



# FINANCIAL ANALYSIS OF THE INDUSTRY



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NSCA's mission involves helping *you* make smart business decisions so you can run your organization more efficiently and profitably. Like most of you, we are certainly thankful that 2020 is over. It was the most difficult year many of you faced on a business and personal level. As we developed this report, we took that into account and asked members to use the last financial report completed prior to March 2020; therefore, the benchmarks in the report will not be reflective of the impact created by the pandemic. Likewise, PPP funding will not impact our findings.

This benchmarking report is quite likely the most important document you should have by your side to run a high-performance systems integration company. It offers an outstanding way for you to compare your financial information with other companies that run the same type of business.

We highly recommend that you take time to compare your business ratios and overall performance to the ratios represented in this report and highlight areas with significant discrepancies. Some key metrics from this report can be used to create your own dashboard of critical indicators to measure the financial health of your business in comparison to your peers.

From there, you can determine whether, for example, you account for expense items differently or you allow expenses to increase well beyond the norm. If you identify areas in which you excel far above industry averages, you may want to use this data to recognize your team for their performance.

The benchmarks here allow you to determine the true cost of doing business and set metrics and parameters to help you manage and increase accountability. In the end, profitability depends on the ability to measure and hold people accountable by making data-driven decisions instead of guessing.

NSCA is available to help you make sense of this report and conduct comparisons, set a new course of action, and formulate recommendations for improvement. Our team is always prepared to help you run your business better.

Gathering this data is a time-consuming process, and we thank all the integrators that contributed to this project. We couldn't produce this report without you.

Best regards,

Chuck Wilson  
NSCA Executive Director

Mike Boettcher  
NSCA President, Board of Directors

# Financial Analysis of the Industry

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# I. Project Overview

## Overview

As part of NSCA's ongoing analysis of the commercial electronic systems industry, we regularly conduct the *Financial Analysis of the Industry* survey (formerly known as the *Cost of Doing Business* survey). Our research collects, tracks, and benchmarks key financial ratios across the industry. The *Financial Analysis of the Industry* report presents the results of the 2020 survey, which is the 15<sup>th</sup> iteration of this program.

The 2020 *Financial Analysis of the Industry* survey was conducted similarly to the 2015 and 2018 surveys, collecting data from the last financial report completed prior to March 2020, to allow for data comparisons and survey-to-survey trending. Some modifications were made to ensure that the survey content reflects evolving industry conditions. The changes include questions about remote workforces and the pandemic's impact on backlog.

The information collected is organized in this report in the following categories:

- **Company Profile:** This section of the analysis deals with company background and foundational metrics, such as company size, location, establishment date, etc. This information is used to provide a profile of the 2020 sample and highlight similarities/differences with past samples.
- **Company Operations:** This section explores company operational data, such as the system/technology that accounts for the greatest share of revenue, the primary vertical market sector, and customer dynamics (such as the largest single customer, largest single project, work backlog, etc.). Qualitative issues are also explored, such as how the respondents perceive the financial health of their companies and what they consider to be their primary challenge for 2021.
- **Balance Sheet and Financial Ratios:** This section concentrates on standard balance sheet information, such as accounts receivable, inventory, assets, and others. Each metric is first examined individually and then benchmarked through standard accounting ratios.
- **Sales Ratios:** The “heart” of the analysis involves examining sales ratios to explore a wide range of sales, cost of sales, and operating/selling/administrative expense values experienced by respondents.

## Sample and Analysis Approach

Surveys were distributed by FMI Corp., an independent research firm, beginning in October 2020. Several rounds of follow-up, both via email and through direct contact, were conducted by FMI and NSCA. The survey response window was extended to early November 2020 ensure that all who wished to participate had ample opportunity to do so.

To preserve respondent confidentiality, the respondents sent surveys directly to FMI Corp. No one outside the research firm had access to the survey forms or specific financial data provided

by respondents. All quantitative information, tables, charts, and analyses in this report are limited to aggregated data that do not identify any specific company or respondent.

109 companies responded to the 2020 survey. The sample size collected varied based on the number of usable responses per exhibit. Therefore, variations on sample size were adjusted accordingly.

<b>Year</b>	<b>Analyzed Sample Size</b>
2020	109
2018	75
2015	69
2013	61
2010	70
2008	85
2007	65
2006	103
2005	81
2004	101
2003	76
2002	79
2001	85
2000	99
1999	100

While the overall results are illuminating, more actionable results are seen when the data are segmented by a variety of metrics. This segmentation serves two purposes: It presents a comparative analysis of how different types of companies are performing and allows companies to benchmark their financial performance against those in their “peer group.”

Perhaps the most important segmentation metric is company size since this has a clear and pervasive impact on all company operations. The company demographics of the survey sample continue to change with each new survey. For example, the 2020 sample is more reflective of small to medium firms but when compared with the 2018 survey the number of larger companies has almost doubled. The segments, based on total sales in the last fiscal year, are:

- Up to \$5 million – 28 responses
- \$5.1-\$10 million – 23 responses
- \$10.1-\$20 million – 18 responses
- Greater than \$20 million – 31 responses

While this segmentation method limits insight into the smallest companies, the macro trend indicates fewer integration firms still exist with revenues below \$2 million. Therefore, this method of reporting is still the best match for the data collected. Each year NSCA hopes to have a balanced level of participation in each segment but that is often difficult as members elect to participate in the research.

Company size classification is used for nearly all the data in the report. Selected data, such as the sales ratio data, are segmented by the following criteria:

- **Company Age:** How long a company has been in operation is a telling factor in its financial performance and business operation. Due to the sample composition, relatively broad categories were necessary to maintain acceptable subsample sizes. The categories are:

<u>Establishment Date</u>	<u>% of Responses</u>	<u># of Responses</u>
2010-2018	8%	9
2000-2009	14%	15
1990-1999	27%	29
1980-1989	21%	23
1970-1979	19%	20
Before 1970	11%	12

- **Primary Sales Method:** The data are segmented by the following two groups based upon the percentage of total sales generated by each method:
  - Competitive bid (majority of the company's sales generated through competitive bids): 35.3% of responses
  - Negotiated/direct sales (majority of the company's sales generated through negotiated/direct sales): 64.7% of responses
- **Primary Focus:** The company's primary focus regarding systems/technologies and markets provides insight into the different business conditions faced by companies within each niche; however, while multiple segments are tracked in the survey, the analysis needs to be limited to segments that received at least 10 responses to ensure that the effects of outliers (the very large or very small values) are minimized and to preserve respondent anonymity. The segments used are listed below.

Primary system/technology:

- Video display/AV presentation & control: 84 responses
- Audio/sound reinforcement: 80 responses
- Sound masking/acoustics/speech privacy: 65 responses
- Digital signage: 61 responses
- Videoconferencing/hosted & cloud VC solutions: 57 responses
- Collaboration/unified communications/digital media: 57 responses
- Paging/intercom/commercial sound/clocks/sensors: 54 responses
- Security/access control/surveillance/video management: 49 responses
- Data communications/networking/IT/software: 44 responses
- Low-voltage lighting and control: 41 responses
- Building automation/control & command: 27 responses
- Nurse call/RTLS: 24 responses
- Fire Alarm/emergency evacuation systems/life safety: 23 responses
- Telephony/VoIP/hosted & cloud voice solutions: 22 responses
- Music/entertainment: 22 responses

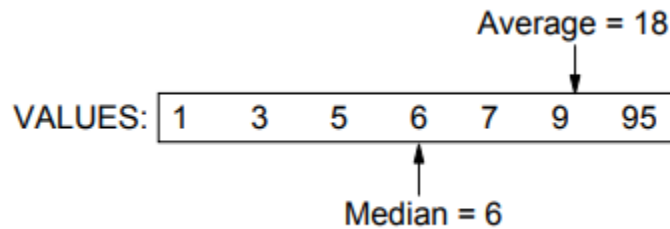
Primary vertical market:

- Education: 100 responses (includes higher education & K-12)
- Corporate: 96 responses
- Government: 87 responses
- Healthcare: 76 responses
- House of worship: 67 responses
- Hospitality/lodging/retail: 42 responses
- Amusement/recreation/entertainment: 39 responses
- Manufacturing: 37 responses
- Multifamily: 11 responses

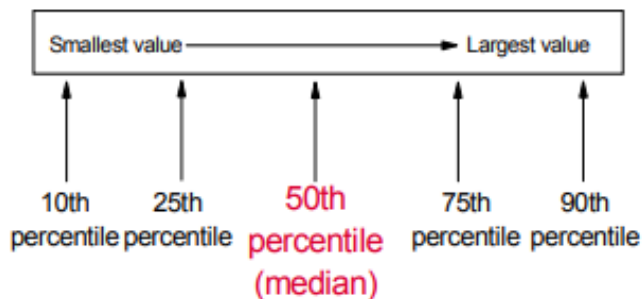
### Statistical Definitions

The average (also called the mean) and the median are two summary statistics used throughout this report to describe the data collected. Though closely related, each describes a different facet of the data. The **average** is computed by taking the sum of all responses divided by the number of responses.

