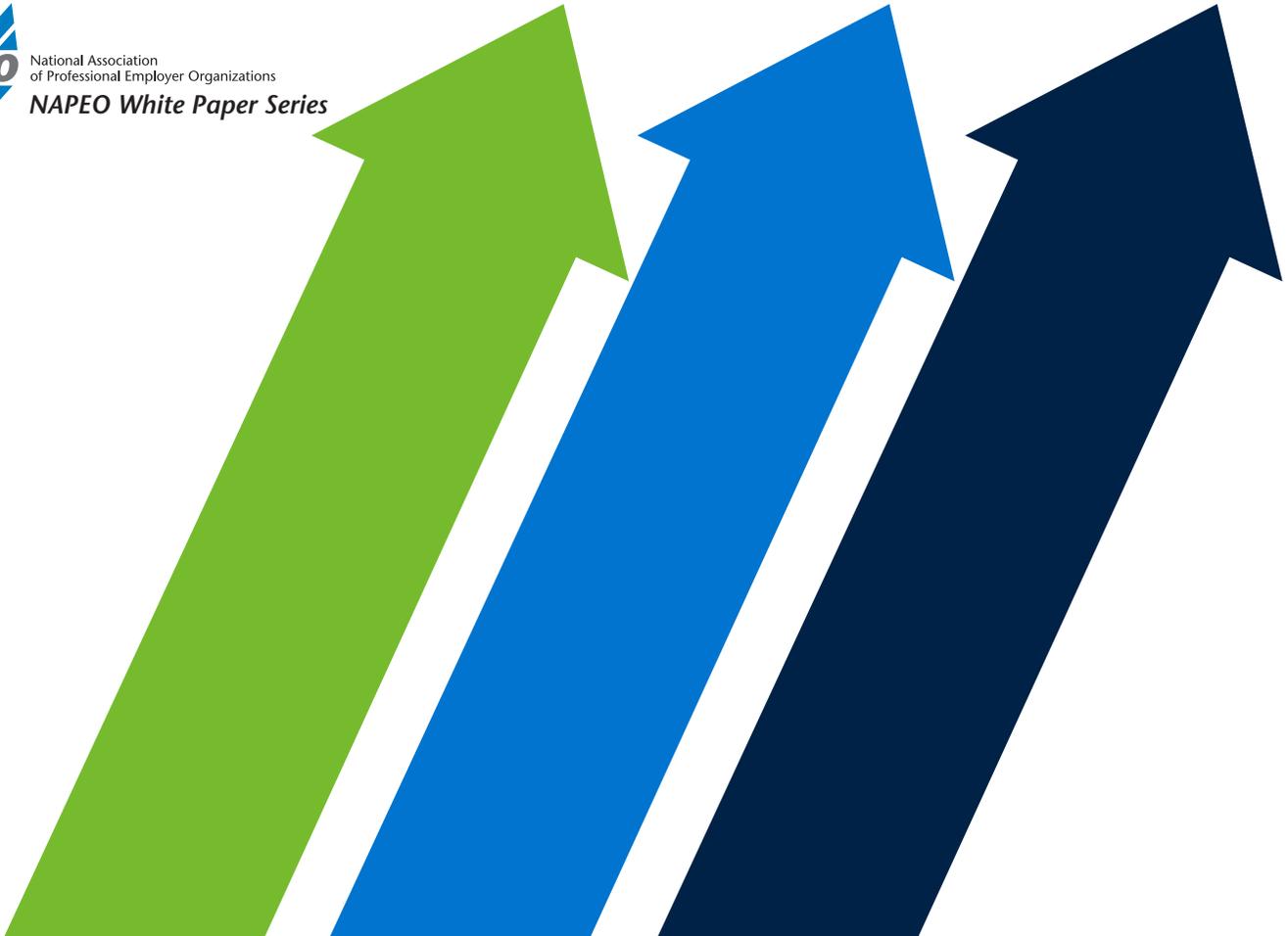




National Association  
of Professional Employer Organizations

**NAPEO White Paper Series**



# An Economic Analysis: The PEO Industry Footprint

By Laurie Bassi and Dan McMurrer  
McBassi & Company

September 2015

# An Economic Analysis: The PEO Industry Footprint

## Highlights

Professional employer organizations (PEOs) provide an array of HR services and employee benefits to client organizations, typically small- to mid-sized businesses. This frees those clients to focus their primary efforts on the core business itself, including operations, strategy, and innovation. Our previous research on a variety of measures has found that this arrangement yields significant benefits to PEO clients, as they grow more quickly than comparable other businesses, doing so with lower rates of employee turnover and higher rates of year-to-year business survival. Anecdotally, evidence points to a growing PEO industry driven by a rebounding small business sector, an increase in the use of outsourcing by small businesses, and the rise of complicated employment regulations such as the Affordable Care Act (ACA). Precisely calculating the size of the industry, however, has proved to be tricky due to the fact that traditional sources such as the U.S. Bureau of Labor Statistics (BLS) and Hoovers do not accurately define PEOs and often include non-PEOs in the category. This white paper therefore examines that question from multiple perspectives using a variety of data sources.

We calculate the current size of the PEO industry to be **between \$136 and \$156 billion**, as measured in gross revenues (which includes clients' payrolls as well as the fees charged to clients). PEOs provide services to **between 2.7 and 3.4 million worksite employees for 156,000 to 180,000 clients**, and **employ between 21,000 and 27,000 internal employees**. We estimate there are **between 780 and 980 PEOs** currently operating in the United States. Table 1, below, summarizes the key statistics that emerged from this industry analysis. Ranges provided are large due to the vagaries of the data, as noted above.

