

20th Annual

Engineering Study

**KNOW
GREATER
VALUE®**





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20 Years Strong and Committed to Adding Value to Your Business

A Message to Our Architecture and Engineering Community

We're pleased to present the 20th annual celebratory editions of our Architectural and Engineering Studies. What's special about this year's Studies is that they include a historical perspective, highlighting significant events over the past 20 years that have shaped your industry and our practice. Additionally, industry experts offer their insight into the direction of the ever-evolving landscape.

Based on a survey of participants, our 2024 Studies are designed to deliver a comprehensive industry snapshot. Featuring multi-year trends and key takeaways throughout, they provide the information you need to benchmark your firm against its peers and position it for future growth and success.

The benchmarking data features a comprehensive analysis of key performance indicators (KPIs) crucial to your business (e.g., utilization rates, billing multiples, overhead costs and working capital ratios). To provide a broader industry perspective, select trends span 10 and 20 years. In addition, new this year, we surveyed study participants on their current and expected use of artificial intelligence (AI).

To all who participated in these studies, we express our gratitude. Your insights and experiences are invaluable and we thank you for sharing them with your industry colleagues. We value the trusted relationships we've made with clients and industry experts and look forward to what the next 20 years will bring!

We welcome your feedback for future studies and invite you to connect with us directly. In the meantime, be on the lookout for a *Save the Date* for next year's Architectural and Engineering Summit in Boston, MA in June 2025. We hope to see you there!



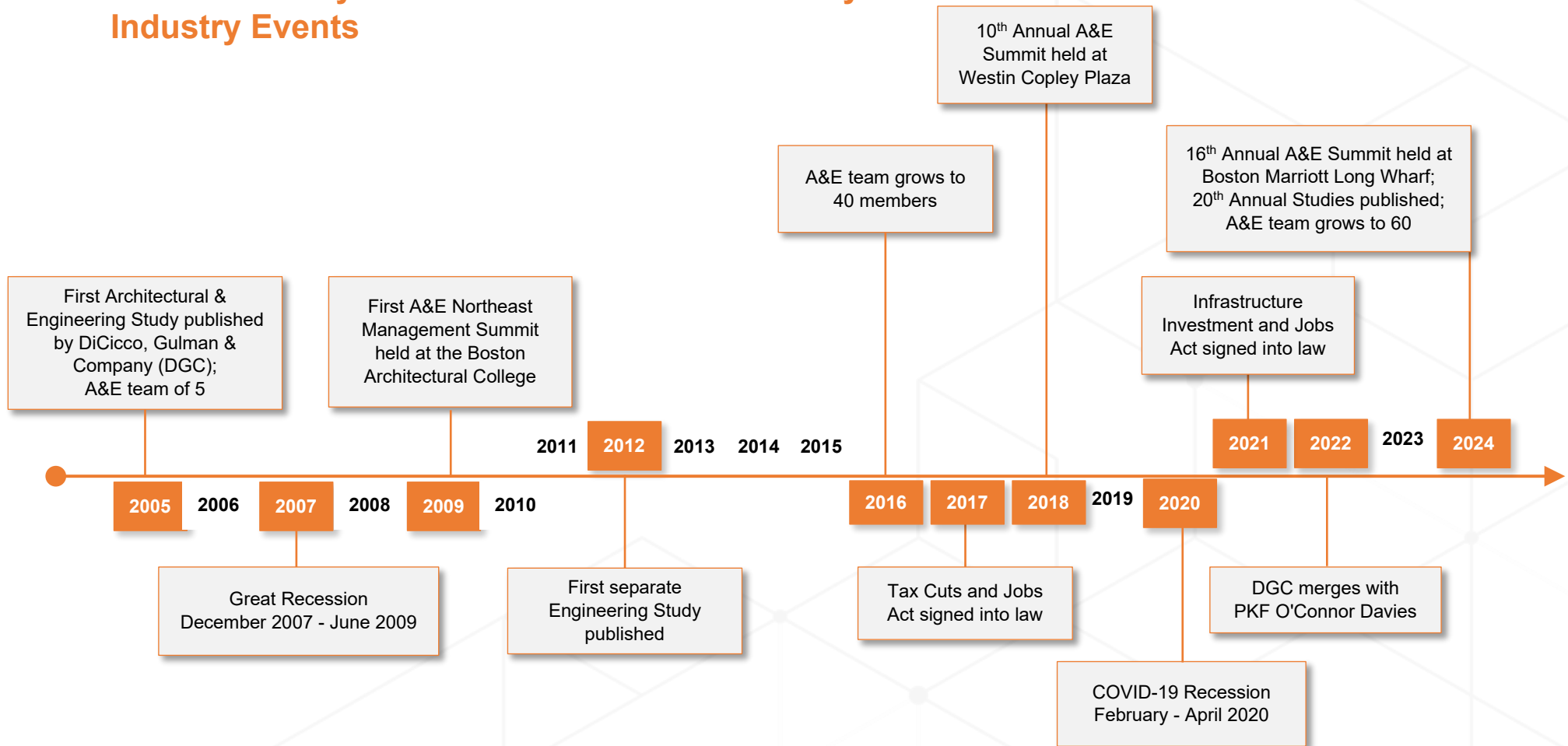
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A Look Back...

20-Year History of Our Practice and Noteworthy Industry Events



Key Takeaways

Our analysis of this year's data revealed several key takeaways for the engineering industry.

- Despite the decline in utilization from 63.1 percent in 2022 to 62.4 percent in 2023, profit as a percentage of net fee income reached its highest level in the past five years at 15.7 percent on average.
- The billing multiple increased slightly from 3.20 in 2022 to 3.23 as firms continued to focus on project management efficiencies.
- The breakeven multiple and overhead rate continued to trend upward, albeit at a slower pace than the prior year. Indirect labor, employee and fringe benefits, computer and IT and travel costs were the main contributors to the increase from 2022.
- Although raises as a percentage of base compensation decreased from 6.2 percent in 2022 to 5.6 percent in 2023, this statistic is still above the historical average.
- On average, it took firms three days longer to collect on its sales. Firms should continue to monitor this and understand the trend to maintain sufficient cash flow for operations.



Time Statistics

	Study Average	Range of Studied Firms	
		High	Low
Ratios based on labor dollars			
Direct ratio (utilization)	58.5%	70.6%	49.6%
Total labor billing multiple	1.92	2.66	1.59
Direct labor billing multiple	3.23	3.90	2.76
Breakeven multiple *	2.75	3.47	2.01
Overhead rate *	175.3%	246.5%	100.8%
Ratios based on hours			
Direct ratio (utilization)	62.4%	69.2%	46.3%
Billing rate per direct hour	\$159.25	\$216.30	\$125.99
Overhead rate per direct hour	\$82.85	\$146.15	\$49.93
Employees' average hourly rates			
Direct labor rate	\$51.37	\$66.41	\$42.44
Indirect labor rate	\$55.89	\$62.02	\$41.12
Combined labor rate	\$52.99	\$59.80	\$46.73
Calculation of profit per direct hour			
Billing rate per direct hour	\$159.25		
Direct labor rate	\$(51.37)		
Overhead rate per direct hour	<u>\$(82.85)</u>		
Profit per direct hour	<u>\$25.03</u>	<u>\$37.19</u>	<u>\$2.48</u>
Profitability ratios			
Profit as a % of net fee income **	15.7%	27.2%	1.7%
Net fee income per employee	\$197,370	\$254,167	\$174,489

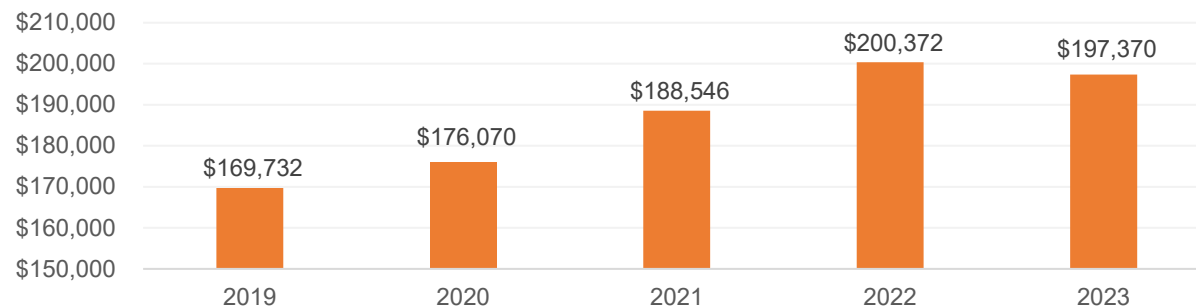
* Breakeven multiple and overhead rate include staff bonuses.

** Profit as a % of net fee income is calculated before bonuses to principal owners.

Historical Trend Analysis

	2019	2020	2021	2022	2023
Ratios based on labor dollars					
Direct ratio (utilization)	60.9%	61.2%	60.1%	59.3%	58.5%
Total labor billing multiple	1.86	1.89	1.85	1.91	1.92
Direct labor billing multiple	3.08	3.10	3.13	3.20	3.23
Breakeven multiple	2.72	2.65	2.70	2.73	2.75
Overhead rate	172.4%	165.0%	170.0%	173.3%	175.3%
Ratios based on hours					
Direct ratio (utilization)	63.4%	64.7%	63.2%	63.1%	62.4%
Billing rate per direct hour	\$137.92	\$138.54	\$144.13	\$154.58	\$159.25
Overhead rate per direct hour	\$72.45	\$70.44	\$74.40	\$81.22	\$82.85
Employees' average hourly rates					
Direct labor rate	\$45.51	\$46.48	\$48.24	\$49.96	\$51.37
Indirect labor rate	\$50.92	\$51.52	\$52.42	\$53.25	\$55.89
Combined labor rate	\$47.68	\$47.86	\$49.57	\$51.09	\$52.99
Calculation of profit per direct hour					
Billing rate per direct hour	\$137.92	\$138.54	\$144.13	\$154.58	\$159.25
Direct labor rate	\$(45.51)	\$(46.48)	\$(48.24)	\$(49.96)	\$(51.37)
Overhead rate per direct hour	<u>\$(72.45)</u>	<u>\$(70.44)</u>	<u>\$(74.40)</u>	<u>\$(81.22)</u>	<u>\$(82.85)</u>
Profit per direct hour	<u>\$19.96</u>	<u>\$21.62</u>	<u>\$21.49</u>	<u>\$23.40</u>	<u>\$25.03</u>
Profitability ratios					
Profit as a % of net fee income	14.5%	15.6%	14.9%	15.1%	15.7%

Net Fee Income Per Employee



Key Takeaway

Despite utilization decreasing from 2022, profit as a percentage of net fee income reached its highest level in the past five years at 15.7 percent on average.

