



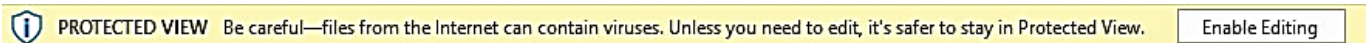
Navigating Demand LMI Tables

OPENING and USING the demand tables for researching labor market information by region, economic sub-region or county

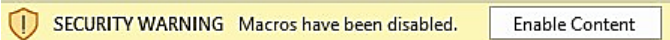
Opening the Demand Excel File *Macros, Enable Content and Mac Users*

Macro Warning: The Demand LMI Excel file is macro enabled. A warning message may display upon opening the file. Opening this file will NOT affect any other files or the computer that it is stored on. When listed in a file directory, it does have an icon indicating that it does contain macros.

Enable Editing: Upon opening the files, you may also encounter this message to Enable Editing.



Enable Content: After clicking on the “Enable Editing” button, an Enable Content message appears.



Clicking on both buttons will not affect your computer nor your files.


Note for Mac and tablet users: These files were created with Microsoft Office Excel on a PC. While there are Microsoft Office versions for Mac and PC, the interface for the Mac version can be quite different. Mac Users will need to upgrade to Office 2016 for Mac suite (which includes Excel Version 16.28) or Microsoft Office 360. There are two warnings. One, that there are macros to enable. Two, that the features can only be used in read-only mode. Any changes made cannot be saved. Once you click through those, the table and pivots should work fine. If you are trying to open the files on a tablet, you may also encounter problems and will need to use a laptop or desktop.

How to Navigate the files

Guide to tabs in the files and tips for getting desired information

There are two tabs in the Demand File: "INSTRUCTIONS" and "DEMAND LMI". To navigate between the two, just click on either tab with your cursor.

INSTRUCTIONS tab: The Instructions tab in the Supply and Demand files contains overviews of the data included in the LMI tabs, help with selecting the data that you want to display, and the data sources. The Supply LMI Instructions tab also contains a resource table that you can scroll through to help with your selection of a TOP06 code (if you should need it) in TOP06 numerical order.

 **Scroll Bar**

TOP06	TOP06_Title
010100	Agriculture Technology and Sciences, General
010200	Animal Science
010210	Veterinary Technician (Licensed)
010220	Artificial Inseminator (Licensed)
010230	Dairy Science
010240	Plant Science
010240	Equine Science
010300	Plant Science
010310	Agricultural Pest Control Adviser and Operator (Licensed)
010400	Viticulture, Enology, and Wine Business

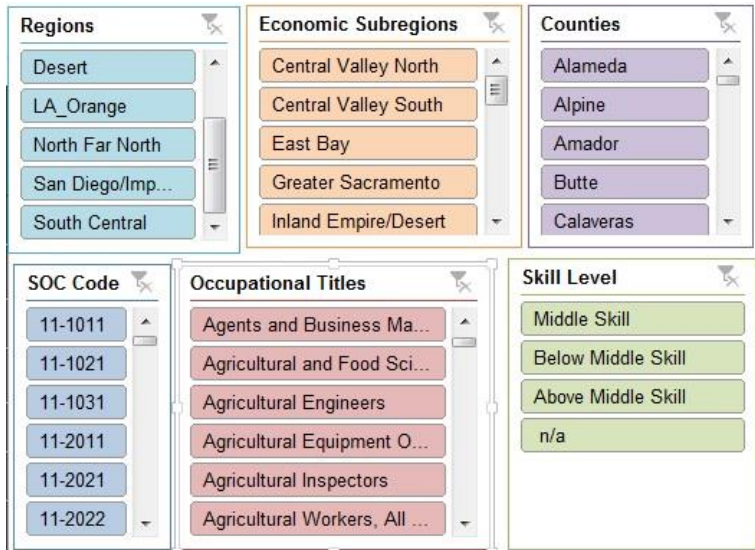
SOC code(s) need to be selected in order to see annual openings from the Demand LMI table. There are two options for selecting these codes:

- **Option 1** – O*NET: Click on the red button to go to O*NET OnLine and search by job title or keyword and choose from a list. There is a link to a short video about O*NET and selection of SOC codes at the top of the page.
- **Option 2** – Crosswalk: The other option is to use the crosswalk provided on the Demand LMI Instructions tab. This crosswalk was developed by the Centers of Excellence to map TOP06 codes to SOC (Standard Occupational Classification) codes. It can be scrolled through to see which SOC code(s) are typically associated with a TOP06. However, there may be different SOC codes related to a TOP06 depending on the college program. This crosswalk should be considered as a starting point for your SOC search. Usually three to five SOC codes are chosen as potential occupations upon completion of a particular program. Of course, this will vary depending on the program.

TOP06	TOP06_Title	soc2010	SOC2010_Title	Education
010100	Agriculture Technology and Sciences, General	194011	Agricultural and Food Science Technicians	Requires an Associate Degree
010100	Agriculture Technology and Sciences, General	191012	Food Scientists and Technologists	Requires a Bachelor's or Higher
010200	Animal Science	119013	Farmers, Ranchers, and Other Agricultural Managers	On-The-Job Training, No College Required
010200	Animal Science	451011	First-Line Supervisors of Farming, Fishing, and Forestry Workers	On-The-Job Training, No College Required
010200	Animal Science	452021	Animal Breeders	On-The-Job Training, No College Required
010210	Veterinary Technician (Licensed)	292056	Veterinary Technologists and Technicians	Requires an Associate Degree

