The Jobs vs. Job Family Debate in America
Jobs: Counting, Identifying, Listing, Locating, Mining, Parsing, Pricing & Valuing

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Many HR problems can be traced to placing good people in the wrong job; and when one can't define a job's requirements and content, it is easy to do. America has lost much of its ability to determine work capacities required in any specific job, because we no longer study specific jobs. Selection, disability determination and the internal valuing of work (fairness in pay) have all suffered. But picture yourself sitting in your chair, hearing a freight train approaching from the back of the room. What you will hear today is the sound of information and technology about to unexpectedly overrun the status quo, labor economics, vocational counseling, and expert witness testimony. What will be described at this Conference is "real;" it is already incorporated in available software applications. The sound and message is that of emerging technologies, PAQ job analyses, and ERI data - all mixing together in ways to forever change our knowledge of work in America and perhaps, just perhaps, putting us on the right track again.

Counting Jobs

Twenty-five years ago, politicians in the "Western World" (Republicans and Democrats alike in the US) silently agreed that knowing "what specific jobs" existed in an economy only gave fuel to their next year's political opponents who could claim that "*on Representative X's 'watch' we saw the last clockmaker job move overseas.*" Most western governments, including the US, changed their labor demographic collection models to those of "job families" where tracking of specific job demographics was no longer possible (automobile assemblers, cabinetmakers, fishing fly tiers, shock absorber installers, etc. all went into the single job family: "assemblers & fabricators"). In the US, this meant "killing" the Dictionary of Occupational Titles (DOT). Assuring that the "DOT is dead" was necessary because one needs to know what specific jobs exist before they can be studied. One can't count marbles without knowing what marbles look like. Today, we don't know of anyone who can accurately predict counts of specific jobs in America, other than PAQ and ERI. ERI Economic Research Institute, Inc. (ERI) does so because since 1987, it has needed to report numbers of incumbents, along with competitive rates of pay, for specific jobs. This data is supplied to 10,000 subscribers who "have no dog" in the war to destroy the DOT. PAQ's history of studying work via job analysis is longer; our data files go back to 1967. We've watched the US DOT Killers at work since the early 1990s.

And we must admit defeat in many areas. Job family data reign supreme. High schools and colleges can train "generally" using government job family data; it's wonderful for career planning and aggregate economic studies! Unfortunately, private industry (ERI subscribers) wants practical, specific data about real jobs. The DOT Killers still exist, are in power, and have a defined agenda. But the needs of private industry run counter to these Killers' goals. Proof point: if today's US DOL O*NET generalities and its complementing OES wage survey would suffice, there would be no reason for the existence of ERI, its 10,000 subscribers, or the hundreds of private salary surveys reporting competitive values for specific jobs. (ERI is not alone; Mercer, Wyatt, Towers, Hay, and others have like numbers of subscribers for their job specific survey data). When it comes to "earnings data" in the business world, "government data" is not "good enough."

Few of ERI's **Assessor Series**® subscribers are interested in job family statistics (mind in the microwave, feet in the freezer, halfway in between you are "average" … for those who no longer have ovens). They are interested in specific jobs, occupations that are current, updated, and existent. These subscribers require that ERI identifies not only what specific jobs exist, but where they exist, what they are paid, and in what incumbent numbers they are found. ERI does this in a consistent, constant fashion allowing for jobs to wane (be compressed into others) and new jobs to appear in both its **Assessor Series** and PAQ's **enhanced Dictionary of Occupational Titles** (**eDOT**®). In 2004 ERI gave PAQ Services, Inc. (PAQ) its eDOT Skills Project so that eDOT might access real field job analyses from over a thousand of PAQ's US clients. This inclusion added hundreds of new specific jobs for study, most technology and service based, along with hundreds of thousands of field, subject matter expert (SME) quality, job analyses records. Earlier, ERI had added thousands of new jobs to eDOT, jobs found multiple times in modern, privately-sponsored salary surveys. In 2006, after analyzing an extensive collection of health care salary surveys and other documents, many hundreds of new health care jobs also were added. And because of PAQ, the consequence is that ERI fileservers now house the mental and physical capacity measures, education, knowledge, and skills required for these specific jobs, along with standard updated job descriptions, task statements, demographics, and incumbent counts. These incorporated PAQ data are SME field job analyst quality measures, gold in the world of studying work.