Trend Analysis of Hours

	2019	2020	2021	2022	2023
Total firm					
Direct hours	<u>63.4%</u>	<u>64.7%</u>	<u>63.2%</u>	<u>63.1%</u>	<u>62.4%</u>
Indirect hours:					
Holiday, vacation, sick	10.7%	10.1%	11.7%	11.8%	11.5%
Marketing	6.8%	6.4%	6.5%	5.4%	5.0%
Other	<u>19.1%</u>	<u>18.8%</u>	<u>18.6%</u>	<u>19.7%</u>	<u>21.1%</u>
	<u>36.6%</u>	<u>35.3%</u>	<u>36.8%</u>	<u>36.9%</u>	<u>37.6%</u>
Total	<u>100.0%</u>	<u>100.0%</u>	<u>100.0%</u>	<u>100.0%</u>	<u>100.0%</u>
Principals					
Direct hours	<u>49.5%</u>	<u>50.5%</u>	<u>49.0%</u>	<u>46.4%</u>	<u>45.4%</u>
Indirect hours:					
Holiday, vacation, sick	12.9%	10.7%	13.9%	13.7%	13.1%
Marketing	13.4%	10.8%	10.8%	8.3%	9.8%
Other	<u>24.2%</u>	<u>28.0%</u>	<u>26.3%</u>	<u>31.6%</u>	<u>31.7%</u>
	<u>50.5%</u>	<u>49.5%</u>	<u>51.0%</u>	<u>53.6%</u>	<u>54.6%</u>
Total	<u>100.0%</u>	<u>100.0%</u>	<u>100.0%</u>	<u>100.0%</u>	<u>100.0%</u>
Professional staff					
Direct hours	<u>75.4%</u>	<u>72.0%</u>	<u>71.4%</u>	<u>73.1%</u>	<u>74.1%</u>
Indirect hours:					
Holiday, vacation, sick	11.0%	10.0%	11.4%	11.5%	11.2%
Marketing	3.8%	4.3%	3.1%	2.7%	3.2%
Other	<u>9.8%</u>	<u>13.7%</u>	<u>14.1%</u>	<u>12.7%</u>	<u>11.5%</u>
	<u>24.6%</u>	<u>28.0%</u>	<u>28.6%</u>	<u>26.9%</u>	<u>25.9%</u>
Total	<u>100.0%</u>	<u>100.0%</u>	<u>100.0%</u>	<u>100.0%</u>	<u>100.0%</u>
Support staff					
Direct hours	<u>4.3%</u>	<u>5.4%</u>	<u>5.0%</u>	<u>5.7%</u>	<u>3.0%</u>
Indirect hours:					
Holiday, vacation, sick	11.1%	9.7%	11.4%	11.4%	11.7%
Marketing	11.8%	9.7%	14.7%	13.2%	14.0%
Other	<u>72.8%</u>	<u>75.2%</u>	<u>68.9%</u>	<u>69.7%</u>	<u>71.3%</u>
	<u>95.7%</u>	<u>94.6%</u>	<u>95.0%</u>	<u>94.3%</u>	<u>97.0%</u>
Total	<u>100.0%</u>	<u>100.0%</u>	<u>100.0%</u>	<u>100.0%</u>	<u>100.0%</u>

Key Takeaway

On average, principal utilization has been decreasing over the past four years, which is in line with the growing spread between the hours and dollars utilization. Firms should keep an eye on this trend and ensure that principal utilization is in line with their business strategy.

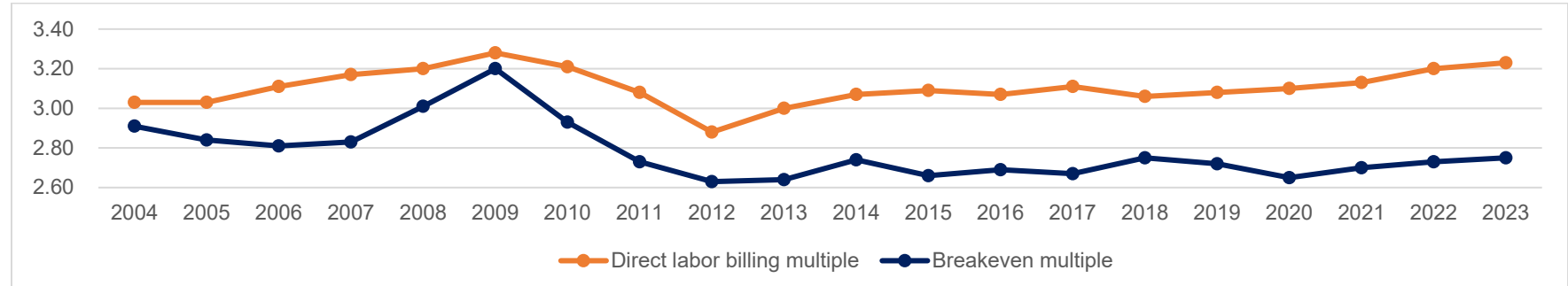
20-Year Historical Data Comparison

Direct Labor Billing Multiple & Breakeven Multiple

The direct labor billing multiple is calculated by dividing net fee income by direct labor cost. This ratio represents the average amount billed as a multiple of direct labor. The breakeven multiple is calculated by dividing total operating costs (including direct labor) by direct labor. This ratio multiplied by an employee's pay rate is the amount that needs to be billed out to cover their salary and overhead (breakeven). Both ratios are heavily influenced by a firm's direct ratio.

	2004	2005	2006	2007	2008	2009	2010	2011*	2012	2013	2014	2015	2016	2017	2018	2019	2020	2021	2022	2023
Direct labor billing multiple	3.03	3.03	3.11	3.17	3.20	3.28	3.21	3.08	2.88	3.00	3.07	3.09	3.07	3.11	3.06	3.08	3.10	3.13	3.20	3.23
Breakeven multiple	2.91	2.84	2.81	2.83	3.01	3.20	2.93	2.73	2.63	2.64	2.74	2.66	2.69	2.67	2.75	2.72	2.65	2.70	2.73	2.75

*Prior to 2012, the Architectural and Engineering Studies were combined.



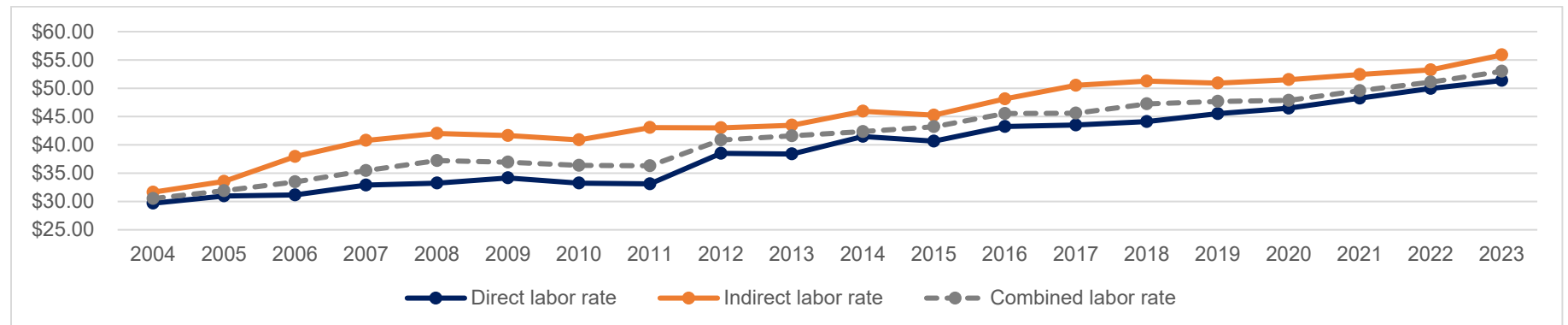
20-Year Historical Data Comparison (continued)

Employees' Average Hourly Rates

Direct labor divided by direct hours represents the average wage rate for each direct hour worked. Indirect labor divided by indirect hours represents the average wage rate for each indirect hour worked. Total labor divided by total hours represents the average wage rate for an hour worked.

	2004	2005	2006	2007	2008	2009	2010	2011*	2012	2013	2014	2015	2016	2017	2018	2019	2020	2021	2022	2023
Direct labor rate	\$29.69	\$30.97	\$31.15	\$32.89	\$33.24	\$34.16	\$33.24	\$33.11	\$38.50	\$38.39	\$41.49	\$40.65	\$43.24	\$43.51	\$44.11	\$45.51	\$46.48	\$48.24	\$49.96	\$51.37
Indirect labor rate	\$31.64	\$33.54	\$37.93	\$40.79	\$42.02	\$41.65	\$40.88	\$43.06	\$43.01	\$43.47	\$45.94	\$45.24	\$48.12	\$50.51	\$51.26	\$50.92	\$51.52	\$52.42	\$53.25	\$55.89
Combined labor rate	\$30.52	\$31.90	\$33.46	\$35.45	\$37.22	\$36.94	\$36.37	\$36.30	\$40.86	\$41.59	\$42.34	\$43.20	\$45.54	\$45.60	\$47.24	\$47.68	\$47.86	\$49.57	\$51.09	\$52.99

*Prior to 2012, the Architectural and Engineering Studies were combined.



