

Online Wage Library Users Guide

Version 2.0

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1 Introduction

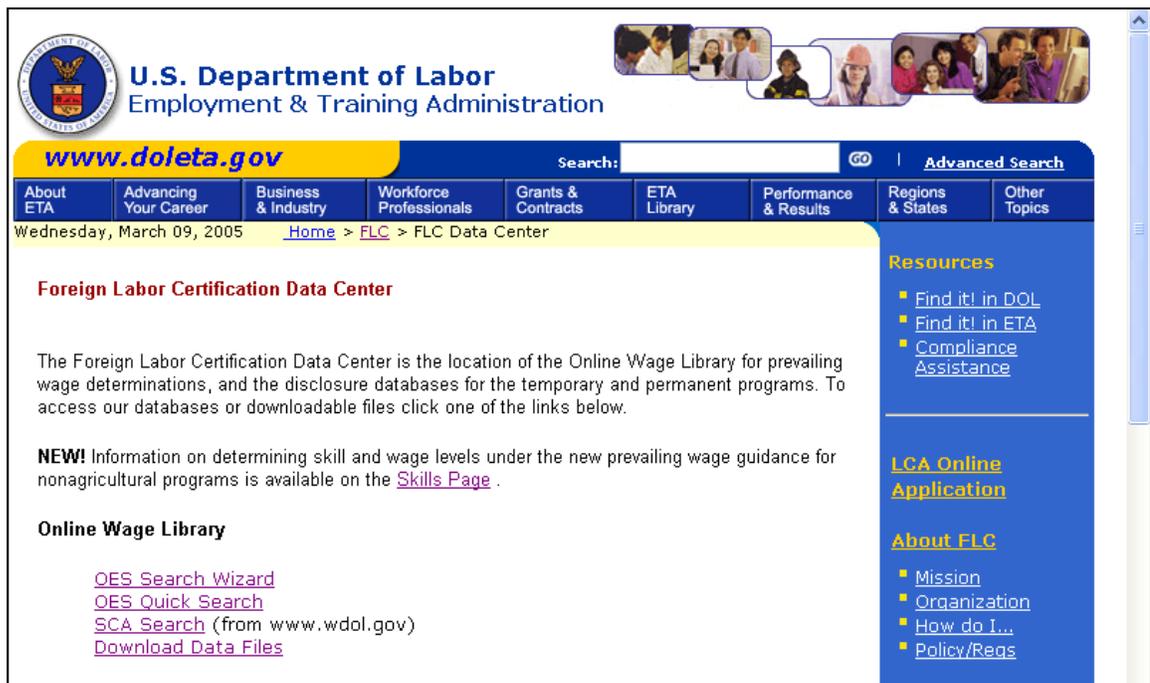
The Online Wage Library was created in the fall of 2000 to make the Occupational Employment Statistics Wages for Alien Labor Certification available over the Internet. Designed as a replacement for the ALCATS system, the OWL integrated OES wage and O*Net™ occupational information with an easy to use search interface.

With the arrival of major changes to the Prevailing Wage Program in early 2005, OWL was modified facilitate the work of prevailing wage specialists operating under the new guidance to assign one of the four wage levels to an occupation.

The OWL includes two separate search utilities, a Search Wizard and a Quick Search. Both interfaces provide a list of OES occupations, and a set of help links.

2 Home Page

The Online Wage Library is found on the main page of the FLC Data Center at flcdatacenter.com.



There are four options associated with OWL. The OES Search Wizard and OWS Quick Search allow you to search for wages using OES and O*Net™ information. The SCA Search link now takes you out of the FLC Data Center site to another source of current and archived Service Contract Act and Davis-Bacon Act wage determinations. Finally, there is a download page where users can download the most current version of the OES data, as well as other helpful documents.

3 Search Wizard

3.1 Using the Search Wizard

The Search Wizard function is a multi-step query builder designed for use when you don't know the BLS Area code or OES Occupation code. The first step is to filter the areas available by selecting the desired state from the list and clicking "continue" as show below.

Online Wage Library - OES Search Wizard

Select a State/Territory:

Alabama [v] [Continue]

Alabama [v]

Alabama

Alaska

Arizona

Arkansas

California

Colorado

Connecticut

Delaware

District of Columbia

Florida

Georgia

Area Code and the OES/SO

ch.

updated 3/8/2005.

e FLC Data Center:

The OWL will find all of the BLS geographic areas in that state. You are then presented with the Search Wizard query page as shown here.

FLC Data Center - OES Search Wizard [New Quick Search](#) [New Search Wizard](#)

You have requested data for **Utah**

Select an area based on County/Township BLS Areas [?]

Beaver County - Other Utah BOS [v]

Select an occupation from the list: [?] [DOT Crosswalk](#) [v]

Or enter a keyword or phrase: [?] []

Select a Data Year: [v]

Current Year - 2005 [v]

Select a Data Source: [?]

All Industries Database [v]

[Search]

To continue your advanced search you must select one of the BLS areas. To simplify finding the appropriate area code, the OWL displays both the county or township, and the name of the associated BLS area. Simply select the desired county or area from the drop down list

FLC Data Center - OES Search Wizard [New Quick Search](#) [New Search Wizard](#)

You have requested data for **Utah**

Select an area based on County/Township BLS Areas ?

