# Understanding Labor Market Information Resources:

## Descriptions, Benefits, and Limitations

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This guide was underwritten by the California Community Colleges Chancellor's Office Vocational Education Research and Technical Advisory Committee (VERATAC).

It is available online at www.coeccc.net, along with a companion piece that provides more detailed information on where to find labor market data for common community college decisions.

# Introduction

Recently, the number of data sources for labor market information has grown considerably. Given all these sources of information, it can be difficult to know which are best suited to the questions most often asked by community colleges. This guide is designed to help practitioners evaluate commonly-used sources of labor market information.

## How to use this guide

This guide provides a brief overview of 21 labor market information sources, including:

- What each tool provides
- When to use it
- What to use it for
- Strengths
- Limitations
- Whether it is publicly available or requires a subscription
- Screenshots
- Web links

It is divided into four sections:


- Traditional labor market information (page 3)
- Real-time labor market information (page 15)
- Employer information (page 19)
- Student information (page 26)


*Additional information on using labor market information can be found in a companion guide, "Making Use of Labor Market Information: Where to Find Data for Common Community College Decision." Structured around the types of questions that community colleges commonly ask related to developing new programs, grant applications, program review, and regional planning, it addresses issues ranging from projected demand to evaluating how well programs are preparing students for the workplace. The guide is available at www.coeccc.net.*

# Traditional Labor Market Information

The following resources provide secondary information on the demand for trained workers.

## 1. Bureau of Labor Statistics (BLS)

**Summary:**
Using a semi-annual survey of business establishments, the Bureau of Labor Statistics collects data on employment and earnings of workers and produces labor market data at the national, state, and local levels. Every two years employment projections by occupation and industry are released (for example, 2012-22 projections are the most current in 2014). For California, much of this information is produced in cooperation with the California Employment Development Department.

Through web-based tools on BLS website, users can access the following information:

- **Industry-level employment and wages data:** The *Quarterly Census of Employment and Wages (QCEW) database searches* provide tables on the number of establishments, total employment, and average wages for selected industries. The data are available for national, state, and local/metropolitan statistical areas (MSAs).
- **Occupation-level wage data:** The *Overview of Wage Data by Area and Occupation* includes detailed wage data that can be viewed by occupation and geographic area. Users can select a region or state, find a robust list of occupations, and gather information about employment rates and median wages.

**Cost:**
BLS is a free resource.

**Web links**:

- Main website: www.bls.gov
- Industry-level employment and wages data tool: http://www.bls.gov/cew/data.htm
- Occupation-level wage data tool: http://www.bls.gov/bls/blswage.htm

**When to use it:**

- Developing new programs
- Writing grant applications
- Conducting program review
- Engaging in regional planning

**What to use it for:**

- Finding out the number of available jobs and projected demand
- Documenting what jobs are like and what employers are looking for

**Strengths:**

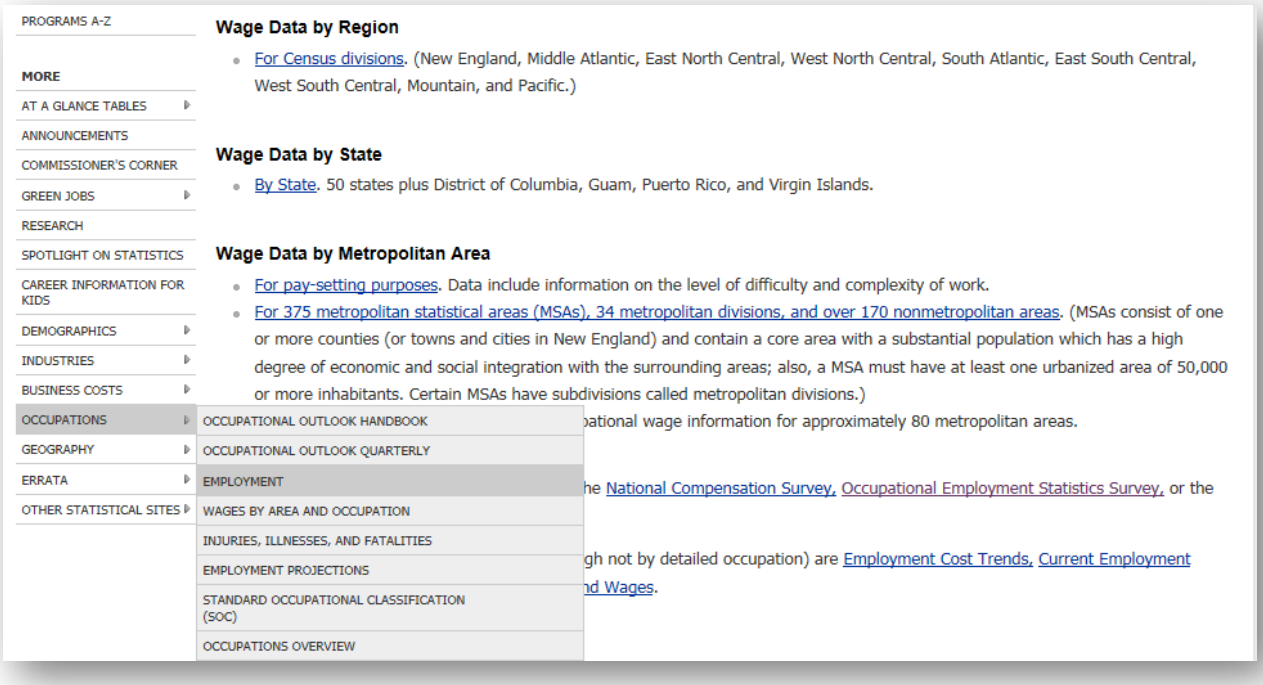
- Information is collected using a consistent, documented method, which allows for comparisons of labor market trends over time and regions

- Information is reliable and robust. Estimates are based on surveys of large numbers of employers. All tables contain the margin of error, which colleges could use to determine how reliable job estimates are for each occupation/industry and geographic region

**Limitations:**

- Employment projections are based on historic data and don't account for recent changes in the labor markets
- Information is only provided for occupations with an SOC code; colleges that are interested in data for emerging jobs will not find relevant information
- Employment estimates do not include self-employed workers
- BLS online search tools and tables might be difficult to navigate for non-researchers
- BLS provides projections only for a 10-year period and there is 12-24 month time lag for publishing projections--for example, in 2014, the most up-to-date projections published on the website are for the 2012-2022 time period
- County or MSA is the smallest unit of geography for which BLS provides employment statistics; community colleges located in large counties with varying local economies (e.g., San Bernardino County) will find it difficult to use county-level data to understand the labor markets that they serve

**Screenshots:**


PROGRAMS A-Z
MORE
AT A GLANCE TABLES
ANNOUNCEMENTS
COMMISSIONER'S CORNER
GREEN JOBS
RESEARCH
SPOTLIGHT ON STATISTICS
CAREER INFORMATION FOR KIDS
DEMOGRAPHICS
INDUSTRIES
BUSINESS COSTS
OCCUPATIONS
GEOGRAPHY
ERRATA
OTHER STATISTICAL SITES
OCCUPATIONAL OUTLOOK HANDBOOK
OCCUPATIONAL OUTLOOK QUARTERLY
EMPLOYMENT
WAGES BY AREA AND OCCUPATION
INJURIES, ILLNESSES, AND FATALITIES
EMPLOYMENT PROJECTIONS
STANDARD OCCUPATIONAL CLASSIFICATION (SOC)
OCCUPATIONS OVERVIEW
Wage Data by Region
For Census divisions. (New England, Middle Atlantic, East North Central, West North Central, South Atlantic, East South Central, West South Central, Mountain, and Pacific.)
Wage Data by State
By State. 50 states plus District of Columbia, Guam, Puerto Rico, and Virgin Islands.
Wage Data by Metropolitan Area
For pay-setting purposes. Data include information on the level of difficulty and complexity of work.
For 375 metropolitan statistical areas (MSAs), 34 metropolitan divisions, and over 170 nonmetropolitan areas. (MSAs consist of one or more counties (or towns and cities in New England) and contain a core area with a substantial population which has a high degree of economic and social integration with the surrounding areas; also, a MSA must have at least one urbanized area of 50,000 or more inhabitants. Certain MSAs have subdivisions called metropolitan divisions.)
ational wage information for approximately 80 metropolitan areas.
he National Compensation Survey, Occupational Employment Statistics Survey, or the
gh not by detailed occupation) are Employment Cost Trends, Current Employment
nd Wages.

## 2. California Employment Development Department/Labor Market Information Division (EDD/LMID)

**Summary:**
A division of the Employment Development Department, the Labor Market Information Division (LMID) produces and hosts a variety of labor market information and data. LMID's website has a specific page for educators and trainers that allows users to select program codes, occupational codes, and counties to view current positions and annual job openings by occupation.

**Cost:**
These data and reports are free. For a fee, EDD also provides customized data reporting, including reports on students' earnings outcomes.