Key Takeaway

The combined labor rate grew by 73.6 percent over the last 20 years. However, over the past two decades, firms have been able to offset these costs by increasing bill rates, resulting in profit increasing from 4.1 percent in 2004 to 15.7 percent in 2023.

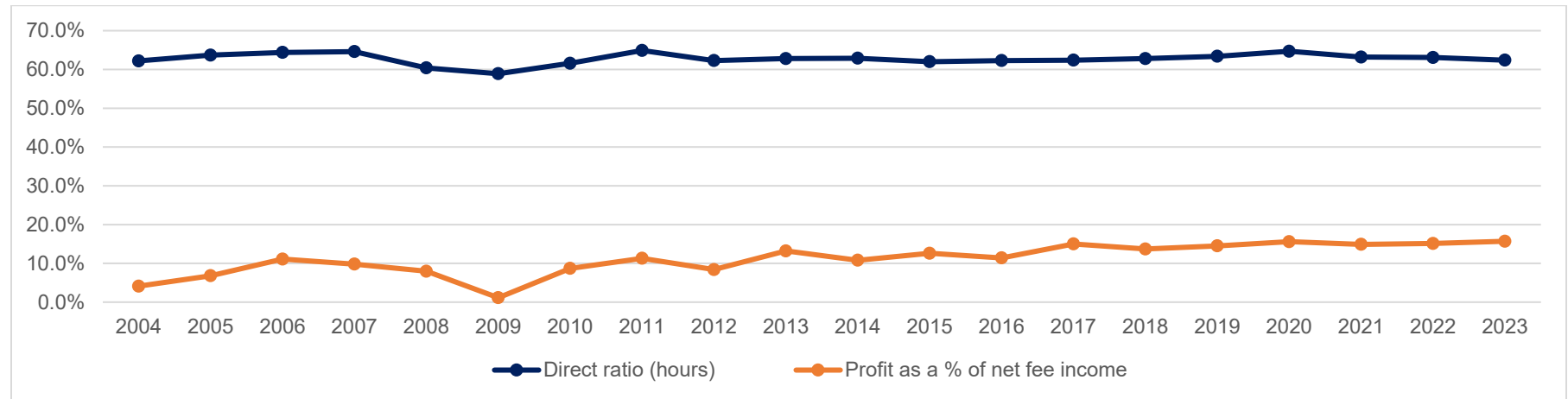
20-Year Historical Data Comparison (continued)

Direct Ratio (Utilization) & Profit as a % of Net Fee Income

The direct ratio (utilization) represents the percentage of total hours that are chargeable to projects. Maintaining a high percentage here can be the key to a firm's profitability. Profit as a percentage of net fee income represents the ratio of income from operations to net fee income.

	2004	2005	2006	2007	2008	2009	2010	2011*	2012	2013	2014	2015	2016	2017	2018	2019	2020	2021	2022	2023
Direct ratio (hours)	62.2%	63.7%	64.4%	64.6%	60.4%	58.9%	61.6%	64.9%	62.3%	62.8%	62.9%	62.0%	62.3%	62.4%	62.8%	63.4%	64.7%	63.2%	63.1%	62.4%
Profit as a % of net fee income	4.1%	6.8%	11.1%	9.8%	8.0%	1.1%	8.7%	11.3%	8.4%	13.2%	10.8%	12.6%	11.4%	15.0%	13.7%	14.5%	15.6%	14.9%	15.1%	15.7%

*Prior to 2012, the Architectural and Engineering Studies were combined.



Other Statistics

The following table is presented to show additional firm statistics, including various compensation rates, billing rates and the percentage change in the volume of business.

	2023			2022
	Study Average	Range of Studied Firms		Study Average
		High	Low	
Staffing statistics				
Ratio of shareholders to total employees	24.6%	65.9%	7.1%	24.7%
Staffing turnover ratio	11.7%	22.2%	1.0%	13.8%
Raises as a % of base compensation	5.6%	8.0%	3.5%	6.2%
Staff bonuses as a % of base compensation	8.0%	12.0%	3.0%	8.2%
Average employee tenure (in years)	7.4	13.0	2.5	N/A
Ratio of non-technical employees to total employees				
Administration	3.0%	14.3%	0.4%	3.0%
Finance/accounting	4.4%	8.0%	2.3%	5.6%
Human resources	2.9%	7.1%	1.4%	3.3%
Information technology	2.4%	3.9%	0.0%	2.6%
Marketing	4.6%	10.0%	0.0%	4.0%
Billing rates				
Principals	\$290	\$380	\$190	\$280
Project managers	\$220	\$310	\$150	\$210
Senior engineers	\$200	\$260	\$140	\$190
Engineers	\$160	\$230	\$120	\$160
Technical professionals/draftspersons	\$130	\$155	\$110	\$120
Base salary (before bonuses), professional staff				
Principals	\$214,000	\$250,000	\$150,000	\$209,100
Project managers	\$148,000	\$194,000	\$104,000	\$146,500
Senior engineers	\$120,000	\$142,000	\$99,000	\$113,500
Engineers	\$101,000	\$138,000	\$86,000	\$92,700
Technical professionals/draftspersons	\$82,000	\$110,000	\$65,000	\$73,900

Key Takeaway

In 2023, for the first time, we asked participants to share the average tenure of employees. Employee tenure ranged from 2.5 years to 13 years, with an average of 7.4 years.

Other Statistics (continued)

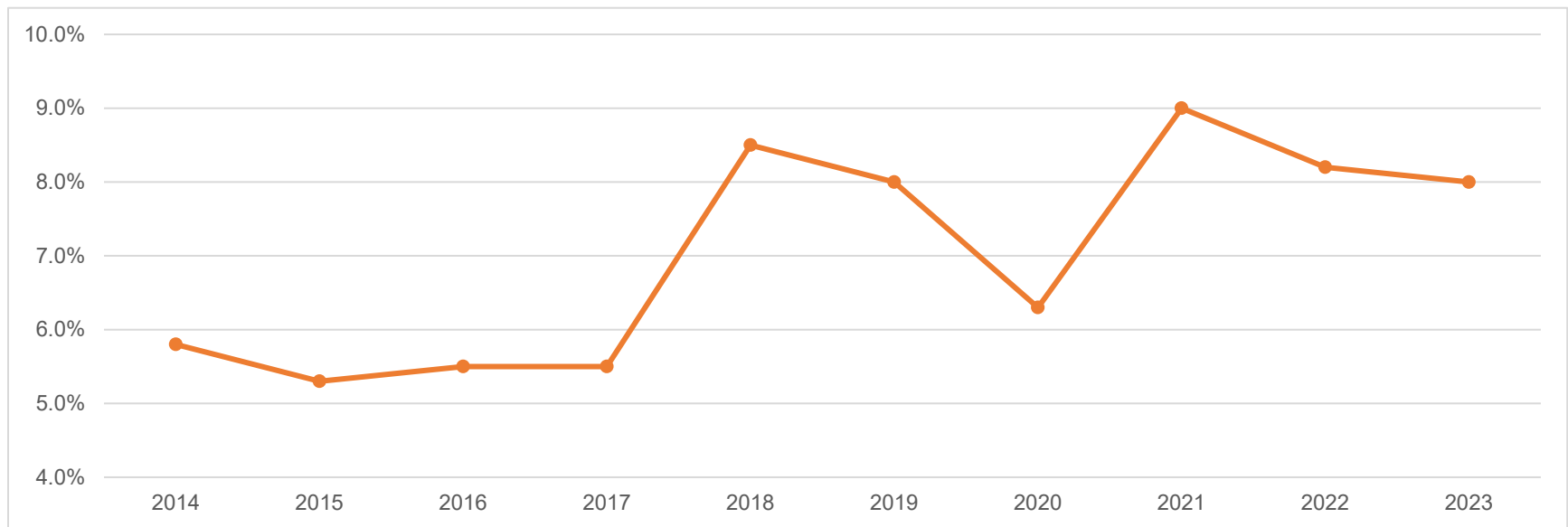
	2023			2022
	Study Average	Range of Studied Firms		Study Average
		High	Low	
Base salary (before bonuses), support staff				
CFO	\$235,000	\$372,000	\$171,000	\$230,000
Marketing director	\$202,000	\$242,000	\$175,000	\$200,000
Human resources director	\$195,000	\$241,000	\$131,000	\$191,000
Controller	\$157,000	\$244,000	\$105,000	\$157,000
Information technology director	\$194,000	\$232,000	\$150,000	\$185,000
Percentage changes from prior year				
Change in total hours	7.6%	11.7%	-3.5%	6.6%
Change in direct hours	5.6%	17.3%	-5.3%	6.2%
Change in gross billings	13.4%	31.3%	-0.4%	13.9%
Change in net fee income	12.2%	25.9%	-0.4%	11.4%
Change in total expenses	11.9%	22.0%	0.7%	10.7%

Other Statistics (continued)

A Decade of Statistical Analysis

Staff Bonuses as a Percentage of Base Compensation

2014	2015	2016	2017	2018	2019	2020	2021	2022	2023
5.8%	5.3%	5.5%	5.5%	8.5%	8.0%	6.3%	9.0%	8.2%	8.0%

