2016 State Salary Survey Methodologies Overview

This methodology document is intended to be used in conjunction with the executive summary or State Salary Survey, April 2016 PowerPoint presentation.

State governments methodology

Inclusion methodology

- All states that fall within the standard deviation of the identified economic criteria, plus
- State governments that were invited to the 2014 State Salary Survey.

Economic criteria

- 1. 2014 Population from Census Bureau midyear population estimate via Bureau of Economic Analysis (BEA) SA1 tables;
- 2. 2013 State Government Employment from BEA SA25N tables;
- 3. 2013 Regional Price Parities* from BEA Regional Price Parities all items index.

Geographic adjustments

State government data used in the survey was geographically adjusted using the 2013 Regional Price Parities*.

*Regional Price Parities (RPPs) measure geographic differences in the price levels of consumption goods and services relative to the national average. RPPs are expressed as a percentage of the overall national price level for each year, which is equal to 100.

The RPPs are calculated using price quotes for a wide array of items from the Consumer Price Index (CPI), which are aggregated into broader expenditure categories (such as food, transportation, or education)¹. Data on rents are obtained separately from the Census Bureau's American Community Survey (ACS). The expenditure weights for each category are constructed using CPI expenditure weights, BEA's Personal Consumption Expenditures, and ACS rents expenditures.²

The broader categories and the data on rents are combined with the expenditure weights using a multilateral aggregation method that expresses a region's price level relative to the US.³

For example, if the RPP for area A is 120 and for area B is 90, then on average, prices are 20 percent higher and 10 percent lower than the US average for A and B, respectively. If the Personal Income for area A is \$12,000 and for area B is \$9,000, then RPP-adjusted incomes are \$10,000 (\$12,000/1.20) and

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¹ The BEA Regional Price Parity statistics are based in part on restricted access Consumer Price Index data from the Bureau of Labor Statistics (BLS). The BEA statistics expressed herein are products of BEA and not BLS.

² To estimate RPPs, CPI price quotes are quality adjusted and pooled over 5 years. The ACS rents are also quality adjusted and are either annual for states or pooled over 3 years for metropolitan areas. The expenditure weights are specific to each year.

³ The multilateral system that is used is the Geary additive method. Any region or combination of regions may be used as the base or reference region without loss of consistency.

\$10,000 (\$9,000/0.90), respectively. In other words, the purchasing power of the two incomes is equivalent when adjusted by their respective RPPs.

BEA site reference as contained in the 2016 state salary survey participant report: https://www.bea.gov/newsreleases/regional/rpp/rpp_newsrelease.htm

Benchmark result calculations

Average salary minimum

Sum of all reported salary minimum rates/total number of data points

Average salary maximum

Sum of all reported salary maximum rates/total number of data points

Salary midpoint for each respondent

(Salary range minimum + salary range maximum)/2

Average salary midpoint

Sum of all salary midpoints/total number of data points

Additional survey sources

Due to declining participation rates, the salary survey was supplemented with Washington state market data from the following trusted sources: (1) Economic Research Institute (ERI) 2015 Salary Assessor, (2) Towers Watson Data Services 2015 Compensation Surveys, and (3) Milliman 2015 Healthcare Core Salary Survey.

Benchmark results

Benchmark results will only be published when there are five or more responses including participant data and published data. Federal Safe Harbor Guidelines (Antitrust Safety Zone) are followed for publishing participant data. Therefore, it is possible that the only response published will be for "All Responses."

Definitions, symbols and acronyms

Union = Responses related to employees that are represented by a labor organization

Non-Rep = Responses related to employees that are not represented by a labor organization

OT Eligible = Eligible for overtime compensation under the Fair Labor Standards Act

OT Exempt = Exempt from overtime compensation under the Fair Labor Standards Act

= Number of survey responses

% = Percent of survey responses

Failed benchmarks

Application of survey data for in-state private, in-state public and state governments is consistent with the vendor participant report. Market data will not be reported by market industry or as a combined result where there are less than a total of five participants with matches.

Midpoint to midpoint analysis is used for determining the percentage to reach the combined market

- The combined market is private and public sector in-state entities and other state governments.
- The survey average midpoint is derived from the average minimum and average maximum for participants by job, excluding Washington state data. The state's midpoint is derived from the minimum and maximum with the maximum being step L for standard progression salary schedules and step U for nurse's salary schedules.
- This methodology is selected (1) in order to allow consideration of both the minimum and maximum for all sectors and (2) to factor in that the majority of participants are within public sector.

Jobs classifications excluded from the 2016 State Salary Survey

- Represented University of Washington (UW) classifications not used by general government or other higher education institutions and independently surveyed by UW
- Information technology (IT) classifications included in the enterprise-wide IT classification study
- Apprentice jobs that are paid a percent of the journey level job
- Certificated teacher jobs that are subject to any adjustment made to the Vancouver School District No. 37 professional salary schedule are excluded from the 2016 state salary survey

Survey methodology for Physician benchmark

Due to difficulties effectively recruiting physicians, Physicians 2 and 3 were surveyed in order to provide salary data at the management and non-management levels.