**Web links**:
- Main site: www.labormarketinfo.edd.ca.gov
- Educators and training page: http://www.labormarketinfo.edd.ca.gov/customers/educators-trainers.html
- Program code tool: http://www.labormarketinfo.edd.ca.gov/CommColleges

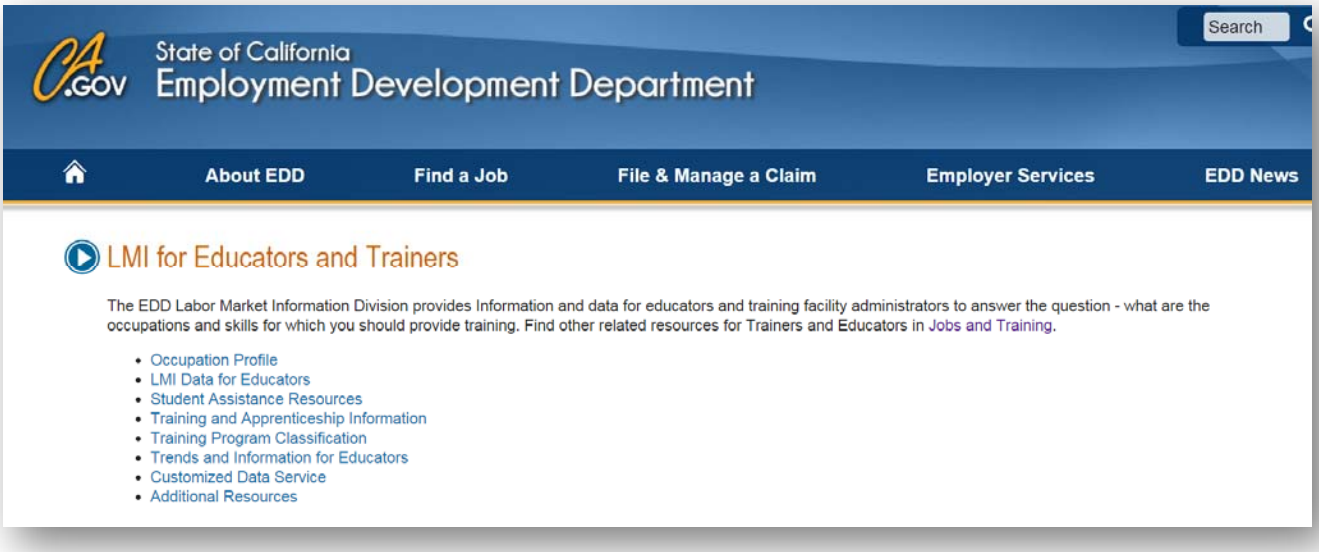
**When to use it:**
- Developing new programs
- Writing grant applications
- Conducting program review
- Engaging in regional planning

**What to use it for:**
- Finding out the number of available jobs and projected demand
- Documenting what jobs are like and what employers are looking for

**Strengths:**
- Access to a variety of data on industry and occupations at the state level and for sub-state regions
- Ability to look up wage data by region
- Many interactive tools to extract specific data elements
- Information is continuously updated

**Limitations:**
- Data for occupations is based on Standard Occupational Classification (SOC), so it is more difficult to research programs that address occupations that do not have a specific SOC code or share a SOC code with other job titles
- The outlook (projection) for industry and occupational data is only available for a 10-year period (e.g. 2012-2022)
- Data are only refreshed or updated about every 18-24 months

**Screenshot:**


Search
State of California
Employment Development Department
About EDD
Find a Job
File & Manage a Claim
Employer Services
EDD News
LMI for Educators and Trainers
The EDD Labor Market Information Division provides Information and data for educators and training facility administrators to answer the question - what are the occupations and skills for which you should provide training. Find other related resources for Trainers and Educators in Jobs and Training.
Occupation Profile
LMI Data for Educators
Student Assistance Resources
Training and Apprenticeship Information
Training Program Classification
Trends and Information for Educators
Customized Data Service
Additional Resources

## 3. Census Bureau

**Summary:**
The Census Bureau collects data that measure the state of the nation's workforce, including employment and unemployment levels, as well as weeks and hours worked. Data collection also includes occupation, industry, and class of worker (e.g., self-employed, working for a private firm, or working for a government agency), in addition to commuting behavior and estimates of home-based work. These statistics are available by age, race, gender, household composition, and a variety of other demographic factors. Employment statistics are also available at various geographic levels.

**Cost:**
The census is a free resource.

**Web link**: www.census.gov

**When to use it:**
- Developing new programs
- Writing grant applications
- Conducting program review
- Engaging in regional planning

**What to use it for:**
- Finding out the number of available jobs and projected demand
- Documenting what jobs are like and what employers are looking for

**Strengths:**
- Combines information from multiple government surveys and encompasses a broader approach to employment information, including elements not generally produced at the state or local level
- Can be extracted by many demographic elements (e.g., age, gender, household)
- Provides information about the residential population, including commuting behavior
- Offers information about more obscure employment situations, like home-based work
- Documents changes in employment and factors influencing demand

**Limitations:**
- For state and local (sub-state) areas, the data sample may be small and have a high margin of error
- Data are not always annual – some are collected at 5- or 10-year intervals
- Data are always historical

**Screenshot:**


U.S. Department of Commerce
United States Census Bureau
Search
Topics
Population, Economy
Geography
Maps, Geographic Data
Library
Infographics, Publications
Data
Tools, Developers
About the Bureau
Research, Surveys
Employment
About this Topic
Data
News
Publications
Related Sites
Surveys/Programs
Visualizations
Working Papers
The U.S. Census Bureau collects data that measure the state of the nation's workforce, including employment and unemployment levels, as well as weeks and hours worked.
Read More
Commuting
Disability Employment Tabulation
Employers: Private Sector
Employers: Public Sector
Equal Employment Opportunity Tabulation
Industry and Class of Worker (Employees)
Labor Force Statistics
Occupation
Public Sector Employment and Payroll
Work from Home

## 4. Economic Modeling Specialists International (EMSI)

**Summary:**
EMSI is a proprietary resource the combines multiple sources of publically available data. Information can be customized and sorted by factors like zip code, county, and time period. The tool includes industry and occupational employment reports, college program completion information, basic demographic indicators, GIS mapping, business listings, and economic indicators such as unemployment.

**Cost:**
Colleges must have a paid subscription to access EMSI data, although some information is provided free of charge on the LaunchBoard (https://www.calpassplus.org/Launchboard/Home.aspx), including program-level information on current and projected job openings, starting and median wages, and expected education levels for related occupations. You can also contact your regional Centers of Excellence to inquire about EMSI data (www.coeccc.net/contact.asp).

**Web link**: www.economicmodeling.com

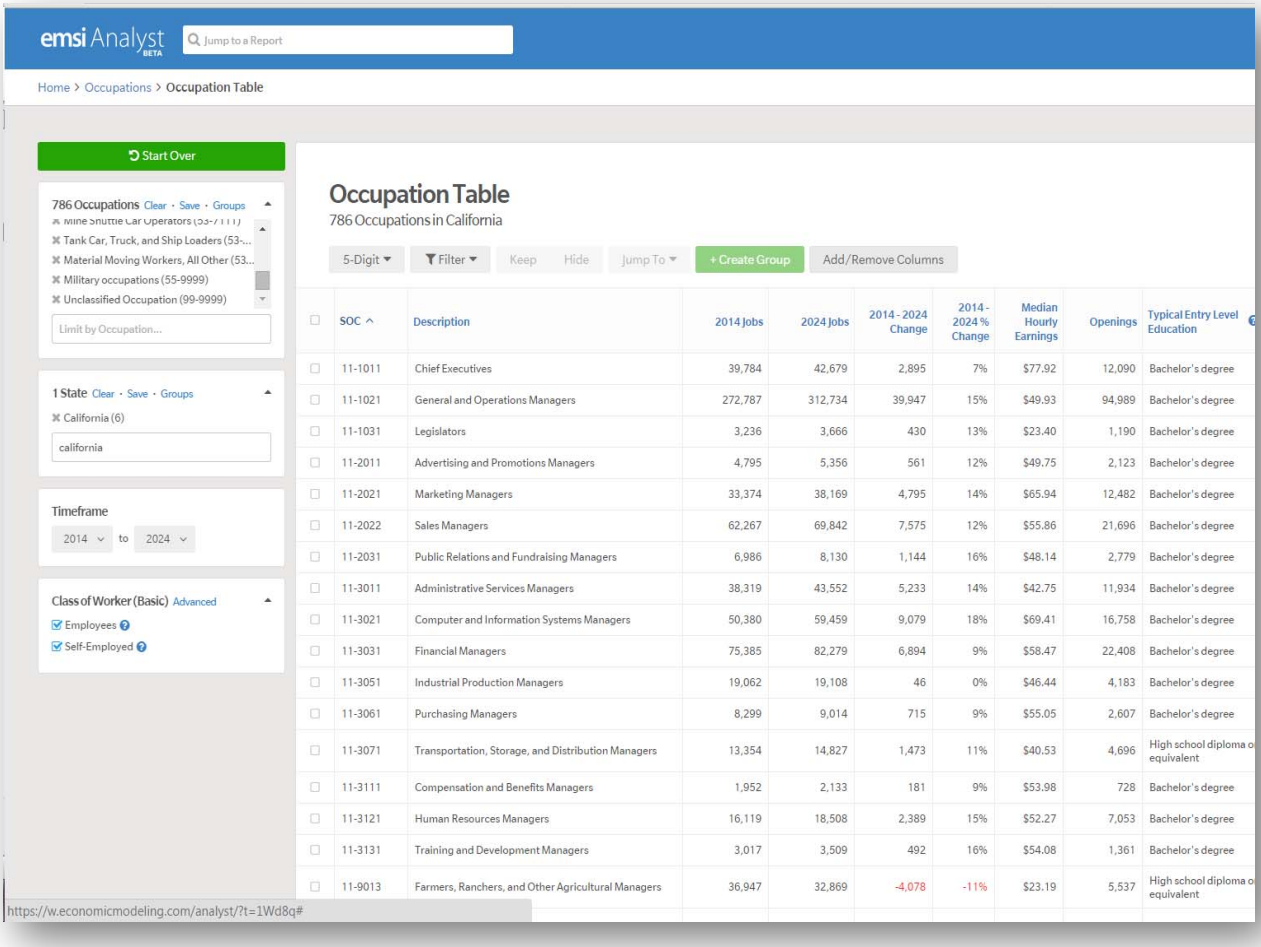
**When to use it:**
- Developing new programs
- Writing grant applications
- Conducting program review
- Engaging in regional planning

**What to use it for:**
- Finding out the number of available jobs and projected demand
- Documenting what jobs are like and what employers are looking for
- Understanding the projected supply of qualified workers

**Strengths**:
- Produces occupational reports and projections for customized geographies
- Identifies wages and education requirements for occupations
- Staffing pattern reports describe the occupations that are employed within area industries
- Conveniently packaged educational completion data
- Provides multiple data elements in one place
- Easy to use and quick to share

**Limitations:**
- Colleges may not have funding to cover subscription costs
- Projections are based on historical data
- Lack of data on emerging industries or occupations
- Data limitations, such as inability to document the sources of information and concerns about the accuracy of the crosswalk between occupations and educational programs