Meanwhile, the Internet and advances in publicly available data have created multiple sources where employers, their locations' addresses, numbers of employees, and industries in which they operate are known. ERI combines US data from almost a dozen different sources, including: state employer/government filings, credit agency records, US DOL benefit filings (Form 5500s), government contractor lists, SEC & IRS public files (8-Ks, 10-Ks, Form 990s, etc.), research compiled from yellow pages, and files from private firms from whom ERI leases data. Merging, purging, and deleting duplications found in these multiple datasets, ERI creates a universe of US employers, their industry(ies) codes, numbers of employees (or ranges), recorded names of officers and directors, and locations of branch locations/offices. (Foreign employer lists are more easily attained; countries such as France make data/demographic filled rosters of

corporations operating within their boundaries publicly available.) This sets the stage for another way to count and identify jobs (adding all employers' incumbent numbers), one that in the US has three different audit checks with industry summation crosschecks. Almost all countries (including the US) report job family populations within industries, so turning a company's employment matrix 90 degrees while knowing a county's probable distribution of job families within industries, and knowing specific jobs within a job family, one can predict a specific employer (of a size certain in a specific area/county and industry) with a "national norm profile" staffing pattern for that industry. In the US, PAQ's eDOT and ERI's Assessor Series allow further definition by parsing these job families into specific jobs (missing those few jobs, of course, that are not reported in either eDOT or the Assessor Series). ERI is at a point where when given an employer in a location, the Assessor Series can estimate the employer's specific occupations held, its incumbent counts, their demographics (gender and race), along with the expected competitive pay norms and other associated labor costs. (Nationally, in the US in 2006, these four approaches sum and crosscheck to ~129 million Americans working at full-time specific jobs in ~1,400 NAICS/eSIC industry categories.)

Parsing Jobs within a Job Family

Before ERI and PAQ had access to an archived (by month) accumulation of almost all job board listings (ERI's SalariesReview Combined Job Board Database), before listings of job titles held by workers' compensation claimants were known, and before the creation of ERI's Job Availability Survey, the parsing of specific jobs within a job family was purely mathematical. Some US Government O*NET job families contain hundreds of unique specific jobs; others, such as receptionist and word processor, are "homogeneous" where minimal parsing is required. The methodology available was that of a "statistical complexity model" where more complex jobs (requiring higher mental and physical capacities) were distributed by pyramid forming equations. (The more complex mental and physical capacities of a job within a job family and the more demanding the skill and educational requirements, the fewer the expected number of incumbents. Early writers, PAQ's McCormick et.al., 1974, described this as "natural selection within a job family.") Now frequency of occurrence of jobs found on job boards, frequency of job titles found on workers' compensation claim forms and ERI's Job Availability Survey all contribute to the ability to parse job counts within a job family. A fifth source exists, the frequency of "lay titles" reported on US Census Long Forms (the latter is not incorporated, as yet, in ERI analyses, but will be when that data is placed in the public domain). And ERI, with over 10,000 employer/subscribers, has a sixth source; 10,000 subscribers tell ERI when and how our models are incorrect via a much used and useful 24/5 workday subscriber call center.

Job Boards, a New Source of Data

ERI collects (mining this data with proprietary eSpideri software) Internet job postings (worldwide) and inventories these (now) millions of listings monthly by employer, industry, specific job posted (and accompanying skill, pay, and job demand data) and geographic location (county). Archival datasets exist for litigation where evidence of job listings in some historic month/year may be of interest (separate file bins/inventories contain "all jobs posted" for any month or time period). Job boards, admittedly, have terrible salary survey data (50% are general job postings where recruiting firms with temporary contract staffing divisions "troll" for resumes advertising attractive salary levels). Amidst this chaff, however, one finds a few excellent job descriptions, some (a very few) even US ADA compliant (with mental and/or physical capacities), and some with specific job titles with enough prose to accurately describe the primary duty and functions performed. But there is a dirty secret with job boards and it doesn't take long once you start working with them to understand (to see for yourself, click on the top banner "Find Jobs" at ERI's www.salariesreview.com and review a hundred listings). Many job postings are false (false, as in "false ceiling") and nothing more than recruiting firms building resume libraries for their temporary staffing divisions. Many other Job Board description postings are just as bad in their "generality."

Job Boards have also become a safety net for corporations to show and prove that they are nondiscriminatory in their hiring practices. Companies go out of their way to make certain all their job openings are posted on the Internet, but only in a "general way." Generalized job descriptions, those without too much detail and certainly with no ADA compliant measures, allow organizations to still make the decision as to whom or who they don't hire. Few want to be faced with an applicant who exactly matches requirements, but who will not "fit" in their organization for qualitative reasons. This is especially obvious among federal contractors' job postings, organizations that must give preference to Veterans. The consequence is that the really good, complete job descriptions found on job boards are typically from city or county governments and those few private entities that are unaware of, or don't play, the "game." ERI finds this huge library of job postings useful for noting existence of jobs, measuring the vibrancy of the economy, and determining probable job family compositions. But when it comes to physical and mental job demand measures and true salary levels paid, this data is softer than quicksand.

