Methodology
The Salary Assessor® & Survey

ERI Economic Research Institute was founded over 30 years ago to provide compensation applications for private and public organizations. ERI's applications are available to management, analysts and consultants and are now widely used by client organizations. Subscribers include corporate compensation, relocation, human resources, and other professionals, as well as independent consultants and counselors, and US and Canadian public sector administrators (including military, law enforcement, city/county, state/provincial, and federal government pay administrators).

ERI compiles the most robust salary, cost-of-living, and executive compensation survey data available, with current market data for more than 1,000 industry sectors. The majority of the Fortune 500 and thousands of other small and medium sized organizations rely on ERI data and analytics for compensation and salary planning, relocations, disability determinations, board presentations, and setting branch office salary structures in the United States, Canada, and worldwide.

ERI is a leader in the collection and analysis of compensation, occupation, and cost-of-living data. All data are employer-provided and come from a variety of sources. Survey data are collected through internally conducted salary surveys and the purchase of salary surveys from survey vendors. Additional data are gathered through the digitization of Proxy and 10-K data and Freedom of Information Requests in the US. Compensation data are compiled in terms of mean and median salaries for jobs of similar duties, responsibilities, skills, and functions through an extensive job matching process. ERI produces surveys and application analyses by which managers, advisors, and Boards of Directors may make recommendations and/or decisions. ERI does not provide fee-for-service consulting; our sole focus is providing valid and reliable information to our subscribers.

Overview
The methodology for the **Salary Assessor & Survey** application and databases, as found below, is further defined in the help menus. All figures are reported in local currencies.

The **Salary Assessor** (**SA**) application and databases provide detailed pay analysis for the US, Canada, UK, Europe, and other areas around the globe. These data help users to market price jobs and assess an organization's wage/salary competitiveness and internal equity. The **Salary Assessor & Survey** application database assists with precise up-to-date evaluations of market pay.

ERI's data are primarily derived from in-house salary surveys. Data are also purchased from other salary survey vendors, extracted from publicly filed tax returns leased from other survey vendors or gained from Freedom of Information Act (FOIA) requests. Data that are collected from third-party sources are then matched to ERI's internal job descriptions. First, multiple independent raters go through the job descriptions in the surveys and match the jobs in the surveys to ERI's internal job descriptions. Factors such as level, education, industry and 98 additional hard metrics are considered for each job.

Job data are matched and reported according to the position description. Data are adjusted for geographic area, industry (matched to SIC or NACE), organization size (revenue, assets, fiscal year budget, or number of employees), and salary planning date (data is trended forwards and backwards through time series analysis).

The **Salary Assessor & Survey** application database does not reproduce data reported by any copyrighted, privately conducted survey. This would be copyright infringement and would undermine the sales of individual surveys. Many surveys are produced by small proprietors struggling to maintain quality control in an industry dominated by large consulting firms and federal government surveys. These survey publishers need both your and our support. **ERI** performs compilation and analysis of these data; that is, the examination, projection and refinement of combined survey data based upon **ERI**'s research methods. Jobs found within the **Salary Assessor & Survey** application database are those for which multiple salary survey sources are available and for which reported data has been condensed, modified, and compiled.

Survey Means and Medians

Mean
The salary calculations available from the **Salary Assessor & Survey** application and databases are the

result of salary surveys collected and analyzed by **ERI. ERI** has over 30 years of experience in this field. National average data is carefully constructed. It is noted that individual salary surveys may or may not represent a true weighted average or mean. However, **ERI**'s overall results drawn from multiple salary surveys should represent more accurately a true weighted average or mean. **ERI** defines mean as the weighted average salary resulting from **ERI**'s analysis of all survey data available for the particular job, industry, company size, and geographic area. Since salary surveys have different effective dates, **ERI** selects the first day of the data update, released twice each quarter, as a common benchmark and updates all salary survey data to that date, so that "apples are compared to apples."

Median
ERI defines the median as the value at which half of all incumbents earn more and half of all incumbents earn less than the calculated salary. The median value tends to be less influenced by extremes than a survey mean. As wage and salary distributions are skewed for most jobs, the mean generally falls close to, but slightly higher than, the median. For this reason, some view a median value as a better target for market pricing and competitive pay. Based upon subscriber requests, **ERI** reports both survey mean and median wages/salaries and defaults initial analyses to the survey mean.

Salaries by Experience/Size Tables
The Salaries by Experience/Size table provides detailed pay range data for a single job, matched by Survey Description. Subscribers may view pay data by percentile, median, and mean. These jobs may be cross referenced by years of experience for non-executive jobs and by revenue/size for executive jobs. Pay may be further refined by subscriber specification of geographic area, industry, organization size, and salary planning date, as well as adjustments for education, skills, certifications, and shift work.

Base Salaries
The Base Salaries table and graph illustrate how a salary continuously changes by organization size and years of experience.

Total Cash
The Total Cash table and graph illustrate how total cash compensation (base salary + incentive) continuously changes as the organization size and years of experience change. Please note: Incentive data represent an average of all employees in the job, including organization data where no incentive or cash bonus was paid.

Incentive
The Incentive table and graph illustrate average incentives paid according to organization size and years of experience. This average includes all survey data where no incentive or cash bonus is reported paid. It therefore represents an average of all employees in the job, rather than the norms for organizations that pay incentives.

Salaries by Level Table
The **Salary Assessor**'s Salaries by Level tab is based on matching ERI Survey Descriptions with job/survey descriptions of available salary survey sources for relevant levels. (Please also see the Definition of Levels topic in **Salary Assessor** help. These definitions are printed at the bottom of Salaries by Level reports exported to PDF or Excel.)