The **median** is computed by ordering all responses, then taking the response that falls at the midpoint. As illustrated in the diagram below, the average is influenced by very large or very small numbers; the median is not. This typically makes the median a more representative indicator of the data when there are relatively small sample sizes or significant outliers.



Percentiles are a variation on the median and are especially helpful in interpreting financial data. As illustrated previously, the median splits the data into two equal parts. Percentiles go one step further, splitting the data into additional parts. It's common to use three segments (25<sup>th</sup>, 50<sup>th</sup>, and 75<sup>th</sup>) or five segments (10<sup>th</sup>, 25<sup>th</sup>, 50<sup>th</sup>, 75<sup>th</sup>, and 90<sup>th</sup>), but any number of divisions can be made.





Percentiles help in the interpretation of financial data by providing a greater level of insight than averages and medians. For example, let's assume the following values for cash on hand:

- 10<sup>th</sup> percentile = \$12,187
- 25<sup>th</sup> percentile = \$57,266
- 50<sup>th</sup> percentile (median) = \$149,964
- 75<sup>th</sup> percentile = \$744,926
- 90<sup>th</sup> percentile = \$1,682,218

This means that, while the “typical” company has a total of \$149,964 in cash on hand, one in 10 companies reports \$12,187 or less, and one in 10 companies reports \$1,682,218 or more for their cash on hand. Or the scope can be broadened: one-quarter of companies have \$57,266 or less cash on hand; one-quarter have \$744,926 or more cash on hand.

Knowing where your company falls allows you to benchmark your financial results against all others in this sample.

## II. Research Findings

### A. Company Profile

#### Location

The 2020 survey sample has a good geographic scope, representing companies from 31 states and three provinces. California is the best-represented state, accounting for 12.1% of the sample. The top five states (see Exhibit 1) collectively account for 36.4% of the sample.

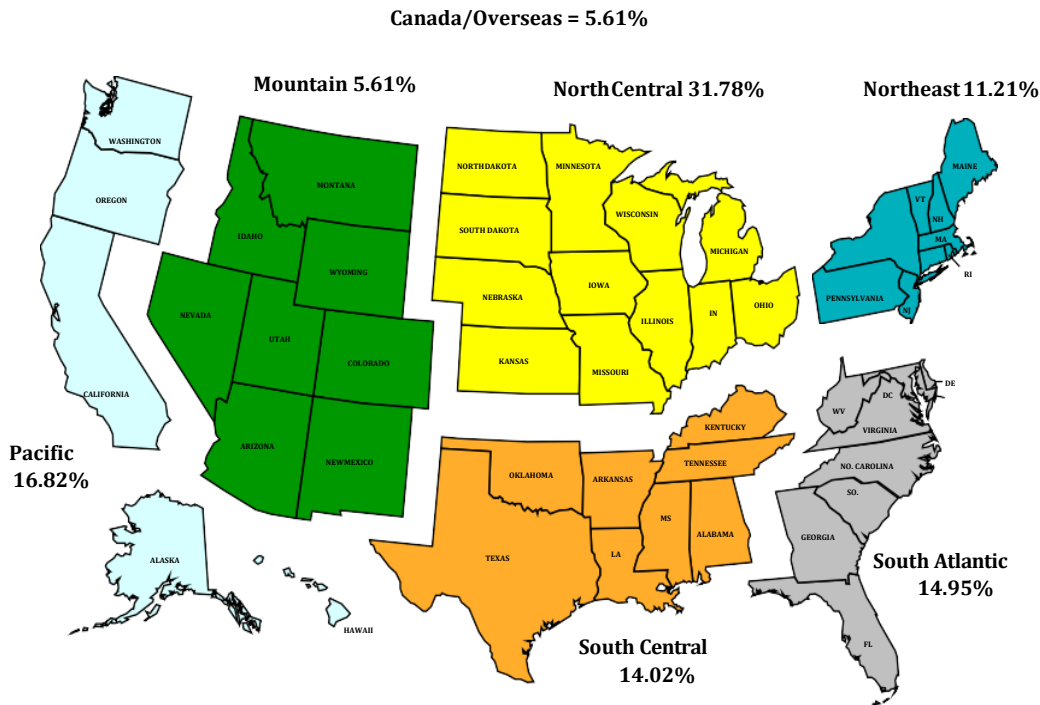
A better depiction of the national scope of the sample is seen when the data are segmented by region. Doing so (see Exhibit 2) shows that while the largest cluster of companies is found in the North Central region, there is good representation of most regions in the 2020 sample.

#### Top Represented States

	Percentage of sample
California	12.1%
Texas	7.5%
Illinois	5.6%
Michigan	5.6%
Pennsylvania	5.6%

**Exhibit 1: Top Represented States**

## Regional Distribution

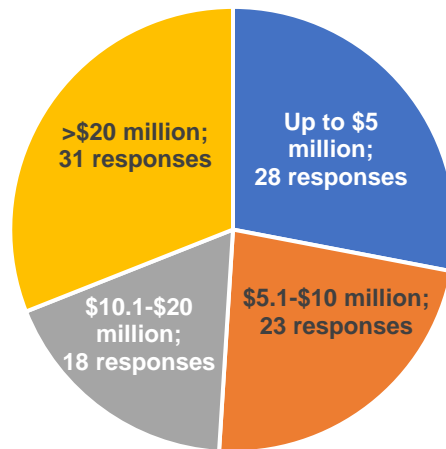


**Exhibit 2: Regional Distribution**

### *Company Size*

The trend of having a greater concentration of larger companies in the survey sample continues. Only 5% of the 2020 respondents represent companies with \$2 million or less in total sales. On the opposite side of the spectrum, the percentage of companies that report greater than \$10 million in sales reaches a historical high point of nearly one-half of the sample, 49% (Exhibit 3).

The company size categories were adjusted for the 2018 sample to best reflect the sample composition. These were continued in 2020. The four categories illustrated in Exhibit 3 support a more statistically- meaningful analysis and are used for all company size breakouts for the remainder of the report.

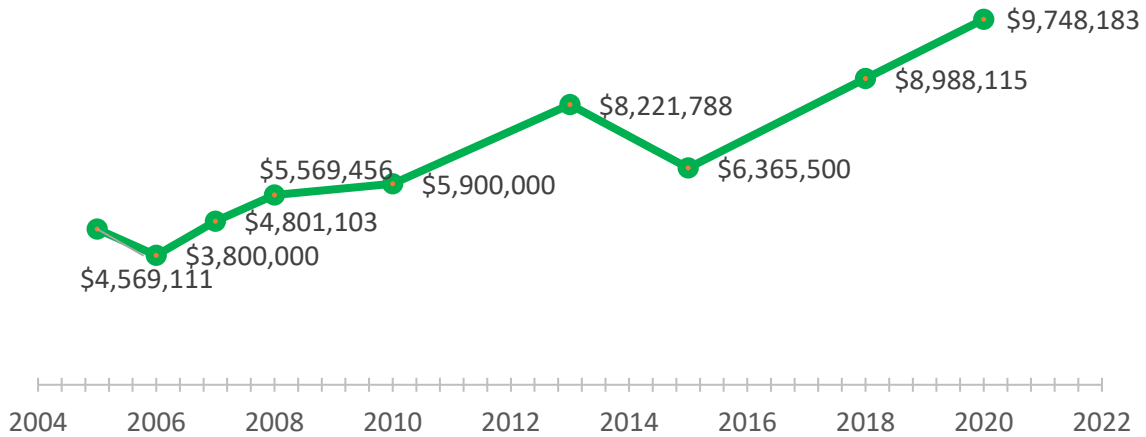


***Exhibit 3: Company Size Categories***

The typical company in the sample had over \$9.7 million in total sales in its last fiscal year. This is the highest sales volume reported to date, as illustrated in Exhibit 4 on the following page.

It is important to note that this is not a direct comparison to the exact sample group from prior years. However, the vast majority of NSCA members that complete the survey remain the same. Thus, the variance in total sales over time depicted in Exhibit 4 does not directly track overall industry metrics or growth, but rather is a reflection of the core groups of integration firms that elected to participate in this research.