Locations of these Jobs

Addresses of employees/employers, disability claimants, or job searchers can be pinpointed using US geographic/address data and matched to the closest potential employers. For the job searcher or outplacement specialist, employers within xx miles of an individual's residence that are expected to employ a specific job can be identified. For disability determinations, employers with known jobs of certain physical and mental capacities within xx miles can be identified. Labor markets can be defined (and easily described via maps provided by sites such as Yahoo or Google). Competitors can be identified; probable staffing patterns can be estimated. In the US, this is accomplished by using the publicly available databases of the US Census Bureau's TIGER® System. (Any address can be assigned a longitude and latitude and with the known distance to the center of the earth, mileage between points is easily found after the calculation of the angle created at the earth's core.) Both PAQ's eDOT and ERI's Assessor Series allow for searches within a known radius of a specified office or residence address.

What is a Job?
ERI and PAQ have adopted the DOT's definition of an "occupation" used for almost 70 years by professionals, courts, and experts; and have added a selection/use threshold based on the generally accepted "norms" of US Administrative Law (ALJ) courts. "Job" equals "occupation." When ERI talks of a specific job with an incumbent, it may use the term "position." This differs from O*NET's "occupational groups" which are job groups, often called "job families" (eDOT also defines "occupational groups" with its first 3 digits of eDOT's 9 digit code). O*NET states it has "800 occupations" (it misuses the term), the DOL/OES/BLS surveys combine data (roll up O*NET stragglers) into 742 OES/SOC job families, while the US Census continues this roll-up into 471 Census Occupations (while adding an occupation, "Logisticians"). ERI's Assessor Series and PAQ's eDOT report on ~2,500 to ~10,000 specific occupations respectively (varying each Quarter by additions of new jobs, compressions of waning jobs). Each must have:

- A unique, non-industry specific job title.
- A unique "Primary Duty" requiring an identifiable skill, if existent.
- Two – three unique additional task statements (with related skills, abilities, and/or knowledge required)
- An ERI eSemantic low score of job match relevancy as compared to other specific eDOT occupations.
- An occupation must exist in counts exceeding 2,500 incumbents in the national economy for use in the Assessor Series.
- A job must be estimated to exist in 250 or more instances in the national economy to be included in eDOT (explaining why eDOT has more jobs than the combined Assessor Series' occupations and matching generally acknowledged, but unwritten, US Social Security Administration ALJ national guidelines). The estimation of a job's existence is based on data collected by:

  ERI's Job Availability Survey
  Jobs are known to exist if:

  - They are reported in published salary surveys with listed survey participant names and incumbent counts.
  - Their job titles and/or specific descriptions are found on disability claim forms (California).
  - They have been collected by ERI's eSpideri's datamining of specific job postings (SalariesReview's Find Jobs) and are complete, specific, and matched to a bona fide employing entity (matched to ERI's Potential Employer list); vague, general descriptions from "Company Unknown" are not analyzed.
  - PAQ field job analyst input, including cybernetic use of eDOT, report the existence of these occupations and their work measures and duties as found in an on-site job analysis.

  Additional evidence of a job's existence* is noted, but not determined by:

  - users of SalaryExpert's ePRO+ (which displays all eDOT positions) or PRO+ (which lists over 100,000 job titles), including the US Census Lay Titles. Visitor interest in job titles is noted along with their IP source.*
  - users of SalaryExpert's salary calculator (almost one million searches each month); this is the second most popular of the free data sites (and reports conservative Government job family salary data).*
  - requests for "new titles" whenever the eDOT PC program is first used (in a "submit process") and requests by ERI and PAQ subscribers, and
  - inclusion in US Government listings (Census Lay Titles, etc., the former will move to the above filter when auditable aggregate numbers for each lay title are placed in the public domain).

  (*a review of these searches can be found anytime on ERI's Job Availability Survey's Daily Log.)

- Industry-specific segregations are made not only by job titles, but also via separate, complementary code designations traced to the before-mentioned government reports of job family industry patterns within specific employers (in the US, see the BLS – CEW, tied to NAICS codes, crosswalked to SIC codes). SIC codes are still used by the majority of industry and US non-statistical agencies like the US SEC. ERI has adopted a "fixed in time" SIC coding system which we label, "eSIC;" we will change over to NAICS totally when the US SEC and IRS NTEE codes are replaced (both are of critical importance to ERI salary research). Industry coding is in great disarray in America; case in point: the US SEC's use of SIC rather than NAICS.