Benchmark List Table
To assist with planning or auditing pay for up to 3,000 jobs in one location, the Benchmark List table enables users to enter and view the salaries for multiple jobs in one location. This allows users to view a list of benchmark or key jobs with ERI calculated salaries and compare current pay practices to local market pricing calculations. In addition, the Benchmark List allows users to view selected jobs within a selected industry. These are jobs that have been found to exist with each industry and may assist users in creating benchmark lists of jobs within the organization.

Geographic List Table
To assist with planning or auditing pay for one job in multiple (branch) locations, the multiple locations Geographic List table enables you to enter and view salaries for one job in up to 3,000 areas. On one table (or one printout report), you may view a listing of branch offices with **ERI** calculated salaries and compare your current pay practice to local market pricing.

Statistical Methodology
The **Salary Assessor** and **Executive Compensation Assessor & Survey** utilize polynomial regression analyses techniques.

Geography and Industry
ERI's analysis of salary survey data for unique locations and industries is dependent on the occupation being analyzed. This is because industry and location have different amounts of influence over an occupation's salary depending on the occupation. These differences generally exist between executive and non-executive occupations.

Non-executive occupations are frequently influenced by geography more than industry. This is because organizations will frequently have to compete for labor across industries. An accountant may search for work in multiple industries as their skills are transferable. ERI is able to provide local data for these occupations by expanding analyses to other industries that would be competing for the same labor. The analyses capture any differences that may exist between the industries by examining the differences between those industries within other local labor markets.

Executive occupations are frequently influenced by industry more than geography. This is because competition for executive labor frequently exists on a national level and also because industry knowledge is more frequently critical to success in these occupations. ERI accurately captures the market rate for these occupations by expanding the analysis to other comparable organizations within the same industry. Geographic differences are captured by examining relative value patterns within an industry to other, related industries.

These methods provide a clear picture of how an occupation exists within a labor market, while accounting for differences which may exist between the industries. Over the years, the accuracy of these methods has been found to be quite accurate. The accuracy has been demonstrated by later salary surveys which have included the occupation, industry, and location in question and from company/customer feedback.

User-Defined Averages
Suburbs and geographic areas may be grouped as *User-Defined Averages* and reflect defined labor market pools or geographic zones. A labor market area by radius can also be defined.

Canada Average vs. United States Average
ERI profiles costs and salaries for Canadian job incumbents, using Canadian market prices for overall average spending patterns (home size, goods and services spending patterns), and using Canadian effective income tax estimates, which vary significantly from the US. The Canadian Benchmark earning and spending levels are not simply converted US dollars benchmarks. Because consumer inflation rates, currency exchange rates, and local pay rates are not statistically related, all Canadian costs and salaries are stored in **ERI** databases in Canadian dollars. The effective exchange rate for the current release will change in every data release (updated twice each quarter) and influence the appearance of international comparisons from release to release (in addition to the influence of the inclusion of new survey data, trending to a new effective date for the current release, and new United States Average to Canada Average relationships).

Because Canadian provinces and industries value jobs differently than their US counterparts, and because expenditure patterns and costs also vary from US patterns, **ERI** has added numerous Canadian sources for both wage/salary and cost-of-living calculations. The data for Canadian cities are those costs and wage/salary levels that an employee could assume to face either after moving within Canada or after moving from the United States (and becoming a temporary Canadian resident).

ERI Statement as to the Relevance and Reliability of Data
Relevance is totally determinable by the circumstances and situation presented. **ERI** enables subscribers to conduct analyses and create presentations of salary, executive compensation, benefit, and cost of living survey data. Reliability is described in a non-exclusive summary:

Subject to Publication and Peer Review

ERI's peers are its competitors, those firms that also provide data analyses to their clients. Unlike **ERI**, which solicits an annual subscription, most compensation and benefit consulting firms charge an hourly rate for their research services. Suffice it to say, all the major consulting firms have purchased subscriptions so that their consultants could utilize **ERI** analyses. **ERI** data are used by these firms in their consulting with their clients. **ERI** data and analyzes are under constant review and critique by its competitors. **ERI**, unlike these firms, provides no fee-for-service/time consulting.

Known or Potential Rate of Error

Each **Assessor Series** application database illustrates via a Variance Statistics link, the beginning of a statistical overview of **ERI** data. Statistics are reported as derived from just one survey source for all salary and compensation presentations (so that copyright restrictions are not violated). **ERI** accumulates many survey sources to compile its analyses. Hence the data illustrated may be, in **ERI's** estimate, considered to be the highest possible standard error that might exist with each analysis. **Assessor Series** application database results are, by logic, more robust than the standard error displayed and reported.

General Level of Acceptance within the Discipline's Community

Thousands of organizations subscribe each year to ERI's analyses. Special extracts of ERI databases are purchased annually by large organizations. ERI exhibits at major tradeshows (e.g., WaW and SHRM). ERI data is used as source data by major publications and job boards. WorldatWork, NASBA, SHRM, and HRCI accept ERI Distance Learning Center courses for professional maintenance and recertification continuing education credit. Major US employers rely upon ERI data as cited in corporate proxy filings (see http://www.erieri.com/ExecutiveCompensationProxyData).

Industry Codes

ERI utilizes an enhanced Standard Industrial Classification (eSIC) code based on the U.S. SIC structure. These codes are then cross-walked to the North American Industrial Classification System (NAICS) and the Securities & Exchange Commission's Standard Industry Classification (usSEC).

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