These numbers indicate the PEO industry has grown significantly since the PEO concept first began to take hold three decades ago. In each of the last 30 years, the industry has added, on average, roughly 100,000 worksite employees and 6,000 net new clients. For perspective, that means that every five years, the PEO industry has added the employment equivalent of the entire utilities industry in the United States.

Multiple data sources were used to make the calculations in this paper, with primary focus on the following:

- NAPEO membership data;
- BLS data;
- NAPEO's 2014 Financial Ratio & Operating Statistics (FROS) Survey;
- Hoovers/Dun & Bradstreet data on all companies classified as PEOs by Hoovers; and
- Detailed administrative data from five selected states.

No single data source contains enough information by itself to accurately estimate the size of the industry, so we sought to combine the best (and most reliable) components of each in order to make the most accurate estimate possible. The lower-bound estimates are based on the most conservative assumptions for those areas where quantitative parameters are not precisely known, while higher-range estimates are based on less conservative assumptions.

We found that data on the PEO industry (from major business databases such as Hoovers, as well as from the BLS), often over-counts PEOs, typically by including businesses that do not meet the traditional definition of PEO and/or by mixing worksite employees and internal employees in reporting employee counts. Our calculation methods and manual data reviews were therefore designed specifically to avoid both of those problems, which can be inherent in more automated data gathering and reporting methods.

The estimated 2.7 to 3.4 million employees who benefit from PEO services is a number larger than the size of the entire agriculture/forestry industry in the United States (and close to the size of the federal government, the education sector, or the information sector), based on data from the BLS.<sup>1</sup>