- And "levels" within an occupation (1, 2, 3, etc.) are covered by the work measures like Specific Vocation Preparation (SVP) within eDOT. However, the Assessor Series uses levels to report competitive salaries, with the mid level being the eDOT equivalent (1, 2, 3, often has a "4" as the lead supervisory position; sequences might also be 1-5 plus a 6th, etc. In these cases the eDOT job would be Job Level 2 and 3 respectively.)**

  **ERI's Assessor Series report pay "by level." PAQ's eDOT would treat jobs # 1-3 as one job with Job Level #2 = the "naked" Job Title (i.e., level 2, serving as an alternative title). As of April 2006, Salary Assessor users may toggle back and forth between reviewing jobs reported by level or by ERI's traditional experience/maturity curves. The default for US/Canadian applications is the latter. UK/EU applications default to the culturally based career/occupation levels approach (not all jobs will have more than one level). Use the "Options" menu at the top of any Assessor (Salary, Executive Compensation, Nonprofit or Health Care) to change this selection.

PAQ's Sources – An Overview of Measuring Jobs
PAQ uses trained job analysts and its questionnaire (which includes the US Social Security Administration mental/cognitive measures found in Form SSA-4734BK-F4-SUP(8/85) and the complementing physical measure Form SSA-4734BK (1-89) effective (02-2004), the 8/23/04 amended job analyses questions of DOL's Part 541 FLSA exempt determinations, and skill-based pay application measures. Collected data (along with historic data collections of the past 15 years) are found online in PAQ's eDOT Skills Project reflecting:

- Data from field job analyses (typically an organization's analyst, trained by PAQ and knowledgeable about that organization's structure and work content; i.e., a "subject matter expert") utilizing methodology accepted by the courts since the 1970s and
- Users of eDOT PC software where changes to default job work measures are noted and recorded in PAQ's eDOT Skills Project databases (this is a cybernetic system: the more it is used, the better the data becomes).

ERI's Sources – An Overview of Pricing and Valuing Jobs
ERI Economic Research Institute collects data regarding competitive rates of pay in 37 countries (including the US, Canada, UK and the EU). Data sources can be characterized as:

- Optically character recognized (OCR) or pay data mined from the Internet from organization provided forms (in the US: SEC 8-Ks, 10-Ks, proxies, annual reports, Form 5500s, Form 990s/EZs/PFs, etc.). We will mention data mining of job postings, but this data is so corrupted by search firms trolling for resumes for their temporary staffing divisions that it is statistically worthless for most analysis purposes (skill requirements and identification of specific jobs are of more interest to ERI and PAQ).
- Data collected via ERI's patented (March 2005) online interactive salary surveys (see: www.salariesreview.com). Each year, SalariesReview data becomes more and more robust, more and more used. Salary levels run 10% above survey levels, explained in part by the fact that the minimal amount of data mined from job boards that passes validity tests are included in SalariesReview's salary and cost-of-living surveys. Care is taken to not show data that might violate countries' privacy or antitrust laws (including published US FTC 2005 Regulations, first effective in 1993).
- Collected and analyzed published surveys (from trades, license agreements, where copyright laws allow) where "consensus" published norms might exist (a rule used by ERI since the mid '80s: "must exist in three or more published surveys.")***
- Large survey databases and other leased datasets (Statistics Canada, UK National Statistics, etc.) and other published data such as labor contracts or legislated pay norms (state of California union health care, The Netherlands pay schedule(s), Australian minimum rates, etc.).
- Government data (UK, Canada, Portugal, etc., National Statistic Offices; in the US these include DOL OES, BLS CEW, Census earnings, and other non-copyrighted data sources). These typically conservative values (because US OES Prevailing Rates are for immigration purposes and that constituency has its goals also) can be found at the bottom of any free www.salaryexpert.com Salary Calculator retrieval.

SalaryExpert's Sources and Contribution
SalaryExpert's conservative, single source, job family modeled retrievals require 4 questions answered by inquirers (300k – 500k/month). The first question potentially identifies someone with job knowledge; 3 questions follow (rotating a 3 x 33 matrix) where the 99 eDOT job demand and work measures are displayed.