Beaver County - Other Utah BOS

Beaver County - Other Utah BOS

Box Elder County - Box-Elder LMA

Cache County - Box-Elder LMA

Carbon County - Other Utah BOS

Daggett County - Other Utah BOS

Davis County - Salt Lake City-Ogden, UT MSA

DeWette County - Other Utah BOS

If you are more familiar with the BLS Area designations you can have the drop down list display those areas rather than the county list by clicking on the BLS Areas selector:

Select an area based on County/Township BLS Areas ?

Box-Elder LMA

Box-Elder LMA ? [DOT Crosswalk](#)

Flagstaff, AZ-UT MSA

Iron-Washington LMA

Other Utah BOS

Provo-Orem, UT MSA

Salt Lake City-Ogden, UT MSA

After selecting an area you may either choose an occupation from the provided list, or you may search the occupational directory using keywords or search strings. Searching using a keyword or phrase will be covered later.

To select an occupation from the list simply click in the occupation dropdown and find the occupation in which you are interested.

You have requested data for **Utah**

Select an area based on County/Township BLS Areas ?

Beaver County - Other Utah BOS

Select an occupation from the list: ? [DOT Crosswalk](#)

11-2031 | Public relations managers

11-3011 | Administrative services managers

11-3021 | Computer and information systems managers

11-3022 | Computer and Information Systems Managers, Non R&D (EDC Only)

11-3023 | Computer and Information Systems Managers, R&D (EDC Only)

11-3031 | Financial managers

11-3040 | Human resources managers

After you have selected an occupation, verify that the correct Data Year and Data Source are selected. Normally you will want to use the current data year, and the all industries database. If you are doing a prevailing wage request for which a past year would apply you can change the data year. If the employer qualifies under the American Competitiveness and Workforce Investment Act (ACWIA) as an educational/research institution then you can change the Data Source to the ACWIA – Education Industry Database.

3.2 Viewing and understanding your search results

After clicking the search button you should see a display like this one:

You selected the All Industries database for Calendar Year 2005 .

Your search returned the following:

Area Code:	7160
Area Title:	Salt Lake City-Ogden, UT MSA
OES/SOC Code:	11-3021
OES/SOC Title:	Computer and information systems managers
Level 1 Wage:	\$22.92 hour - \$47,674 year
Level 2 Wage:	\$31.19 hour - \$64,875 year
Level 3 Wage:	\$39.45 hour - \$82,056 year
Level 4 Wage:	\$47.72 hour - \$99,258 year
GeoLevel:	1

For information on determining the proper occupation and wage level see the new Prevailing Wage Guidance on the [Skill Level page](#).

This wage applies to the following O*Net occupations:

[11-3021.00](#) Computer and Information Systems Managers

Plan, direct, or coordinate activities in such fields as electronic data processing, information systems, systems analysis, and computer programming.

[O*Net™ JobZone: 5](#)

[Education & Training Code: 4-Work experience, plus a bachelor's or higher degree](#)

This page shows the OES Wage and BLS Area information, as well as a list of all the O*Net™ occupations that match the OES occupation. If you changed the data year to a value earlier than 2005 then the display will be show only two wage levels, among some other minor differences. Clicking on the area code will open a page that displays all of the counties or townships that make up the BLS area. Clicking on an O*Net™ Occupation Code will open the Online O*Net Center Summary Page for that occupation. Clicking on the Job Zone or

Education & Training Link will take you to a page with definitions of the respective levels.

Occasionally when looking at search results you will see an SCA link at the bottom of the occupation list that looks like this:

<p><u>15-1021.00</u> Computer Programmers</p> <p>Convert project specifications and statements of work into logical flow charts for coding into computer programs to store, locate, and retrieve specific information from program web sites.</p> <p><u>O*Net™ JobZone: 4</u></p> <p><u>Education & Training Code: 5-Bachelor's degree</u></p> <p><u>Click here to search for possible SCA matches</u></p>

With the recent changes to the Prevailing Wage Guidance, SCA and DBA wage determinations no longer take precedence over any other wage source. Because of this, the link for SCA now points to an external source for SCA and DBA wage information. The rules differ depending on the data year. Be sure to consult the GALs, regulations and other documentation to determine the applicability of SCA wages to your wage determination.

3.3 Doing a Keyword Search

Before you click on the search button while doing a Keyword search, please verify that the Occupation Drop Down box is empty, and that the Data Year and Data Source values are correct. This information will pass through the next page to the results page.

Searching using a keyword or phrase is not complicated, but requires some experience in order to return a reasonable set of matches. For instance, if you wanted to find matches for computer programmer, you could enter “computer programmer” in the Keyword box. This would find matches where either the occupational title or the job definition contained the exact phrase “computer programmer”, including the space.

Using only portions of a word will normally increase the number of matches. A balance has to be maintained however, since searching on smaller strings increases the likelihood that completely unrelated occupations will be returned. For example, searching on the string “econ” returns over 60 possible matches including all postsecondary teachers, but searching for “econo” returns nine occupational matches, the first two of which are shown here.

Your search has matched one or more occupation. Click on the links below to view the wages for the desired occupation.

15-2041.00 Statisticians

Engage in the development of mathematical theory or apply statistical theory and methods to collect, organize, interpret, and summarize numerical data to provide usable information. May specialize in fields, such as bio-statistics, agricultural statistics, business statistics, economic statistics, or other fields.