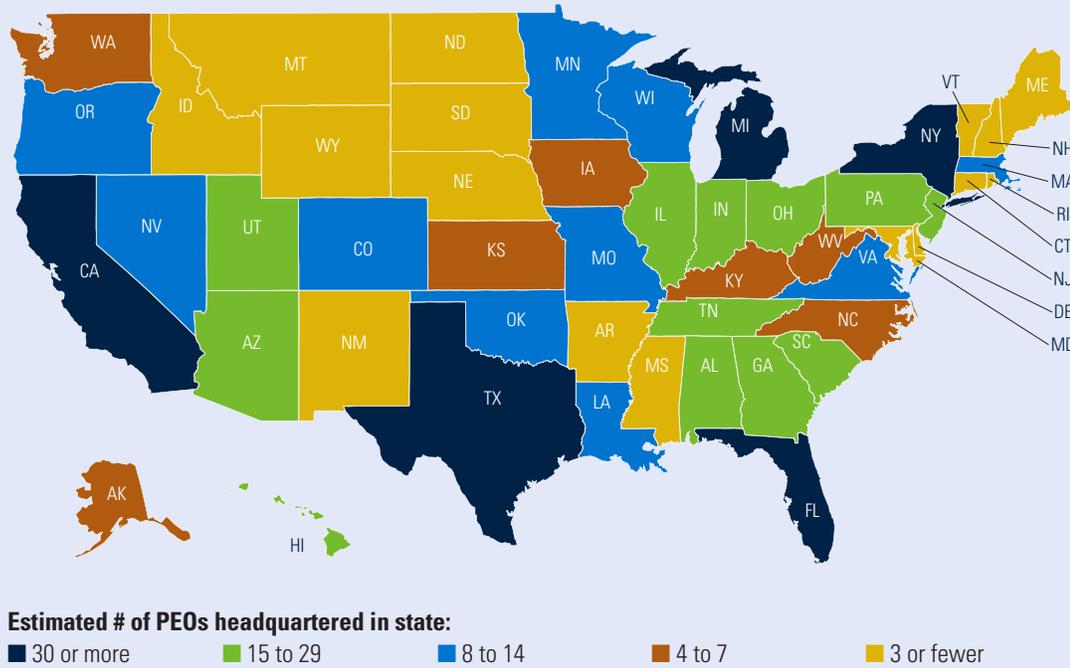
The estimated 780 to 980 PEOs operating in the United States thus touch a substantial number of U.S. employees across some 156,000 to 180,000 different client organizations. And, earlier findings<sup>2</sup> that PEO clients have higher rates of growth, are significantly less likely to go out of business from one year to the next, and have notably lower rates of employee turnover suggest that PEOs are exerting a positive influence on the U.S. economy as a whole, making it possible for many small- and mid-sized enterprises to focus more successfully on their core work, while simultaneously serving as a stabilizing force in employment by reducing unwanted employee turnover among PEO clients.

Notably, PEOs are doing this despite employing only a modest number of internal employees of their own: fewer than 30,000 total internal employees in total. This underscores the tremendous leverage of those internal PEO employees, whose positive effects are felt across an employee base larger than the entire U.S. agricultural sector.

**Table 1. The PEO industry at a glance.**

Total size	\$136 billion to \$156 billion (clients' payrolls plus PEO fees)
Worksite employees	2.7 to 3.4 million
# of PEO clients (organizations)	156,000 to 180,000
Internal employees	21,000 to 27,000
# of PEOs	780 to 980
% Female-owned	15%
% Minority-owned	5%
States with most PEOs	Florida, Texas, California, New York, Michigan

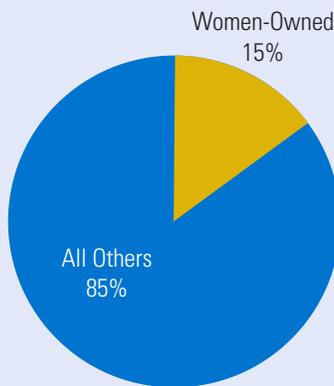
**Figure 1. Estimated state distribution of PEOs (using lower-bound estimates).**



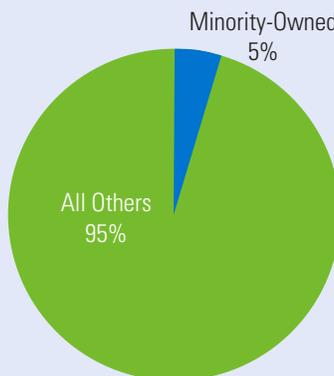
We were also able to use data from the combined databases to estimate the distribution of PEOs (and worksite wages) across states (see Figure 1 and Table 2, page 4), and used Hoovers data to estimate the percentage of women-owned and minority-owned businesses in the PEO industry.

An estimated total of 15 percent of all PEOs are women-owned,<sup>3</sup> while 5 percent are minority-owned<sup>4</sup> (see Figures 2 and 3). Both of these percentages are lower than the percentages of women-owned and minority-owned businesses in the United States as a whole (30 percent for women-owned and 21 percent for minority-owned), suggesting one potential challenge for the PEO industry to address in the years ahead.

**Figure 2. Estimated percentage of women-owned PEOs.**



**Figure 3. Estimated percentage of minority-owned PEOs.**



Overall, the findings point to a PEO industry that is significant in size and scope, distributed broadly across the country, and well-positioned to continue to have a positive economic impact on its clients and, by extension, on the U.S. economy overall.

The remainder of this report contains additional, more technical, details on the analysis, findings, and calculation methodology.