## Total Sales Trends



**Exhibit 4: Total Sales Trends**

### *Establishment Date*

The typical company was formed in 1988. This median shows the sample consisted of some newer companies. The 2020 and 2018 sample share the longevity rate, with the typical company having been in business for 32 years. Segmenting the data by decade shows that a plurality of companies (27%) was formed in the 1990s; comparable numbers were formed in the 1970s (19%) and 1980s (21%), as illustrated in Exhibit 5.

## Survey Response by Establishment Date

Establishment Date	% of Responses	Count of Responses
2010-2018	8%	9
2000-2009	14%	15
1990-1999	27%	29
1980-1989	21%	23
1970-1979	19%	20
Before 1970	11%	12

**Exhibit 5: Survey Response by Establishment Date**

### *Total Staffing*

All of the respondent reports have full-time staff; most (57%) have at least one part-time staff. Staffing levels reflect the diversity of the sample, with a 10th to 90th percentile range of 6.7 to 288.8 full-time individuals. As you can see by the chart below there is a vast discrepancy between average and median. This is reflective of the wide range of employment levels within our membership. The typical integrator reporting would have reduced their staffing level to 35 of which 5 would be considered as a full-time sales representative (see Exhibit 6).

## **Company Staff**

<b>Staff Type</b>	<b>Average count</b>	<b>Median count</b>
Number of full-time sales staff as of last fiscal year	9.44	5.00
Number of part-time sales staff as of last fiscal year	0.16	0.00
Number of part-time staff as of your last fiscal year	3.61	1.00
Number of full-time staff as of your last fiscal year:	70.20	35.00

***Exhibit 6: Company Staff***

Exhibit 7 gives a breakdown of the staffing roles from the 2020 surveyed companies splitting them out based on size of company. There are three staffing divisions, administrative, internal technical, and field staff. The chart goes on to show what expertise group the field staff falls into.

Internal technical (system design/CAD) is the smallest group with 6.59 positions. Field staff appear to be the largest division with 45.68. The size of company shows that those with over \$20 million total sales have between 7 to 10 times more staff in each employee pool as shown in Exhibit 7.

## Staffing by Role

	<i>Average count of staff</i>				
	Total	<\$5 million	\$5.1-\$10 million	\$10.1-\$20 million	>\$20 million
How many administrative employees do you have?	15.81	3.6	7.3	11.0	35.0
How many internal technical employees do you have?	6.59	2.1	4.1	1.1	14.9
How many field staff employees do you have?	45.68	12.2	16.2	25.9	105.6
<i>Within field staff, how many are dedicated to engineering?</i>	6.44	2.9	2.3	2.4	14.6
<i>Within field staff, how many are dedicated to other functions?</i>	6.40	0.9	1.9	2.7	15.7
<i>Within field staff, how many are dedicated to project management?</i>	5.56	2.0	2.2	3.5	12.2
<i>Within field staff, how many are dedicated to technician-work/installation?</i>	25.94	5.7	10.0	18.1	58.3

**Exhibit 7: Staffing by Role**

For the 2021 report, our business analysts felt it important to evaluate and report on the impact of our remote workforce and how this could look for NSCA members moving forward. The timeframe for when these following questions were asked would be primarily the Fall of 2020. Again, note that the financial reporting periods used for this research won't have pandemic influenced data to skew any historical comparisons.

## Staffing Working Remotely

	0%-25%	26%-50%	51%-75%	76%-100%
Currently staff working remotely	53%	22%	16%	8%
Staff working remotely throughout 2021	66%	23%	8%	2%

***Do you schedule and monitor time for specific tasks with remote employees?***

Yes	51%
No	49%

***Exhibit 8: Staff Working Remotely***

## Remote Workforce Sentiment

***How likely are you to allow/promote/encourage employees to work from home in 2021?***

	Not likely	Somewhat likely	Likely	Very likely	Extremely likely
% of respondents	25.6%	43.0%	18.6%	9.3%	3.5%

***Exhibit 9: Remote Workforce Sentiment***

## Costs Related to Remote Workforce

*In what areas do you see a cost increase associated with your remote workforce?*

	% of respondents
Cybersecurity protection costs	56%
Hardware costs	50%
Software costs	39%
Insurance costs	9%
Other costs	26%

### ***Exhibit 10: Costs Related to Remote Workforce***

The remote workforce finding should be used to evaluate the impact of costs, efficiency and productivity on your overall organizational health and business model moving forward. The return to “normal” may include a significant investment in technology or training, yet that could be offset by reduced facility costs.

The following question is a new addition to the 2020 Financial Analysis of the Industry survey:

One of the most frequently asked questions of the NSCA business advisors is how many projects and/or how much value of those projects can be under management by each individual project manager. For the 2021 report we attempted to discover that information for future planning purposes. We will continue these questions in future surveys to see if a trend illustrating a statistical value can be determined.

***What is the approximate dollar value a project manager is responsible for at any one time?***

	Total	<\$5 million	\$5.1-\$10 million	\$10.1-\$20 million	>\$20 million
Average %	\$1,400,974	\$1,165,998	\$1,302,941	\$1,138,214	\$1,787,308

### ***Exhibit 11: Project Manager Dollar Responsibility***



### Sales Staff

As in 2018, the survey collected data on sales staff (with “sales staff” defined in the survey as salespeople, sales managers, and any other staff whose primary responsibility is sales activity). Nearly all respondents (95.4%) report having at least one full-time sales staff; relatively few (12.1%) have at least one part-time sales staff.

As with total staff, the median number of FTE sales staff increases with company size. There is a particularly large jump among the largest companies, with the median FTE at 16 among companies with greater than \$20 million in sales.

Responses by segment are provided in Exhibit 12.

## Company Staff: Breakout by Revenue Size

	Company Size							
	<\$5 million		\$5.1-\$10 million		\$10.1-\$20 million		>\$20 million	
	Average	Median	Average	Median	Average	Median	Average	Median
Number of full-time sales staff as of last fiscal year	3.0	3.0	4.3	4.0	6.8	6.0	21.7	16.0
Number of part-time sales staff as of last fiscal year	0.3	0.0	0.1	0.0	0.0	0.0	0.2	0.0
Number of part-time staff as of your last fiscal year	1.7	1.0	2.6	1.0	3.1	1.0	5.1	0.0
Number of full-time staff as of your last fiscal year	18.3	14.5	30.6	31.0	48.9	43.0	167.4	130.0

**Exhibit 12: Company Staff: Breakout by Revenue Size**

Changes in sales staff was explored in the 2020 survey. 89% increased or kept their staff levels the same (Exhibit 13). Breaking the results out by company size shows that the largest companies are the most likely to keep their staffing levels the same with 71% (Exhibit 14).

## Changes in Sales Staff

	% of respondents	Count of respondents
Significant increase (>20%)	7%	8
Increase (10%-19%)	20%	22
Stay the same (plus or minus 9%)	62%	67
Decrease (10%-19%)	6%	7
Significant decrease (>20%)	4%	4

*Exhibit 13: Changes in Sales Staff*

## Changes in Sales Staff: Breakout by Revenue Size

	Company Size			
	<\$5 million	\$5.1-\$10 million	\$10.1-\$20 million	>\$20 million
Significant increase (>20%)	11%	9%	6%	
Increase (10%-19%)	14%	22%	28%	16%
Stay the same (plus or minus 9%)	68%	52%	61%	71%
Decrease (10%-19%)	4%	9%	6%	10%
Significant decrease (>20%)	4%	9%		3%

*Exhibit 14: Changes in Sales Staff: Breakout by Revenue Size*

## B. Company Operations

### Primary System/Technology Focus

Using median scores, Video Display/AV Presentation & Control and Nurse Call/RTLS are the only options with over 20% when the respondents identify the one system/technology that accounted for the largest share of their companies' total revenue in their last fiscal year. The next four technologies, Audio/Sound Reinforcement/Assistive Listening, Security/Access Control/Surveillance/Video Management, Fire alarm/Emergency Evacuation Systems/Life Safety, and Music Entertainment range from 10% to 17%. All other systems/technologies are each selected by fewer than 10% of the respondents. The overall response distribution is illustrated in Exhibit 15.

