



ERI UPDATE

NOTES TO SUBSCRIBERS

Medians vs. Averages

Over the years, ERI has received subscriber requests to report *mean* rather than *median* wage & salary levels. Historically, ERI has chosen to report medians, which are statistically less influenced by extremes than averages. (Wage and salary distributions are *skewed* for most positions with averages almost always being higher than medians.)

In calling subscribers in a February quality control survey, we discovered a new concern regarding medians. To paraphrase:

The Employment and Training Administration (ETA) of the U.S. Department of Labor sponsored a National Prevailing Wage Conference in Reno, NV from July 17-21, 1995 for the fifty-some State Employment Service Agencies which determine prevailing wages for certification. (Before the conference, there were probably fifty-some methods to make those determinations.)

Each participant received a large ring binder full of printed materials. These materials covered the subject matter... In the last sentence of the last paragraph of page III-23, the U.S. DOL forbids the use of wage surveys with "...measures of central tendency other than the arithmetic mean, such as the median and mode..." This ban was reiterated on page VII-4 in

size 24 type.

(Fascinating! Strange. Why?)

ERI's followup research found this DOL written statement:

"The use of published surveys in making wage determinations is encouraged. In using published wage surveys, measures of central tendency other than the arithmetic mean, such as the median and mode, cannot be used as the bases for a prevailing wage determination."

It appears that ERI must alter its reporting of medians. Too many public sector subscribers: Federal Contractors, cities, agencies, etc. are affected. ERI is now considering limiting its methodology to the use of **weighted averages** (rather than medians). As we make this change, you may expect:

- 1) greater variability between quarterly releases of the **Salary Assessor** (most positions' wages/salaries should increase; very few will decrease);
- 2) greater variability between quarterly releases of the **Geographic Assessor** (changes may "go either way");
- 3) a midyear release of a **7/1 Consultants' Assessor** (to reflect changes in executive pay data);
- 4) **Geographic Reference** salaries should also increase; but
- 5) the **Relocation Assessor**, of course, would be unaffected.

Subscriber comments are welcomed.

1996 Conventions

We will be exhibiting our research at two conferences in 1996. If you attend, please plan to drop by our booth:

May 5 - 7 Las Vegas (*ERC National Convention*)

May 14 - 17 Las Vegas (*ACA National Conference*)

ERI's Canadian Office

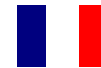
ERI now has researchers living in three countries and six states & provinces and finds that available technology has rendered our multi-country offices unnecessary. Most ERI researchers telecommute from home offices now that **Assessor Series**® data and international communications are available via the new MSN™ Passport Forums and Internet.



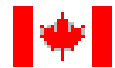
Germany



United Kingdom



France



Canada



Sweden



Australia



Spain

Our Canadian Customer Service office no longer appears to be necessary and although Vancouver, B.C. has been voted the "*most beautiful city*" in North America (in an informal ERI research staff poll), we will soon be closing our Canadian office. Customer service to all countries will be administered by our Redmond, Washington office.

New Subscribers

New subscribers may not have read the notes, hints, and ideas published in past Updates (dating back seven years). This Update contains short extracts from several newsletters that should assist new users of ERI research data/software (see the next pages).

If you would like to review the full prose content of newsletters dating back to 1993, you may access annual collections via The Microsoft Network under the ERI Product Download icon.



Calendar Year
Assessor
Series
Subscriptions



Appraisal
Reports -
Geographic
and Industry



ERI
UPDATES
Annual
Collections

The latest ERI Update (April 1996) is also posted to ERI's main directory on the ERI MSN™ forum. This, the most recent newsletter, is, of course, free.

Area Differences

In 1995 ERI found forty-three states further away from National Average Salaries as compared to 1988. Forty-seven of fifty-one (including D.C.) vary more since 1976, explaining, in part, why more and more firms are using multiple (geographic) pay structures in the 1990s.

Conversions

In Screen 7 of **ERIGA** and Screen 4 of **ERISA** you may wish to try the [™] key. It provides a menu of values other than %s. Salary calculations are based upon 2080 hours and/or 52.14 weeks per year.