## Detailed Description of Analysis and Findings

### How large is the PEO industry?

We estimate a range for PEO industry size. Our first calculations apply conservative assumptions wherever applicable, and thus represent lower-bound estimates (essentially, the “floor” for each value). Based on the conservative set of assumptions, we calculate the PEO industry in the United States to be at least \$136 billion, as measured in gross revenues (which includes clients’ payrolls as well as the fees charged to clients). Conservative estimates indicate there are at least 780 PEOs that combine to provide services to at least 2.7 million worksite employees in at least 156,000 client organizations, while employing approximately 21,000 internal employees of their own.

A second, less conservative, set of estimates and calculations points to an industry about 15 to 30 percent larger than the more conservative estimates: gross revenues of up to \$156 billion, 3.4 million worksite employees in 180,000 client organizations, and 27,000 internal employees distributed across almost 1,000 PEOs.

Both sets of calculations take into account the most significant source of potential error in the lower-bound calculations: the extent to which some PEOs are missing from both NAPEO membership data and the Hoovers data. As described below, we used available state administrative data for five states to estimate the percentage of PEOs from those states that were not included in the combined NAPEO and Hoovers data. We then applied percentages from the combined set of five states to the national totals (while also assuming that any PEOs missing from both databases would be, on average, smaller than the average PEO).

We are confident that the ranges reported above represent accurate, analytically responsible estimates of the true size of the full PEO industry.

**Table 2. Estimated state distribution of PEOs and worksite wages.<sup>5</sup>**

	Number of PEOs		Total Worksite Wages (\$ Millions)	
	Lower-Bound Estimate*	Higher-Range Estimate*	Lower-Bound Estimate	Higher-Range Estimate
United States	787	975	136,400	155,800
Alabama	17	23	874	1,049
Alaska	6	7	167	208
Arizona	19	25	1,314	1,531
Arkansas	3	4	86	105
California	59	77	29,203	32,817
Colorado	13	17	343	408
Connecticut	4	6	79	89
Delaware	2	3	184	230
District of Columbia	1	1	7	9
Florida	107	107	46,002	51,408
Georgia	27	35	725	860
Hawaii	8	11	1,326	1,593
Idaho	4	6	824	1,023
Illinois	26	34	3,529	4,329
Indiana	18	18	2,006	2,412
Iowa	6	8	629	701
Kansas	6	8	695	855
Kentucky	6	7	128	155
Louisiana	9	12	700	867
Maine	2	3	26	30
Maryland	5	7	360	406
Massachusetts	12	16	1,002	1,208
Michigan	45	59	4,597	5,638
Minnesota	14	18	1,990	2,326
Mississippi	3	4	48	59
Missouri	13	17	514	590
Montana	1	2	434	482
Nebraska	2	3	155	172
Nevada	8	10	419	471
New Hampshire	4	5	139	166
New Jersey	22	29	1,308	1,478
New Mexico	4	5	139	174
New York	47	47	2,657	3,100
North Carolina	7	9	358	447
North Dakota	0	0	-	-
Ohio	26	34	2,487	2,931
Oklahoma	13	13	591	661
Oregon	14	18	453	534
Pennsylvania	23	31	984	1,218
Rhode Island	1	1	7	9
South Carolina	19	25	1,159	1,317
South Dakota	0	0	-	-
Tennessee	28	37	1,947	2,274
Texas	100	100	18,696	20,912
Utah	24	32	2,080	2,363
Vermont	0	0	-	-
Virginia	11	14	304	378
Washington	6	7	3,548	4,428
West Virginia	5	7	177	197
Wisconsin	10	13	1,003	1,187
Wyoming	0	0	-	-

\* Actual data are used (instead of higher and lower estimates) for number of PEOs in states for which we have accurate PEO counts available from state administrative data: Florida, Indiana, New York, Oklahoma, Texas.

## What sources of data were used for the calculations?

To calculate industry size, we relied on information from the following sources:

- Current NAPEO member records, including data on actual worksite wages, worksite employees, and (when available) number of clients;
- NAPEO’s 2014 Financial Ratio & Operating Statistics (FROS) Survey;
- A subscription-based database of information from Hoovers/Dun & Bradstreet containing a variety of information on those companies classified in the database as PEOs; and
- State administrative data from Florida, Indiana, New York, Oklahoma, and Texas<sup>6</sup> to compare comprehensive counts of PEOs in each of those states with the estimates derived from the NAPEO and Hoovers databases.