## System/Technologies

	Avg % of Rev	Median % of Rev	Count
Video Display/AV Presentation & Control	28.8%	25.0%	84
Audio/Sound Reinforcement/Assistive Listening	16.1%	10.0%	80
Soundmasking/Acoustics/Speech Privacy	4.4%	3.0%	65
Digital Signage	8.4%	5.0%	61
Videoconferencing/Hosted & Cloud VC Solutions	8.6%	7.0%	57
Collaboration/Unified Communications/Digital Media	10.6%	5.0%	57
Paging/Intercom/Commercial Sound/Clocks/Sensors	12.9%	8.0%	54
Security/Access Control/Surveillance/Video Management	23.6%	15.0%	49
Data Communications/Networking/IT/Software	10.7%	5.0%	44
Low-Voltage Lighting and Control	11.5%	5.0%	41
Building Automation/Control & Command	9.6%	5.0%	27
Nurse Call/RTLS	28.8%	22.5%	24
Fire Alarm/Emergency Evacuation Systems/Life Safety	21.7%	15.0%	23
Telephony/VoIP/Hosted & Cloud Voice Solutions	8.6%	4.5%	22
Music/Entertainment	17.7%	17.0%	22

**Exhibit 15: System/Technology**

### *Primary Vertical Market*

The education market (100 responses, including higher education & K-12) is top-ranked when the respondents identify their primary vertical market with the corporate market (96 companies) following close behind. The overall response distribution is summarized in Exhibit 16.

There have been only modest changes in the relative importance (% of revenue) of the top vertical markets over time. The government market (22%) is the top-ranked vertical market for 2020. The corporate market is second at 20% and has been the top vertical market in seven of the past nine surveys and is usually followed by the education market.

## Vertical Markets

	Avg % of Rev	Median % of Rev	Count
Education	21%	15%	100
Corporate	25%	20%	96
Government	28%	22%	87
Healthcare	15%	10%	76
House of worship	20%	10%	67
Hospitality/Lodging/Retail	11%	7%	42
Amusement/Recreation/Entertainment	15%	6%	39
Manufacturing	10%	5%	37
Multi-family	10%	7%	11

***Exhibit 16: Vertical Markets***

### Customer Dynamics

Three metrics were collected to help illustrate the general customer dynamic situation among the respondents. These are:

- The percentage of total revenue from the largest single customer.
- The percentage of total revenue from the largest single project.
- The percentage of revenue from new customers.

There is a sizeable amount of data variation, especially with regards to the largest single customer. While the typical company booked 21.1% of its revenue from its largest single customer, the responses range from 4% to 81%. A similarly large range is seen for the percentage of revenue from new customers (2% to 93%, with an average of 19%). The response range for the largest single project is more modest, spanning from 1% to 58%, with an average of 13.6%.

The overall response distribution is illustrated in Exhibit 17.

Segmenting the responses shows that the smallest companies are the ones most closely tied to a single customer, with these companies noting that an average of 26.5% of total revenue came from their largest customer. The reliance on the single project has also increased to 18.4% (average value) among the smallest companies.

Variations for the additional company sizes are more modest across the additional data.

The response distribution across segments is provided in Exhibit 17.

## Customer Dynamics

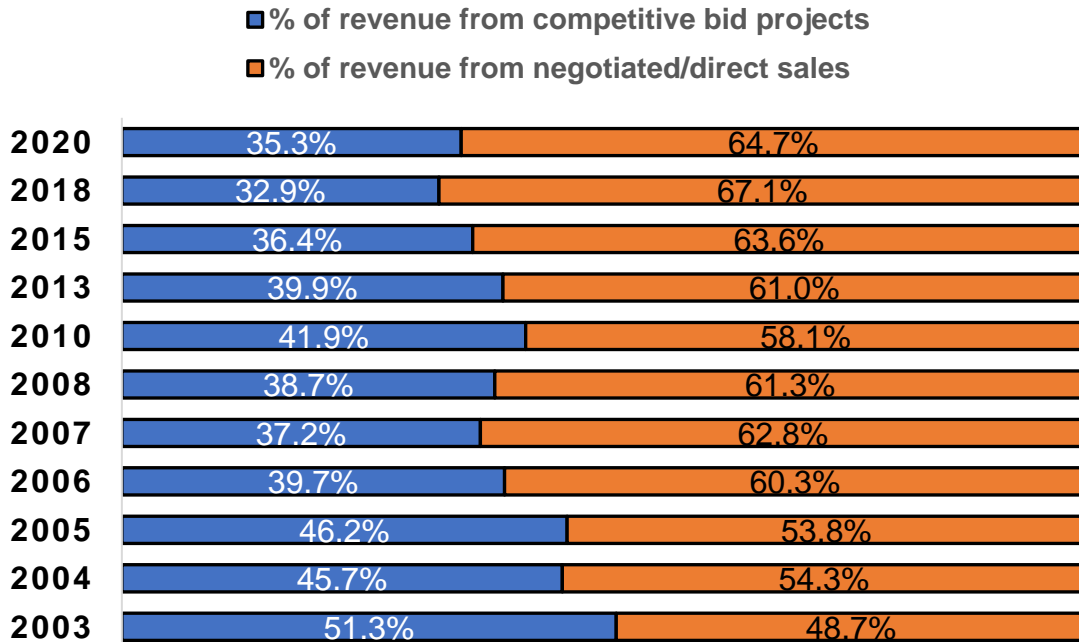
	<b>New customers, % of total revenues (average)</b>	<b>Largest single customer, % of total revenues (average)</b>	<b>Largest single project, % of total revenues (average)</b>	<b>Count</b>
Total	19.0%	21.1%	13.6%	100
<\$5 million	19.4%	26.5%	18.4%	28
\$5.1-\$10 million	21.0%	18.1%	11.7%	23
\$10.1-\$20 million	17.6%	17.8%	10.6%	18
>\$20 million	17.3%	15.8%	9.9%	31

**Exhibit 17: Customer Dynamics**

### Competitive Bid versus Negotiated/Direct Sales

The percentage of total company revenue realized from competitive bid projects has ticked up from the 2018 low of 32.9% to 35.3%. Negotiated/direct sales still accounts for an average of more than two-thirds of total revenue, up from its low point of 48.7% in 2003 (see Exhibit 24).

## Competitive Bid vs. Negotiated/Direct Sales



**Exhibit 18: Competitive Bid vs. Negotiated/Direct Sales**

The 2020 survey saw very little variation across segments tied to company size. Each segment varied between 1.3% to 4.2% with the smallest companies most apt to generate revenue through negotiated/direct sales rather than competitive bid projects. These companies report an average of 66% of their revenue is from negotiated/direct sales

Variations are present across all other segments, but regardless of the segment, the percentage of revenue generated from negotiated/direct sales is always at the majority- level.

Responses by segment are provided in Exhibit 19 on the following page.

## Bid Type Dynamics

	Competitive bid projects, % of total revenues (average)	Negotiated/direct sales, % of total revenues (average)	Count
Total	35.3%	64.7%	100
<\$5 million	34%	66%	28
\$5.1-\$10 million	37%	63%	23
\$10.1-\$20 million	38%	62%	18
>\$20 million	34%	66%	31

***Exhibit 19: Bid Type Dynamics***

### *Prime Contractor Status*

The percentage of projects where the company was the prime contractor shows continued growth from the level seen in 2015 (the first time this metric was collected) with the average moving from 51.7% to 56.18%. As with the customer dynamic metrics, there is considerable data variance, with responses ranging from zero to 100%.

Peak responses are seen among both the smallest two tiers of companies, with average values for both segments in excess of 62%. Average values for upper-level firms, in contrast, are in the 42.9% to 50.8% range.

Responses by segment are provided in Exhibit 20.

## **Serving as Prime Contractor**

	<b>% of projects as prime contractor</b>	<b>Count</b>
Total	56.18%	78
<\$5 million	62.4%	23
\$5.1-\$10 million	64.4%	20
\$10.1-\$20 million	42.9%	15
>\$20 million	50.8%	20

***Exhibit 20: Serving as Prime Contractor***



### *Work Backlog*

The dollar amount of work backlog (defined as unfinished work and sales orders that have not yet been fulfilled) has seen a drop since the 2018 survey, moving from a median of \$4.8 million to \$3.01 million.

The amount of work backlog has a sizeable range when shown at company size. The dollar amount range of \$642,500 to \$13 million (Exhibit 21).

## Backlog Dynamics

	Median backlog	Count
Total	\$3,011,499	100
<\$5 million	\$642,500	28
\$5.1-\$10 million	\$2,000,000	23
\$10.1-\$20 million	\$5,000,000	18
>\$20 million	\$13,000,000	31

### ***Exhibit 21: Backlog Dynamics***

The impact of COVID on the NSCA integration community is interesting. Our analysts note, citing our technological advantages, that there likely isn't another industry sector more prepared than ours to manage through this. With the vast majority of our workforce determined "essential" and out in the field anyway, the work-from-home impact may be far less than that of other sectors.