National Norms

The Geographic Reference (up to 4/1/96) has reported average median salaries for eighty-eight benchmark jobs. ERI methodology retains Canadian data in separate databases and analyzes Canadian data independently from U.S. data.

Canadian differentials are based on local rates regressed against Canadian National Norms. U.S. & Canadian national norms can be found in the **Consultants'** and **Salary Assessors** and Reference (p. 299).

FAVR

The **Relocation Assessor** produces low cost calculations for Fixed and Variable Rate Auto Allowances (where U.S. corporations may pay more than \$.31/mile in high cost areas for auto reimbursements without triggering federal & state tax withholding).

Virus Checking

All **Assessor** software check the "boot" directory and memory for certain viruses and flag (message) any problems, using ERI's own virus checking code (built into all **Assessor Series**[®] programs). ERI produces all of our software datasets in-house and we check all diskettes before their release, using multiple virus-checking software including: Microsoft Anti-Virus[™], Norton AntiVirus[®], McAfee VirusScan[®], and RG Software's Vi-Spy[®]

COL Assumptions

"Comparable Rental - Apartment" - Rental size assumptions vary by the earnings level inputted by a subscriber. Defaults assume the temporary long-term residence of a professional/manager in a low crime neighborhood. For example, at the \$ 24,000 earnings level, a 2 bedroom, 1 bath, 900 square foot/80 square meter apartment in a low crime neighborhood is assumed.

Geographic

Assessor

In constructing Screen 7 rankings using a Base City other than National Average, we recommend you consider that Base City's overall variance from the norm (say 5 % below) using a "zz" city (in this case zz05-). Rename this structure by averaging zz04- and zz06- if you wish.

Salary Trends

ERI is keeping careful watch on salary increase practices. We forecast that most U.S. industries will ~ 4.0 % increases (basically an unchanged amount for the past 4 years). One might also assume ~ 2.4 % increases for Canada. "Gainsharing" (where salary increases are replaced by group profit/revenue sharing) now make most salary increase surveys suspect.

COL Structures

Random telephone calls by the Institute's Director in January found that 2% of our subscribers report that they pay "the same for all jobs nationally, but vary levels by cost of living." (These subscribers were all national engineering firms.) All other surveyed subscribers stated they ignored COL and concentrated on the demand and supply/market pricing for labor. The most common application of geographic pay differentials is the use of 5 or 6 geographic structures ("pay zones") with 5 % differentials, disappearing at the executive level.

DOL'S Glass

Ceiling Audits

Secretary of Labor, Elizabeth Dole's legacy is being pursued by the OFCCP in "glass ceiling" audits for Federal Contractors. Interestingly, these reviews are being split, first addressing compensation issues (while bypassing job evaluation and focusing on the historical setting of beginning salaries and increase methodology).

Advancement issues are then secondly addressed. This strategy allows initial, easily supported quantitative claims, cost effectively funding the more subjective promotion challenges.

Data Input

ERI does not copy other surveys' data into its databases. Consensus survey results are converted into polynomial regression equations of the form:

$$y = (a + bx + c x^2) * (1.0 +/- ~2se)$$

where x = size or years
 l = log or dimension
 a = intercept
 b & c = coefficients
 se = standard error

Two or more surveys are required before any position is included in the **Consultants'** and **Salary Assessors**.

International

Assessor

The **International Assessor** is a subprogram of the **Relocation Assessor** (a:> erira i). The separate executable command brings up data otherwise "hidden"; reporting cost-of-living for "renters-only" in an additional 1,400+ international locations.

Position

Descriptions

Full position descriptions may be accessed via the **Salary Assessor** if the **Consultants' Assessor** is installed to your PC.

Surveys

2,887 individual salary surveys and sources were used in compiling the 1996 Geographic Reference and form the foundation for **Assessor** wage/salary analyses. Additional Survey Source titles and publishers by state or province may be accessed from the **Geographic** or **Salary Assessor** with | S. A hardcopy bibliography of additional survey sources is found in ERI's **Assessor Series® User's Guide** manual.