**Screenshot:**




| SOC | Description | 2014 Jobs | 2024 Jobs | 2014 - 2024 Change | 2014 - 2024 % Change | Median Hourly Earnings | Openings | Typical Entry Level Education |
|---|---|---|---|---|---|---|---|---|
| 11-1011 | Chief Executives | 39,784 | 42,679 | 2,895 | 7% | $77.92 | 12,090 | Bachelor's degree |
| 11-1021 | General and Operations Managers | 272,787 | 312,734 | 39,947 | 15% | $49.93 | 94,989 | Bachelor's degree |
| 11-1031 | Legislators | 3,236 | 3,666 | 430 | 13% | $23.40 | 1,190 | Bachelor's degree |
| 11-2011 | Advertising and Promotions Managers | 4,795 | 5,356 | 561 | 12% | $49.75 | 2,123 | Bachelor's degree |
| 11-2021 | Marketing Managers | 33,374 | 38,169 | 4,795 | 14% | $65.94 | 12,482 | Bachelor's degree |
| 11-2022 | Sales Managers | 62,267 | 69,842 | 7,575 | 12% | $55.86 | 21,696 | Bachelor's degree |
| 11-2031 | Public Relations and Fundraising Managers | 6,986 | 8,130 | 1,144 | 16% | $48.14 | 2,779 | Bachelor's degree |
| 11-3011 | Administrative Services Managers | 38,319 | 43,552 | 5,233 | 14% | $42.75 | 11,934 | Bachelor's degree |
| 11-3021 | Computer and Information Systems Managers | 50,380 | 59,459 | 9,079 | 18% | $69.41 | 16,758 | Bachelor's degree |
| 11-3031 | Financial Managers | 75,385 | 82,279 | 6,894 | 9% | $58.47 | 22,408 | Bachelor's degree |
| 11-3051 | Industrial Production Managers | 19,062 | 19,108 | 46 | 0% | $46.44 | 4,183 | Bachelor's degree |
| 11-3061 | Purchasing Managers | 8,299 | 9,014 | 715 | 9% | $55.05 | 2,607 | Bachelor's degree |
| 11-3071 | Transportation, Storage, and Distribution Managers | 13,354 | 14,827 | 1,473 | 11% | $40.53 | 4,696 | High school diploma o equivalent |
| 11-3111 | Compensation and Benefits Managers | 1,952 | 2,133 | 181 | 9% | $53.98 | 728 | Bachelor's degree |
| 11-3121 | Human Resources Managers | 16,119 | 18,508 | 2,389 | 15% | $52.27 | 7,053 | Bachelor's degree |
| 11-3131 | Training and Development Managers | 3,017 | 3,509 | 492 | 16% | $54.08 | 1,361 | Bachelor's degree |
| 11-9013 | Farmers, Ranchers, and Other Agricultural Managers | 36,947 | 32,869 | -4,078 | -11% | $23.19 | 5,537 | High school diploma o equivalent |

## 5. ESRI Business Analyst and Community Analyst

**Summary:**
ESRI's Business Analyst and Community Analyst tools combine demographic data, business information, and geographic data to map and analyze information. Visual displays allow users to compare regional and sub-regional clustering of industries and student demographics, identify employers, and make decisions about educational locations.

**Cost:**
Colleges must pay a subscription fee to access ESRI software and data.

**Web links**:
- ESRI Business Analyst tool: http://www.esri.com/software/businessanalyst
- ESRI Community Analyst tool: http://www.esri.com/software/arcgis/community-analyst

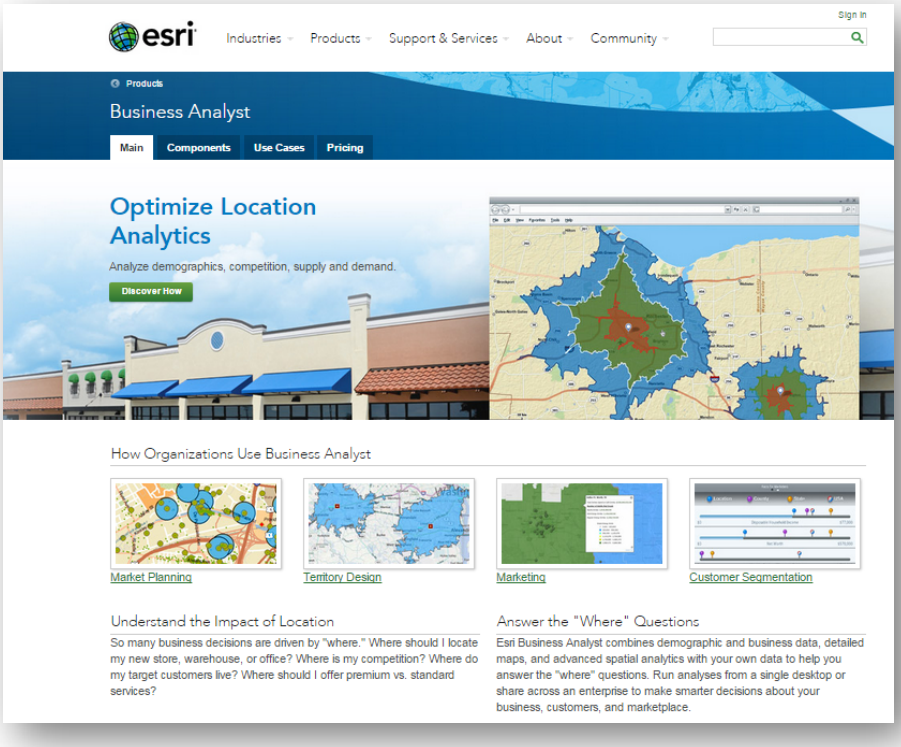
**When to use it:**
- Writing grant applications
- Conducting program review
- Engaging in regional planning

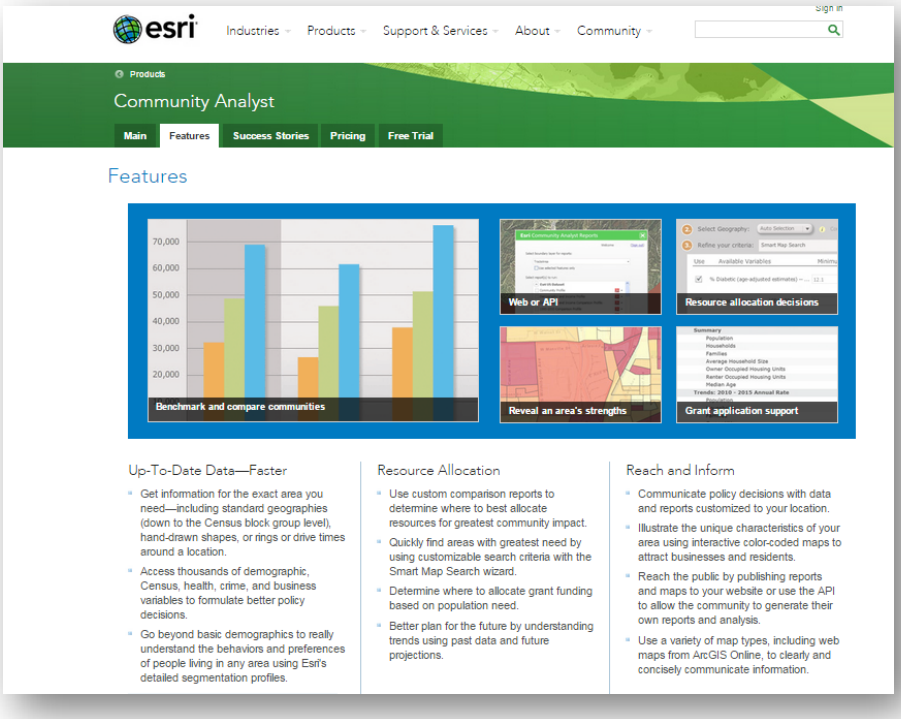
**What to use it for:**
- Finding out the number of available jobs and projected demand

**Strengths:**
- Provides access to the most up-to-date demographic and business data
- Allows users to identify major industries and employers in the region and generates listings of businesses for a specific industry
- Uses appealing graphical displays to show data on business concentration and demographics
- Data can be customized using various geographic elements such as zip codes, simple rings, and drive-times—for example, colleges can find out how many businesses of a specific industry are within a 10-mile radius or 10-minute drive from the campus
- Documents regional concentration of priority and emergent sectors
- Provides insight into factors influencing demand

**Limitations:**
- In order to use the tools, some training might be required
- Information on employers comes from a database of businesses that ESRI purchases from either Infogroup or Dunn & Bradstreet once a year, so information on business employment size, industry codes, emerging markets, and contact information is not always up-to-date
- Analyzes community demographics, business composition, and local industries, not occupations in demand
- Does not provide information about employer needs or requirements

**Screenshots:**



## 6. O*NET

**Summary:**
Sponsored by the Department of Labor, the Occupation Information Network (O*NET) provides detailed information on hundreds of occupations. Users can view many elements including: common job tasks and work activities; required knowledge, skills and abilities; tools and technology used on the job; work contexts (working on the phone or face-to-face, indoor or outdoor environments); related credentials; work styles and values; median wages and employment trends by state; and expected education levels, experience, and job training. Users can find occupational information by entering key words or search using criteria such as Standard Occupational Classification (SOC) code, career cluster, industry, education, experience and training level, and expected rate of growth.

**Cost:**
O*NET is a free resource.

**Web link**: http://online.onetcenter.org

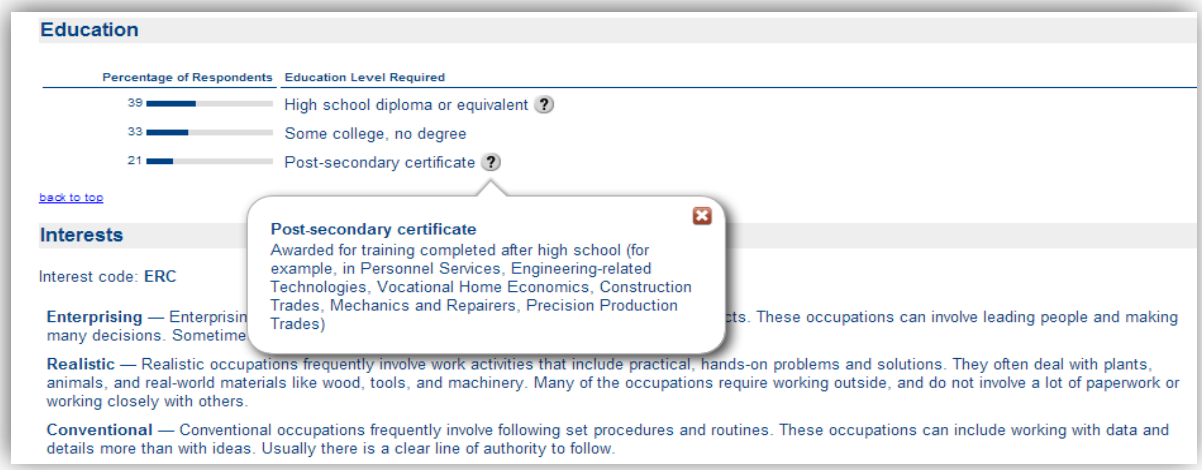
**When to use it:**
- Developing new programs
- Designing curriculum
- Conducting program review
- Engaging in regional planning

**What to use it for:**
- Assessing the types of jobs that are aligned with college programs
- Documenting what jobs are like and what employers are looking for

**Strengths:**
- Provides detailed descriptive information about occupations
- Connects titles to SOC codes, which are often needed for additional research
- Uses an O*NET-SOC taxonomy that expands the list of distinct occupations to capture new or emerging jobs

**Limitations:**
- Updates are infrequent—last revision to the taxonomy was 2010
- May not include all emerging occupations, only those that are assigned an O*NET code

**Screenshots:**

## Real Time Labor Market Information

The following resources provide secondary information on the demand for trained workers by compiling millions of job postings on the internet. Vendors gather information from online job boards such as Monster, Indeed, Dice, the California State Personnel Board, industry-specific websites, and company websites.