However, NSCA members are reporting that backlog erosion is a major concern and proven out by our findings. We see a major decline in backlog heading into 2021 and subjectively believe it was caused by billings in far excess of bookings. Backlog is a key indicator of future revenues. As such, for budgeting and forecasting purposes we strongly suggest factoring any reduction in backlog into a more conservative budget for 2021.

## COVID Impact to Company Backlog

	% of Respondents	Count
Significant increase (>20%)	6%	6
Increase (10%-19%)	10%	10
Stay the same (plus or minus 9%)	30%	30
Decrease (10%-19%)	36%	36
Significant decrease (>20%)	18%	18

*Exhibit 22: COVID Impact to Company Backlog*

## COVID Impact to Company Backlog: Breakout by Revenue Size

	Company Size			
	<\$5 million	\$5.1-\$10 million	\$10.1-\$20 million	>\$20 million
Significant increase (>20%)	7%	3%	4%	11%
Increase (10%-19%)	14%	3%	17%	6%
Stay the same (plus or minus 9%)	29%	29%	30%	33%
Decrease (10%-19%)	25%	52%	26%	39%
Significant decrease (>20%)	25%	13%	22%	11%

*Exhibit 23: COVID Impact to Company Backlog: Breakout by Revenue Size*

### *Perceived Company Financial Health*

While the bulk of the NSCA Financial Analysis of the Industry survey provides quantitative insight into company operational and financial aspects, it is also productive to examine key issues using qualitative data. The “gut feel” a respondent has about how his/her company is performing is a highly useful data element.

The respondents were asked to rate their companies’ financial health for three time periods (the past two years, the present time, and the next two years) using a scale that ranged from “very poor” to “outstanding.” As summarized in Exhibit 24, a plurality to majority of respondents rate their companies’ financial health as “good to very good” for all three time periods. Optimism can be seen, with 81% feeling their company’s financial health will be “very good” or “outstanding” over the next two years. That, however, is down from 82.6% in 2018.

## Company Financial Health

*Percent of respondents*

	Very poor	Somewhat poor	Fair	Good	Very good	Outstanding
Company's financial health for the past two years	1%	4%	10%	33%	32%	20%
Company's present financial health	1%	7%	19%	32%	30%	11%
Company's expected financial health for 2021	1%	3%	15%	36%	41%	5%
Company's expected financial health for 2022		1%	7%	30%	51%	11%

***Exhibit 24: Company Financial Health***

### *Challenges for 2021*

Another qualitative metric collected in the survey was to ask the respondents to describe what they anticipate will be their companies' most significant challenge for 2021. The open-ended responses cover a wide spectrum of market and company operational issues, but the most pervasive themes are staffing and the impact of COVID-19. Of the 104 comments offered, 15 involve challenges in finding and retaining staff and 27 comments involve challenges with the economy due to the pandemic.

Other challenges include growing revenue/sales, maintaining margins/profitability, increased competition from a variety of sources, opening new markets, cash flow, and general company operational issues.

Full-text responses are listed below. The responses were edited to remove any information that could identify a specific company and adjusted for format but are otherwise provided verbatim.

*Ability to hire qualified personnel*

*Access to businesses and buildings due to COVID-19*

*Adapting product offerings to accommodate the trend of more employees working from home*

*Adding new customers*

*Altering and reorganizing for a more proactive and accountable sales team (changing who is on the proverbial bus and eliminating less productive or less proactive members)*

*Because most of our clients are non-profits, budgets are going to be slim, not allowing for updates to facilities*

*Being able to sell in the COVID-19 environment*

*Booking timing of new business from the market; workforce management to support demand levels*

*Budget cuts/freezes from primary customers in the public sector*

*Budget shortfalls and challenges for our clients*

*Cash collections on existing projects*

*Churches have had to completely change how they do services, which is less in-person meeting ... which means fewer projects*

*Continued growth in a shrinking economy*

*Continuing to meet our sales objectives, increasing competitive pressures*

*Conversion from design-build to an as-a-service model*

*Converting to an ESOP; development of leadership to stand on their own and stand together without leaning on the owner to be the one who pushes forward*

*Corporate business is a concern since people are not going back to the office yet*

*COVID-19*

*COVID-19 and workforce*

*COVID-19 complications to steady work environment*

*COVID-19 on our employees*

*COVID-19 will impact clients' discretionary spending and cause lost or deferred sales opportunities*

*Customer confidence in the economy so they will move forward with projects*

*Dealing with the unknown impacts of COVID-19 issues on continuing projects in process, including inspections*

*Disseminating and implementing our strategic planning objectives to newly acquired branch locations*

*Economic and political uncertainty, especially with respect to eliminating the COVID-19 pandemic*

*Economic recovery due to the pandemic*

*Economy and the "bounce back" from COVID-19; markets need to re-open and large gatherings need to be promoted again as safe*

*Election and politics*

*Equipment availability; no parts, no work*

*Finding a reliable workforce*

*Finding excellent technical staff*

*Finding qualified employees*

*Finding staff*

*General economy won't fully rebound until after 2021*

*Generating additional sales in the new COVID-19 world*

*Generational leadership*

*Getting and retaining quality people*

*Getting back to 100% capacity at customer locations due to COVID-19*

*Getting clients to commit/closing the deal*

*Getting creative on how to find new projects/customers*

*Getting large venues back open for business so they can commit capital funds with greater confidence*

*Getting qualified employees*

*Getting through the effects of COVID-19*

*Government funding for projects is slowing down*

*Government regulation/taxes*

*Hiring and retaining qualified technicians*

*Hiring new staff and finding qualified talent*

*Hiring personnel in anticipation of growth and reorganizing the team in anticipation of growth*

*Hiring techs*

*How quickly everyone comes back to their offices*

*If a second lockdown is required due to COVID-19, then that will likely have the largest negative impact on sales and revenue*

*If customers have the money and budget to continue current jobs and additional ones*

*If the COVID-19 crisis continues into 2021, there may be significant shifts in several verticals; some will see increased activity while others experience declines in spending due to uncertainty*

*Impact of COVID-19 and the election on the economy; lots of uncertainty for sales opportunities*

*Impact of COVID-19 on the technologies our customers will want*

*Increased workload when businesses reopen*

*Increasing consolidation of the AV industry*

*Increasing revenues in recovering from COVID-19 and balancing those new revenues with expenses and staffing needs*

*Increasing sales in Q1 and Q4*

*Installation staff travel: how to recruit, pay, and charge for that labor*

*Lack of customer investments/bids due to COVID-19*

*Lack of funding due to budget gaps created by the pandemic*

*Lack of public works projects to bid on*

*Lack of spending in higher education*

*Length of the COVID-19 pandemic*

*Losing university clients, which were our biggest customers; we won't have those in 2021 and possibly not in 2022 due to budget issues caused by COVID-19 and all the shutdowns*

*Low bookings due to the inability to get in front of decision-makers during the pandemic*

*Maintaining and enhancing our technical staff, especially with the uncertainty of the pandemic and how that will affect revenue and profitability*

*Many of our projects pushed to 2021; I am concerned about staffing them and keeping our quality of service due to that issue*

*More IT-related work is challenging for us*

*Multiple job locations restricted or temporarily unavailable*

*New standards, policies, and procedure adjustments*

*Not knowing when live events will be coming back*

*Overall economy and impact of COVID-19*

*Overcoming supply and demand challenges*

*Political and social unrest*

*Predicting and planning on the continued COVID-19 impact*

*Price competition/commoditization*

*Product availability to complete projects as bid; we have been experiencing a product shortage*

*Public gathering will recover slowly in 2021, but we expect that our market will not be fully back online until early/mid-2022*

*Rebound from COVID-19*

*Recovering from the COVID-19 slowdown in construction*

*Recovering from the pandemic*

*Releasing our backlog from COVID-19*

*Sales and being able to find qualified/experienced technical employees*

*Sales in the industries we service: hospitality and amusement*

*Slow return of audiences to performing arts centers and resulting termination of existing PAC design and installation project contracts*

*Some of our best customers have had their budgets frozen; finding replacement sources of revenue from new customers*

*Spikes in workload*

*Staff resources*

*Staffing*

*Staffing qualified AV technicians*

*Starting a new line of business with managed services*

*Stimulus spending dries up and demand falls; U.S. private office construction is projecting a 21% decrease in 2021*

*Supply chain impact is still a big unknown and can cause challenges if we can't get the material needed for our projects; COVID-19 still plays a big challenge in 2021 with so many unknowns*

*Technical skilled labor*

*To-be-determined residual effects of COVID-19 to our industries*

*Transition of daily management to management team from owner*

*Unexpected changes in live events/rental business*

*Visibility because of COVID-19 and election (government policies)*

*What will the shakeout be for office space with a hybrid or remote workforce?*

*Will cities/municipalities have a budget for their convention center/theater upgrades?*

### *C. Balance Sheet and Financial Ratios*

This section of the report provides an analysis of key balance sheet values and ratios. The data are presented as follows:

- Overall Values — A full suite of percentiles is provided for each element to illustrate the breadth of values contained within the sample. This also allows for general benchmarking to determine where a particular company falls within the span of responses contained in this research sample.
  