We sought to combine the best elements of each data source—those elements that were the most accurate, the most reliable, or that were unavailable from any other source. The primary elements of the analysis were thus the following:

- Worksite records from NAPEO’s member files on 259 companies (including summative data from members’ IRS Form 941 records on wages and numbers of worksite employees, as well as data on number of clients when available);<sup>7</sup>
- Extensive financial detail from the FROS survey data, including breakdowns by size group of ratios such as number of worksite employees per internal employee and gross profit as percentage of total revenue;
- Basic company information (including location, size, and ownership) from Hoovers on non-NAPEO members in the PEO industry; and
- Databases of registered PEOs in five selected states to attempt to estimate what percentage of PEOs might be missing from both the NAPEO and Hoovers data.

The key elements of each primary data source are summarized in Table 3.

BLS data was also examined but was ultimately not incorporated into the calculations due to the fact that the BLS definition of the PEO industry appears significantly broader than that used by NAPEO. This is explored in additional detail in the discussion below.

Two factors unique to the PEO industry create particular challenges for purposes of calculating its size and scope:

- Because of the nature of the work done by PEOs, worksite employees are sometimes incorrectly treated as internal employees in public records and databases, with this information then reflected in the Hoovers data. This significantly exaggerates the apparent size of such companies, and means that extensive data cleaning is necessary before available databases such as Hoovers can be usefully applied to industry size calculations.
- Databases such as Hoovers also classify into the PEO industry a number of other types of companies that do not provide the full range of services traditionally associated with PEOs. The most common such companies are temporary staffing companies, but numerous other types (e.g., IT, transportation, home healthcare) are also sometimes incorrectly classified as PEOs. Significant data cleaning is required to eliminate such companies as well.

## How were the industry size estimates calculated?

Our calculation model uses actual data when available (in particular, information from NAPEO members on worksite wages, worksite employees, and number of clients), supplemented by information from Hoovers, FROS, and state administrative records to enable the extension of the calculations to apply more broadly across the full scope of the PEO industry.

First, we therefore started our calculations with the NAPEO data on worksite wages, worksite employees, and number of clients. We then verified and adjusted the existing NAPEO membership data against an aggregated measure of worksite wages from the Employer Services Assurance Corporation (ESAC), a third-party accreditation organization with highly reliable, audited data for a subset of NAPEO members. We also used NAPEO’s numbers to estimate numbers of internal employees (not included in the NAPEO data) for its members. Second, several steps were taken to convert raw Hoovers data into information that could be used to supplement the NAPEO data. These included manually identifying which companies in the Hoovers data should be counted as PEOs and then calculating or verifying worksite wages and worksite employees for those companies. (The Hoovers data included internal employees, but not specific information on worksite employees.) Third, we then summed the totals from Hoovers and NAPEO to generate a single industry estimate, and adjusted that estimate to include PEOs that are not a part of either database.

These calculations included summing up worksite wages, worksite employees, and number of clients<sup>8</sup> for PEO

**Table 3. Description of primary data sources for estimating PEO industry size.**

<b>Data Source</b>	<b>Key Elements Available</b>	<b>Weaknesses</b>
NAPEO membership records	Actual worksite wages, worksite employees, and # of clients (for some members)	Doesn’t include non-members; no data on internal employees
NAPEO Financial Ratio & Operating Statistics (FROS) Survey	Key PEO industry ratios, broken down by company size	Doesn’t include non-members
Hoovers	Identifying full extent of industry, numbers of internal employees, location, female-owned, minority-owned	Identifies many companies as PEOs that don’t meet NAPEO’s definition; treats worksite employees as internal for some companies
State administrative records	Accurate counts of PEOs based in each state	Not available for most states; only provides count of PEOs and not additional information

---

companies for which data were available (NAPEO members), and using known industry ratios to estimate internal employees for those PEOs. For those PEO companies for which worksite data were not available (Hoovers data), we estimated worksite wages and worksite employees based on Hoovers data on internal employees (after correcting for possible errors that counted worksite employees as internal employees for some companies) and we estimated numbers of clients by applying calculated ratios based on FROS data on number of clients for various ranges of company size, using numbers of internal PEO employees to determine the appropriate size range. For those companies in the Hoovers data that were identified by Hoovers as PEOs but were not examined as part of the sample that was manually verified by NAPEO or McBassi, we accounted for the uncertainty by applying to each company a weighting factor (0.45) that exactly matched the percentage of companies that had been correctly identified as PEOs in the manual sample.