### 7. Burning Glass/Labor Insight

**Summary:** Burning Glass' Labor Insight tool allows users to search employer job postings by particular criteria, such as required education, job titles, certifications, and geographic location. Also available are historic data on the number of postings for specific occupations and regions or employers that are posting a large number of positions for an occupation.

**Cost:**
Colleges must buy a subscription to access Burning Glass data. You can also contact your regional Centers of Excellence to inquire about available Burning Glass data (www.coeccc.net/contact.asp).

**Web link**: http://laborinsight.burning-glass.com/jobs/us#

**When to use it:**

- Developing new programs
- Designing curriculum
- Writing grant applications
- Conducting program review
- Engaging in regional planning

**What to use it for**:

- Finding out the number of available jobs and projected demand
- Documenting what jobs are like and what employers are looking for

**Strengths:**

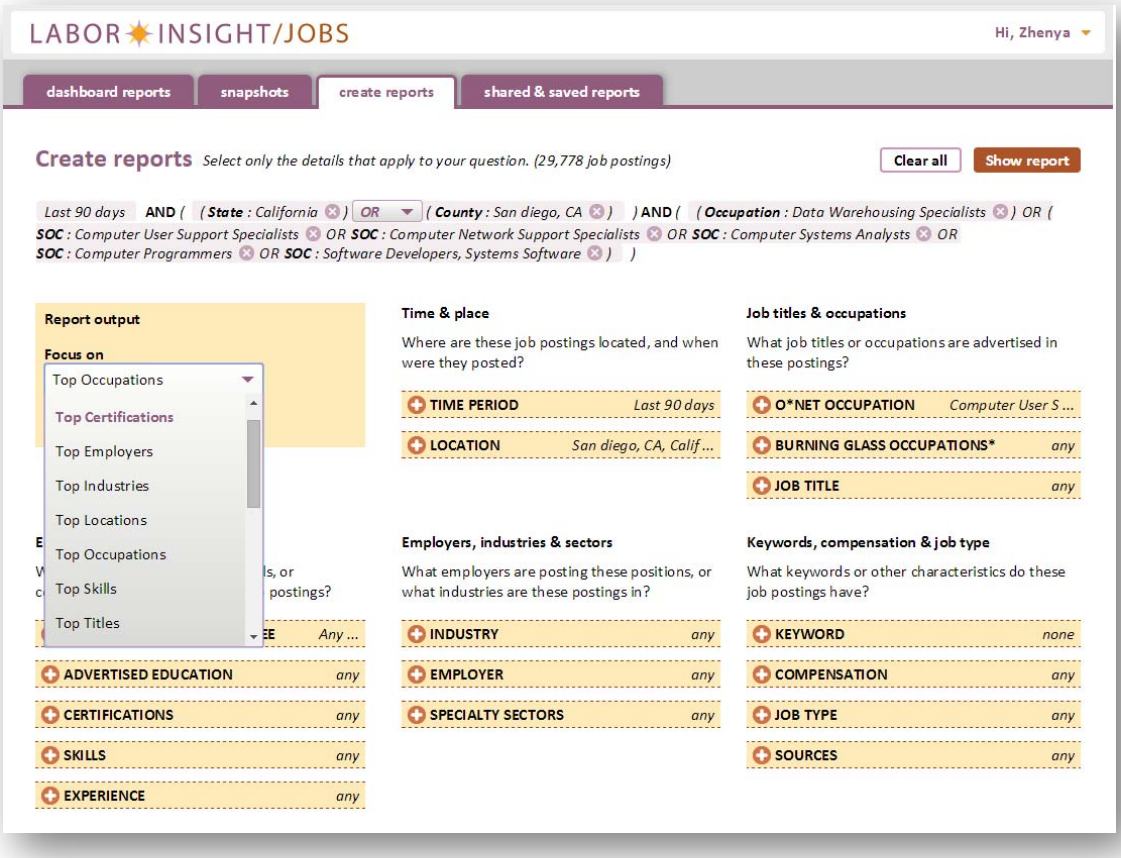
- Continuously updated
- Searchable occupational titles
- Provides information on new and emerging occupations
- Captures regional trends in employer workforce needs
- Can identify in-demand skills, certifications, and job requirements
- Includes names of employers that posted job openings
- Easy to use and share information

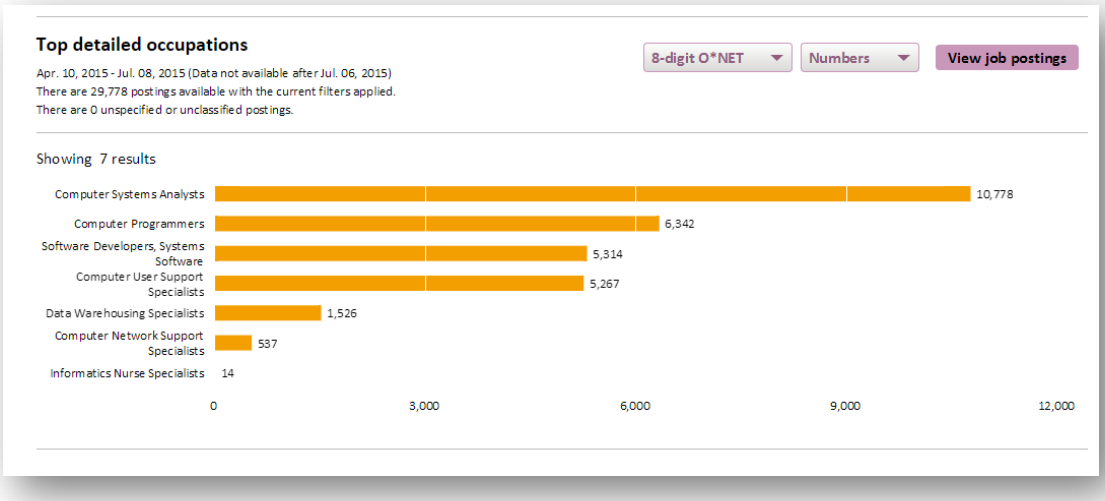
**Limitations**:

- Should not be used to establish current job openings because the numbers include duplicate job postings or postings intended to gather a pool of applicants
- Over half of the listings are for jobs requiring a bachelor's degree or above

- Job postings vary across industries; for example, certain occupations in construction are not well represented in employer job ads, while jobs in retail and hospitality are heavily represented

**Screenshots:**



## 8. Help Wanted Online

**Summary:**
Help Wanted Online is a real-time data tool developed by the Conference Board and Wanted Analytics. The tool allows users to filter job postings by particular criteria, such as required education levels and expected skills for various occupations, changes in the number of postings for specific occupations, and regions or employers that are posting a large number of positions for an occupation.

**Cost:**
Colleges must buy a subscription to access Help Wanted Online.

**Web link**: https://www.conference-board.org/data/helpwantedonline.cfm

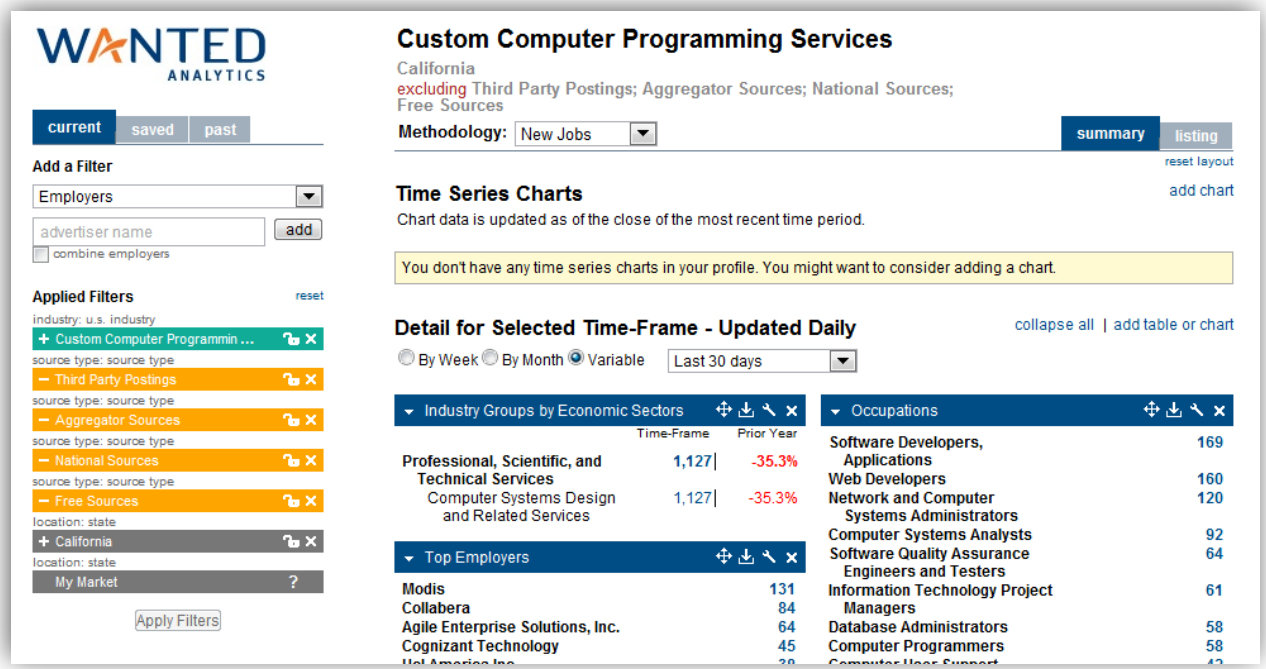
**When to use it:**
- Developing new programs
- Designing curriculum
- Writing grant applications
- Conducting program review
- Engaging in regional planning