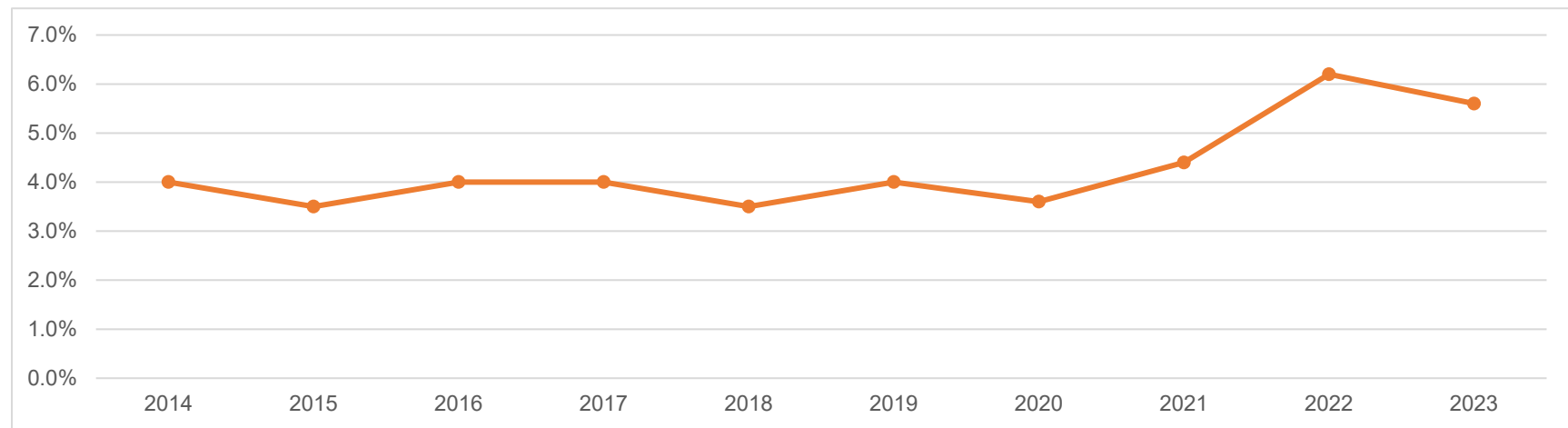


Other Statistics (continued)

A Decade of Statistical Analysis

Raises as a Percentage of Base Compensation

2014	2015	2016	2017	2018	2019	2020	2021	2022	2023
4.0%	3.5%	4.0%	4.0%	3.5%	4.0%	3.6%	4.4%	6.2%	5.6%

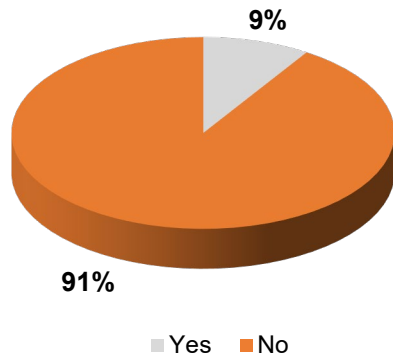


Key Takeaway

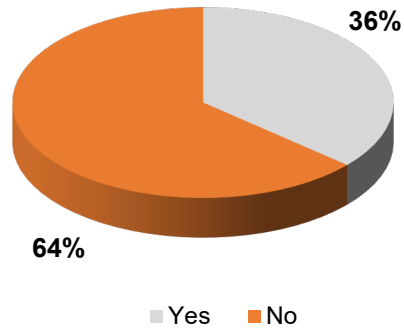
Historically, this statistic held relatively consistent between 3.5 percent and 4.5 percent. Beginning in 2022, it began to increase as firms focused on retaining talent in a highly competitive labor market.

Other Statistics (continued)

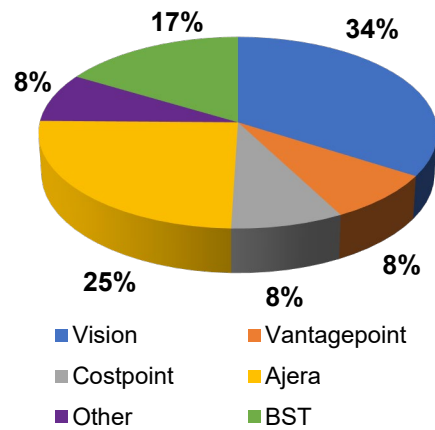
% of Firms Outsourcing Design Work



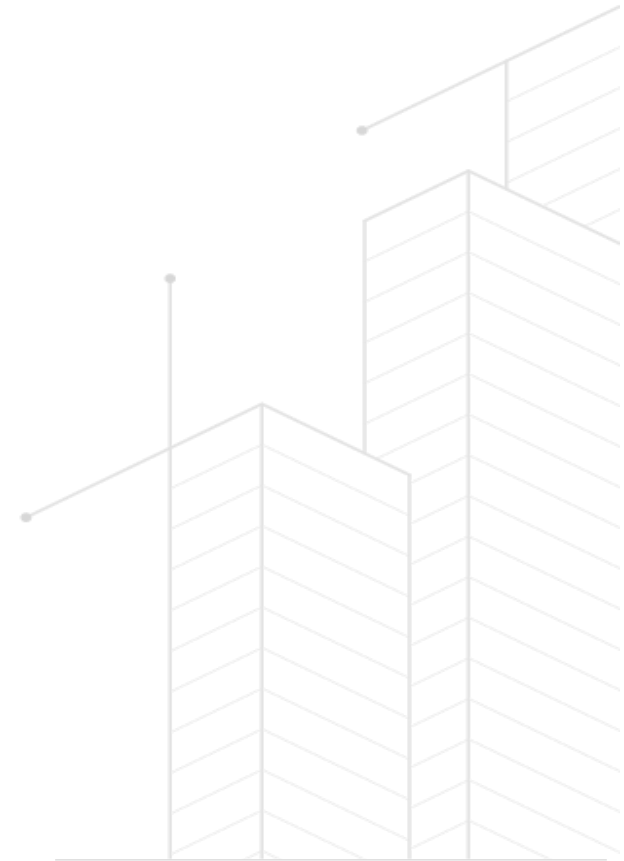
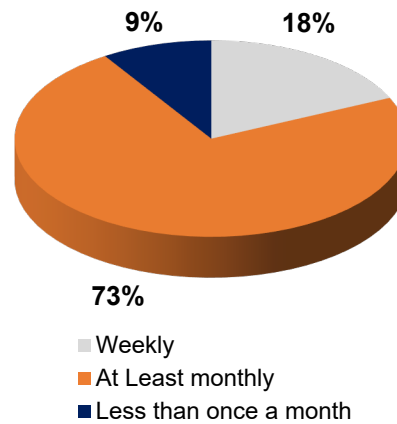
% of Firms Operating in Foreign Countries



Accounting Software Used

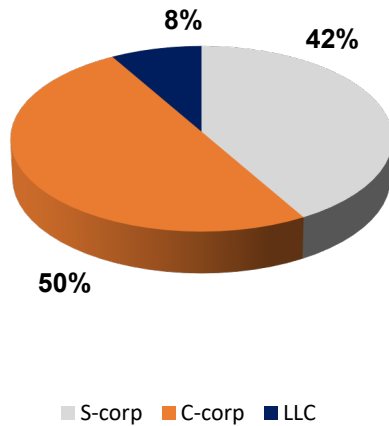


Frequency of Project Budget Review Meetings

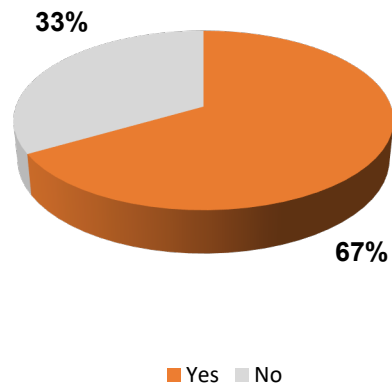


Other Statistics (continued)

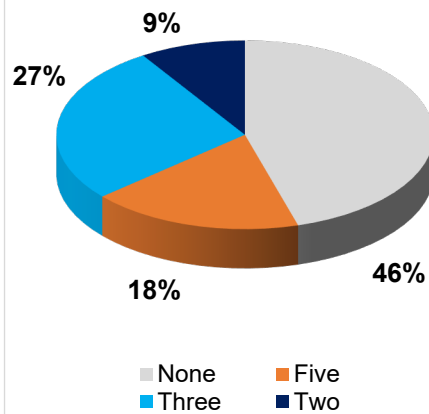
Legal Entity Type



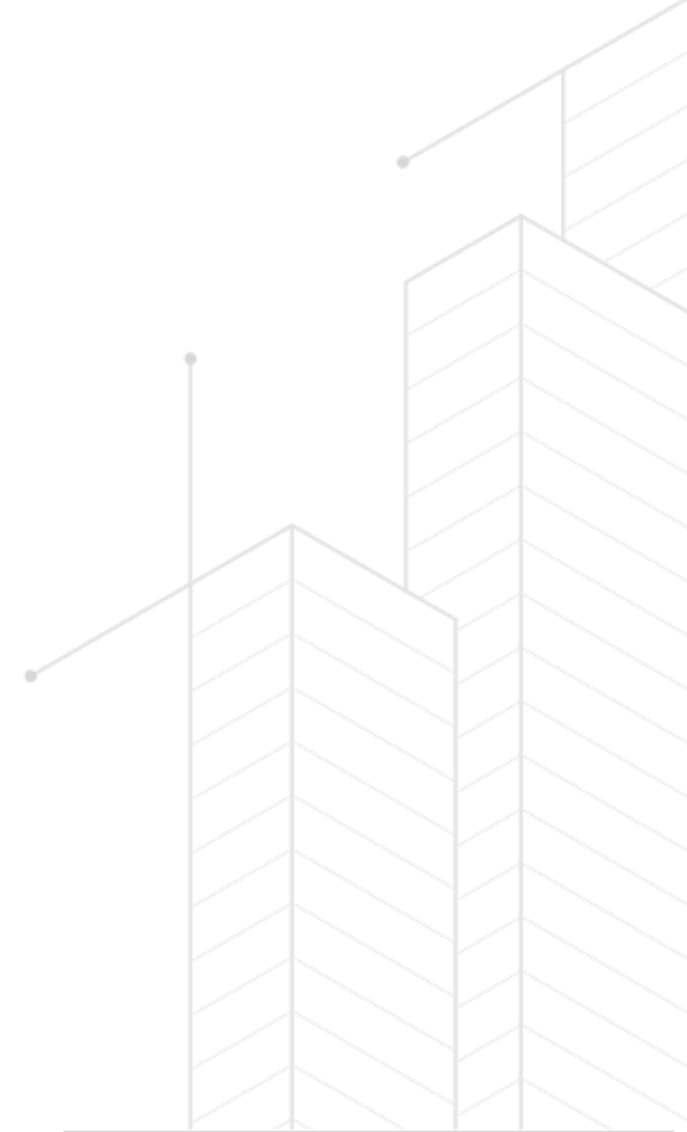
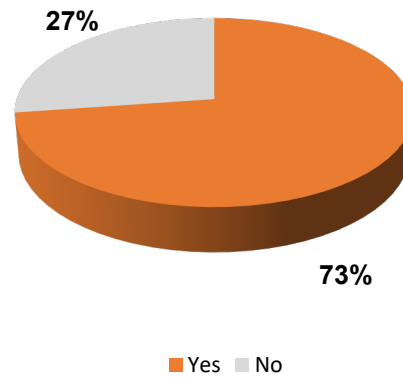
% of Firms with Mandatory Stock Redemption Age