- 2 questions are from the old DOT's Selected Characteristics of Occupations work measures, scales unchanged.
- The last is a "stress" measure, the mental cognitive questions found on SSA workpapers, Forms SSA-4734BK, etc. 26 of the eDOT's SCO physical job demands (word-for-word eDOT prose matches) are used to determine whether alternative jobs exist; 20 eDOT measurements are used in behavioral science reviews (~30% of SSA DI are mental/cognitive). Together they may affect two and one-half million SSA DI claimant respondents each year. See the "Form use" Record below to understand the magnitude of DOT work measures' use today as reported in the Federal Register:

Physical Residual Functional Capacity Assessment and Mental *—20 CFR 404.1545 and 416.945— 0960-0431. The information collected by form SSA-4734 is used in the adjudication of disability claims involving physical and/or mental impairments. The form provides the state Disability Determination Service (DDS) with a standardized data collection format to evaluate impairment(s) and to present findings in a clear, concise, and consistent manner. The respondents are State DDSs administering Title II and Title XVI disability programs. Type of Request: Extension of an OMB-approved information collection.* (Public disclosure: required forms' time usage)

	SSA-4734-BK	SSA-4734-SUP
Number of Respondents	1,625,095	796,770.
Frequency of Response	1	1.
Average Burden Per Response	20 minutes	20 minutes.
Estimated Annual Burden	541,698 hours	265,590 hours.

http://www.ssa.gov/regulations/articles/info-collect122.htm 10/04/05

PAQ's (and others') research finds job analysts excellent judges of physical job measures, but poor gauges of "stress" found in a job. (What is stress to you may not be stress to another.) After 3 years of data gathering, these measures, contributed daily in the tens of thousands to the PAQ eDOT Skills Project, allow PAQ to report the average, expected job demands for SSA's 20 Mental Residual Capacity questions. Indeed, SalaryExpert's contributions should be judged by their uniqueness, not by the strength of their competitive salary data, which can be described as "only good enough for government purposes." These stress-related measures have no comparison alternative source in America. They are truly unique and someday worthy of much study. (PAQ's raw datasets, since their inception in 1967, have been available "free of charge" for doctoral candidates' research.)

Private Industry Quality Data – ERI Assessor Series

In the mid 80's when ERI created the Assessor Series (and continued today), a single polynomial curve was generated for each Assessor Series job. (Picture a graph with the x-axis being the years 1977 .. 1978…. 1979 …. then to 1988 … now to 2006 … 2007 where a single source/survey's data for a job is shown as a "dot" with an incumbent count and a measure of variability (standard error, deviation, etc.). Picture 3 dots for 1977, 8 dots (surveys) for 1978, etc. This long-term study (curve cut through many years of dots of varying power) allows ERI to report a constant prediction, protected from a single year's variance created by any particular survey (a high or low dot/survey in 2006, for example). It takes powerful data to significantly alter an Assessor Series job value curve. (All these curves' slopes differ; for more discussion, see ERI's Salary Increase Survey found at www.erieri.com or accessed via the top of ERI's Platform Library CD-ROM. If they did not differ in their increase rates, one would only need to have purchased a salary survey in some ancient year and increase all jobs' values by a like percentage over subsequent years.)

*** Certain longtime Assessor Series jobs appear to be disappearing from survey reporting. Some 1980's jobs (such as Rotogravure Press Operator) have indeed disappeared, but a more likely explanation is that "salary surveys are disappearing." Picture a survey operation where $80 of every $100 is for covered fixed costs while $10 exists for marketing and $10 for profit. The US Government dealt these private surveys a terrible blow when in 1995 and 1996 they altered their OES employment survey to include wages (for immigration prevailing rate purposes). ERI saw an immediate cessation of many local and regional surveys (from Scottsbluff to Bellingham); eliminating 20% of a survey's subscribers eliminated the profit and sales funding. And the 2000s introduction of "free salary" data via the Internet did not help. Both well-intended sources like SalaryExpert.com (which reports conservative values based on the US and other government OES or OES-like surveys) or those other sites that exist to attract job search candidates (typically showing high values) have had a similar negative effect on private and local surveys. And government regulation has perhaps taken the largest toll. In the US, the September 15, 1993 Federal Trade Commission's safety zone directive that "*a survey must be managed by a legitimate third-party; the data provided must be more than three months old; and at least five organizations must report the data on which each statistic is based. No one data source can represent more than 25 percent of the statistic, etc.*" has had a chilling effect on salary survey firms that now know they can easily be part of antitrust litigation (frivolous suits still require a defense; defend ten cases and win them all and a small firm will still be bankrupt). Today, ERI Assessor Series continues polynomial curves for some jobs known to exist, but where no known 2006 survey reports data (although in 1987 there were 3 or more surveys). Our hope would be that ERI's SalariesReview builds in its robustness to bridge this gap; we do not believe rational firms of any size will enter the "salary survey business" any time soon. Today, there is too much liability with no profit margin. (Many European countries are ahead of the US in this phenomenon; private salary surveys have all but disappeared in the UK, Germany, etc.)