We also adjusted for the fact that some existing PEOs are not included in either the Hoovers or NAPEO databases and thus would be left out of the estimates entirely unless the data were adjusted accordingly. We did this by using administrative data from five different states where state registration of PEOs is required. We calculated the total number of PEOs in each state (after excluding out-of-state registrants and inactive corporations) as a percentage of the number included in the combined NAPEO/Hoovers data for that state. We found the states had, on average, 66 percent more PEOs than were included in the NAPEO/Hoovers count. We used actual numbers of PEOs for those five states, and applied that percentage to remaining states to enable the industry estimates as a whole to reflect companies not included in either NAPEO or Hoovers data.

As part of those calculations, we assumed the missing PEOs were smaller than average PEOs (because we had found smaller PEOs were more likely to have been excluded from the Hoovers data) but similar in all other ways (i.e., the same industry ratios on other key measures). We used two different assumptions for average company size (five employees per company and 10 employees per company). These adjustments for missing companies thus increased the overall size of the industry by 10 to 20 percent (when measured by worksite wages and fees), by 11 to 22 percent (when measured by number of worksite employees), and by 3 to 15 percent (when measured by the number of PEO clients).

### **What about the BLS data that reports the PEO industry employs more than 300,000 employees?<sup>9</sup>**

Based on our calculations, complemented by our experience with manually examining company-by-company data in Hoovers (which is typically drawn on publicly available sources), we believe the BLS data applies a much broader definition of PEO than is used by NAPEO (and within the PEO industry itself) and/or may incorrectly include worksite employees for some employers. We are confident that our estimates of 21,000 to 27,000 internal PEO employees are much closer to the true number for the PEO industry as it is defined by NAPEO.

### **How were the state distribution estimates calculated?**

For the lower-range estimate of the number of PEOs in each state, we used our most conservative estimates of the full sample of NAPEO data, all Hoovers companies that were either manually confirmed as PEOs or had a weighting factor applied to account for the likelihood of being PEOs, and the estimate of the number of PEOs missing from the two databases. We used available data on primary state location to count the estimated number of PEOs based in each state and adjusted it for the estimated missing PEOs. For the higher-range estimate, we used our alternative estimates of each of the above elements.

Estimates of state worksite wages were calculated similarly, using actual NAPEO data when available, supplemented with Hoovers companies that were either manually confirmed as PEOs or had a weighting factor applied to account for the likelihood of being PEOs, and adding in estimated worksite wages for missing companies using the smallest size estimates. Worksite wages are calculated based on the state in which a PEO is located, and do not incorporate any information on clients' locations (in other words, if a PEO in California has clients in other states, all worksite wages are assigned to California for purposes of these estimates).

### **How were the women-owned and minority-owned estimates calculated?**

Using the full sample of Hoovers companies that were either manually confirmed as PEOs or had a weighting factor applied to account for the likelihood of being PEOs, we calculated the percentage of those companies that Hoovers had coded as women-owned or minority-owned.

- 1 U.S. Bureau of Labor Statistics, "Employment by major industry sector," [www.bls.gov/emp/ep\\_table\\_201.htm](http://www.bls.gov/emp/ep_table_201.htm), accessed June 15, 2015.
- 2 Laurie Bassi and Dan McMurrer, "Professional Employer Organizations: Fueling Small Business Growth," NAPEO White Paper, September 2013, and Bassi and McMurrer, "Professional Employer Organizations: Keeping Turnover Low and Survival High," NAPEO White Paper, September 2014, [www.napeo.org/docs/2014\\_wp\\_peos-business-survival-rates.pdf](http://www.napeo.org/docs/2014_wp_peos-business-survival-rates.pdf).
- 3 "The 2014 State of Women-Owned Businesses Report: A Summary of Important Trends 1997-2014," [www.womenable.com/content/userfiles/2014\\_State\\_of\\_Women-owned\\_Businesses\\_public.pdf](http://www.womenable.com/content/userfiles/2014_State_of_Women-owned_Businesses_public.pdf).
- 4 U.S. Census Bureau, news release on minority-owned firms, June 7, 2011, [https://www.census.gov/newsroom/releases/archives/business\\_ownership/cb11-103.html](https://www.census.gov/newsroom/releases/archives/business_ownership/cb11-103.html).
- 5 Estimated worksite wages assign all wages by the state of the PEO, not the client.
- 6 These five states were used because each requires state registration of PEOs, makes lists of registered PEOs available to the public in an accessible format, and includes sufficient information to identify the state in which each PEO is based, as well as whether the PEO is currently active.
- 7 NAPEO's (unaudited, membership-based) data was compared to similar data held by the Employer Services Assurance Corporation (ESAC), which provides accreditation for PEOs. As part of its accreditation process, ESAC has audited worksite wage data for a subset of NAPEO members. Hence, the audited ESAC data was used to adjust the overall NAPEO worksite wages data in a way that ensured the confidentiality of both NAPEO's and ESAC's member-level data. A more detailed discussion of the process that was used can be found in the Technical Notes section at the end of this paper.