- Segmented Values — Each value is segmented by company size, Top Ten status, and quartile rank. Due to the smaller sample size of each subsample, only the median is provided.
  
- Historical Values — Data are provided for each value from the 2003 to 2020 surveys to permit tracking general trends over time. Note that the same companies are not contained in each sample. Thus, any historical trends should be considered a general reflection of the market as a whole, rather than specific tracking of company-to-company variations.
  
- Financial Ratios — Ten key financial ratios are computed (see Exhibit 26 for an explanation of the computational methods). The results are provided as described above for the balance sheet values.

All data are from the respondents' most recently closed fiscal year.



## Analysis: Balance Sheet

### Overall Balance Sheet Values

	10th percentile	25th percentile	Median	75th percentile	90th percentile	Average	Number of responses
Accounts Receivable	\$174,137	\$643,964	\$1,696,319	\$4,051,828	\$8,633,764	\$3,338,562	102
Inventory	\$9,098	\$124,750	\$320,063	\$811,986	\$1,679,411	\$665,831	102
Current Assets	\$356,000	\$1,065,922	\$2,725,551	\$6,161,060	\$14,755,083	\$5,364,938	100
Total Assets	\$844,171	\$1,722,713	\$3,556,717	\$8,059,500	\$25,254,855	\$8,928,240	100
Current liabilities	\$197,015	\$524,825	\$1,701,700	\$3,998,137	\$10,668,968	\$3,810,248	100
Equity, beginning of FY	-\$202	\$152,790	\$1,000,000	\$3,532,686	\$6,700,000	\$3,151,087	99
Cash on hand, beginning of FY	\$1,910	\$70,863	\$276,009	\$853,249	\$2,330,360	\$1,054,025	100
Cash on hand, end of FY	\$2,009	\$66,661	\$279,900	\$1,060,000	\$2,149,251	\$1,150,374	100
Total sales	\$2,604,975	\$4,549,375	\$9,748,183	\$24,999,808	\$52,785,443	\$28,442,995	100
Total cost of material sold	\$1,456,138	\$2,818,295	\$6,155,310	\$14,740,329	\$34,139,212	\$13,868,142	98
Pre-tax profit/(loss)	-\$90,674	\$58,857	\$350,257	\$1,254,167	\$2,863,447	\$1,024,122	98
Cost in excess	\$0	\$0	\$105,708	\$605,488	\$2,076,500	\$537,259	94
Billings in excess	\$0	\$0	\$87,965	\$584,000	\$2,651,019	\$727,964	95

### ***Exhibit 25: Overall Balance Sheet Values***

Note that the average values in Exhibit 25 are highly swayed by the very large and the very small responses in the sample. A more accurate depiction of the “typical” respondent is found by examining the median values, since the median is affected far less by outliers than the average. Therefore, medians are used for all of the following comparisons of balance sheet values across segments.

## Analysis: Balance Sheet

### Overall Balance Sheet Values by Company Size

Values are medians					
	<b>Overall</b>	Up to \$5 Million	\$5.1-\$10 Million	\$10.1-\$20 Million	>\$20 Million
Accounts Receivable	\$1,696,319	\$442,400	\$1,250,000	\$2,446,739	\$5,948,194
Inventory	\$320,063	\$99,000	\$319,382	\$372,443	\$1,236,270
Current Assets	\$2,725,551	\$696,980	\$1,917,529	\$4,102,095	\$10,403,639
Total Assets	\$3,556,717	\$1,162,740	\$2,464,049	\$4,659,332	\$18,145,507
Current liabilities	\$1,701,700	\$431,589	\$979,837	\$2,135,926	\$7,213,000
Equity, beginning of FY	\$1,000,000	\$384,000	\$921,495	\$1,179,183	\$4,287,292
Cash on hand, beginning of FY	\$276,009	\$105,000	\$273,450	\$238,575	\$883,565
Cash on hand, end of FY	\$279,900	\$127,473	\$325,000	\$306,626	\$618,745
Total sales	\$9,748,183	\$3,200,000	\$7,367,745	\$13,140,106	\$46,092,721
Total cost of material sold	\$6,155,310	\$1,700,000	\$4,575,806	\$9,444,883	\$22,815,759
Pre-tax profit/(loss)	\$350,257	\$74,417	\$222,255	\$747,083	\$1,164,269
Cost in excess	\$105,708	\$0	\$25,037	\$396,137	\$604,439
Billings in excess	\$87,965	\$0	\$40,575	\$315,725	\$960,000
Number of responses	95	25	23	18	29

**Exhibit 26: Overall Balance Sheet Values by Company Size**

## Financial Ratio Descriptions

Ratio	Computation method	Description
Revenue per employee	Total sales revenue divided by number of FTE staff	This ratio tracks the amount of sales revenue generated by each employee.
Revenue per salesperson	Total sales revenue divided by the number of FTE sales staff	This ratio tracks the amount of sales revenue generated by each salesperson.
Profit per salesperson	Per-tax profit (loss) divided by the number of FTE sales staff	This tracks the “profitability” of each salesperson.
Days sales outstanding	Accounts receivable divided by (sales/360)	This ratio measures the number of days an invoice stays in accounts receivable before it is received in cash.
Inventory turnover	Cost of materials sold divided by inventory	This ratio measures the number of times inventory revolves over the course of a year.
Return on assets	Pre-tax profit divided by total assets	This ratio measures the efficiency of asset utilization - the profits generated by assets.
Return on equity	Pre-tax profit divided by average equity	This ratio measures the owner’s return on the equity kept at risk in the company.
Current ratio	Current assets divided by current liabilities	This ratio measures liquidity — the ability to cover current debts with current assets by examining the number of dollars in assets for each dollar in liabilities.
Debt to equity	Total liabilities divided by average equity	This ratio measures the leverage or risk profile — the amount of indebtedness compared to equity.
Cash on hand variation	Percentage change between cash on hand BOFY and EOFY	The amount of cash on hand resources expended/accumulated.

### ***Exhibit 27: Financial Ratio Descriptions...continued***

## Financial Ratio Descriptions

Ratio	Computation method	Description
Recurring revenue	Calculate the sum total dollar value of managed services agreements, service level agreements, service contacts, embedded staffing, and "as-a-service" programs	A contractually binding agreement for goods and services over a predetermined period of time, or having an auto-renewal process. RMR (Recurring Monthly Revenue), MRR (Monthly Recurring Revenue) are common abbreviations for this transactional model.
Reoccurring revenue	This revenue should be budgeted and recognized under time and materials services, (MAC) moves, adds and changes, or any similar non-contracted, and/or non-fixed priced income	Reoccurring refers to the non-contracted goods and services provided to repeat clients. Any income; even based on agreed upon rates or block labor bundles, without a defined performance obligation or fixed cost, shall be deemed as simply reoccurring.
Billings in excess	We begin with revenue earned to date on all current projects (work in process or WIP). To determine billings in excess, the integrator needs to know how much they have invoiced to date for those contracts	A financial accounting of over-billing where the actual revenues earned are less than the accounts receivable billed. This entry on the balance sheet is shown as a liability until the revenue is collected, because services and/or equipment are still owed to the customer.
Costs in excess	We begin with revenue earned to date on all current projects (work in process or WIP). To determine costs in excess, the integrator needs to know how much they have invoiced to date	Cost in excess of billings, a financial accounting of under-billing is when the billings on uncompleted contracts are less than the revenue earned to date. This entry on the balance sheet is shown as an increased asset until the balance is invoiced.