[View Wages](#)

17-2171.00 Petroleum Engineers

Devise methods to improve oil and gas well production and determine the need for new or modified tool designs. Oversee drilling and offer technical advice to achieve economical and satisfactory progress.

[View Wages](#)

From this intermediate page you can click on the View Wages link to see the screen displayed in section 3.2.

It is essential that the OWL user verify the accuracy of any occupational match. Crosswalks and databases are no substitute for analyst experience, and in every case the occupational definitions should be checked.

3.4 Advanced Search Tips

- To find a specific word, try entering the word with a single space at the beginning and/or end. For instance, searching on the word “art” returns 100 occupational matches because the string “part” is contained in words like department, and participate. Searching on “ part “ returns only 4 matches.
- If you find yourself frequently using the Advanced Search to find the appropriate area when you already know at least the first few digits of the occupational code, make a list of all the area codes for your state and post it in a visible area. The documentation for the Quick Search explains how to do a search if you know at least the first four digits (11-1 for example).

4 Quick Search

4.1 Conducting a Quick Search

The main page for the Quick Search is shown below.

FLC Data Center - OES Quick Search

Enter a BLS Area Code: ?

Select an occupation from the list:

OR Enter an Occupation Code: ? [DOT Crosswalk](#)

Select a Data Year:
 Current Year - 2005 ▼

Select a Data Source:
 All Industries Database ▼

In order to process a Quick Search, the OWL system requires both a BLS Area Code, and either an OES or O*Net™ occupation code.

A BLS Area code is either a four-digit Metropolitan Statistical Area code, or a six-digit Balance of State area code. Do not attempt to search using three digit telephone area codes, or Postal Zip codes. In the Quick Search, the Area Code must be entered by hand, and must include leading zeros (like 0040) if any. If you are unsure of the correct area code you must use the Search Wizard.

Once you have entered a BLS Area code, you can either enter an OES code, enter an O*Net™ code, or pick an OES code from the list. The graphic below shows a Quick Search form with the Area code filled in, and the OES Code drop-down list activated.

FLC Data Center - OES Quick Search

Enter a BLS Area Code: ?
 7160

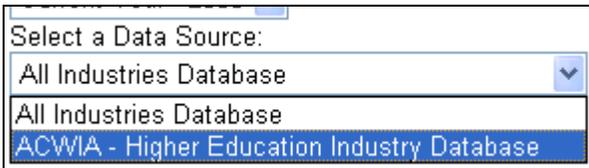
Select an occupation from the list:

- 13-2099 | Financial specialists, all other
- 15-1011 | Computer and information scientists, research
- 15-1021 | Computer programmers
- 15-1022 | Computer Programmers, Non R&D (EDC Only)
- 15-1023 | Computer Programmers, R&D (EDC Only)
- 15-1031 | Computer software engineers, applications
- 15-1032 | Computer software engineers, systems software

The Occupation code drop-down supports mouse or keyboard scrolling. You select the desired occupation by clicking on it. In the image shown above, results will be returned for the occupation 15-1021 – Computer Programmers. If there is information in both the Occupation Code box, and the Occupation Code

List, the information in the Code Entry box is ignored and the value selected in the list used.

The OWL links to data from both the ALC general wage database and the ACWIA compliant database (EDC) for post-secondary educational institutions, and some non-profit, federally funded research facilities (see Appendix 5.1, Attachment C to GAL 2-98 Change 1). Appendix 5.2 list all of the occupations that currently exist in the ACWIA compliant database. The default link is to the Standard database. To switch to the ACWIA compliant database, change the Source field from Standard to ACWIA as shown below.

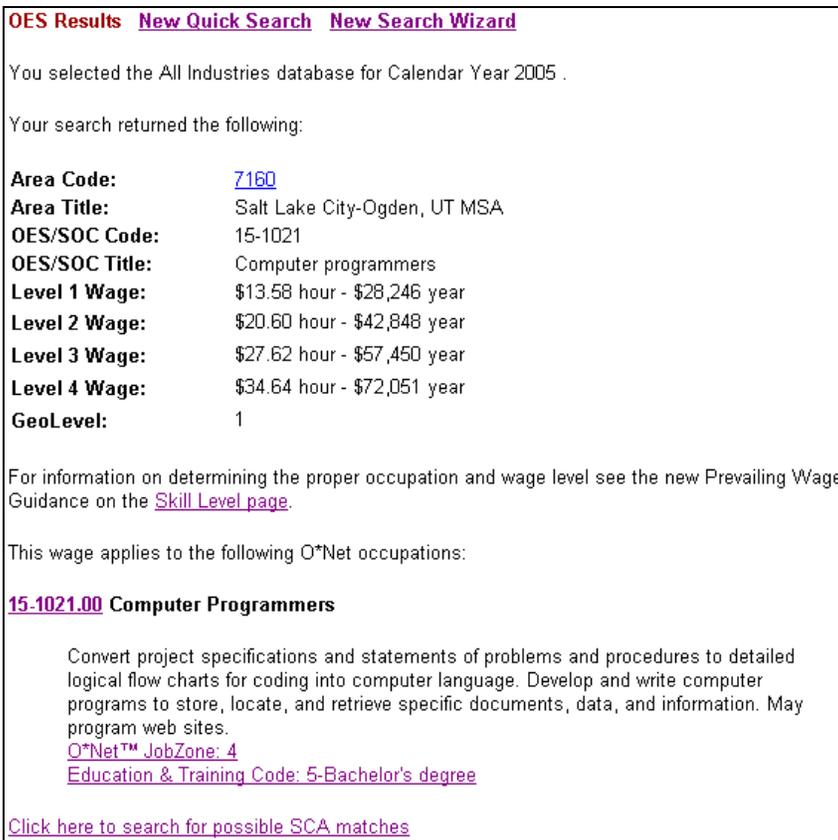


Select a Data Source:
All Industries Database
All Industries Database
ACWIA - Higher Education Industry Database

Once the appropriate data has been entered, you submit the query by either pressing your keyboards Enter key, or by clicking on the Search button.