- 8 We also accounted for the possibility that some NAPEO members may have reported only partial numbers of clients by applying estimated clients to those members instead. We found this alternative calculation had little effect on the overall estimate (changing it by only about 3 percent).
- 9 U.S. Bureau of Labor Statistics, Current Employment Statistics data for series ID CEU6056133001, Professional employer organizations, <http://beta.bls.gov/dataViewer/view/timeseries/CEU6056133001>. Accessed June 15, 2015.

## Technical Notes

### Manual Review and Data Cleaning

Before being able to use the Hoovers data in calculations, we first conducted extensive manual reviews of those 759 company locations identified by Hoovers in April 2015 as having their primary industry listed in the database as “Professional Employer Organizations.” To avoid double counting, we first identified and eliminated those companies in the Hoovers database that also appeared among the member companies for which NAPEO provided data for this analysis. For the remaining 639 company locations (non-NAPEO members) in the Hoovers database, we then sought to eliminate all companies that had duplicate records in the Hoovers file (or records that could otherwise result in additional double-counting). Most often, these were branches of companies for which the company headquarters was included in the database as well. A total of 93 duplicates were removed.

A large sample (238 companies) of the remaining 546 companies was manually reviewed by NAPEO and McBassi to determine whether they should be counted as PEOs based on NAPEO’s definition of a PEO. This sample included all of the largest companies in the data file (those with 125 or more employees listed) as well as all remaining companies with three or more employees that had company websites listed. Overall, we determined that 45 percent of all companies reviewed qualified as PEOs. Companies that were determined to be PEOs were fully counted in the calculations. Companies that were determined definitively not to be PEOs were eliminated from the database. Those companies that were not reviewed were partially weighted (at 0.45, reflecting the 45 percent PEO rate in the Hoovers data overall) for the remainder of the calculations.

We also attempted to verify Hoovers’ reported employee size data for all companies with 100 employees or more, using company websites and other available information to determine whether worksite employees had been incorrectly included in the number of employees reported for a company. In cases in which the reported number was deemed to have included worksite employees as well, the FROS ratio of worksite employees to internal employees was applied to the existing number of employees in order to generate a more accurate estimate of the number of internal employees for that company.

### Data Verification

Whenever possible, we sought to compare available database information with external sources of information that would help to confirm its validity. One important source of third-party verification was ESAC, which provides accreditation for PEOs and thus has highly reliable, audited data on worksite wages as well as data on a number of PEO client organizations. ESAC members represent a subset of NAPEO

members. ESAC provided a single sum of aggregated worksite wages for its members that are also NAPEO members. Comparison of this aggregate number with the total worksite wages from the NAPEO data for those same PEOs revealed that actual, verified worksite wages are 12.5 percent higher than the unaudited membership-based data NAPEO has available.

We thus applied a 12.5 percent adjustment to worksite wage data in our database for NAPEO members. This adjustment could be applied in multiple ways. We examined the consequences of three different assumptions:

- The underestimate is fully a result of lower reported worksite wages;
- The underestimate is fully a result of lower reported worksite employees; and
- The underestimate reflects both factors (lower reported worksite wages and lower reported worksite employees) equally.

In all cases, the numbers used resulted in a final 12.5 percent impact on worksite wages for NAPEO members. As noted below, we used the lowest results for various measures in the lower-bound estimates, and the highest results in the higher-range estimates.

We also communicated with PrismHR, which provides software services to PEOs, regarding its separate calculations of the rough size of the PEO industry. We determined that, despite using entirely different sources of data, our calculations and the calculations from PrismHR resulted in final estimates that are quite consistent with one another.