**What to use it for:**
- Finding out the number of available jobs and projected demand
- Documenting what jobs are like and what employers are looking for

**Strengths:**
- Continuously updated
- Searchable occupational titles
- Can identify postings by tools, software, or bodies of knowledge (i.e. “business practices”)
- May include new and emerging occupations
- Includes names of employers that posted job advertisements

**Limitations**:
- Should not be used to establish current job openings because the numbers include duplicate job postings or postings intended to gather a pool of applicants
- Over half of the listings are for jobs requiring a bachelor’s degree or above
- Job postings vary across industries; for example, certain occupations in construction are not well represented in employer job ads, while jobs in retail and hospitality are heavily represented

**Screenshot:**


WANTED ANALYTICS
current
saved
past
Add a Filter
Employers
advertiser name
add
combine employers
Applied Filters
reset
industry: u.s. industry
+ Custom Computer Programmin ...
source type: source type
– Third Party Postings
source type: source type
– Aggregator Sources
source type: source type
– National Sources
source type: source type
– Free Sources
location: state
+ California
location: state
My Market
Apply Filters
Custom Computer Programming Services
California
excluding Third Party Postings; Aggregator Sources; National Sources; Free Sources
Methodology: New Jobs
summary
listing
reset layout
Time Series Charts
add chart
Chart data is updated as of the close of the most recent time period.
You don't have any time series charts in your profile. You might want to consider adding a chart.
Detail for Selected Time-Frame - Updated Daily
collapse all | add table or chart
By Week By Month Variable
Last 30 days
Industry Groups by Economic Sectors
Time-Frame
Prior Year
Professional, Scientific, and Technical Services
1,127
-35.3%
Computer Systems Design and Related Services
1,127
-35.3%
Top Employers
Modis 131
Collabera 84
Agile Enterprise Solutions, Inc. 64
Cognizant Technology 45
Occupations
Software Developers, Applications 169
Web Developers 160
Network and Computer Systems Administrators 120
Computer Systems Analysts 92
Software Quality Assurance Engineers and Testers 64
Information Technology Project Managers 61
Database Administrators 58
Computer Programmers 58

## Employer Information

The following resources can be used by colleges, technical assistance providers, and consultants to collect primary information on the demand for trained workers. In addition to these statewide resources, regional and local organizations also provide labor market information. Please contact the Centers of Excellence for regional resources (www.coeccc.net/contact.asp).

### 9. Advisory Boards

**Summary:**
Most colleges have advisory boards that provide direct access to employers. Advisory boards offer first-hand information on topics like current and projected demand for specific occupations, desired job skills for both entry-level and advanced positions, clarity on educational and certification requirements, and the impact of new regulations.

**Cost:**
Costs associated with advisory boards are low, generally to cover meeting expenses.

**When to use it:**

- Developing new programs
- Designing curriculum
- Conducting program review
- Engaging in regional planning

**What to use it for**:

- Documenting what jobs are like and what employers are looking for
- Evaluating how well programs are training students for the workplace

**Strengths:**

- Offer first-hand information about employer training preferences
- Lend insight into new and emerging occupations
- Provide understanding of local and regional labor market trends
- Opportunity to incorporate employer needs into existing program content

**Limitations:**

- Rural areas may have access to fewer employers
- Represent opinions of a very small number of employers, which may or may not be reflective of employer needs across a region or local area
- Employers are sometimes asked to serve on advisory boards by multiple institutions/agencies
- Employers may represent only the interest of their specific company

## 10. Economic Development Corporations and Economic Development Agencies

**Summary:**
Economic development corporations (EDCs) and economic development agencies (EDAs) conduct activities to improve the overall health of a local economy. According to the California Association of Economic Development, "local economic development involves the allocation of limited resources – land, labor, capitol and entrepreneurship in a way that has a positive effect on the level of business activity, employment, income distribution patterns, and fiscal solvency." Common economic development activities include business retention and expansion. These activities help to increase a city or region's tax base, economic diversification (types of industries and sectors), and job options. Some corporations and agencies conduct benchmark research to assess the health of their economy compared to others of the same size and resource base.

**Cost:**
Reports are generally free.

**When to use it:**
- Developing new programs
- Engaging in regional planning

**What to use it for:**

- Finding out the number of available jobs and projected demand
- Documenting what jobs are like and what employers are looking for

**Strengths:**
- Familiar with workforce needs at the local level, as they have close ties with the business community
- Research may provide a high-level assessment of the region's economic health compared to other areas
- EDC studies often capture new and emerging industry trends

**Limitations:**
- Only some economic development corporations and economic development agencies conduct studies and produce reports
- Research is usually focused on business climate and industries, not occupations or workforce trends
- Those that do conduct research may not have a regular release schedule

## 11. Employer Surveys

**Summary:**
Surveys can be conducted with employers either online or by phone. Focused on a limited number of industries and occupations, surveys gather information on current and projected positions (both for an employer and for individual occupations), current and projected turnover, hiring challenges, education and training preferences, and the skills and deficiencies of former students.

**Cost:**
Surveys require underwriting for development, implementation, and analysis.

**When to use it:**
- Developing new programs
- Designing curriculum
- Writing grant applications
- Conducting program review
- Engaging in regional planning

**What to use it for:**
- Finding out the number of available jobs and projected demand
- Documenting what jobs are like and what employers are looking for
- Evaluating how well programs are training students for the workplace

**Strengths**:
- Customizable, so colleges can include the questions that are of greatest interest
- Collect specific information on current and projected demand for workers in critical occupations, skill requirements, and employer preferences
- Identify what training and education offerings are of most interest to employers
- Document emerging occupations and industries
- Can be used as a marketing tool

**Limitations:**
- Time lags for collecting information
- Require getting a sufficient and representative sample of responders to draw conclusions
- Narrow in scope
- Only reliable for short-term projections (1 to 3 years)

## 12. Industry Associations

**Summary:**
Industry associations, which can be found at the local, state, and national levels, can provide useful information like listings of related occupations, recommended credentials, and employer information. Please contact your Deputy Sector Navigator, Sector Navigator, or Center of Excellence for sector-specific resources (http://doingwhatmatters.cccco.edu/Contact.aspx).

**Cost:**
Industry association information is generally available free of charge, however some industry associations charge for reports and research on industry trends.

**When to use it:**
- Developing new programs
- Designing curriculum
- Writing grant applications
- Engaging in regional planning

**What to use it for:**
- Assessing the types of jobs that are aligned with college programs
- Finding out the number of available jobs and projected demand
- Documenting what jobs are like and what employers are looking for

**Strengths:**
- Provides access to information that comes directly from employers in the industry
- Provides opportunity for partnerships with industry that can lead to improved curriculum, internships for students, and equipment donations for college programs
- Provides access to industry professionals who may be interested in adjunct teaching or guest lecturing at community colleges

**Limitations:**
- Can be challenging to gain access to industry associations
- Can take time to establish partnerships that are mutually beneficial
- Associations may be inclined to work with a regional or sub-regional group of community colleges, as opposed to one college, due to time and resource constraints

## 13. Infogroup's ReferenceUSA

**Summary:**
Infogroup's ReferenceUSA online tool allows users to filter businesses by geography, employment size, and industry code in order to retrieve listings of firms. Data points for each business record may include location information, contact information, industry profile (NAICS code), and business demographics such as number of employees, sales volume, etc.

**Cost:**
Colleges must have a paid subscription to access this tool.

**Web link**: www.referenceusa.com

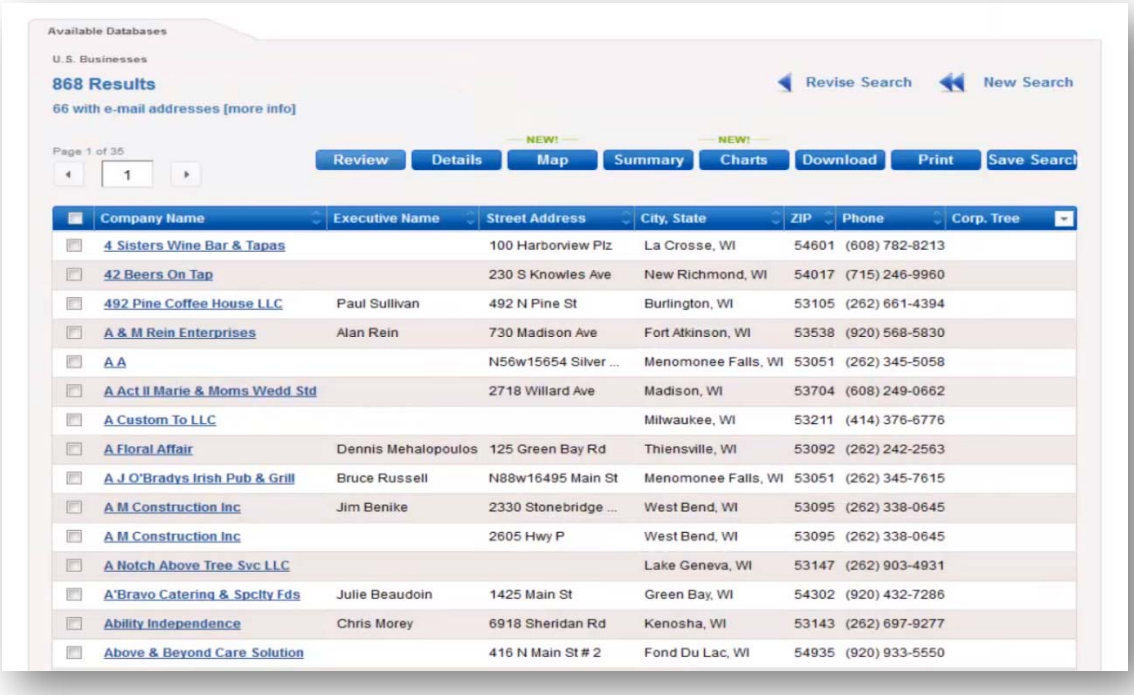
**When to use it:**
- Developing new programs
- Conducting program review
- Engaging in regional planning

**What to use it for:**
- Documenting what jobs are like and what employers are looking for

**Strengths:**
- Enables colleges to identify specific employers in an industry within a geographic area in order to build local advisory boards, conduct skill panels, and secure internships and employment opportunities for students
- Incorporates a variety of data sources to make business listings as comprehensive as possible
- Information is constantly validated through phone calls to companies
- Tool is available online and easy to use, including mapping and charting features

**Limitations:**
- Some records may be out-of-date, inaccurate, or missing due to real-time changes in business environment
- Only documents business composition in an industry, not occupations in demand
- Does not provide any information about employer needs or requirements

**Screenshots:**

## 14. Workforce Investment Boards (WIB)

**Summary:**
Workforce Investment Boards (WIB) offer a number of services, based on their relationships with area employers. WIBs understand the needs of the local labor market, giving colleges insight into areas for training. They produce local or regional economic and labor market reports that can be used to support program creation or program review. WIBs have subscriptions to various data tools that can potentially be free resources for colleges. Colleges can also tap into WIB employer partners for advisory board participation.