Number of Days Employees Required to be in Office

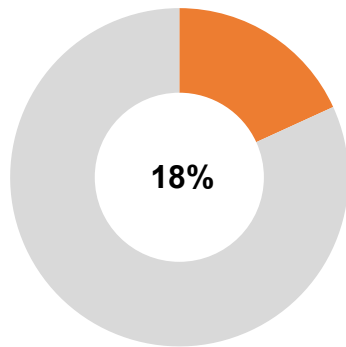


% of Firms Actively Transitioning Ownership

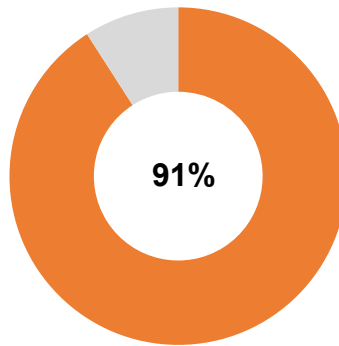


IT Statistics

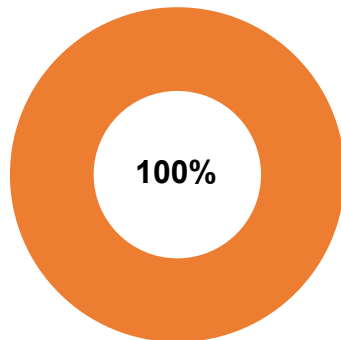
% of Firms Outsourcing IT



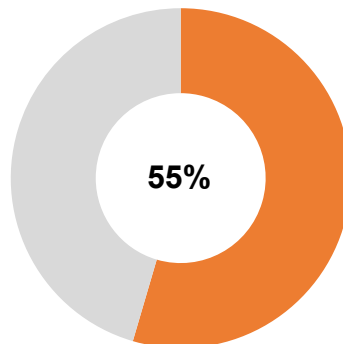
% of Firms with an IT Budget



% of Firms with Cyber Insurance



% of Firms with Dedicated Cybersecurity Budget

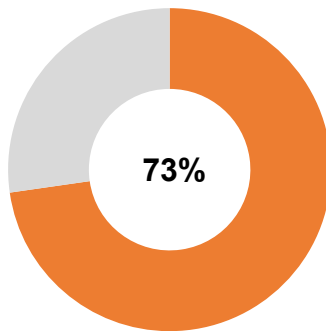


Key Takeaway

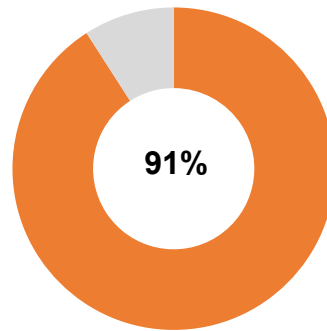
Firms are continuing to invest in IT and cybersecurity to strengthen their defenses against evolving threats, which has become a permanent agenda item for management and governance.

IT Statistics (continued)

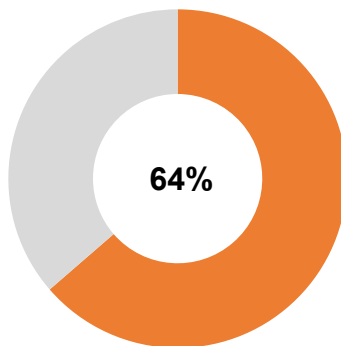
% of Firms with Documented Incident Response Plan



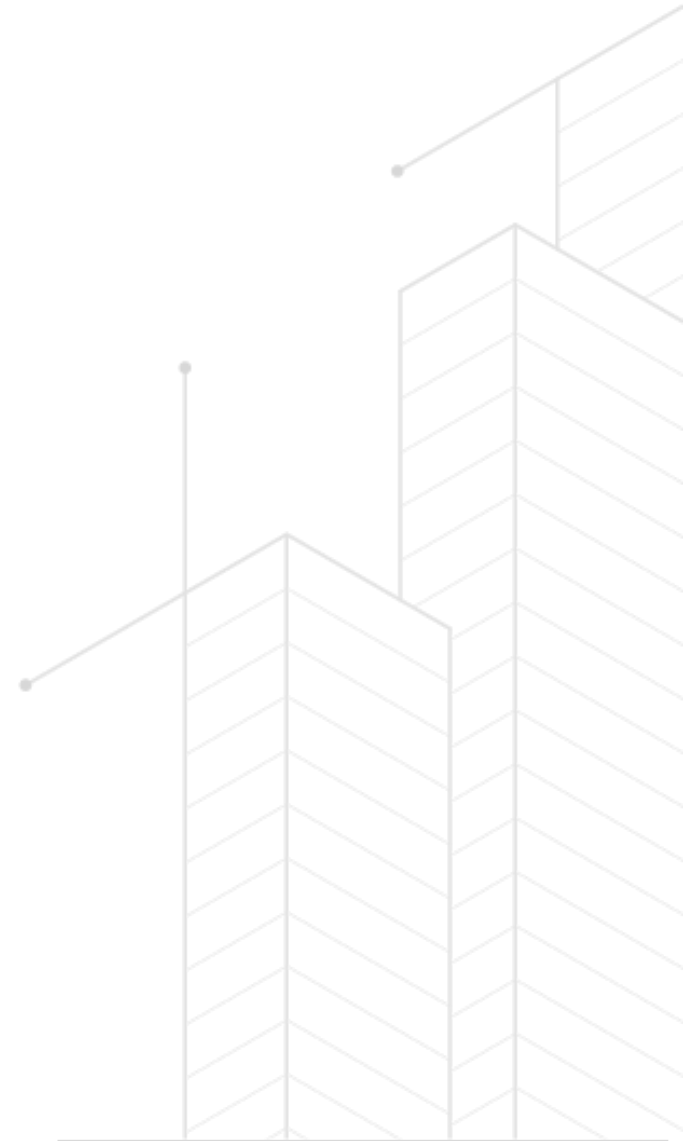
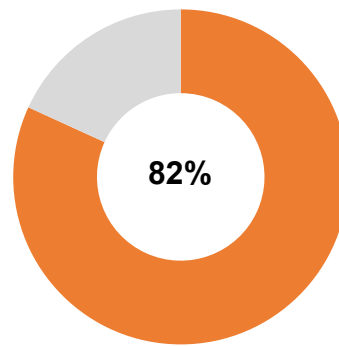
% of Firms with a WISP in Accordance with State Laws



% of Firms that Perform Simulated Phishing Attacks Against Employees

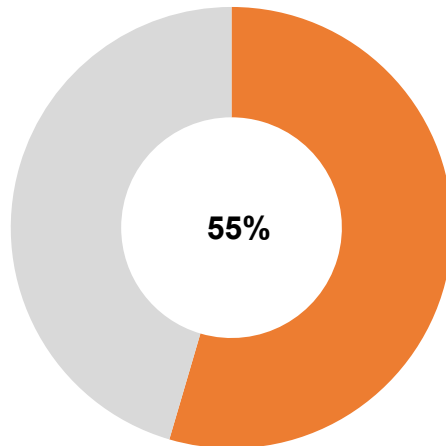


% of Firms that Conduct Periodic Security Awareness Trainings

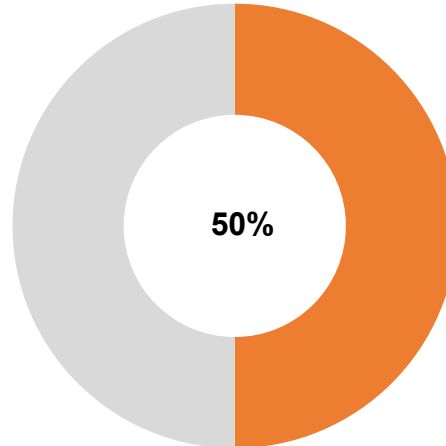


AI Trends

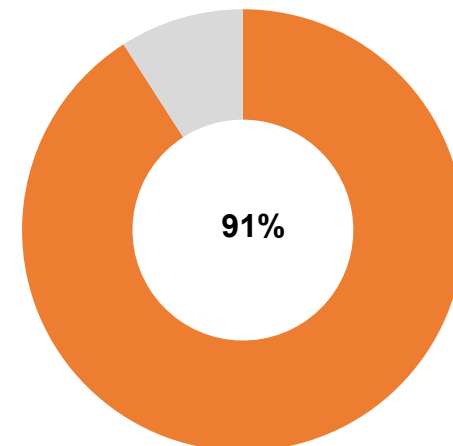
**% of Firms Currently Using
AI-based Tools Internally**