4.2 Analyzing Quick Search Results

The image below is a sample of an OWL Quick Search Results page.



[OES Results](#) [New Quick Search](#) [New Search Wizard](#)

You selected the All Industries database for Calendar Year 2005 .

Your search returned the following:

Area Code:	7160
Area Title:	Salt Lake City-Ogden, UT MSA
OES/SOC Code:	15-1021
OES/SOC Title:	Computer programmers
Level 1 Wage:	\$13.58 hour - \$28,246 year
Level 2 Wage:	\$20.60 hour - \$42,848 year
Level 3 Wage:	\$27.62 hour - \$57,450 year
Level 4 Wage:	\$34.64 hour - \$72,051 year
GeoLevel:	1

For information on determining the proper occupation and wage level see the new Prevailing Wage Guidance on the [Skill Level page](#).

This wage applies to the following O*Net occupations:

[15-1021.00](#) Computer Programmers

Convert project specifications and statements of problems and procedures to detailed logical flow charts for coding into computer language. Develop and write computer programs to store, locate, and retrieve specific documents, data, and information. May program web sites.

[O*Net™ JobZone: 4](#)
[Education & Training Code: 5-Bachelor's degree](#)

[Click here to search for possible SCA matches](#)

It is essential that the OWL user verify the accuracy of any occupational match. Crosswalks and databases are not a substitute for analyst experience, and in every case the occupational definitions should be checked.

There are several things to note about the results table. First, the wage is listed by OES occupational code. All of the O*Net™ occupations that match the OES occupation will be displayed below the wage information. All occupations that share the same OES code will share the same wage rates, regardless of O*Net designation.

Second, some of the result information is formatted as clickable hyperlinks. These links provide additional information for the analyst. When clicked on they typically a second browser window and populate it with the desired information. To return to your Quick Search Results page simply close the pop-up window. For instance the Area Code hyperlink opens a window that provides a list of all counties/townships included in that area as shown below.

<p>Area Code: 7160</p> <p>Area Name: Salt Lake City-Ogden, UT MSA</p> <p>Counties / Townships: Davis County, Salt Lake County, Weber County</p>
--

If the O*Net™ code is clicked on the users is taken to the Online O*Net™ Center Occupation Summary page.

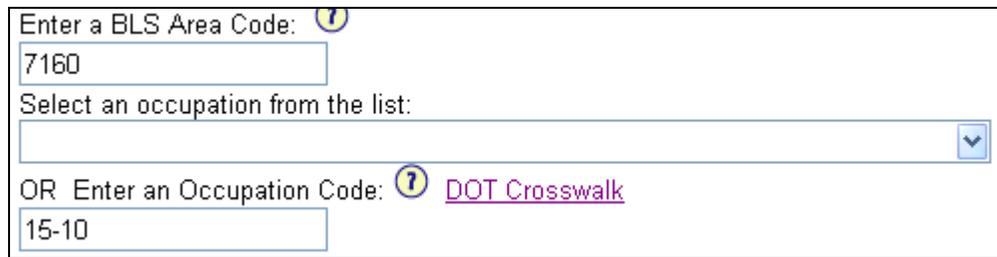
The screenshot shows the O*NET OnLine interface. At the top, there is a blue header with the O*NET OnLine logo and the text "Occupational Information Network". Below the header, there is a navigation bar with links for "Related Links", "OnLine Help", and "Home". The main content area is titled "Summary Report for: 15-1021.00 - Computer Programmers". Below the title, there is a brief description of the occupation: "Convert project specifications and statements of problems and procedures to detailed logical flow charts for coding into computer language. Store, locate, and retrieve specific documents, data, and information. May program web sites." A section titled "Sample of reported job titles" lists: "Programmer Analyst, Programmer, Computer Programmer, Software Developer, Internet Programmer". Below this, there are three tabs: "View report:", "Summary" (selected), "Details", and "Custom". At the bottom, there is a "Tasks" section with a list of tasks: "Correct errors by making appropriate changes and then rechecking the program to ensure that the desired results are produced.", "Conduct trial runs of programs and software applications to be sure they will produce the desired information and that the information is accurate.", "Compile and write documentation of program development and subsequent revisions, inserting comments in the coded instructions.", "Write, update, and maintain computer programs or software packages to handle specific jobs, such as tracking inventory, scheduling equipment.", and "Consult with managerial, engineering, and technical personnel to clarify program intent, identify problems, and suggest changes."

There are direct links to the O*Net Job Zone and the Education and Training Code to help users determine the typical skill requirements for and occupation.

Finally, some occupations are identified with a flag that indicates there may be an SCA occupational match. Because the SCA no longer takes precedence over the OES, the SCA link opens to a separate SCA search page. OWL no longer includes SCA wages in its database.