Overview

For those unfamiliar with the **Geographic Assessor**, since the introduction of the XT (in 1984, less than 12 years ago), it has become possible to conduct inexpensive salary surveys. Consulting firms, government agencies, and professional groups now produce over 3,000 local area salary surveys for various areas within North America. ERI collects these surveys and provides consensus area differential equations based on three regression analyses (for positions ranging between minimum wage & \$ 24,000, \$ 24,001 - \$ 48,000, and \$ 48,001 & above.) As an example of what may portend for the future, we received an Idaho Occupational Wage & Employment Survey with 764 occupations (covering 54.7 % of all that State's private sector employees.) We see the day when every job in the U.S. may be surveyed.

For those unfamiliar with the **Relocation Assessor**, the late 1980s held another technological evolution: cost of living data became available via "downloading" major grocery & drug store chains' prices (consumables), gasoline (transportation), medical costs (services), taxes (ERI created), and home sales (TRW, Coldwell Banker, Dataquick, National & State Realty Boards, Harmon, Royal LePage, Prudential, etc. for housing). Our subscribers and published reports tell us that **ERIRA's** analysis results are more accurate than other firms' far more expensive reports.

Competitive Assessments

Benchmark job title listings and competitive salary estimates for any industry (a bank in Omaha, a hospital in Troy, a wholesaler in Winnipeg, a CPA firm in Atlanta - 2,018 SIC's in 298 geographic areas) may be viewed using the **Salary Assessor** Screen 4. You may enter the SIC or PBA code, location, organization size, and add titles to, or remove from, the **ERISA** default listing.

To Those Interested

If "UP"= used & predictive;
 "NP" = neither used nor predictive;
 "PN" = predictive but not used; and
 you've read **ERIGA's** documentation concerning those smaller cities of the **Geographic Assessor's** 4,000+ that have never, ever had wages surveyed, the following ERI model may be of interest (to the statistically minded):

% Farming (UP), % FIRE (UP), % Government (UP), # Days Below Freezing (UP), # Violent Crimes/1,000 (UP), % Unemployment (UP), % College Grads (UP), Rental & Residence (UP), Tax Rate @ \$ 72,000 (UP), % Unionization (UP), Major Employers (UP), Nearby Areas' Salaries (UP), Ethnic Status (PN), % Age over 40 (PN), % Male (PN), % Married (PN), Snowfall (NP), Coastal Distance (NP), Rainfall (NP), Sales Tax (NP), Per Diems (PN), COL (PN).

Research Talks

The Institute donates speaker's time (and ERI pays travel expenses) when ERI is asked to provide a talk related to compensation & benefits research, salary planning, etc. We've spoken/attended compensation meetings in:

Atlanta	Chicago	Columbus
Dallas	Dayton	Durham
Kansas City	Las Vegas	Minneapolis
Nashville	New Orleans	Orange County
Pittsburgh	Portland	Sacramento
San Antonio	San Diego	San Francisco
Washington		

Each meeting begins with two questions: 1) "How many of you are solely analysts in the compensation field?" Common answer: 2 of 60; and 2) "How many of you have used the Internet?" Answer: 1 of 60 (most often 0 of 60). (People working in business appear too busy to surf the net & comp professionals are extra busy with multiple-function positions.)

Assumptions

A March 1995 U.S. General Accounting Office's Report to Congress, "Poverty Measurement, Adjusting for Geographic Cost-of-Living Difference" reported on modeling techniques for **ERIRA** and other sources of cost differential information. The report is available by writing the:

U.S. General Accounting Office
 P.O. # Box 6015, Gaithersburg, MD
 20884-6015

Geographic Notes

Major cities are divided up into suburbs. City centers are "CC" and the focus of salary structures; suburbs are modeled in relation to the "CC". Note: this definition ("city center") differs from the **Relocation Assessor's** (where the definition is "combined city"). "change columns" now work the same in **ERIRA** & **ERIGA**; you may now zero out columns and list one column of data.

Salary Assessor

"to change all assumptions:

- Area structures affect management jobs only;
- All other jobs directly tied to local area survey data.
- "Industry" affects all jobs earning > \$ 24,000 nationally.
- Date changes (time) affect all position values.
- "Size" affects those jobs beginning with "Top", "Chief", or "Director" titles.

The hierarchy for management positions within the **Salary & Consultants' Assessors** can be listed as: Chief/Top, Director, Manager, Supervisor, Foreman. Directors earn more than Managers, Managers more than Superintendent/Supervisors, etc.