**Cost:**
WIBs do not charge for their services. Any studies that they commission are publicly available online.

**Web link**: http://cwdb.ca.gov/

**When to use it:**
- Developing new programs
- Designing curriculum
- Writing grant applications
- Conducting program review
- Engaging in regional planning

**What to use it for:**
- Finding out the number of available jobs and projected demand
- Documenting what jobs are like and what employers are looking for
- Evaluating how well programs are preparing students for the workplace

**Strengths:**
- WIBs have business services teams that have established relationships with local employers
- Local and regional economic and labor market reports are regularly published by WIBs
- Provide both quantitative and qualitative information about the local labor market
- Strong partners for finding out about employment trends
- Provide access to employers and other community stakeholders

**Limitations:**
- Some WIB regions do not align with community college regions
- WIB clients are sometimes different than the community college audience
- Priority sectors are not always the same for WIBs and community colleges

## Student Information

The following resources provide primary and secondary supply-side information on the numbers of students completing and participating in various programs of study and their employment outcomes.

### 15. CTE Outcomes Survey (CTEOS)

**Summary:**
Conducted by Santa Rosa Junior College, the CTE Outcomes Survey (CTEOS) is a statewide survey of students in California community college career and technical education programs, one-and-a-half years after they earned a credential or stopped taking courses. It collects information such as employment in field of study, attainment of a third-party credential, whether students started a business, changes in the number of hours worked, and wages before and after attending college.

**Cost:**
Survey costs are covered by the California Community Colleges Chancellor's Office.

**Web link**: http://cteos.santarosa.edu

**When to use it:**
- Conducting program review
- Engaging in regional planning

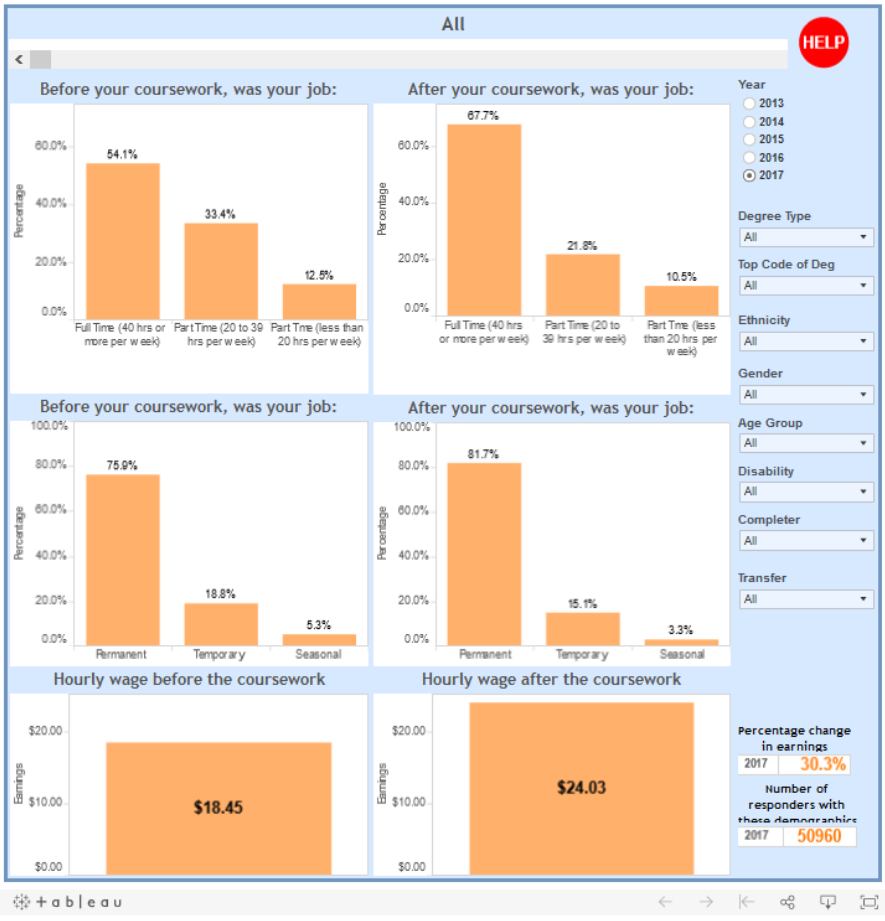
**What to use it for:**
- Evaluating how well programs are training students for the workplace

**Strengths:**
- Designed by community college practitioners to address the questions of greatest interest related to student employment outcomes
- Provides access to employment information that is not available from other sources like the state unemployment insurance wage data
- Data can be viewed by program of study, student completion status, and many other variables that can be examined using a Tableau interface on the survey website
- Implemented consistently across institutions so that data can be aggregated or compared
- Captures employment outcomes for non-completers who are "skills-builders"
- Leverages economies of scale to keep costs as low as possible

**Limitations:**
- Survey cannot be customized
- Response rates are about 30%, so data may not be fully representative and sample sizes at the program level are often very small
- Response rates can be low if colleges don't maintain current contact information on former students, particularly email addresses

**Screenshot:**

## CTEOS: JOBS BEFORE AND AFTER



## 16. Curriculum Inventory

**Summary:**
Hosted by the California Community Colleges Chancellor's Office, the Curriculum Inventory allows users to identify colleges that have programs and courses associated with specific Taxonomy of Program (TOP) codes or key words. Program information includes the type of awards associated with the program (certificate or degree), the number of units associated with certificate programs, the year the program was approved, and whether the program is still active. Course information includes course titles, various codes associated with the course (such as CB21, which designates the levels of basic skills courses), and whether the course is still active.

**Cost:**
The Curriculum Inventory is a free resource.

**Web link**: https://coci2.ccctechcenter.org/
**When to use it:**

- Developing new programs
- Writing grant applications
- Conducting program review
- Engaging in regional planning

**What to use it for:**

- Understanding the projected supply of qualified workers

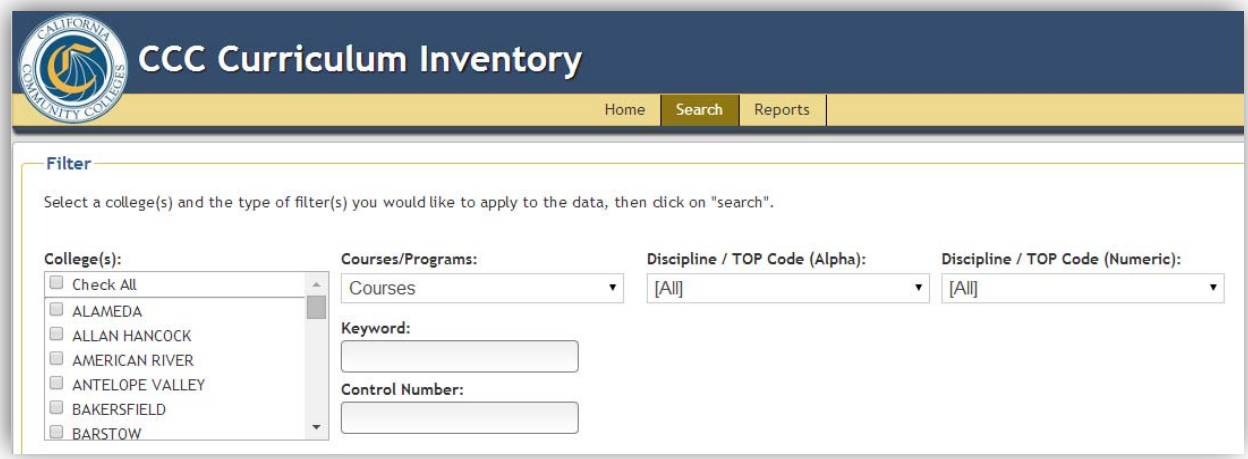
**Strengths:**

- Shows awards offered in a program code across the state
- Documents the types of courses offered in similar programs, including course titles
- Keyword search allows users to search for key terms
- Captures the breadth of California community college offerings

**Limitations:**

- If colleges don't select the same Taxonomy of Program (TOP) code for similar programs, information may not appear in the same search
- Programs are designated by single Taxonomy of Program (TOP) codes, whereas college may assign numerous TOP codes to courses within a program
- Course-related information lists the code for the attribute rather than a description of what the code captures (for example, it just lists "CB21" rather than specifying that this code captures the level below the gateway course)

**Screenshot:**


CCC Curriculum Inventory
Home
Search
Reports
Filter
Select a college(s) and the type of filter(s) you would like to apply to the data, then click on "search".
College(s):
Check All
ALAMEDA
ALLAN HANCOCK
AMERICAN RIVER
ANTELOPE VALLEY
BAKERSFIELD
BARSTOW
Courses/Programs:
Courses
Discipline / TOP Code (Alpha):
[All]
Discipline / TOP Code (Numeric):
[All]
Keyword:
Control Number:

## 17. Data Mart

**Summary:**
Hosted by the California Community Colleges Chancellor's Office, the Data Mart provides information about students, courses, student services, outcomes, and faculty and staff. Users can run reports on topics such as the number of full- and part-time students, sections offered and students enrolled, and program awards. Data can be viewed statewide or customized for specific districts, colleges, and terms, and disaggregated to see results by gender, age group, and ethnicity. Some reports allow users to select specific program areas using high-level, departmental, and specific Taxonomy of Program (2, 4, and 6 digit TOP) codes, as well as course type (basic skills, degree-applicable, transfer, and vocational).

