OCCUPATIONAL EMPLOYMENT STATISTICS (OES) OVERVIEW

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LMI Advisory Committee Meeting

OES Overview

- Overview of OES Program

- Standard Occupational Classification (SOC) Codes

- Occupational Employment and Wage Estimates

What is OES

- The OES Program is the only comprehensive source of regularly produced occupational employment and wage data for the U.S. economy.

- A Federal/State Cooperative Program between the Bureau of Labor Statistics (BLS) and State Agencies and is funded by the U.S. Department of Labor.

- All 50 states, as well as the District of Columbia, Puerto Rico, Guam, and the U.S. Virgin Islands, participate in the survey.

What is OES

- The California OES Unit surveys around 34,000 non-farm establishments per year in California using a semi-annual voluntary mail survey.

- The OES survey sample is drawn from the Quarterly Census of Employment and Wages (QCEW) – a near census count of employment and wages reported by all employers covered by Unemployment Insurance.

- The sample is randomly stratified by industry, geography, and size of employment.

- We collect occupational titles and wages for over 820 occupations.

OES Work & Processes

- ☐ Solicitation – Postcards, Letters, Survey Packages, Email

- ☐ Collection – Survey Form, Electronic File, Email, Fax, Phone

- ☐ Coding – Staff has experience in Standard Occupational Classification (SOC) and North American Industry Classification (NAICS)

- ☐ Review – Use EDD databases, internet, employer contact and websites, and other research methods

- ☐ We must reach a 75% Response Rate in units or employment for 34 designated areas in California.

How OES Data is Used

- Vocational, higher education, and training programs

- Career counseling and job placement

- Market analysis of employment and wages

- Economic development

- Projections of occupations and industries

- Foreign labor certification

SOC Structure & Principles

- [ ] The Standard Occupational Classification (SOC) structure

- [ ] How coding principles and guidelines are used in classifying SOC occupations

Standard Occupational Classification

- A system to classify all occupations in which work is performed for pay or profit

- Includes private, public, and military occupations

- Reflects current occupational composition of the U.S.

- Provides a standard set of occupations for which to collect, calculate, and disseminate data, following common classification principles.

- Facilitates comparison of occupational data from different sources.

SOC Hierarchy

☐ The SOC structure is a four level hierarchy
- Major Groups (23)
  - Minor Groups (97)
    - Broad Occupations (461)
      - Detailed Occupations (840)

Major Groups

- There are 23 major groups at the broadest level.
- All occupations are clustered into one of the following major groups

  - 11-0000 Management
  - 13-0000 Business and Financial Operations
  - 15-0000 Computer and Mathematical
  - 17-0000 Architecture and Engineering
  - 19-0000 Life, Physical, and Social Science
  - 21-0000 Community and Social Services
  - 23-0000 Legal Occupations
  - 25-0000 Education, Training, and Library
  - 27-0000 Arts, Design, Entertainment, Sports, Media
  - 29-0000 Health Practitioners and Technical

Major Groups Cont.

- 31-0000 Healthcare Support
- 33-0000 Protective Service
- 35-0000 Food Preparation and Serving Related
- 37-0000 Building and Ground Cleaning and Maintenance
- 39-0000 Personal Care and Service
- 41-0000 Sales Related
- 43-0000 Office and Administrative Support
- 45-0000 Farming, Fishing, and Forestry
- 47-0000 Construction and Extraction
- 49-0000 Installation, Maintenance, and Repair
- 51-0000 Production
- 53-0000 Transportation and Material Moving
- 55-0000 Military Specific

Residual Categories

- ☐ Not every occupation in the economy is represented by a detailed occupation

- ☐ Occupations coded to residual occupations are as important as detailed occupations

- ☐ Detailed residuals should be used when there is either no SOC code for a specific occupation

Coding Principle

- Each occupation is assigned to only one occupational category at the lowest level of detail.

- Workers should be classified based on work performed and, in some cases, on the skills, education, and training needed to perform the work at a competent level.
  - Work performed: classify workers based upon what is actually being done on the job, not the title of the occupation.

Coding Principle

- When workers may be classified in more than one occupation, they should be classified in the occupation that requires the <u>highest level of skill.</u>

- If there is no measurable difference in skill requirements for a job, the worker is coded to the occupation in which he or she spends the most time.

- Team leaders, lead workers, and supervisors who spend at <u>least 20%</u> of their time performing work similar to workers they supervise, are classified with the workers they supervise.

Coding Principle

- Apprentices and trainees should be classified with the occupations for which they are being trained.

- People receiving on-the-job training should be classified according to the job they are training for.

- Helpers and aides should be classified separately from the occupations which they are assisting.

SOC Revisions

☐ Revising the Standard Occupational Classification System is a multi-year process done by the Office of Management and Budget (OMB) and includes solicitation for review and comments by the public.

☐ The SOC was last revised in 2010 and the next revision will be in 2018.

☐ For more information on SOC and SOC Revisions, including Federal Notices, comments, and changes: https://www.bls.gov/soc/home.htm

Employment and Wage Estimates

- The OES program produces employment and wage estimates for over 820 occupations.

- Estimates are available by geographic area, by industry, and by ownership.

- Estimates are produced annually by combining 6 panels or 3 years of collected data.

- OES Data are available on the LMID website: http://www.labormarketinfo.edd.ca.gov/data/wages/html

OES Estimates

- Estimates are produced for the nation, statewide, metropolitan areas, and balance of state areas.

- Employment and wage rate estimates are computed using a rolling 6-panel (3-year) sample.

- Every unit sampled is assigned an original weight. Sampling weights are computed so that each panel will roughly represent the entire universe of establishments.

- To compensate for nonresponse, missing data for each nonrespondent is imputed using data from responding units with similar characteristics.

OES Estimates

- The Local Employment Wage Information System (LEWIS) is used to create wage and employment estimates of areas not covered by the BLS.
    - Custom estimates for detailed geographic areas
    - Wage estimates at various percentiles
    - Staffing patterns by industry

- LEWIS wage data is updated using the latest Employment Cost Index (ECI).

- Certain LEWIS data is suppressed by the BLS for confidentiality purposes.

OES Wage Estimates

- Mean wage for a specific SOC occupation
  - The mathematical average of all wages reported for that occupation

- Median wage for a specific SOC occupation
  - The wage where 50% of the workers in that occupation earn more and 50% earn less
  - The 50th percentile wage

- Percentile wage estimates for a specific SOC occupation
  - 10, 25, 75, 90 percentiles

- OES uses the Employment Cost Index to age prior panel data and update wage data.

Data Quality

- Each sampled unit is extremely important, as it represents many other units with the same characteristics.

- Insufficient sample size in areas or industries can cause further imputation.

- It is important to accurately assign SOC codes to employees in an establishment.
    - Incorrect codes can significantly impact estimates – especially if the establishment has a high weighted employment
    - Incorrect codes can also be magnified through imputation

QUESTIONS?

David Garcia
(916) 651-6318
DavidR.Garcia@edd.ca.gov

Tom Stassi
(916) 651-5680
Tom.Stassi@edd.ca.gov

Brad Bailey
(916) 651-6316
Bradley.Bailey@edd.ca.gov

http://www.labormarketinfo.edd.ca.gov/