The Microsoft Network (MSN) is operated by Microsoft Corp. on behalf of Microsoft Online Services Partnership. Microsoft and Windows are either registered trademarks or trademarks of Microsoft Corp. in the United States and/or other countries.

DOS/Windows®/Windows® 95

The **Assessor Series**® were developed as DOS programs. **Geographic, Relocation, and Salary Assessors** may be run from a diskette. We recommend, however, copying those programs & datasets to your hard drive and saving the diskettes as archive copies. Most subscribers access ERI data via Windows 3.x software. Like all DOS-designed programs, you will obtain the best results if you run **Assessor Series**® software from the DOS prompt. Click on the "MSDOS" icon in the Windows® 95 Start Folder or the Windows 3.x Main Group. Power Mac users may not access **Assessor Series**® data without partitioning their hard disk and adding DOS operating programs.

Running Programs from a floppy drive

Place the **Assessor** diskette in a floppy drive (A: or B:). Make this disk drive your current drive by typing *A:* or *B:* and pressing **<**. Type the **Assessor's** short name (e.g. *ERIGA for the Geographic Assessor*) and press **<**. Type *eri* for the **Assessor Series**® **Demonstrator** (a:>eri and then **<**). The **Consultants' Assessor** uses the *c:>a:\install* and **<** command. **(Remember: When running a program from a diskette, do not remove the diskette from the floppy drive until you have completely exited the program.)**

Running Programs from a hard drive

Assume your hard drive specifier is C: and the directory in which the **Assessor** will be installed and used is \ERIGA (e.g. *ERIGA for the Geographic Assessor*). Make your hard drive the current drive: type *C:* and press **<**. If the directory \ERIGA does not already exist, create it. Type *MD\ERIGA* and press **<**. Make \ERIGA your current directory. Type *CD\ERIGA* and press **<**. Insert the **Assessor** diskette in a floppy drive (assume it's A:), type *COPY A:.*.** and press **<**. Keep the **Assessor** diskette as a "backup". The **Consultants' Assessor** and Windows® 95 versions (under development) require installation & may not be run from a diskette.

Geographic Assessor

- To receive help from any of the 9 screens, press the **`** key. **| #** to move to any Screen.
- Use the **<** key to move on after inputting data, the exception being:
- Use the **^** and **3** keys to move from screen to screen in Screens 7 and 8.
- Use the **o** key to move to a previous screen or to exit a help screen. **š** to Screen 7.
- To exit the program, use **| Q** if in Screens 4 through 9 or use **o** if in Screens 1 through 3.
- In Screens 7 and 8 you may simultaneously make up to 99 comparisons onto one table (with the ability to save, load, or print). **~** allows printing to either a printer or disk file.
- Save and load your data in Screens 7 and 8 to and from a file; use the **•** and **-** keys.
- Insert a line in Screen 7 or 8 with use of the **±** key; use the **µ** to delete a city.
- Use **'** key in Screens 1, 2, 7 and 8 to select a city from a listing by state, province, or county.
- **™** overrides the \$99,999 limits in Screen 4, converts value types (%'s to \$'s) in Screens 7 & 8.
- **| S** provides a listing of survey sources for that city/area's state or province.
- Use "National" or "Canadian National" or zz00, zz10, zz10- as standard "Base Cities".

Salary Assessor

- The **| Q** keys provide exit from the program; **| S** for survey sources (if c:\eriga present).
- To receive help from any of the main screens, press the **`** key.
- Use the **<** or **š** keys to move within Screen 4 or 5; **^ 3** to the next or prior screen.
- All **Assessor Series**® programs store data (positions & cities) alphabetically.
- Use the **"** key to delete data in any entered line. (**"** key delete is true for almost all programs.)
- **š Ƴ** usually inserts a position above a line; **š Ʋ** inserts below.
- Use **' ^** keys to view a listing of all positions containing a key word or title.
- Screen 4 allows for a benchmark listing of positions in any one location in any industry.
- Screen 5 allows for listing of salaries for one position in multiple locations.
- Full position descriptions present if c:\erica (**Consultants' Assessor**) is installed.