**% of Firms Anticipating
to Offer AI-based
Product/Service Within
Five Years**



**% of Firms Anticipating to
Use AI-based Tools
Internally Within Five Years**



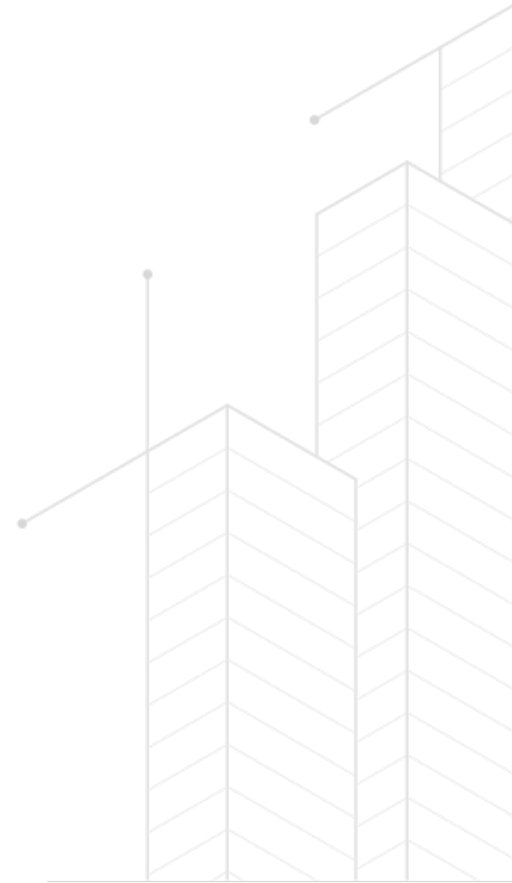
Key Takeaway

Although only 55 percent of firms are currently using AI tools, almost all firms are expecting to utilize them over the next five years to remain competitive. Additionally, half of all firms anticipate offering an AI-based product or service by 2029.

Common Size Income Statements

Common size income statements are a valuable means of comparing different size firms. The table shows the income statement based on a percentage of net fee income.

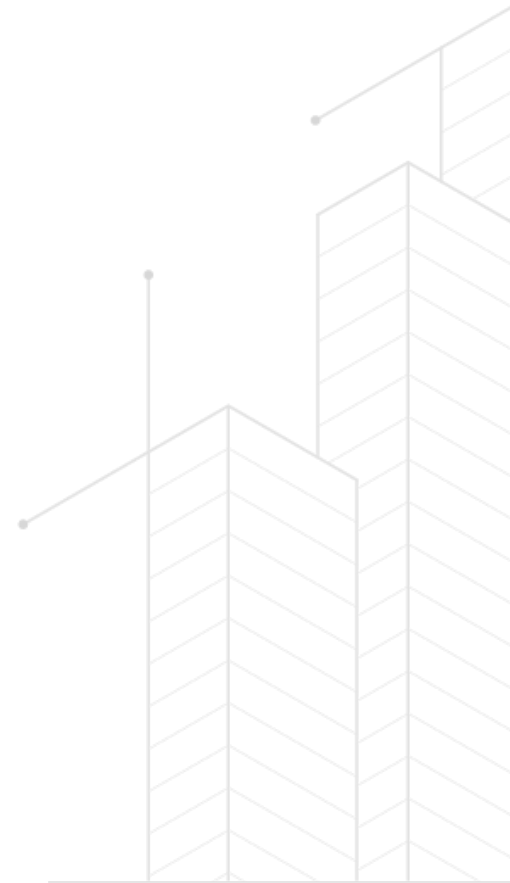
	2023			2022
	Study Average	Range of Studied Firms		Study Average
		High	Low	
Gross fee income	100.0%			100.0%
Direct consultants and reimbursables	<u>15.9%</u>	30.4%	6.5%	<u>13.8%</u>
Net fee income	<u>84.1%</u>	<u>93.5%</u>	<u>69.6%</u>	<u>86.2%</u>
Net fee income	100.0%			100.0%
Direct labor	<u>31.3%</u>	36.3%	25.6%	<u>32.3%</u>
Gross margin	<u>68.7%</u>	74.4%	63.7%	<u>67.7%</u>
Indirect payroll	22.9%	29.0%	12.0%	22.0%
Staff bonuses	3.8%	13.3%	0.1%	4.8%
Employee and fringe benefits	12.1%	17.0%	5.6%	12.3%
Rent and utilities	4.3%	7.5%	3.0%	4.1%
Other indirect	<u>9.9%</u>	23.2%	8.3%	<u>9.4%</u>
Total	<u>53.0%</u>	70.0%	36.5%	<u>52.6%</u>
Profit from operations	<u>15.7%</u>	<u>27.2%</u>	<u>1.7%</u>	<u>15.1%</u>



Overhead Rates Per Direct Hour

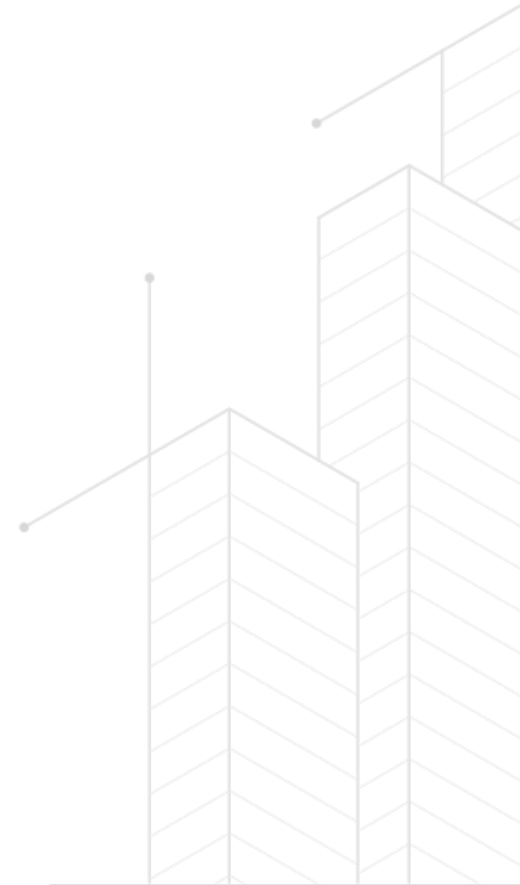
The overhead rate per direct hour equals total indirect expenses divided by direct labor hours. It represents the amount of overhead a firm is sustaining in order to support its volume of business.

	Study Average	
	2023	2022
Labor		
Indirect labor	\$34.91	\$32.08
Staff bonuses	<u>4.91</u>	<u>5.97</u>
	<u>39.82</u>	<u>38.05</u>
Employee and fringe benefits		
Employee and fringe benefits, other	0.16	0.14
Insurance, health	9.30	9.29
Retirement plan contribution	3.33	3.01
Severance	0.03	N/A
Taxes, payroll	<u>6.72</u>	<u>6.38</u>
	<u>19.54</u>	<u>18.82</u>
Bid & proposal and marketing	<u>0.49</u>	<u>0.44</u>
Depreciation and amortization	<u>1.87</u>	<u>1.84</u>
Insurance, professional liability and other		
Insurance, other	0.20	0.16
Officers' life and disability insurance	0.11	0.18
Professional liability insurance	1.39	1.58
Workers' compensation	<u>0.16</u>	<u>0.15</u>
	<u>1.86</u>	<u>2.07</u>
Occupancy costs		
Rent	5.87	5.92
Utilities	<u>0.33</u>	<u>0.31</u>
	<u>\$6.20</u>	<u>\$6.23</u>



Overhead Rates Per Direct Hour (continued)

	Study Average	
	2023	2022
Other indirect		
Administrative service fees	\$0.18	\$0.22
Computer and IT	5.48	4.73
Contributions	0.07	0.06
Credit loss expense/bad debt expense	0.35	0.30
Dues and subscriptions	0.66	0.60
Office supplies and expenses	1.48	1.37
Postage and shipping	0.07	0.06
Printing and reproduction	0.08	0.07
Professional fees	2.52	2.48
Recruiting	0.51	0.57
Repairs and maintenance	0.15	0.13
Seminars and conferences	0.31	0.29
Taxes, other	0.12	0.15
Telephone	0.59	0.62
Temporary employment and fees	0.04	0.03
Travel and entertainment	1.83	1.64
Expense recovery	(0.24)	(0.25)
Miscellaneous and rounding	<u>(1.13)</u>	<u>0.70</u>
	<u>13.07</u>	<u>13.77</u>
Total	<u>\$82.85</u>	<u>\$81.22</u>



Components of the Overhead Rate

The overhead rate percentage equals indirect expenses divided by direct labor cost.

The following chart shows how each indirect expense category contributes to the overall overhead rate.

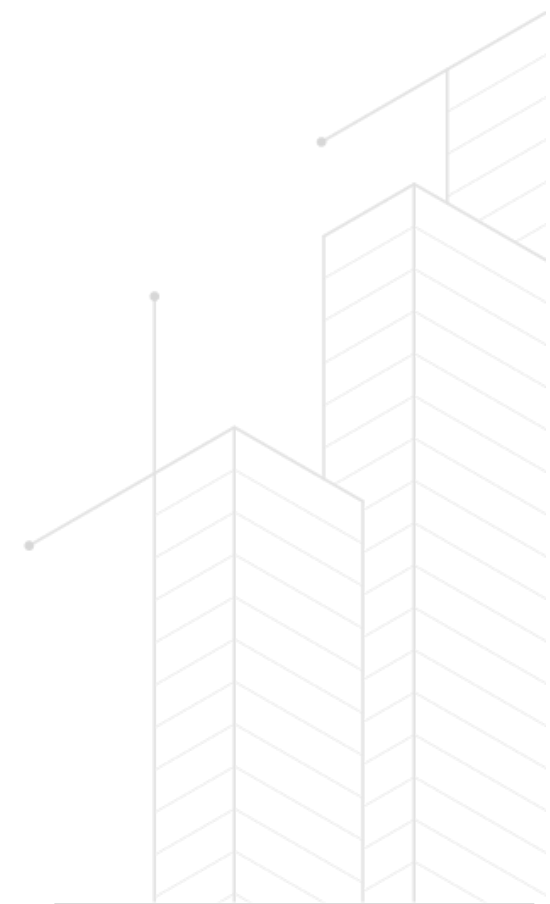
	Study Average	
	2023	2022
Labor		
Indirect labor	71.9%	69.7%
Staff bonuses	<u>9.9%</u>	<u>13.4%</u>
	<u>81.8%</u>	<u>83.1%</u>
Employee and fringe benefits		
Employee and fringe benefits, other	0.4%	0.3%
Insurance, health	19.1%	19.0%
Retirement plan contribution	7.8%	7.2%
Severance	0.1%	N/A
Taxes, payroll	<u>14.2%</u>	<u>13.8%</u>
	<u>41.6%</u>	<u>40.3%</u>
Bid & proposal and marketing	<u>1.5%</u>	<u>1.3%</u>
Depreciation and amortization	<u>4.8%</u>	<u>4.6%</u>
Insurance, professional liability and other		
Insurance, other	0.7%	0.9%
Officers' life and disability insurance	0.4%	0.5%
Professional liability insurance	2.9%	3.1%
Workers' compensation	<u>0.4%</u>	<u>0.3%</u>
	<u>4.4%</u>	<u>4.8%</u>
Occupancy costs		
Rent	12.5%	12.8%
Utilities	<u>0.7%</u>	<u>0.7%</u>
	<u>13.2%</u>	<u>13.5%</u>