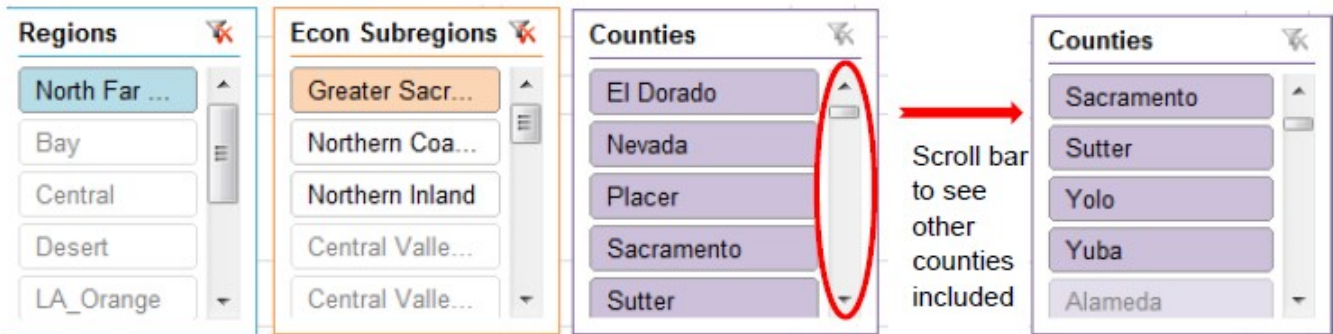
Three SOC codes are crosswalked to 010200 Animal Science

DEMAND LMI tab: There are six slicer or filter boxes in the Demand table: Regions, Economic Subregions, Counties, SOC codes, Occupational Titles and Skill Level. To make MULTIPLE SELECTIONS within a box or filter, hold down the control key while clicking on all of the selected items for which data is needed.



If a selection is cut off in a box, simply hover over that selection and the full name will appear. See selection to the right in Occupational Titles filer for Agriculture Equipment Operators.

Like the Supply filters, if you make a selection in one box, it affects all of the others. Let's choose North Far North as the region and Greater Sacramento as the sub-region:



There are more than just the five counties displayed in the box initially. Just use the scroll bar on the right in the Counties box to see the others. Again, the counties not included such as Alameda are greyed out. Also, the same symbols appear in the slicer boxes where selections have been made. The symbol is not in the Counties box since no selection was made in that box.

To clear ALL of your filters, there are two options:

- (1) Click on all symbols in the boxes,
- (2) Select the blue REFRESH button in the middle of the sheet.

REFRESH - Clear All Filters

To see the effects on the Demand table, let's continue and choose SOC codes (Standard Occupational Classification) codes like 29-2011 and 29-2012 for Medical and Clinical Laboratory Technologists and Technicians. You can select either the SOC code or the Occupational title. Here is how the table will look based on your 3 filters for region, sub-region and SOC code.

To View your Demand Side Data BELOW make your selections in the boxes on the RIGHT. Refer to the TIP box (top right) for help. Click the "SOC Code Search" box BELOW to navigate away from this page to the Instructions tab for help on choosing SOC codes.

REFRESH - Clear All Filters

SOC Code Search										
SOC Code	Occupational Title	Typical Entry Level	2015 Jobs	2018 Jobs	2015-18 Change	% Change 2015-18	Openings (New + Replacements)	Annual Openings	10% Hourly Earnings	Median Hourly Earnings
29-2011	Medical and Clinical Laboratory Technologists	Bachelor's degree	11,300	12,479	1,179	10.4%	2,047	682	\$26.22	\$44.07
29-2012	Medical and Clinical Laboratory Technicians	Associate degree	18,176	19,853	1,677	9.2%	3,075	1,025	\$14.70	\$24.04
Grand Total			29,476	32,333	2,857	9.7%	5,122	1,707	\$19.12	\$31.72

The number of jobs in 2015 and 2018 are listed as well as the change in jobs, representing new jobs or contraction in jobs (if negative), projected to be created in that three-year period. The % change is for 2015-18. To get annual change, divide by three. In this instance for the two job titles, annual growth is 3.2%. The number to use for demand is the Annual Openings, which is the 2015-18 Change in jobs (new jobs) + Replacements. 10th percentile hourly earnings are typically considered entry level wages. To get annual salaries, simply multiply the hourly wage x 2,080 hours. For these two jobs, the 10th percentile (or entry-level) annual salary would be \$39,762.

Looking at the typical entry level of education, notice that Medical and Clinical Lab Technologists typically require a Bachelor's degree for entry. While this is not always the case, it is an indication of the desired level of education. For a breakdown of education levels of people currently employed in a certain occupation at the national level, visit <http://www.onetonline.org> and type in the SOC code, job title or keyword (a box with a link is provided on the Demand LMI Instruction tab for navigating to O*NET). Select the occupation from the list provided and view the report on Education. For Medical and Clinical Lab Technologists, O*NET shows that while 59% of those currently employed have a Bachelor's degree, 30% have an Associate Degree.

To filter for Middle Skill jobs only, use the filter or slicer box on the far right of the bottom row for "Skill Level." The Centers of Excellence used the following criteria to classify occupations into the Middle Skill category:

- All occupations listed as having some college or associate degree = Yes
- All occupations needing an apprenticeship = Yes
- All occupations with a Bachelor's degree with $\sim \geq 33\%$ of workers having some college to associate degree = Yes
- All occupations with High school, equivalent or no formal education with long-term OTJ = Yes
- All supervisory occupations (skills-builder qualified) = Yes
- Exceptions for Bachelor's degree where there are pre-existing CCs level programs
- Exceptions were made for occupations with high school or equivalent or no formal education with short or moderate OTJ where multiple CCs have pre-existing programs

Data Definitions and Interpreting Data tabs: The Data Definition tab has more information on data sources and demand data provided. The Interpreting Data tab provides disclaimers when using the data and implications for analysis.