4.3 Quick Search Tips

- You do not have to enter the whole Occupation Code to complete a search. The OWL system appends a wildcard character to any code that is not seven digits. This type of search is not as fast as a quick search, but is useful when you want to view a family of jobs.



The screenshot shows a search form with two main sections. The first section is labeled 'Enter a BLS Area Code:' and contains a text input field with the value '7160'. Below this is a dropdown menu labeled 'Select an occupation from the list:'. The second section is labeled 'OR Enter an Occupation Code:' and contains a text input field with the value '15-10'. To the right of this field is a link labeled 'DOT Crosswalk'.

For instance, entering just “15-10” as shown above returns all 11 occupations where the first five digits match 15-10.

However, this tip only works on the Occupational code. Area codes must be complete, including any leading or trailing zeros.

- Create and post custom lists of your frequently used Area and Occupation codes.
- Create a list of the top DOT to O*Net crosswalk requests. Posting this list will allow you to go directly to the wage search rather than take the intermediate step through the Occupation Code Help discussed later.

5 Additional Info and Tips

5.1 SVP and Job Zones

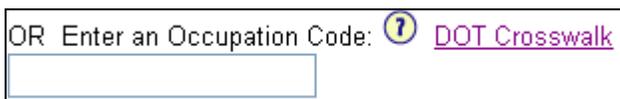
Many people have noticed that not all occupations have a Job Zone assigned. In those cases it may be difficult to determine the appropriate SVP for the occupation if necessary. One option is to do a Quick search using only the first five digits of the occupation code and check the job zones on other occupations in the same family

The information for each zone is independent of the particular occupations. Appendix 5.4 shows the information for each of the Job Zones. It may be useful to post this or a similar table to conserve the step of checking zones online.

5.2 Other Wage Library Resources

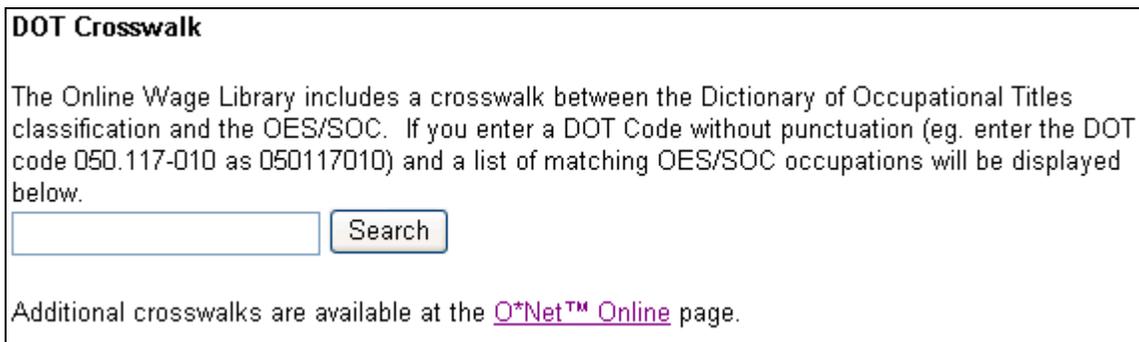
5.2.1 DOT Crosswalk

OWL includes a DOT to OES crosswalk on the FAQ page. You can access the crosswalk by clicking on the link next to the Occupation List dropdown on both search pages.



OR Enter an Occupation Code: [?](#) [DOT Crosswalk](#)

This is the DOT portion of the FAQ page:



DOT Crosswalk

The Online Wage Library includes a crosswalk between the Dictionary of Occupational Titles classification and the OES/SOC. If you enter a DOT Code without punctuation (eg. enter the DOT code 050.117-010 as 050117010) and a list of matching OES/SOC occupations will be displayed below.

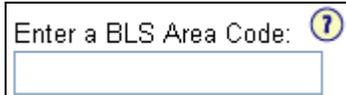
Please remember that using an occupational crosswalk is no substitute for reading and comparing the O*Net™ and OES occupational information and comparing it to the employers job requirements. The DOT has become very outdated, and relying on this crosswalk as the final word on occupational coding is sure to lead to errors.

5.2.2 Links and Downloadable Files

The Wage Info link on the Foreign Labor Certification web site includes several other resources that may be helpful to prevailing wage specialists. There are links to the downloadable files mentioned previously, as well as to the OES dictionary that was current when the wage data was compiled. Links to the Davis-Bacon wages site and an SCA dictionary are also provided.

5.3 Getting Help

There is a detailed “FAQ” on the site that you can access through the link in the page footer. In addition, in places on the search pages you may see a question mark icon:

A rectangular input field with a light blue border. Inside the field, the text "Enter a BLS Area Code:" is displayed in a dark gray font. To the right of the text is a small, circular icon containing a question mark. Below the text and icon is a horizontal line indicating the input area.

Clicking on the question mark icon will take you to the relevant section of the FAQ page.

Prior to contacting customer support for the OWL system, please be sure that you have read this entire guide, as well as checked the help and frequently asked question links on the page.

If you still have questions, or are having trouble conducting a particular search please email your question to:

gray@utah.gov

or

vbdev@sisna.com

with “OWL” or “Online Wage Library” somewhere in the message. Please be specific about the site, page and situation that is experiencing errors. We maintain several sites and it is sometimes difficult to determine which site is experiencing difficulty.