Key Takeaway

The overhead rate continued to trend upward in 2023. Indirect labor increased from 2022 as a result of the decrease in direct labor utilization. Employee and fringe benefits, computer and IT and travel costs were also contributing factors to this increase.

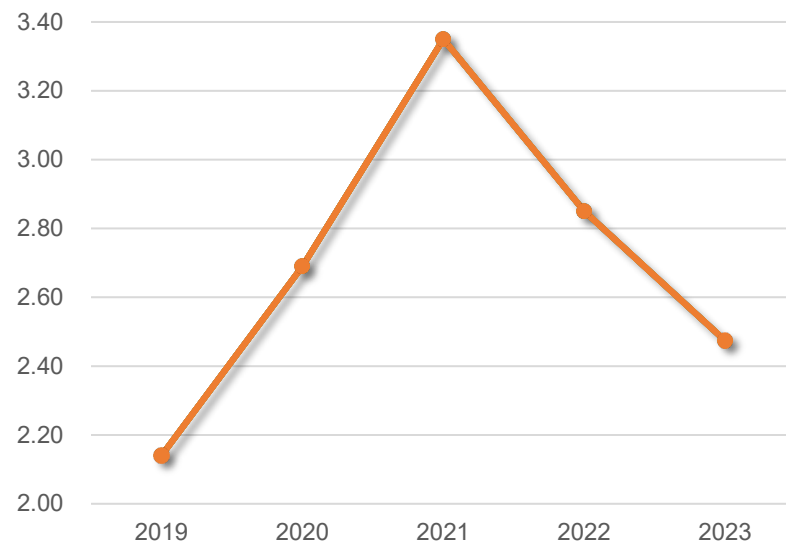
Components of the Overhead Rate (continued)

	Study Average	
	2023	2022
Other indirect		
Administrative service fees	0.4%	0.4%
Computer and IT	11.0%	9.8%
Contributions	0.2%	0.1%
Credit loss expense/bad debt expense	0.7%	0.6%
Dues and subscriptions	1.2%	1.1%
Office supplies and expenses	2.8%	2.6%
Postage and shipping	0.2%	0.1%
Printing and reproduction	0.2%	0.2%
Professional fees	4.2%	5.0%
Recruiting	1.2%	1.2%
Repairs and maintenance	0.4%	0.8%
Seminars and conferences	1.1%	1.0%
Taxes, other	0.5%	0.4%
Telephone	1.2%	1.5%
Temporary employment and fees	0.1%	0.1%
Travel and entertainment	4.1%	3.1%
Expense recovery	-0.4%	-0.6%
Miscellaneous and rounding	-1.1%	-1.7%
	<u>28.0%</u>	<u>25.7%</u>
Total	<u>175.3%</u>	<u>173.3%</u>



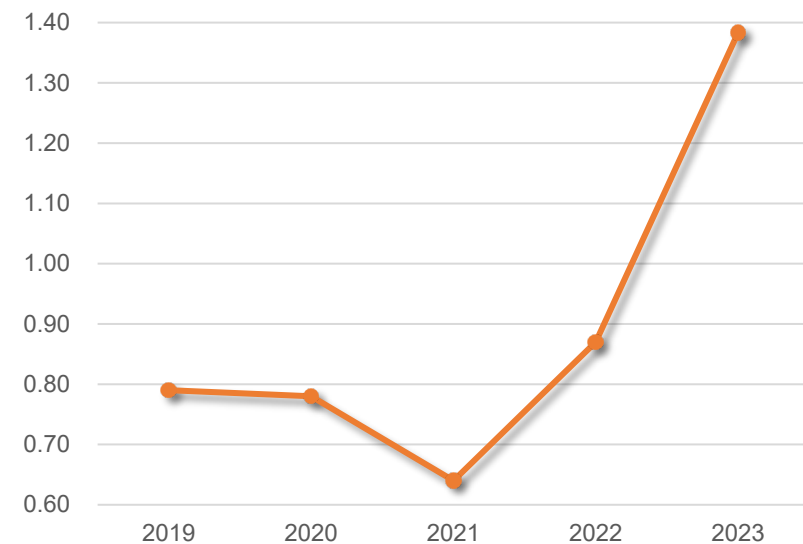
Balance Sheet Ratios

Current Ratio				
2019	2020	2021	2022	2023
2.14	2.69	3.35	2.85	2.47



The current ratio is calculated as current assets divided by current liabilities and is an indicator of a firm's ability to meet its current obligations.

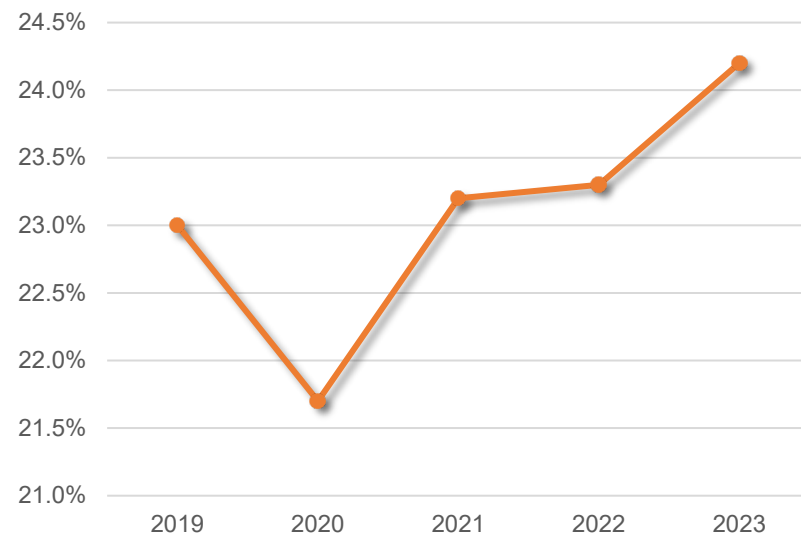
Debt to Equity				
2019	2020	2021	2022	2023
0.79	0.78	0.64	0.87	1.38



The debt to equity ratio is calculated as total liabilities divided by equity. A high debt to equity ratio indicates that a firm has been aggressive in financing its operations with debt.

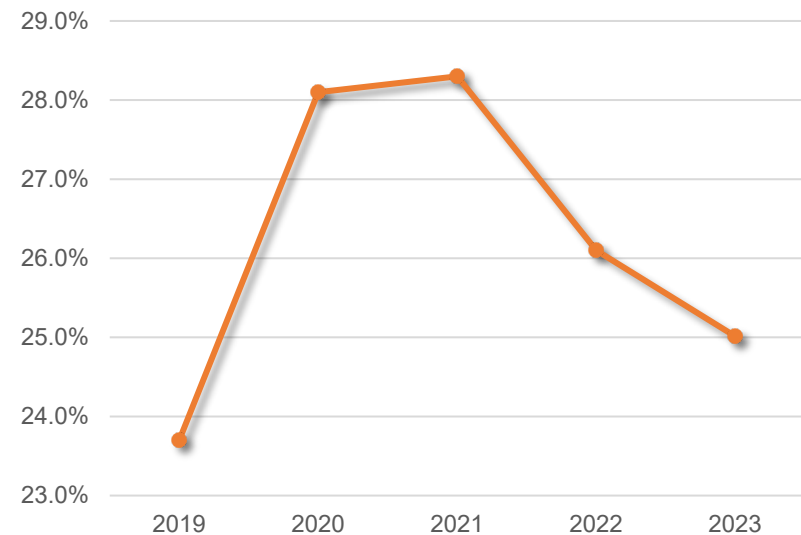
Balance Sheet Ratios (continued)

Receivables as a Percentage of Gross Fee				
2019	2020	2021	2022	2023
23.0%	21.7%	23.2%	23.3%	24.2%



Receivables as a percentage of gross fee show the portion of the year's sales that remain uncollected as of the end of the year. A higher percentage can be due to the nature of a firm's customer base or collection issues.