A question to ask any supplier of estimates of competitive salary information is "where do you get your data?" Over the next ten years, ERI expects the trend of seeing fewer and fewer viable salary survey organizations and surveys to continue. Unless sources are optically reading, sponsoring their own surveys (such as SalariesReview.com, etc.), leasing identified databases and/or taking the time and resources needed to research legislated, union, and other sources, they will have to be doing the obvious: sewing the Emperor's Clothes or .....

EU Data along with US and Canadian Data in the Assessor Series

ERI has been slowly building its data sources and improving the quality of data used by subscribers in the UK and Europe (Euro-using countries, plus Switzerland and Scandinavia). Most of this paper is US market pricing-centric, but the dynamics discussed are worldwide. ERI's methodology is the same, only the currency and the numbers differ. PAQ also offers its scoring services worldwide; its neutral culture orientation (measures behaviors, skills required, work measures rather than job tasks) is a reason why it is popular in the Arab and Eastern world. (Artificially valuing jobs with "job evaluation points" has all but disappeared in the US, but the most popular plan created for an eastern US bank in the 1940s prevails in southern Europe and South America. Some liken these plans to a virus planted within 2nd world corporate cultures. That said, there is a place for artificial value systems that model internally equitable rates, especially within organizations with ever changing tasks, where everyone does a bit of "this and that," where multiple unique jobs exist, and external competitive benchmark comparisons are impossible to determine.) As PAQ is to internal equity, ERI is to external competitiveness.

Summary - US

In summary, ERI combines and contrasts derived employment population numbers that are specific to real employers to US Census data (updated 1990 to 2000 to present trend), OES job family and area populations, and the BLS CEW survey of county industry employment statistics. To derive job family distribution, ERI overlays these employers with the national expected staffing pattern for that industry from the OES data found at: http://www.bls.gov/oes/current/oessrci.htm#44-45 to proportion the CEW industry headcounts into SOC job families. Combined and contrasted with the sum of estimated employees in the created Potential Employer database (previously described), these sources provide estimates of industry employment, by county and SOC job family down to the specific potential employer. Sources include:

- Census (prior project) 1990 – 2000 - present
- CEW http://www.bls.gov/cew/home.htm
- OES http://www.bls.gov/oes/current/oessrci.htm#44-45
- Potential Employer totals sum (ERI's merged, purged, deleted duplicates database)

Then via PAQ's eDOT, ERI can segment this job family data into "specific jobs" (rather than O*NET job families, which is where US government methodology ends). PAQ's eDOT contains ~10,000 unique specific occupations, specific jobs found posted on the Internet more than 250 times each year, jobs reported in salary surveys, jobs found on worker compensation claims, etc. Segmentation of these job families combines up to six different methodologies, including:

PAQ's Complexity Model ERI's Job Availability Survey Frequency of Occurrence eSpideri Job Board's Frequency

The consequence is that ERI and PAQ have something unique for 2006; something no one else in America has the ability to offer:

ERI/PAQ can estimate a "national staffing profile" for any of the over 12 million US organizations with > 10 employees;
listing the specific eDOT jobs expected in that organization and their numbers (depending
upon the employee size of that organization, industry, and area in which it resides).
ERI/PAQ can also estimate their local pay for those specific jobs, their
demographics (EEO-1 Report) and "job listing exposure"
(potential to lose staff) and relate this data to an
employer's or claimant's residence address.
And we know the physical and mental
capacities these jobs contain.

A New Survey Application and an Existing Survey Renamed

As of April 2006, ERI has changed the name of the Compensation Comparables Assessor & Tax-Exempt Survey to a more simple Non-profit Survey & Assessor (CA) and has broken out health care (from this survey and the Salary Assessor) to create a Health-Care Survey & Assessor (HA). Both contain the full range of positions, from CEO/Executive Director to the lowest paid (equivalent to a Salary Assessor, Consultant Edition); both contain model organizations NTEE/Industry, location/county and size/revenue or assets. ERI uses the term "survey" because much of what is shown can be sourced back to retrievable documents (one can review the source materials). With some pride ERI can ask, "What other survey reports data for 154,000 unique organizations in its data display, showing actual source documents?" Similarly, ERI's new Health Care Survey & Assessor is built on NS's health segment (NTEE codes E-H), data from SalariesReview surveys, and sources cited above. For areas that do not ignore the 1993 FTC antitrust safety zones previously discussed, local hospitals and health care providers should have great interest in this research. It is not that HS has more unique organizations represented, it is that the number of organizations represented is not 380 (typical for a survey) or 3,800; it is 38,000!

