

Trends in Architecture: the 2024 AIA Firm Survey Report

By Jon Tennent & Teddi Hibberd

As we read the 2024 AIA Firm Survey Report, we thought it would be interesting to collaborate on an article that teases out some of the most relevant recent trends for the BOA newsletter and community.

Why collaborate? Teddi Hibberd is a licensed architect practicing at a mid-size firm in Lexington, KY. Jon Tennent (full disclosure – her husband) is a CPA who has written for the BOA newsletter a couple times on tax and finance topics. Together, we hope to highlight some trends that are interesting to both of us and edifying to the reader.

From a financial perspective...

One of the more striking financial trends highlighted in the AIA's Firm Survey Report was the average net billings per employee, which have risen steadily from \$86,000 in 2011 to \$143,000 in 2023. For some context, however, I ran these numbers through the US Bureau of Labor Statistics' CPI inflation calculator to compare those nominal billings per employee in 2024 dollars.

Adjusted for inflation (to 2024 dollars), there has actually been relatively little growth over the past decade: \$144k in 2015, \$143k in 2021, and \$147k in 2023. There was, however, a material increase between 2011 (\$120k) and 2015 (\$144k) which is likely due in part to the improving economy as the country finally recovered from the 2008 financial crisis.

While net billings per employee do not directly translate into wages paid to each employee, most firms would likely see a correlation between their billings per employee and how much they're able to compensate those employees. So what does it mean if these numbers, adjusted for inflation, remain relatively flat over time?

As with most things economic, the possible answers are myriad. But one common factor is productivity growth: if the output per worker is not increasing, that's one possible layer of meaning behind the flat numbers. Although worker productivity can be affected by soft factors such as training and even company culture, the biggest leaps in productivity are generally driven by technological tools that augment human capabilities. For example, the advent of BIM software not only made individual employees capable of more gross output, but it also increased their technical abilities.

What could be the disruptive factor in 2024 that could lead to the next leap forward in productivity? Most industries are anticipating *some* effect from the use of artificial intelligence, and this was also a question that firms were asked on the AIA's Firm Survey Report. Unsurprisingly, large firms (defined as 50 or more employees) were the most likely to be utilizing AI in some form – whether that be content generation, photo editing, code research, or AI embedded in CAD/BIM software.

To me, however, the most shocking statistic was the percentage of firms reporting that they do *not* use AI *at all* in their day-to-day work. This was 39% of large firms, 58% of mid-size firms, and a whopping 73% of small firms.

These relatively low adoption rates, contrasted with the near inevitability of higher adoption rates over the next ten years, may very well translate into increased productivity per employee in the industry and, therefore, could mean higher billings per employee as well. If so – ideally – these higher billings per employee could also foretell compensation increases across the industry.

From a design perspective...

As a design professional whose portfolio includes significant renovation work, I was struck by the recent decline in renovations and alterations cited by the Firm Survey Report, specifically in light of the critical role existing buildings will play in achieving the AIA's carbon neutrality goals. My initial concern was that these numbers were an indication that the ideology and the practice of our profession were not aligned. However, the details present a more nuanced story.

With 40% of U.S. energy consumed by buildings, the AIA 2030 Commitment program states that architects are uniquely positioned to make consequential impacts in CO2 emissions and offers action items on how our buildings can reach carbon neutrality by 2030 and net zero emissions by 2050. While the path towards achieving carbon neutrality for any project is composed of a multitude of decisions whose collective impact make this goal possible, the single largest variable, most readily available across all regions and project types, is the decision to extend the life of our existing infrastructure. As stated by AIA President Kimberly Dowdell, AIA at the United Nations Climate Change Conference, "Simply put, there is no path to zero emissions without directly addressing America's 325 billion square feet of existing built environment."

The AIA's Guide to Building Reuse for Climate Action states that "half the U.S. building stock is over 40 years old and an estimated 28% of global emissions come from the fuel and electricity consumed by existing buildings." There is clearly a need and corresponding opportunity to take swift and decisive action towards reducing our carbon impact, and renovations are a key way to accomplish this. So why, if renovations and alterations were on the rise, did they take a notable downturn between 2021 and 2023?

Looking at other data in the Firm Survey Report, the largest share of billings is driven by the institutional market, where the distribution of new construction vs. renovation/alteration dollars increased by 14% – with new construction rising from 37% of billings in 2021 to 51% in 2023. The top three sectors within the institutional market are healthcare (14% of billings), K-12 (10% of billings), and higher education (9% of billings). While all three of these groups are important to the conversation, I found the impact of healthcare industry standards to be the most notable.

Healthcare was one of the few building sectors that continued to see gains during the pandemic, and spending is projected to continue as the baby boomers age. So what does the impact of this pressure mean for our nation's healthcare infrastructure? The American Society for Health Care Engineering (ASHE) states that the two key metrics of health care facility conditions are the age of plant (AoP), a financial ratio that measures how well a hospital is maintaining its facilities, and the facility condition index (FCI), a compilation of reported facility assessments translated into a ratio that represents the cost of repairing a facility over the cost of replacing it. While the AoP is a reasonable proxy for the condition of health care facility infrastructure, the FCI is the most common metric for evaluating a facility's condition with benchmarks for replacement of critical functions – hospitals and surgery centers -- at .05 or 5% of the cost of total replacement.

In other words, the industry standard for evaluating whether a facility needs to be replaced (new construction) vs. updated (renovation) is 5% of the total facility cost – a shockingly low threshold. As demographic and aging infrastructure demands persist, this metric will continue to guide the market away from renovations and towards new construction.

K-12 spending also saw a boost following the pandemic when most schools were shut down. ConstructConnect reports that “the value of construction starts for junior high and high school facilities increased 20% through the first five months of 2023, college and university facilities starts were up 14%, while preschool and elementary facilities increased 9%.” However, it is important to note that these stats are not parsing between dollars spent on renovations vs. new construction. Both the K-12 and higher education markets are more inclined towards renovations depending on the unique project conditions – namely project types where the demand for student housing leans toward new construction whereas improved classroom and student programming space lean towards renovation.

In summary, when parsing the decline in renovations cited by the AIA Firm Survey Report against the AIA’s 2030 Commitment, it is important to understand the immense market forces imposed by our stressed and aging healthcare system. Can we overcome this hurdle? I hope the answer is yes, but it will require the profession’s continued partnership with our K-12 and higher educational clients to leverage the opportunities of reusing their existing infrastructure.

In conclusion

There is far more data in the 2024 AIA Firm Survey Report than what we’ve highlighted here, and the report has some beautiful charts and graphs to help visualize the trends. We urge everyone to check it out in its entirety if these topics are of interest to you. Although trend lines don’t predict the future, they can show you where the momentum is – or isn’t.

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