When contacting customer support, please indicate the Area code and area details (state and county) and the Occupational code and title that you attempted to find. This will allow customer support to troubleshoot or verify your problem immediately rather than requiring follow-up contact to clarify your question.

6 Appendices

6.1 Attachment C to GAL 2-98, Change 1

Federally Funded Research and Development Centers Operated by Colleges and Universities

Ames Laboratory, Ames, IA (Iowa State University of Science and Technology)

Argonne National Laboratory, Argonne, IL (University of Chicago)

Brookhaven National Laboratory, Upton, Long Island, NY (Associated Universities, Inc.)

Ernest Orlando Lawrence Berkeley National Laboratory, Berkeley, CA (University of California)

Fermi National Accelerator Laboratory, Batavia, IL (Universities Research Association, Inc.)

Jet Propulsion Laboratory, Pasadena, CA (California Institute of Technology)

Lawrence Livermore National Laboratory, Livermore, CA (University of California)

Lincoln Laboratory, Lexington, MA (Massachusetts Institute of Technology)

Los Alamos National Laboratory, Los Alamos, NM (University of California)

National Astronomy and Ionosphere Center, Arecibo, PR (Cornell University)

National Center for Atmospheric Research, Boulder, CO (University Corporation for Atmospheric Research)

National Optical Astronomy Observatories, Tucson, AZ (Association of Universities for Research in Astronomy, Inc.)

National Radio Astronomy Observatory, Green Bank, WV (Associated Universities, Inc.)

Oak Ridge Institute for Science and Education, Oak Ridge, TN (Oak Ridge Associated Universities, Inc.)

Princeton Plasma Physics Laboratory, Princeton, NJ (Princeton University)

Software Engineering Institute, Pittsburgh, PA (Carnegie Mellon University)

Stanford Linear Accelerator Center, Stanford, CA (Leland Stanford, Jr., University)

Thomas Jefferson National Accelerator Facility, Newport News, VA (Southeastern Universities Research Association)

6.2 Occupations Included in the EDC Database

11-1021	General and operations managers	13-2011	Accountants and auditors
11-2011	Advertising and promotions managers	13-2031	Budget analysts
11-2021	Marketing managers	13-2051	Financial analysts
11-2031	Public relations managers	13-2099	Financial specialists, all other
11-3011	Administrative services managers	15-1022	Computer Programmers, Non R&D (EDC Only)
11-3022	Computer and Information Systems Managers, Non R&D (EDC Only)	15-1023	Computer Programmers, R&D (EDC Only)
11-3023	Computer and Information Systems Managers, R&D (EDC Only)	15-1041	Computer support specialists
11-3031	Financial managers	15-1052	Computer Systems Analysts, Non R&D (EDC Only)
11-3040	Human resources managers	15-1053	Computer Systems Analysts, R&D (EDC Only)
11-3061	Purchasing managers	15-1061	Database administrators
11-3071	Transportation, storage, and distribution managers	15-1071	Network and computer systems administrators
11-9031	Education administrators, preschool and child care center/program	15-1099	Computer specialists, all other
11-9032	Education administrators, elementary and secondary school	17-2001	Engineers, Non R&D (EDC Only)
11-9033	Education administrators, postsecondary	17-2002	Engineers, R&D (EDC Only)
11-9042	Engineering Managers, Non R&D (EDC Only)	17-3001	Drafters, Engineering, and Mapping Technicians Non R&D (EDC Only)
11-9043	Engineering Managers, R&D (EDC Only)	17-3002	Drafters, Engineering, and Mapping Technicians R&D (EDC Only)
11-9051	Food service managers	19-1001	Life Scientists, Non R&D (EDC Only)
11-9122	Natural Sciences Managers, Non R&D (EDC Only)	19-1002	Life Scientists, R&D (EDC Only)
11-9123	Natural Sciences Managers, R&D (EDC Only)	19-2001	Physical Scientists, Non R&D (EDC Only)
11-9199	Managers, all other	19-2002	Physical Scientists, R&D (EDC Only)
13-1023	Purchasing agents, except wholesale, retail, and farm products	19-3001	Social Scientists, Non R&D (EDC Only)
13-1071	Employment, recruitment, and placement specialists	19-3002	Social Scientists, R&D (EDC Only)
13-1073	Training and development specialists	19-3036	Clinical, Counseling, and School Psychologists, Non R&D (EDC Only)
13-1121	Meeting and convention planners	19-3037	Clinical, Counseling, and School Psychologists, R&D (EDC Only)
13-1199	Business operations specialists, all other	19-4001	Life, Physical, and Social Science Technicians, Non R&D (EDC Only)