### Calculations: Lower-Bound Equations

Total size of the industry (worksite wages + PEO fees) = {Conservative adjusted worksite wages (NAPEO members) + Estimated worksite wages [Hoovers companies (confirmed as PEOs or with weighting factor applied), based on internal employees \* FROS worksite/internal employee ratio \* average wages per worksite employee from NAPEO data] + [Estimated # “missing PEOs” (based on state data calculations) \* 5 employees each \* FROS worksite/internal employee ratio \* average wages per worksite employee from NAPEO data]} \* 1.0306 (from FROS, to account for gross profits as a percentage of total revenues)

Worksite employees = Worksite employees (NAPEO members) + Estimated worksite employees [Hoovers companies (confirmed as PEOs or with weighting factor applied), based on internal employees \* FROS worksite/internal employee ratio] + Estimated # “missing PEOs” (based on state data calculations) \* 5 employees each \* FROS worksite/internal employee ratio

Internal employees = Estimated internal employees (NAPEO members, based on worksite employees divided by FROS worksite/internal employee ratio) +

internal employees [Hoovers companies (confirmed as PEOs or with weighting factor applied), after adjusting to correct for any for which worksite employees were incorrectly included in internal employee count] + Estimated “missing PEOs” (based on state data calculations) \* 5 employees each

Number of clients = Number of clients for NAPEO members reporting number of clients (reflecting ESAC total for ESAC members) + estimated number of clients for NAPEO members that did not directly report number of clients to NAPEO (applying FROS-based calculation of clients per PEO using ranges of size based on numbers of internal employees) + estimated number of clients for Hoovers companies (confirmed as PEOs or with weighting factor applied) based on internal employees \* FROS-based calculation of clients per PEO using ranges of size based on numbers of internal employees + [Estimated # “missing PEOs” (based on state data calculations) \* 5 employees each \* FROS client/internal employee ratio for that size group]

### Calculations: Higher-Range Equations

The higher ranges were calculated just as above, with two differences. First, we assumed any PEOs missing from the NAPEO/Hoovers databases had 10 employees each (compared to the five assumed in the lower-bound estimates), and adjusted all calculations accordingly (including now applying the appropriate FROS-based size group-based ratio for PEOs with 10 employees). Second, as noted above, when we determined that the NAPEO worksite wage estimates were 12 percent lower than actual worksite wages for a sample of NAPEO members, there were multiple ways to apply the 12 percent adjustment (depending on what percentage of the underestimate was attributable to reporting of worksite wages versus reporting of number of worksite employees). The applications that resulted in the smallest estimates for each measure were used in the lower-bound estimates, while the applications that resulted in the largest estimates for each measure were applied in the higher-range estimates.

### Additional Calculation Notes

We assumed that, for any company for which Hoovers mixed worksite employees with internal employees, it included all worksite employees handled by that company and that the internal number should therefore be calculated by using the full FROS ratio of worksite employees to internal employees. If only a portion of a company’s worksite employees (rather than all the company’s worksite employees) were included in some cases, our adjustments would have the effect of underestimating the size of any such firms.

For all PEOs included in both the NAPEO and Hoovers databases, we used NAPEO data as the foundation for that company’s data whenever it was available (state location, worksite wages, etc.).

---

## About McBassi & Company

McBassi is an independent analytics and research firm that helps clients create consistently profitable and enlightened workplaces. McBassi uses the language and tools of business—metrics and analysis—to build successful organizations by optimizing the power of their people. McBassi's principals (Dr. Laurie Bassi and Dan McMurrer) are co-authors of "Good Company: Business Success in the Worthiness Era" (winner of the 2012 Nautilus Gold Award for Business/Leadership) and the "HR Analytics Handbook."

## About the Authors

Dr. Laurie Bassi is CEO of McBassi and a global leader in the field of applying analytics in the world of HR. Laurie is the author of more than 90 published papers and books and was previously a tenured professor of economics and public policy at Georgetown University. She holds a Ph.D. in economics from Princeton University.

Dan McMurrer is the chief analyst at McBassi. An analytics expert, Dan focuses on researching the relationship between organizations' work and learning environments and their business results. He holds an M.P.P. in public policy from Georgetown University.



### **National Association of Professional Employer Organizations**

707 North Saint Asaph Street

Alexandria, VA 22314

703/836-0466

[www.napeo.org](http://www.napeo.org)