### ***Exhibit 27: Financial Ratio Descriptions***

## Analysis: Financial Ratios

### Financial Ratios as a percent of revenue, Overall Values

	10th percentile	25th percentile	Median	75th percentile	90th percentile	Number of responses
Revenue per employee	\$155,206	\$190,577	<b>\$259,497</b>	\$364,808	\$548,705	100
Revenue per salesperson	\$820,000	\$1,212,693	<b>\$1,789,936</b>	\$2,632,216	\$3,608,549	95
Profit per salesperson	(\$22,210)	\$14,478	<b>\$60,878</b>	\$151,067	\$360,261	79
Days sales outstanding	22	36	<b>58</b>	78	89	100
Inventory turnover	11	17	<b>25</b>	82	154	92
Return on assets	(6.5%)	2.6%	<b>10.3%</b>	24.1%	40.3%	83
Return on equity	(50.0%)	8.1%	<b>23.6%</b>	64.7%	146.2%	75
Current ratio	0.9	1.1	<b>1.5</b>	2.7	6.0	100
Debt to equity	-1.3	0.3	<b>0.8</b>	2.1	16.9	86
Cash on hand variation	(93.7%)	(35.9%)	<b>16.1%</b>	69.4%	215.2%	87

\*extreme outliers omitted for Cash on hand variation

\*\* return on equity & inventory turnover based on beginning values

### Exhibit 28: Financial Ratios as a percent of revenue, Overall Values

#### Financial Ratios as a percent of revenue by company size, Overall Values

Values are medians		Up to \$5	\$5.1-\$10	\$10.1-\$20	>\$20
	Overall	Million	Million	Million	Million
Revenue per employee	\$259,497	\$188,293	\$234,645	\$294,897	\$295,455
Revenue per salesperson	\$1,789,936	\$898,938	\$1,650,000	\$2,353,620	\$2,436,716
Profit per salesperson	\$60,878	\$16,740	\$55,600	\$137,564	\$62,800
Days sales outstanding	58	42	63	67	59
Inventory turnover	25	15	22	24	41
Return on assets	10.3%	15.6%	9.8%	16.2%	6.9%
Return on equity	23.6%	12.5%	13.6%	33.7%	31.2%
Current ratio	1.5	1.3	1.9	1.9	1.3
Debt to equity	0.8	0.3	0.6	1.6	1.3
Cash on hand variation	16.1%	3%	37%	19%	0.0%

### Exhibit 28: Financial Ratios as a percent of revenue by company size, Overall Values

#### *D. Sales Ratios*

This section of the report explores detailed sales and expense data. All sales ratios are expressed as a percentage of total sales.

Each table is segmented into the following major areas:

- **Sales** — These data illustrate the breakout between non-recurring sales and recurring sales. The latter category is further segmented into five specific types of recurring sales (service, as-a-service, contracted maintenance agreements, monitoring, leasing/rental, deferred recurring revenue, and all others). The total of non-recurring and recurring sales sums to 100%.
- **Cost of Sales** — These data explore the expenses that comprise cost of sales (i.e., materials, labor, freight, job supplies, etc.). Gross profit is also provided, which is total sales less cost of sales.
- **Operating, Selling, and Administrative Costs** — These data examine a wide range of specific expenses, including salaries, insurance, rent, office expenses, etc. Operating income is also provided, which is gross profit less total operating/selling/administrative expenses.
- **Pre-Tax Profit (loss)** — This key metric is operating income less net interest expense.
- **Other Ratios** — Two other ratios are tracked: year-end inventory as a percentage of material cost, and year-end accounts receivable as a percentage of sales.

The data are first illustrated using percentiles to explore the range of values contained within the sample. The remainder of the tables are based upon average values. While the averages are swayed by the very small and the very large values in the sample, it is a more intuitive way of examining sales ratios since it permits subtotal data to sum to their contributing line items (the percentile values will not, by design, sum to their associated line items).

To ensure maximum accuracy, all averages are computed independently for each line item. Due to rounding, some subtotals for the average values may not sum exactly to their associated line items.

The 2020 data are segmented by a variety of metrics, as described in Section I. While these current year data are the most valuable aspect of this section for benchmarking purposes, the trend data provided in Exhibits 29 and 30 also have value since these provide an overarching view of industry operations and profitability over time. One of the more interesting metrics is the relationship between recurring and non-recurring sales.

While the large majority of sales have always been derived from non-recurring sources, the percentage of revenue derived from recurring sales, as an average, made a healthy upswing in 2020 going from 10.83% in 2018 to 17.32%. Service and Leasing/rental are the top two sales categories with 10.59% and 11.31% respectively. See Exhibit 29 below.

## Analysis: Sales Ratios

### Sales Ratios as a percent of revenue, Overall Values

	25th percentile	Median	75th percentile	Average	Number of responses
Non-recurring sales	76.78%	89.53%	98.05%	92.55%	78
Recurring sales					
Service	1.08%	4.97%	9.80%	10.59%	58
As-a-Service	0.74%	1.25%	6.02%	5.87%	18
Contracted maintenance agreements	0.90%	2.71%	6.74%	4.69%	53
Monitoring	0.75%	1.09%	3.58%	3.58%	15
Leasing/rental	0.25%	3.48%	14.65%	11.31%	11
Deferred recurring revenue	1.07%	4.64%	10.17%	5.28%	8
Other recurring fees	0.50%	1.73%	5.73%	2.93%	8
Total recurring sales	3.37%	10.66%	23.22%	17.32%	70
Total sales	100%	100%	100%	100%	99
<b>Cost of Sales</b>					
Materials	33.42%	43.76%	51.24%	42.33%	80
Direct Labor	8.66%	16.30%	25.77%	17.82%	79
Subcontract labor	1.48%	3.31%	5.41%	4.71%	67
Freight	0.44%	0.75%	1.26%	0.93%	66
Job supplies and miscellaneous job costs	0.72%	2.07%	4.36%	3.11%	70
Total cost of sales	62.31%	69.43%	74.26%	67.36%	80
<b>Gross Profit</b>	<b>25.31%</b>	<b>29.90%</b>	<b>37.20%</b>	<b>32.18%</b>	<b>81</b>

**Exhibit 29: Sales Ratios as a percent of revenue, Overall Values**

## Analysis: Sales Ratios

### Operating, selling, and administrative expenses

	25th percentile	Median	75th percentile	Average	Number of responses
Salaries	9.4%	12.9%	19.5%	15.4%	79
Payroll taxes	1.0%	1.6%	2.2%	1.7%	73
Employee benefits	0.8%	1.8%	2.7%	1.9%	73
Insurance	0.5%	0.8%	1.4%	1.1%	76
Operating supplies	0.2%	0.3%	0.6%	0.4%	56
Rent	0.9%	1.2%	2.0%	1.7%	72
Utilities and communications	0.3%	0.6%	0.9%	0.7%	77
Depreciation	0.5%	0.9%	1.6%	1.7%	74
Repairs and maintenance	0.1%	0.2%	0.4%	0.3%	69
Vehicle expenses	0.2%	0.6%	1.2%	0.8%	69
Outside services	0.5%	0.9%	1.3%	1.0%	58
Office expenses	0.2%	0.4%	0.7%	0.5%	64
Marketing / promotion	0.1%	0.2%	0.5%	0.3%	69
Training and education	0.1%	0.2%	0.4%	0.3%	69
All other expenses	0.9%	1.9%	3.1%	2.6%	67
<b>Total operating, selling, admin expenses</b>	<b>20.6%</b>	<b>26.3%</b>	<b>32.0%</b>	<b>29.0%</b>	<b>79</b>
<b>Operating income</b>	<b>1.2%</b>	<b>3.4%</b>	<b>6.3%</b>	<b>4.4%</b>	<b>79</b>
Net interest expense	0.1%	0.4%	0.8%	0.6%	72
<b>Pre-tax profit (loss)</b>	<b>0.9%</b>	<b>3.2%</b>	<b>5.9%</b>	<b>3.7%</b>	<b>78</b>
Inventory as a percentage of material cost for the year	1.9%	5.2%	9.1%	6.4%	81
Accounts receivable as a percentage of sales for the year	10.4%	15.9%	20.3%	15.6%	81

NOTE: In the calculations for interest expenses, the NSCA business analysts have determined that for this report and going forward we provide greater value in comparing only the companies who use debt to fund operations with others who do the same. Therefore, companies that don't exercise a line of credit to fund operations won't skew the interest expense category. Thus, the interest expense is no longer a relevant calculation to the operating income line item above it.

#### ***Exhibit 29: Sales Ratios: Operating, selling, and administrative expenses***



Exhibit 30 breaks out the responses by company size. It shows the largest companies have the lowest percent of their sales in non-recurring at 87%. The non-recurring and recurring percentages below are median values of survey responses that were calculated independently. Each value in the chart is the median for that service for each company size column. Therefore, the addition of non-recurring sales percent plus recurring sales percent does not equal 100%. The line, Total Sales of 100%, relates to the reporting of all types of sales.