19-4002	Life, Physical, and Social Science Technicians, R&D (EDC Only)	25-1066	Psychology teachers, postsecondary
21-1011	Substance abuse and behavioral disorder counselors	25-1067	Sociology teachers, postsecondary
21-1012	Educational, vocational, and school counselors	25-1071	Health specialties teachers, postsecondary
21-1014	Mental health counselors	25-1072	Nursing instructors and teachers, postsecondary
21-1021	Child, family, and school social workers	25-1081	Education teachers, postsecondary
21-1096	Health Educators, Non R&D (EDC Only)	25-1082	Library science teachers, postsecondary
21-1097	Health Educators, R&D (EDC Only)	25-1111	Criminal justice and law enforcement teachers, postsecondary
21-2011	Clergy	25-1112	Law teachers, postsecondary
21-9099	All other counselors, social and religious workers	25-1113	Social work teachers, postsecondary
25-1011	Business teachers, postsecondary	25-1121	Art, drama, and music teachers, postsecondary
25-1021	Computer science teachers, postsecondary	25-1122	Communications teachers, postsecondary
25-1022	Mathematical science teachers, postsecondary	25-1123	English language and literature teachers, postsecondary
25-1031	Architecture teachers, postsecondary	25-1124	Foreign language and literature teachers, postsecondary
25-1032	Engineering teachers, postsecondary	25-1125	History teachers, postsecondary
25-1041	Agricultural sciences teachers, postsecondary	25-1126	Philosophy and religion teachers, postsecondary
25-1042	Biological science teachers, postsecondary	25-1191	Graduate teaching assistants
25-1043	Forestry and conservation science teachers, postsecondary	25-1192	Home economics teachers, postsecondary
25-1051	Atmospheric, earth, marine, and space sciences teachers, postsecondary	25-1193	Recreation and fitness studies teachers, postsecondary
25-1052	Chemistry teachers, postsecondary	25-1194	Vocational education teachers, postsecondary
25-1053	Environmental science teachers, postsecondary	25-1199	Postsecondary teachers, all other
25-1054	Physics teachers, postsecondary	25-2011	Preschool teachers, except special education
25-1061	Anthropology and archeology teachers, postsecondary	25-3011	Adult literacy, remedial education, and GED teachers and instructors
25-1062	Area, ethnic, and cultural studies teachers, postsecondary	25-3021	Self-enrichment education teachers
25-1063	Economics teachers, postsecondary	25-3999	All other teachers, primary, secondary, and adult
25-1064	Geography teachers, postsecondary	25-4021	Librarians
25-1065	Political science teachers, postsecondary	25-4031	Library technicians

25-9011	Audio-visual collections specialists	29-1156	Speech-Language Pathologists, R&D (EDC Only)
25-9021	Farm and home management advisors	29-1199	Health diagnosing and treating practitioners, all other
25-9031	Instructional coordinators	29-2061	Licensed practical and licensed vocational nurses
25-9041	Teacher assistants	29-9010	Occupational health and safety specialists and technicians
27-2022	Coaches and scouts	29-9091	Athletic trainers
27-2023	Umpires, referees, and other sports officials	31-1012	Nursing aides, orderlies, and attendants
27-2031	Dancers	31-9099	Healthcare support workers, all other
27-2032	Choreographers	33-9032	Security guards
27-2041	Music directors and composers	33-9091	Crossing guards
27-2099	Entertainers and performers, sports and related workers, all other	33-9099	Protective service workers, all other
27-3031	Public relations specialists	35-1012	First-line supervisors/managers of food preparation and serving workers
27-3041	Editors	35-2012	Cooks, institution and cafeteria
27-3043	Writers and authors	35-2021	Food preparation workers
27-3091	Interpreters and translators	35-3022	Counter attendants, cafeteria, food concession, and coffee shop
27-3099	Media and communication workers, all other	35-9011	Dining room and cafeteria attendants and bartender helpers
27-4011	Audio and video equipment technicians	35-9021	Dishwashers
27-4014	Sound engineering technicians	35-9099	Food preparation and serving related workers, all other
27-4099	Media and communication equipment workers, all other	37-1011	First-line supervisors/managers of housekeeping and janitorial workers
29-1032	Dietitians and Nutritionists, Non R&D (EDC Only)	37-1012	First-line supervisors/managers of landscaping, lawn service, and groundskeeping workers
29-1033	Dietitians and Nutritionists, R&D (EDC Only)	37-2011	Janitors and cleaners, except maids and housekeeping cleaners
29-1062	Family and general practitioners	37-3011	Landscaping and groundskeeping workers
29-1114	Registered Nurses, Non R&D (EDC Only)	37-9099	All other building and grounds cleaning and maintenance workers
29-1115	Registered Nurses, R&D (EDC Only)	39-9011	Child care workers
29-1151	Audiologists, Non R&D (EDC Only)	39-9041	Residential advisors
29-1152	Audiologists, R&D (EDC Only)	39-9099	Personal care and service workers, all other
29-1153	Occupational Therapists, Non R&D (EDC Only)		
29-1154	Occupational Therapists, R&D (EDC Only)		
29-1155	Speech-Language Pathologists, Non R&D (EDC Only)		