Relocation Assessor

(The **International Assessor** is a "hidden dataset" ... erira i)

- To receive help from any of the 9 screens, press the **`** key. **| #** to move to any Screen.
- Use other commands as described in the **Geographic Assessor** directions (above).
- To exit the program, use **| Q** if in Screens 3 through 9 or use **o** if in Screen 1 through 3.
- You may save and load your data in Screens 6 and 8 to and from a file. Use the **•** and **-** keys.
- **'** key in Screens 1, 2, 4, 6, 7, 8 & 9 selects a city from a listing by country, state, province or county.
- Use the **~** key to print an analysis in either Screen 4, 6, 7, or 8 to either a printer or a disk file.
- Use the **^ 3** keys to escape the Exchange Rate Screen.
- **~** prints graphs of Screen 5 to HP laser compatible printers.
- To analyze just 4,000+ Canadian & U.S. cities, type a:>erira; to review an additional 1,400+ international areas, type a:>erira i (reviews all cities in database, international, Canadian, and U.S.).

Downloading from MSN™

- Remember, each & every download creates a full annual subscription charge (ERI exercises no control over billing, payments, etc.).
- After logging onto The Microsoft Network from the MSN™ Central page, select "Edit... Go To...Other Location" and type in *eri*.
- Select the ERI Product Download folder and then the category.
- Double click on the product you wish to order. For example, double click on the **Geographic Assessor** Download.
- Read the message; scroll to the download "zip"; double click the icon.
- Find the **Geographic Assessor** program and database on your PC's hard drive under: c:\Program Files\The Microsoft Network\Transferred Files\eriga.000. To access this file:
 - Double click on the "My Computer" icon.
 - Double click on the folders listed above.
 - Double click on "eriga.exe" (blank eriga folder) to execute
- Programs are best run under the MS-DOS prompt. We recommend copying the eriga.000 folder to a c:\eriga directory.

Benefit Assessor

- **š** provides a menu of commands.
- **>** provides Benefit Statements from Screens 3 & 4.
- **œ** provides COBRA letters from Screen 3 (Status must be "C").
- **-** searches for any employee's name. **`** key for other helpful hints.
- **~** allows for the importing/exporting of employee data in Screen 3.
- The **š** Menu allows printing of an Employee Census, a 125 Plan document, SPD, and IRS, DOL & COBRA submission letters.

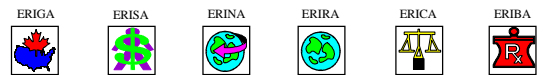
Consultants' Assessor

- Select among individual position analyses, benchmark listings, reasonable accommodation reports, executive compensation, and/or workforce demographic analyses.
- The **| M** keys provide a menu; **| Q** keys provide exit from the program/subprograms.
- When a description is displayed, use **^ 3 ^ £** to scroll through.
- The **Executive Compensation Assessor** is incorporated in the **Consultants' Assessor** with salary & bonuses for the top 6 positions.
- Uses a revised format with top of screen keys.
- Data is in a "packed" form and requires installation to a hard disk.
- Use the **Ƴ Ʋ Ʋ | *** to shift to different program functions.

No basic *.exe changes are made for 4/96; all work is focused on Windows®95 versions.

Notes

All 1996 **Assessor** software have an "icon" file (*.ico) which reproduces one of the icons below:



Assume ERIGA (**Geographic Assessor**) is installed on your hard drive (c:). To Install ERIGA.ICO for Windows® Microsoft

- 1) In Windows select "New" from "Program Manager's File" menu; or select the Option or Change Properties line.
- 2) Select "Item".
- 3) Click "OK" (bringing up the "Properties" box/line).
- 4) Type "ERIGA" at the "Title" prompt.
- 5) Type "ERIGA.EXE" at the "Command Line" prompt.
- 6) Type "C:\ERIGA" at the "Working Directory" prompt.
- 7) Click "O.K."
- 8) Click "Change Icon" (bringing up "Change Icon").
- 9) Type "C:\ERIGA\ERIGA.ICO" at the "File Name".
- 10) Click "O.K." (two times).

ERI is a small business corporation; 53.95% WOB;
U.S. EIN 33-0356443; Canadian GST 133229716RT.
Internet <http://www.eri.com/~eri> MSN™ *eri*
Copyright © 1996