## Analysis: Sales Ratios

### Sales Ratios as a percent of revenue by company size, Overall Values

Numer of Responses	19	21	15	27
	Up to \$5 Million	\$5.1-\$10 Million	\$10.1-\$20 Million	>\$20 Million
Non-recurring sales	92.22%	89.25%	95.52%	87.00%
Recurring sales				
Service	6.00%	4.62%	4.47%	6.11%
As-a-Service	9.38%	4.69%	0.24%	0.99%
Contracted maintenance agreements	6.08%	2.50%	1.07%	3.69%
Monitoring	0.92%	0.60%	3.58%	1.80%
Leasing/rental	0.79%	-	-	3.48%
Deferred recurring revenue	-	-	-	2.50%
Other recurring fees	1.57%	1.80%	-	0.01%
Total recurring sales	14.44%	10.75%	6.28%	11.63%
Total sales	100%	100%	100%	100%
<b>Cost of Sales</b>				
Materials	40.96%	46.05%	43.76%	36.75%
Direct Labor	17.08%	15.71%	17.23%	17.58%
Subcontract labor	3.31%	3.12%	2.52%	3.74%
Freight	0.54%	0.83%	0.67%	0.89%
Job supplies and miscellaneous job costs	1.67%	0.95%	1.97%	3.50%
Total cost of sales	63.14%	69.19%	72.37%	68.98%
<b>Gross Profit</b>	<b>39.63%</b>	<b>29.70%</b>	<b>27.63%</b>	<b>27.00%</b>

\*line items with less than 3 values denoted as " - "

### *Exhibit 30: Sales Ratios as a percent of revenue by company size, Overall Values*

## Analysis: Sales Ratios

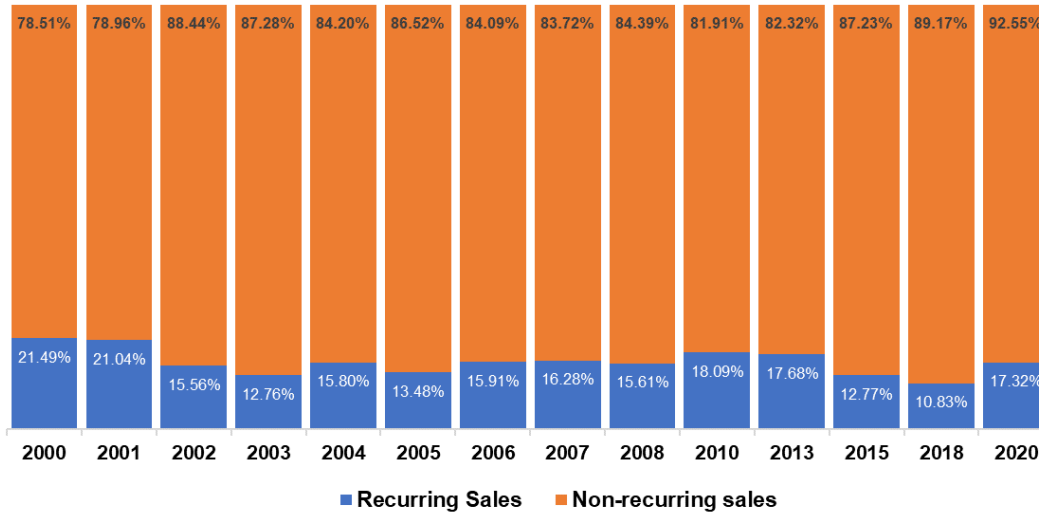
### Operating, selling, and administrative expenses

	Up to \$5 Million	\$5.1-\$10 Million	\$10.1-\$20 Million	>\$20 Million
Salaries	23.2%	12.5%	11.6%	12.3%
Payroll taxes	2.5%	1.7%	1.2%	1.3%
Employee benefits	2.5%	1.5%	1.2%	1.5%
Insurance	1.3%	0.7%	1.0%	0.6%
Operating supplies	0.3%	0.3%	0.6%	0.2%
Rent	2.0%	1.2%	0.9%	1.0%
Utilities and communications	0.8%	0.5%	0.4%	0.6%
Depreciation	1.6%	0.8%	0.8%	1.0%
Repairs and maintenance	0.5%	0.2%	0.2%	0.2%
Vehicle Expenses	1.2%	0.4%	0.6%	0.3%
Outside services	1.1%	0.7%	1.3%	0.8%
Office expenses	0.6%	0.4%	0.3%	0.3%
Marketing / promotion	0.2%	0.3%	0.4%	0.2%
Training and education	0.2%	0.3%	0.3%	0.2%
All other expenses	2.0%	2.2%	1.5%	1.9%
<b>Total operating, selling, admin expenses</b>	<b>33.0%</b>	<b>25.7%</b>	<b>23.0%</b>	<b>25.1%</b>
<b>Operating income</b>	<b>1.8%</b>	<b>4.4%</b>	<b>3.4%</b>	<b>3.3%</b>
Net interest expense	0.3%	0.4%	0.2%	0.7%
<b>Pre-tax profit (loss)</b>	<b>2.4%</b>	<b>3.5%</b>	<b>3.7%</b>	<b>2.7%</b>
*net interest expense is stand alone calculation instead of subtraction as in years past				
Inventory as a percentage of material cost for the year	3.3%	6.9%	6.7%	3.4%
Accounts receivable as a percentage of sales for the year	11.5%	17.3%	18.8%	16.1%

### **Exhibit 30: Sales Ratios: Operating, selling and administrative expenses**

## Historical Sale Ratios

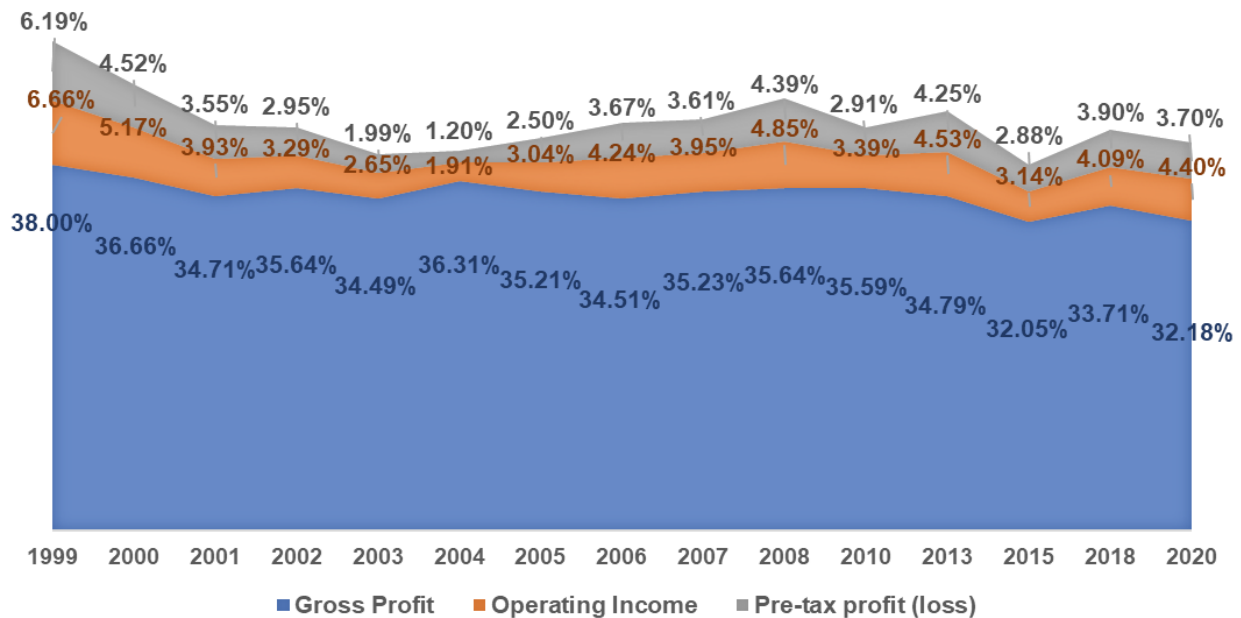
### *Non-recurring and recurring sales*



**Exhibit 31: Historical Sale Ratios, Non-recurring and recurring sales**

## Historical Sale Ratios

### *Gross profit and income*



**Exhibit 32: Historical Sales Ratios, Gross profit and income**



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