41-2011	Cashiers	43-9071	Office machine operators, except computer
41-2031	Retail salespersons	43-9999	All other secretaries, administrative assistants, and other office support workers
41-9099	Sales and related workers, all other	47-2031	Carpenters
43-1011	First-line supervisors/managers of office and administrative support workers	47-2081	Drywall and ceiling tile installers
43-2011	Switchboard operators, including answering service	47-2111	Electricians
43-2099	Communications equipment operators, all other	47-2141	Painters, construction and maintenance
43-3021	Billing and posting clerks and machine operators	47-2152	Plumbers, pipefitters, and steamfitters
43-3031	Bookkeeping, accounting, and auditing clerks	47-4999	All other construction trades and related workers
43-3051	Payroll and timekeeping clerks	49-1011	First-line supervisors/managers of mechanics, installers, and repairers
43-4071	File clerks	49-3023	Automotive service technicians and mechanics
43-4121	Library assistants, clerical	49-3031	Bus and truck mechanics and diesel engine specialists
43-4161	Human resources assistants, except payroll and timekeeping	49-3099	All other vehicle and mobile equipment mechanics, installers, and repairers
43-4171	Receptionists and information clerks	49-9021	Heating, air conditioning, and refrigeration mechanics and installers
43-4999	All other financial, information, and record clerks	49-9042	Maintenance and repair workers, general
43-5081	Stock clerks and order fillers	49-9099	Installation, maintenance, and repair workers, all other
43-5199	All other material recording, scheduling, dispatching, and distributing workers	53-1021	First-line supervisors/managers of helpers, laborers, and material movers, hand
43-6011	Executive secretaries and administrative assistants	53-1031	First-line supervisors/managers of transportation and material-moving machine and vehicle operators
43-6014	Secretaries, except legal, medical, and executive	53-3022	Bus drivers, school
43-9011	Computer operators	53-3033	Truck drivers, light or delivery services
43-9021	Data entry keyers	53-3099	Motor vehicle operators, all other
43-9022	Word processors and typists	53-7062	Laborers and freight, stock, and material movers, hand
43-9051	Mail clerks and mail machine operators, except postal service	53-7199	Material moving workers, all other
43-9061	Office clerks, general		

6.3 Job Zone Tables

JobZone One: Little or No Preparation Needed

Experience: No previous work-related skill, knowledge, or experience is needed for these occupations. For example, a person can become a general office clerk even if he/she has never worked in an office before.

Education: These occupations may require a high school diploma or GED certificate. Some may require a formal training course to obtain a license.

Job Training: Employees in these occupations need anywhere from a few days to a few months of training. Usually, an experienced worker could show you how to do the job.

Examples: These occupations involve following instructions and helping others. Examples include bus drivers, forest and conservation workers, general office clerks, home health aides, and waiters/waitresses.

SVP Range: Below 4.0

JobZone Two: Some Preparation Needed

Experience: Some previous work-related skill, knowledge, or experience may be helpful in these occupations, but usually is not needed. For example, a drywall installer might benefit from experience installing drywall, but an inexperienced person could still learn to be an installer with little difficulty.

Education: These occupations usually require a high school diploma and may require some vocational training or job-related course work. In some cases, an associate's or bachelor's degree could be needed.

Job Training: Employees in these occupations need anywhere from a few months to one year of working with experienced employees.

Examples: These occupations often involve using your knowledge and skills to help others. Examples include drywall installers, fire inspectors, flight attendants, pharmacy technicians, salespersons (retail), and tellers.

SVP Range: 4.0 to < 6.0

JobZone Three: Medium Preparation Needed

Experience: Previous work-related skill, knowledge, or experience is required for these occupations. For example, an electrician must have completed three or four years of apprenticeship or several years of vocational training, and often must have passed a licensing exam in order to perform the job.

Education: Most occupations in this zone require training in vocational schools, on-the-job experience, or an associate's degree. Some may require a bachelor's degree.

Job Training: Employees in these occupations usually need one or two years of training involving both on-the-job experience and informal training with experienced workers.

Examples: These occupations usually involve using communication and organizational skills to coordinate, supervise, manage, or train others to accomplish goals. Examples include dental assistants, electricians, fish and game wardens, legal secretaries, personnel recruiters, and recreation workers.

SVP Range: >6.0 < 7.0

JobZone Four: Considerable Preparation Needed

Experience: A minimum of two to four years of work-related skill, knowledge, or experience is needed for these occupations. For example, an accountant must complete four years of college and work for several years in accounting to be considered qualified.

Education: Most of these occupations require a four-year bachelor's degree, but some do not.

Job Training: Employees in these occupations usually need several years of work-related experience, on-the-job training, and/or vocational training.

Examples: many of these occupations involve coordinating, supervising, managing, or training others. Examples include accountants, chefs and head cooks, computer programmers, historians, pharmacists, and police detectives.

SVP Range: 7.0 < 8.0

JobZone Five: Extensive Preparation Needed

Experience: Extensive skill, knowledge, and experience are needed for these occupations. Many require more than five years of experience. For example, surgeons must complete four years of college and an additional five to seven years of specialized medical training to be able to do their job.

Education: A bachelor's degree is the minimum formal education required for these occupations. However, many also require graduate school. For example, they may require a masters degree, and some require a Ph.D., M.D., or J.D. (law degree).

Job Training: Employees may need some on-the-job training, but most of these occupations assume that the person will already have the required skills, knowledge, work-related experience, and/or training.

Examples: These occupations often involve coordinating, training, supervising, or managing the activities of others to accomplish goals. Very advanced communication and organizational skills are required. Examples include athletic trainers, lawyers, managing editors, physicists, social psychologists, and surgeons.

SVP Range: 8.0 and above

6.4 Professional Occupations Education and Training Categories

Code	Definition
1	First professional degree. Completion of the academic program usually requires at least 6 years of full-time equivalent academic study, including college study prior to entering the professional degree program.
2	Doctoral degree. Completion of the degree program usually requires at least 3 years of full-time equivalent academic work beyond the bachelor's degree.
3	Master's degree. Completion of the degree program usually requires 1 or 2 years of full-time equivalent study beyond the bachelor's degree.
4	Work experience, plus a bachelor's or higher degree. Most occupations in this category are managerial occupations that require experience in a related non-managerial position.
5	Bachelor's degree. Completion of the degree program generally requires at least 4 years but not more than 5 years of full-time equivalent academic work.