 (Q3) to 68.2 (Q4).

Backlogs today are higher than they were last year, the score climbing from 75 (Q3) to 76.4 (Q4), with more than two-thirds of firms (66.8 percent) reporting larger backlogs. Respondents are slightly less sanguine about backlogs a year from now, with the score dropping from 70.7 (Q3) to 66.5 (Q4).

**Private Markets Dampening, but Still Outshine Public Sector**

The dramatic decrease in oil prices over the past six months contributed to increased optimism in the industrial/manufacturing sector, which climbed from 68.3 to 71.3. Nearly half of the respondents (45.7 percent) expect the industrial/manufacturing market to improve over the next 12 months.
On the other hand, the slowdown in capital investment by energy companies in the face of declining prices was reflected in the significant drops in scores for the energy and power sector, which fell from 76.5 (Q3) to 68.1 (Q4), and land development, down from 79.5 (Q3) to 70.2 (Q4). While these scores remain relatively strong, nearly one in ten respondents (9.2 percent) expect the energy and power sector to soften over the coming year.

Public sector markets continue to lag behind the private sector. Respondents anticipate growth in the sector, but their expectations are tempered by a fair degree of pessimism. The transportation sector, for example, fell from 61.3 (Q3) to 60.1 (Q4). While that score reflects market growth, nearly one in five respondents (19 percent) expect the transportation market to worsen in the next 12 months.

Only two public sector markets registered improved scores in the survey: Water and wastewater climbed from 67.7 (Q3) to 69.1 (Q4), with 43 percent of respondents expecting the market to grow over the next year; and Environmental, which jumped from 57.7 (Q3) to 61.7 (Q4).

**Q: Rate the following business factors in relation to how much they THREATEN your firm’s success.**

![Graph showing business factors and their scores]

**Commoditization Threat**

According to respondents, the three leading threats to the market remain Public/Private Sector Funding with a score of 61.2, Economic Uncertainty/Trends (56.8) and Commoditization (51.2).

Selecting the most negative consequences of increased commoditization, nearly four in ten respondents (39 percent) said it is “the elimination of qualifications as a differentiator, thereby establishing lowest price as the prevailing procurement factor.” A further 27 percent pointed to “procurement of engineering services

**Q: Which of the following do you believe is the most negative consequence of commoditization of engineering services? (Choose one)**

- Elimination of qualifications as a differentiator between competing professional service providers and thereby establishing lowest price as the prevailing factor.
- Procurement of engineering services by client’s purchasing department, which typically lacks understanding of how qualifications can impact project performance.
- Transformation of previous partnership relationship to one of a vendor, reducing engineer’s ability to impact scope of work and act as client’s representative.
- Devaluation of specialized engineering expertise and capability into a commodity product available from any supplier.
Q: To combat increased commoditization, which of the following do you believe is the most effective strategy for engineers? (Choose one or more)

One respondent added, “Commoditization is the most dangerous problem facing consulting engineering and the reason why salaries stay dangerously low, thus driving the best and brightest out of our industry.”

 Asked how to combat increased commoditization, 41 percent of respondents cited “educating lawmakers and government agencies to enforce Qualifications-Based Selection guidelines,” followed by “enhanced marketing of a firm’s specialized expertise,” (20 percent) and “eliminate service offerings that have been commoditized and avoid clients that commoditize those services” (19 percent).

Impact of the Affordable Care Act

More than four in ten respondents (41 percent) reported that the average health care insurance costs at their firms have increased “slightly” due to the Affordable Care Act (ACA), while 33 percent said they have “significantly higher premiums,” 19 percent said they perceive no difference, and 7 percent reported lower premiums.

“Why higher costs?” said one respondent. “Take, for example, the cost to comply with all the regulations and requirements associated with the law, the legal expertise required to interpret the thousands of pages of regulation, and the burden and reduced efficiency that top-down edicts cause.”

Asked what changes they had to make to their employee health plans to conform to the ACA, 64 percent of respondents said they have not had to make any modifications, 29 percent said they had to change coverages, and 7 percent didn’t know.

Q. Has your firm had to significantly modify the types of medical services covered under your insurance due to changes required by the ACEC?

Watch for the next quarterly ACEC Engineering Business Index survey form in your email in-box in March.
On the Threat of Commoditization:

“Government competition with the private sector must end. We have seen several examples where the government will simply provide design services to other government agencies, such as the state to a city or the federal to a local, in order to justify their head count and keep their people busy.”

“Consulting engineering is an extremely fragmented industry with plenty of supply (number of firms), a lot of similarity in service offerings, and a low barrier to entry. We are probably a textbook business/industry for which economics can predict that commoditization will occur.”

“I don’t believe that all clients look only at price; they still will push for firms that provide the service and attention that they want.”

“Enforce existing Qualifications-Based Selection legislation for all engineering/architectural/environmental/land surveying services for all agencies that receive federal funding.”

“As an industry we need to educate lawmakers and work to keep/improve legislation so that we can stop this trend. It is a race to the bottom if we let this continue.”

“We need to realize the importance of ACEC’s efforts at raising the bar of leadership development in the industry. We need more engineering firm leaders who have the skills to discuss the issue of commoditization with leaders of other industries and to raise the level of performance of their firms.”

On the Impact of the Affordable Care Act (ACA) on Firms:

“ACA has had no effect on health insurance especially for companies that provided good plans to begin with. I can only see this as a net positive for the country.”

“The main problem is not the ACA, but the incredibly complex, inefficient nature of our entire health system and the ongoing increases in the cost of health care.”

“For the first time we are asking our employees to contribute to their health care plans.”

“It has been a good law for us because it requires our competitors to provide better coverage, leveling the overhead playing field.”

“It is a slow moving train wreck that has significant threats to small business in the next few years.”

“To maintain our desired health care program for our company, we have had to change and modify our plans and even change carriers for it to be manageable. We have found that we pay significantly more for the same or less care. We’re paying more without getting the corresponding benefit of greater quality of care. This is what we’ve gained from government intervention and regulations.”