Other Applications – For ERI and PAQ Subscribers

In 2006, each and every ERI Assessor Series application benefits from, or feeds data to, PAQ and ERI's studies of specific jobs. Examples include April (or later 2006) enhancements to all products:

Relocation Assessor

- New Office Relocate/Plant Screen/Tab Application
  - Models plant/office relocation labor cost comparisons in moving a plant or office containing specific types of positions, each with xx incumbents, from location "A" to location "B" anywhere in the world.
  - Assesses normal staffing/payroll for acquisition purposes, buying of a company, investing, moving, making a loan,
  - Costs labor contracts or HR/organization changes (add a vacation day, change benefit coverages); in effect moving a company "up and down" by changing its compensation and HR practices related to labor costs.
  - Allows self-assessments of an organization's design & staffing distributions by comparing them to the predicted national norm staffing distributions/jobs employed in any specific industry for an organization of like employee size.
  - New Fixed and Variable Rate (FAVR) Analyses.

Geographic Assessor

- New Census Screen/Tab
  - New required (2007) US EEO-1 reporting format of expected organization demographics by industry and location.

Salary Assessor

- New Salary Planning Screen/Tab
  - Given an "n" number of employees and industry, a default fill-in of a salary planning sheet to initiate the process (with expected % salary increases tied to the job function norms found in the latest ERI Salary Planning Survey).

Executive Compensation Assessor

- Organization Design Assessment
  - Utilizing the Benchmark List, one can compare an organization's numbers and types of management and executive positions to national norm patterns for that specific industry and like employee size.

Nonprofit Survey & Assessor

- New Salary Planning Screen/Tab
  - Given an "n" number of employees and industry, a default fill-in of a salary planning sheet to initiate the process (with expected % salary increases tied to the job function norms found in the latest ERI Salary Planning Survey).

- New Tracking of Donor/Fund Raiser/Contractor/Officer Relations Screen/Tab
  - Tracing/tracking of Directors, Officers, and Contractors and interrelationships to the combined Potential Employers databases (found in the Consultant Edition only).

Health Care Survey & Assessor

- New Salary Planning Screen/Tab
  - Given an "n" number of employees and industry, a default fill-in of a salary planning sheet to initiate the process (with expected % salary increases tied to the job function norms found in the latest ERI Salary Planning Survey).

enhanced Dictionary of Occupational Titles (eDOT)

- New Potential Employers Screen/Tab
  - Disability determination: identify not just estimates of populations of alternative jobs and give a laundry list of potential employers in a geographic area, **but list only those specific potential employers profiled to have the specific alternative jobs identified applicable to/for a specific claimant within xx miles of his/her residence**.

  - For disputes of whether there were jobs available, "proof positive" potentially exists of job openings as found in the archived Job Listings for the month/date and geographic location in question for any state month/time period.

- New Administrative Law (SSA) Edition
  - Meet the promise made by the LTD carriers with Attorney General Elliot Spitzer, NY and 47 other states in November 2004 to honor the outcome of a SSA Disability Determination unless error can be shown ("*must give significant weight to evidence of an award of Social Security disability benefits as supporting a finding of disability, unless the …… have compelling evidence that the decision of the Social Security Administration was (i) founded on an error of law or an abuse of discretion, (ii) inconsistent with the applicable medical evidence, …")*, pg 7. eDOT (Admin edition) predicts what the outcome of an SSA DI DDP might be; often a determination that will be made two to three years after a LTD carrier's determination. eDOT contains the 46 residual capacity measures found in today's SSA desk workpapers.

- Occupation, Employee Specific Alternative Job Listings
  - Meet promises UNUM's recently made (October 2005) on behalf of the LTD carrier/industry in California, including a definition of disability determination that promises review of "occupations" and their "mental and physical capacities. ("*and during the another or any-occupation period shall be defined as: a disability that renders one unable to perform with reasonable continuity the substantial and material acts necessary to pursue his or her usual* ***occupation*** *in the usual and customary way and to engage with reasonable continuity in* ***another occupation*** *in which he or she could reasonably be expected to perform satisfactorily in light of his or her age, education, training, experience, station in life,* ***physical*** *and* ***mental capacity****. This change shall be made in all new California Contracts issued after the CSA Effective Date....")*, pg 14. The DOT may be "dead," but less than six months ago UNUM agreed (the California State Attorney General claims for "the industry") to look at "occupations," and not "occupational groups" and mental and physical capacities, just as SSA continues to use its 4734 Forms in 2005 and 2006 to measure these RFCs.

The latter application, assisting in the identification of specific alternative jobs in which a person with lessened capacities might still work, is an inadvertent outcome of ERI's salary focused job count and population research efforts. Previous transferable skills applications (the present state of the art) were to identify a general list of jobs and a general list of potential employers filtered by only area or industry. As described, ERI and PAQ's job demographic and capacity measures allow for the identification and estimation of specific employers with probable applicable alternative specific jobs existent in calculable numbers (and within a stated distance from a specific claimant's residence), all with calculations with error rates.