**Cost:**
Data Mart is a free resource.

**Web link**: http://datamart.cccco.edu

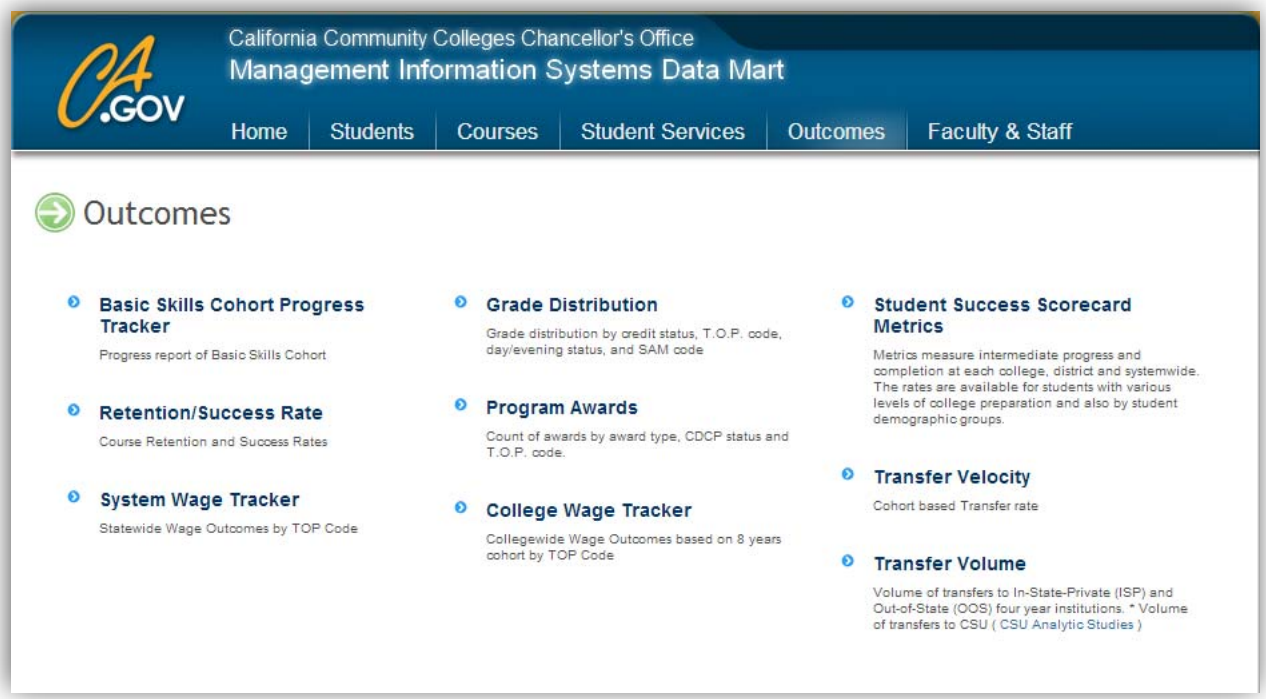
**When to use it:**
- Developing new programs
- Writing grant applications
- Conducting program review
- Engaging in regional planning

**What to use it for:**
- Understanding the projected supply of qualified workers

**Strengths:**
- Reports can be customized to see results for various student sub-groups
- Provides information on many of the data points expected for program review and accreditation
- Programs can be compared across colleges within a region using the same set of metrics

**Limitations:**
- Data provided as yearly snapshots, rather than following a cohort of students over time
- Because there are so many variables that can be customized, the tool may feel overwhelming to those unfamiliar with data queries
- Some reports, like enrollments and special population status, do not allow you to break down outcomes by program
- Data on local low-unit certificate programs may be missing, because districts are not required to report such data to the Chancellor's Office
- Program award data is based on the number of awards given, rather than the number of students who received awards, which impacts estimates of the supply of qualified workers
- All information is based on single Taxonomy of Program (TOP) codes, which may not align directly with college programs or across colleges

**Screenshot:**


California Community Colleges Chancellor's Office
Management Information Systems Data Mart
Home
Students
Courses
Student Services
Outcomes
Faculty & Staff
Outcomes
Basic Skills Cohort Progress Tracker
Progress report of Basic Skills Cohort
Retention/Success Rate
Course Retention and Success Rates
System Wage Tracker
Statewide Wage Outcomes by TOP Code
Grade Distribution
Grade distribution by credit status, T.O.P. code, day/evening status, and SAM code
Program Awards
Count of awards by award type, CDCP status and T.O.P. code.
College Wage Tracker
Collegewide Wage Outcomes based on 8 years cohort by TOP Code
Student Success Scorecard Metrics
Metrics measure intermediate progress and completion at each college, district and systemwide. The rates are available for students with various levels of college preparation and also by student demographic groups.
Transfer Velocity
Cohort based Transfer rate
Transfer Volume
Volume of transfers to In-State-Private (ISP) and Out-of-State (OOS) four year institutions. * Volume of transfers to CSU ( CSU Analytic Studies )

## 18. Integrated Postsecondary Education Data System (IPEDS)

**Summary:**
IPEDS provides information on enrollments, program completions, graduation rates, faculty and staff, finances, institutional prices, and student financial aid. Informational is provided by all colleges, universities, and technical and vocational education institutions that participate in federal student financial aid programs, as per the Higher Education Act of 1965.

**Cost:**
IPEDS is a free resource.

**Web link**: http://nces.ed.gov/ipeds/datacenter

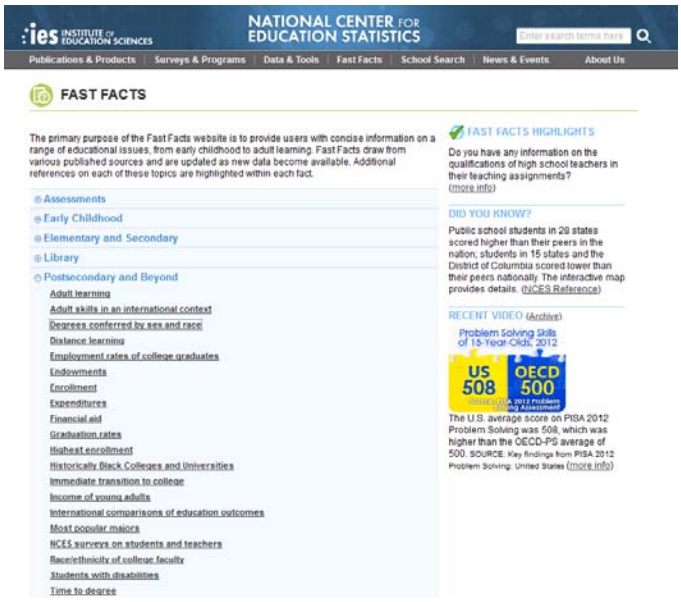
**When to use it:**
- Developing new programs
- Conducting program review
- Engaging in regional planning

**What to use it for:**
- Understanding the projected supply of qualified workers

**Strengths:**
- Provides program completion data – including the number of certificates and degrees conferred – for public and private education institutions

**Limitations:**
- Because there are so many variables that can be customized, the tool may feel overwhelming to those unfamiliar with data queries
- Program completion data is not complete, likely related to reporting errors and compliance issues
- Education programs that do not participate in federal student aid programs are not included in the database
- Program completion data are reported by Classification of instructional Program (CIP) codes, not the codes used by California community colleges (TOP codes)

**Screenshot:**


ies INSTITUTE OF EDUCATION SCIENCES
NATIONAL CENTER FOR EDUCATION STATISTICS
Enter search terms here
Publications & Products | Surveys & Programs | Data & Tools | Fast Facts | School Search | News & Events | About Us
FAST FACTS
The primary purpose of the Fast Facts website is to provide users with concise information on a range of educational issues, from early childhood to adult learning. Fast Facts draw from various published sources and are updated as new data become available. Additional references on each of these topics are highlighted within each fact.
Assessments
Early Childhood
Elementary and Secondary
Library
Postsecondary and Beyond
Adult learning
Adult skills in an international context
Degrees conferred by sex and race
Distance learning
Employment rates of college graduates
Endowments
Enrollment
Expenditures
Financial aid
Graduation rates
Highest enrollment
Historically Black Colleges and Universities
Immediate transition to college
Income of young adults
International comparisons of education outcomes
Most popular majors
NCES surveys on students and teachers
Race/ethnicity of college faculty
Students with disabilities
Time to degree
FAST FACTS HIGHLIGHTS
Do you have any information on the qualifications of high school teachers in their teaching assignments? (more info)
DID YOU KNOW?
Public school students in 29 states scored higher than their peers in the nation; students in 15 states and the District of Columbia scored lower than their peers nationally. The interactive map provides details. (NCES Reference)
RECENT VIDEO (Archive)
Problem Solving Skills of 15-Year-Olds, 2012
US 508
OECD 500
The U.S. average score on PISA 2012 Problem Solving was 508, which was higher than the OECD-PS average of 500. SOURCE: Key findings from PISA 2012 Problem Solving: United States (more info)

## 19. LaunchBoard

**Summary:**
The LaunchBoard is a web-based, user-friendly suite of data dashboards that bring education, employment, and labor market data together to inform decision-making and planning. Supported by the California Community Colleges Chancellor's Office and hosted by Cal-PASS Plus, the LaunchBoard is designed to foster conversations across sectors, regions, and grants by bringing together information on student outcomes in one, easy-to-access location. For example, users can see lists of related occupations by sector or Taxonomy of Program (TOP) code in the Community College Pipeline dashboard. The Pipeline also provides summaries and trend information about regional and statewide enrollments, persistence, completions, employment, and earnings. Other dashboards address outcomes for adult education, K-12 CTE students who enroll in community college, first-year key performance indicators associated with guided pathways, and metrics associated with the Strong Workforce Program funding formula..