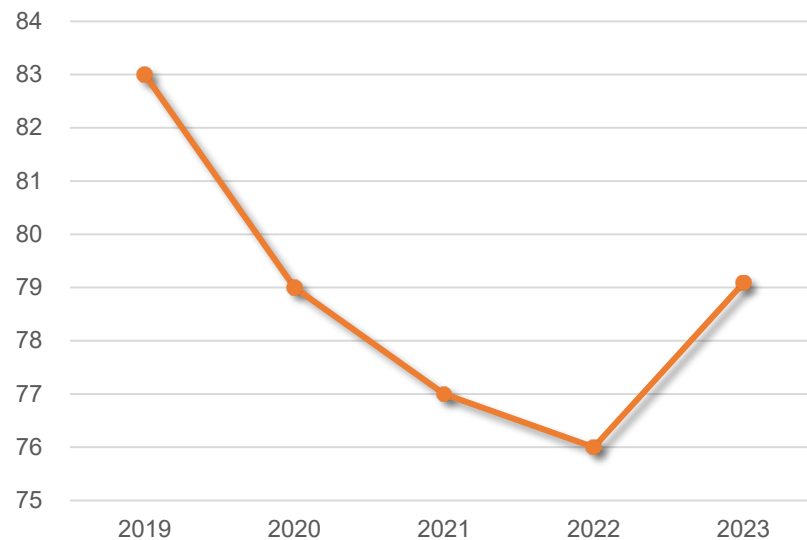
Working Capital to Net Fee Income				
2019	2020	2021	2022	2023
23.7%	28.1%	28.3%	26.1%	25.0%



The working capital to net fee income ratio is calculated by dividing working capital (current assets less current liabilities) by net fee income. The ratio is an indicator of whether a firm has retained a sufficient level of capital and liquidity to fund its annual operations. It also helps to assess whether a firm can achieve growth without incurring additional debt.

Balance Sheet Ratios (continued)

Days Fees in Accounts Receivable				
2019	2020	2021	2022	2023
83	79	77	76	79



Days fees in accounts receivable represent the average collection period for a firm's receivables.

Key Takeaway

On average, it took firms three days longer to collect on their sales. Firms should continue to monitor this and understand the trend to maintain sufficient cash flow for operations.

Our A&E Team

With in-depth experience in the architecture and engineering industry, our team includes specialists in advisory, tax and financial statement matters — all of which are vital to your success in today's complex business environment.

We pride ourselves in providing hands-on, tailored trainings for our team specific to your industry. Our A&E University includes an annual offsite training and team-building day as well as various trainings throughout the year.

We leverage our expansive industry expertise to design solutions tailored to your firm. With unique specialization in this arena, we will work closely with you on a strategic level to help you manage core business processes and align operations with near- and long-term growth objectives.

We'd also like to take a moment to congratulate our Partner, Steve Minson on his retirement in 2023 and thank him for his 16+ years of service and contributions to our Firm. Onward to new journeys in 2024 and beyond!



Summit Highlights

This past June, we had the pleasure of meeting many of you in person during our Architectural and Engineering Summit at the Boston Marriott Long Wharf. It was great to see you and discuss the growth and opportunities in this industry. For those who missed it, here are some event highlights:

- **Dr. Basu keynotes on the economy and your industry:** Dr. Anirban Basu joined us once again as this year's featured keynote speaker, sharing valuable insights on the economy and an outlook for your industry. Topics discussed included key challenges for the U.S. and global economies, current and prospective impact of public policy on the economy, future economic risk sources and the pace of economic growth in 2024.
- **Sullivan and Tamvaklis present KPIs:** Partners David Sullivan and Nicholas Tamvaklis unpacked the KPIs and metrics that successful management teams rely on to run operations and make strategic decisions.
- **AI, anyone?** Our artificial intelligence (AI) panel had an insightful discussion on how AI will transform business in the future. Guest speaker Javier A. Baldor, Chief Executive Officer, BST Global and Partner Suma Chander provided an overview of AI and shared how organizations plan to use new technology to gather data and enhance end-user experiences.



Thank You!

To those who joined us at the 2024 Summit, we extend our thanks! The enthusiasm you shared as industry leaders and stakeholders was energizing. We are confident that these connections, the support our specialists provide at every stage of the A&E business lifecycle and the insights in this year's Study will be key to devising your growth strategies for the years ahead.

Let's Continue the Excitement in 2025!

We look forward to next year's Summit and continuing to help your firm expand and flourish. Subscribe to our Architecture and Engineering e-newsletter at pkfod.com to receive event invitations, studies and more!

Our Architecture & Engineering Practice

Specialized Industry Expertise | Collaboration and Commitment

Long recognized as a trusted partner to the architecture and engineering industry, PKF O'Connor Davies' breadth and depth of resources enable us to deepen our commitment and provide services to support you throughout the life cycle of your business.

Our dedicated team of industry specialists provides tailored services to help you proactively address challenges and explore opportunities. We provide thought leadership throughout the year and are actively involved in and support your industry through participation in various industry associations.

We speak your language and are keenly attuned to your operations, enabling us to offer innovative solutions to improve your firm's profitability and organizational value. Whether it is growing through acquisition, maximizing tax credits or leveraging fast-moving technologies, we have the specialized expertise to help you grow your business.

Services for the A&E Industry

Accounting and Assurance

- Agreed-Upon Procedures
- Employee Benefit Plan and ESOP Audits
- Financial Statement Audits, Reviews and Compilations
- Overhead Rate Audits in Accordance with FAR
- Outsourced CFO

Advisory

- Ownership Transition and Succession Planning
- Business Valuation Advisory
- Deferred Compensation Plans and Section 409A Compliance
- Mergers and Acquisitions
- Benchmarking Financial Performance
- Project Management and Profitability Analysis
- Cybersecurity Assessments and Penetration Testing
- ESG, Sustainability and Impact Optimization
- Cash Flow and Financial Forecasting
- ESOP Advisory Services
- Working Capital Reviews
- Development of Long-Term Tax Strategies
- Employee Retention Credits
- Employee Benefit Consulting
- Design of Internal Control and Financial Reporting Systems
- FAR Compliance, Documentation Evaluation and Agency Audit Support

Tax Planning and Compliance

- Corporate, Partnership and Individual Tax Planning and Compliance
- Multi-State Taxation
- International Taxation
- Research and Development Tax Credits and Section 179D Tax Deductions
- Tax Credit Maximization and Tax Incentive Programs

To learn more about our A&E practice and how we can collaborate to help your organization achieve its objectives, please contact one of our A&E industry experts or visit pkfod.com.

Industry Expert Perspectives

Insights Into the Future

We asked other industry experts about their perspectives on the future of the A&E industry.

From the legal internal/external transition perspective, the next five to 10 years will see vibrant levels of consolidation of privately owned firms with larger private equity backed platforms and public companies fueling acquisition activity. Strategic buyers will face stiff competition from such cash rich financial platforms, which use cash and deal borrowing leverage to increase buying power. There will be a continuation of public companies buying larger private equity backed platforms and the largest employee-owned firms. It is quite possible that some private equity platforms could exit in an initial public offering.

AI and other engineering/architectural related technologies will be in the forefront of challenges firms of all sizes will have to address, either internally or acquisitively. Look for a brisk acquisition pace in this non-traditional sector.

ESOPS may see a resurgence as a viable avenue going forward for firms wishing to remain privately owned and not join larger platforms.

In summary, buckle up for an interesting time for consolidation for the A/E/C sector in the U.S.

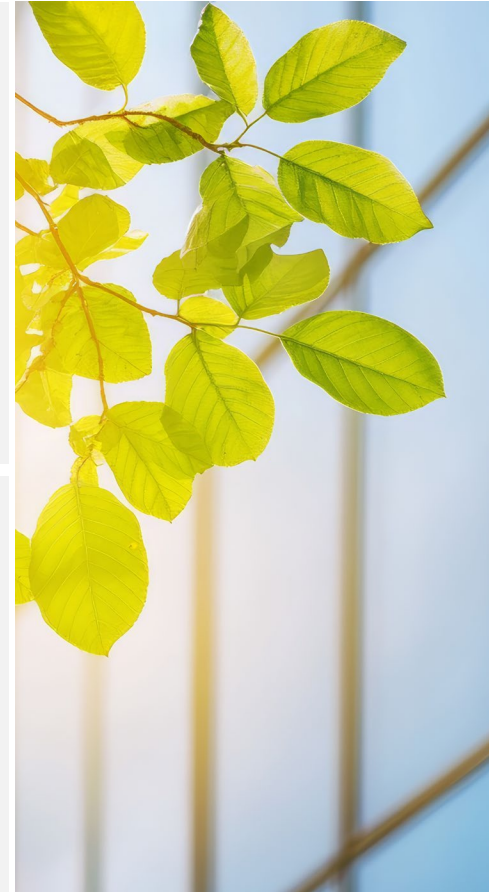
-George E. Christodoulo, PC, Lawson & Weitzen, LLP

From the banking and financing perspective, the A&E industry will continue to face many of the same challenges as other professional services industries. Finding and retaining qualified employees and developing the next generation of leadership will remain a priority.

We will likely continue to see consolidation in the industry, particularly in the engineering space as companies look to grow additional lines of business and add talent through acquisition. Smaller firms may find it difficult to compete with larger firms that can offer more disciplines in one place. Banks remain willing to provide acquisition financing in many of these situations because of the repeatable cash flow and efficiencies that come with scale.

In recent years, A&E firms have become attractive to private equity and there will be continuing discussions on whether to remain independent or become acquired, especially in those firms without clearly defined succession plans.

-Rob Kershaw, Senior VP/Corporate Banking Team Leader, Cambridge Savings Bank



Industry Expert Perspectives (continued)

Insights Into the Future

From an insurance perspective, the A&E industry will continue to experience several significant changes and trends over the next five to 10 years. We will see a continued focus on cybersecurity, evolving risk assessment models (use of AI), emphasis on sustainability issues, workforce challenges and continued emerging technologies. A&E firms will need to adapt to technological advancements, evolving regulatory requirements and ever-changing ownership structure (internal or mergers and acquisitions). Insurers, understanding these challenges, will play a crucial role in helping A&E firms navigate these changes by providing tailored coverage solutions and risk management strategies.

-Brett Gough, COO/Partner, Ames & Gough

There is tremendous opportunity in the A&E industry driven by infrastructure initiatives, a push for sustainable designs and digital innovation. This path forward will demand discipline with a strong financial partner, strategic capital allocation and agility to navigate fluctuating costs and labor shortages. Those firms that can adapt will thrive.

-James L. Murphy, Jr., Senior VP – Team Leader, Commercial Banking, Eastern Bank

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