Each month the eDOT Skills Project collapses DOT jobs no longer found in the economy into remaining eDOT data (so that historic data is not lost and we don't inadvertently, as we have and corrected, eliminate a job like "chicken debeaker" which still exists in the American economy). It should come as no surprise that unskilled, sedentary jobs are disappearing. The joke among PAQ analysts is that the only unskilled, sedentary job to remain in America is the "DOT Killer." But you can't joke about your opposition. As opponents, the "study of specific work" has politicians desiring to be reelected, executive administrations wishing to hide unacceptable unemployment rates, a major user group – career planning, admittedly finding the O*NET a superior alternative, a judicial system where pain and emotion are appealing compared to fact (the latter being appealable), an SSA focused on "studying the problem," vocational experts who believe labor economic data is an "art not a science," and a legal system where attorneys are magnificently compensated under the status quo. Sometimes, however, Killers take on forces they can't stop. Perhaps, just perhaps, the DOT construct is just too good to die.

Today ERI's and PAQ's data are being used by many. We've been authorized to tell you that the IRS is a many-multiples of copies subscriber to our software and data. What might they do with what has been described? Well, if you know the probable distribution of work and labor costs of specific jobs and if there are unexpected funds being spent in an organizations' payroll or executive compensation, one can most likely also identify organizations with unexplained revenue. Interestingly, this application was first evidenced in the Baltic States which have become a center of worldwide money laundering. We've mentioned the New York State Attorney General Office; they too subscribe to multiple copies and have OK'd the mention of this fact. Among the vocational tradecraft, subscribers include the largest LTD carriers with well over half a hundred subscriptions. This is only my extrapolated opinion based on my logic as a non-attorney, but private LTD carriers can't keep signing consent degrees with the likes of New York and California's State Attorney Generals without having real world data to rely upon. Their corporate coffers, funds to cover future claims, are otherwise built on sand. That said, for the record, ERI or I have no real idea how the Commissioners, Elliot Spitzer, or their troops, peers, or colleagues utilize our data and/or with whom our data and software applications are utilized. Neither PAQ nor ERI is engaged in fee-for-service consulting of any type. Our missions are to produce gold quality research data provided on a subscription basis. With 2nd year renewals, we have proof positive from our subscribers that our data, applications, and efforts accomplish this goal.

PAQ's and ERI's goals are to have 1,000 eDOT subscribers and 20,000 Assessor Series subscribers and with the latter, we are more than one-half way there. That's a business goal; we also have a professional goal: to count, identify, list, locate, mine, parse, price, and value specific jobs as a contribution to the fabric of the American society and economy. I'll end by again noting, if the killers of the US Government's study of specific jobs, the Killers of the DOT which had become the "language of work in the world" were correct, I wouldn't be standing here today. Corporate America is serious when it comes to its staffing, pay structures and labor costs. Decisions are employee specific and job specific; they always have been, they always will be. Good management starts by assuring that your staffing has square pegs fitting in square holes and that you know the price, composition, and specific measures of each job. There will always be a reason to count, identify, list, locate, mine, parse, price, and value specific jobs even if federal governments won't.

with the right people in specific jobs, all problems are solvable, but
the corollary is daunting... with the WRONG people, nothing will be accomplished. If you can't define the job .....

We also believe that in the end, some twenty or thirty years from now, the decision to "kill the DOT" will be seen as a poor policy decision, one made at the highest levels. It will not be the first time such a policy decision has occurred; it will not be the last. No one will admit that they were involved or responsible. eDOT/DOT will survive because it is used; we at ERI and PAQ intend to see it survive until this fact becomes obvious to all.

About PAQ

PAQ provides field job analyses services for trained subject matter expert job analysts, manages the **eDOT Skills** Project at www.paq.com, and maintains the **enhanced Dictionary of Occupational Titles** (**eDOT**), a replacement for the abandoned US 1991 Revised DOT. While it provides field job analysts' training, the majority of PAQ's revenues derive from online scoring of PAQ Questionnaire measures inputted by PAQ subscribers related to disability determination, selection, and/or salary administration applications. PAQ provides on-site training to organizations' analysts, online certification, and continuing education via www.eridlc.com. PAQ offers its **eDOT**'s Consultant DDP edition on a subscription basis; the Professional FLSA edition is free in 2006. PAQ is an Indiana corporation that has operated as an independent firm dedicated solely to job analysis methodologies since 1972. Like ERI, PAQ does not provide fee-for-service consulting.

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