**Cost:**
The LaunchBoard is a free resource.

**Web link**: www.calpassplus.org/Launchboard/Home.asp

**When to use it:**
- Developing new programs
- Designing curriculum
- Writing grant applications
- Conducting program review
- Engaging in regional planning

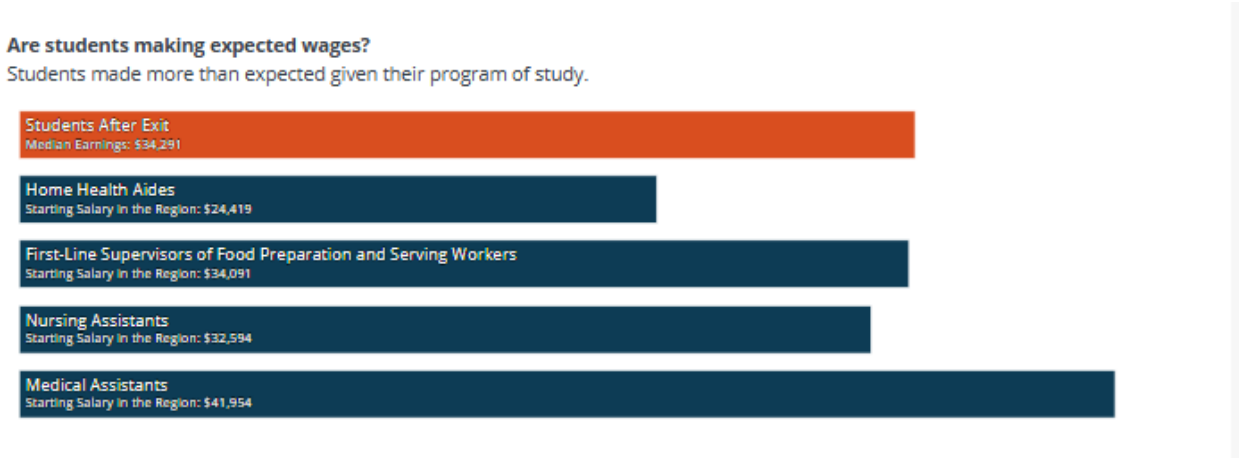
**What to use it for:**
- Assessing the types of jobs that are aligned with college programs
- Understanding the projected supply of qualified workers
- Evaluating how well programs are training students for the workplace

**Strengths:**
- Aggregates information from numerous data sets to provide information necessary for program review and approval in one place, including K-12 student information, adult school information, community college student information, employment outcomes from the California Employment Development Division (EDD) Unemployment Insurance (UI) wage data and the CTE Outcomes Survey, and labor market information from EMSI
- The dashboards were co-developed with practitioners, so data focuses on the metrics most important to faculty and administrators
- Crosswalks between different systems are built in, which makes it easy for a practitioner to compare community college data to K-12 data to labor market data
- Allows for benchmarking specific college program's data to other college, regional, and statewide information
- Groups the programmatic data at various levels including TOP6, TOP4, sector, all-CTE, all non-CTE, and all programs

**Limitations:**

- Programs are designated by single Taxonomy of Program (TOP) codes, whereas college may assign numerous TOP codes to courses within a program
- Data from K-12 and four-year partners requires that institutions voluntarily submit this information, so intersegmental metrics are not robust
- There are data lags of 1-3 years in providing some types of information, such as employment and earnings outcomes
- If local data or college uploads to MIS are flawed, the information that appears in the dashboards is also wrong

**Screenshots:**




| Requires a Bachelors Degree or Higher | Entry Level Salary | Median Salary |
|---|---|---|
| Accountants and Auditors | $51,854 | $80,662 |

| On-The-Job Training, No College Required | Entry Level Salary | Median Salary |
|---|---|---|
| Tax Preparers | $33,093 | $57,512 |
| Payroll and Timekeeping Clerks | $32,781 | $52,520 |
| Brokerage Clerks | $37,066 | $61,173 |

| Requires Some College, No Degree | Entry Level Salary | Median Salary |
|---|---|---|
| Bookkeeping, Accounting, and Auditing Clerks | $30,285 | $47,174 |

## 20. Perkins Core Indicators Reports

**Summary:**
Provided by the California Community Colleges Chancellor's Office, Perkins Core Indicators reports provide information on skills-attainment, persistence and transfer, completion, and employment. Information can be viewed by college, specific Taxonomy of Program (4 and 6 digit TOP) codes, fiscal year, and special population status (such as non-traditional, economically disadvantaged, and limited English proficiency).

**Cost:**
Perkins Core Indicators reports are free.

**Web link**: https://misweb.cccco.edu/perkins/main.aspx

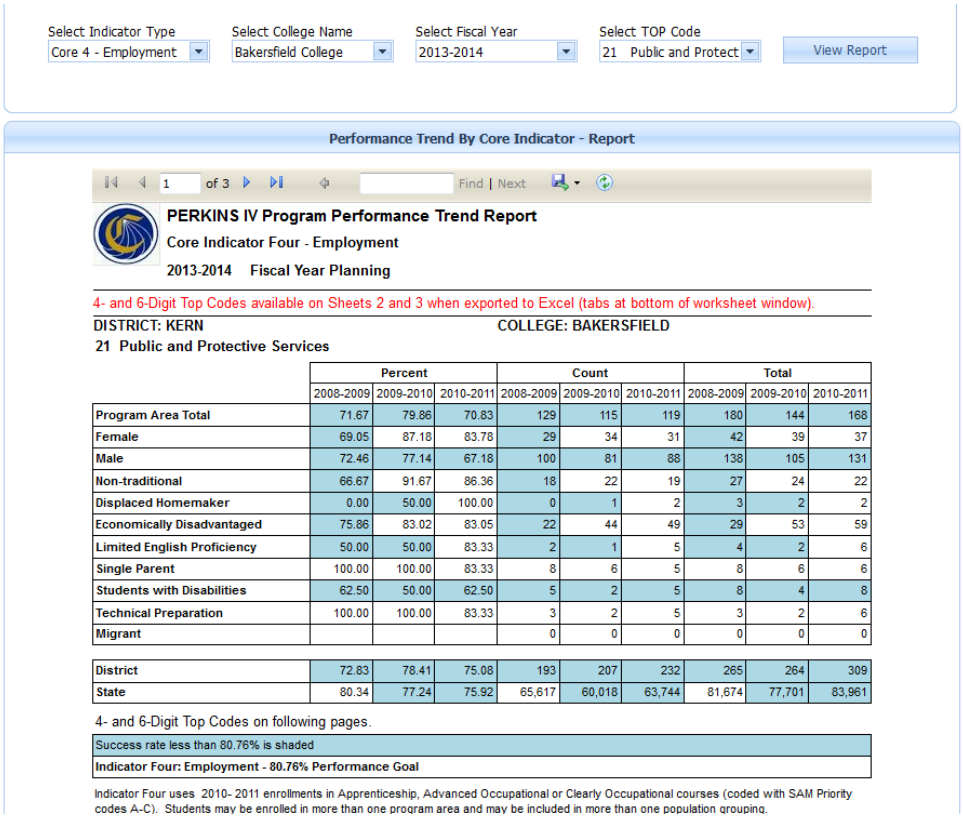
**When to use it:**
- Conducting program review
- Engaging in regional planning

**What to use it for:**
- Evaluating how well programs are training students for the workplace

**Strengths:**
- Provides information on special populations, which can support equity planning
- Data points with low success rates are visually flagged
- Users can compare outcomes to federal performance goals and see trends over time

**Limitations:**
- Outcomes data are only calculated for students who took 12+ units in the same general Taxonomy of Program (2-digit TOP) code
- Data are provided as yearly snapshots, rather than following a cohort of students over time

**Screenshot:**



Select Indicator Type: Core 4 - Employment | Select College Name: Bakersfield College | Select Fiscal Year: 2013-2014 | Select TOP Code: 21 Public and Protect | View Report

Performance Trend By Core Indicator - Report

1 of 3 | Find | Next

**PERKINS IV Program Performance Trend Report**

**Core Indicator Four - Employment**

**2013-2014 Fiscal Year Planning**

4- and 6-Digit Top Codes available on Sheets 2 and 3 when exported to Excel (tabs at bottom of worksheet window).

**DISTRICT: KERN** **COLLEGE: BAKERSFIELD**

**21 Public and Protective Services**

| | Percent | | | Count | | | Total | | |
|---|---|---|---|---|---|---|---|---|---|
| | 2008-2009 | 2009-2010 | 2010-2011 | 2008-2009 | 2009-2010 | 2010-2011 | 2008-2009 | 2009-2010 | 2010-2011 |
| **Program Area Total** | 71.67 | 79.86 | 70.83 | 129 | 115 | 119 | 180 | 144 | 168 |
| **Female** | 69.05 | 87.18 | 83.78 | 29 | 34 | 31 | 42 | 39 | 37 |
| **Male** | 72.46 | 77.14 | 67.18 | 100 | 81 | 88 | 138 | 105 | 131 |
| **Non-traditional** | 66.67 | 91.67 | 86.36 | 18 | 22 | 19 | 27 | 24 | 22 |
| **Displaced Homemaker** | 0.00 | 50.00 | 100.00 | 0 | 1 | 2 | 3 | 2 | 2 |
| **Economically Disadvantaged** | 75.86 | 83.02 | 83.05 | 22 | 44 | 49 | 29 | 53 | 59 |
| **Limited English Proficiency** | 50.00 | 50.00 | 83.33 | 2 | 1 | 5 | 4 | 2 | 6 |
| **Single Parent** | 100.00 | 100.00 | 83.33 | 8 | 6 | 5 | 8 | 6 | 6 |
| **Students with Disabilities** | 62.50 | 50.00 | 62.50 | 5 | 2 | 5 | 8 | 4 | 8 |
| **Technical Preparation** | 100.00 | 100.00 | 83.33 | 3 | 2 | 5 | 3 | 2 | 6 |
| **Migrant** | | | | 0 | 0 | 0 | 0 | 0 | 0 |
| **District** | 72.83 | 78.41 | 75.08 | 193 | 207 | 232 | 265 | 264 | 309 |
| **State** | 80.34 | 77.24 | 75.92 | 65,617 | 60,018 | 63,744 | 81,674 | 77,701 | 83,961 |

4- and 6-Digit Top Codes on following pages.

Success rate less than 80.76% is shaded

**Indicator Four: Employment - 80.76% Performance Goal**

Indicator Four uses 2010- 2011 enrollments in Apprenticeship, Advanced Occupational or Clearly Occupational courses (coded with SAM Priority codes A-C). Students may be enrolled in more than one program area and may be included in more than one population grouping.

## 21. Wage Tracker

**Summary:**
Part of the Chancellor's Office Data Mart, Wage Tracker shows total awards and student wages three years after earning a degree or certificate. Users can specify one or multiple colleges, high-level or specific Taxonomy of Program (2 and 6 digit TOP) codes, and award types. This report uses California Employment Development Division (EDD) Unemployment Insurance (UI) wage data. This is the same data source that is used for the Salary Surfer, which provides state-level information of graduates' earnings based on their program of study.

**Cost:**
The Wage Tracker is a free resource.

**Web link**: http://datamart.cccco.edu/Outcomes/College_Wage_Tracker.aspx

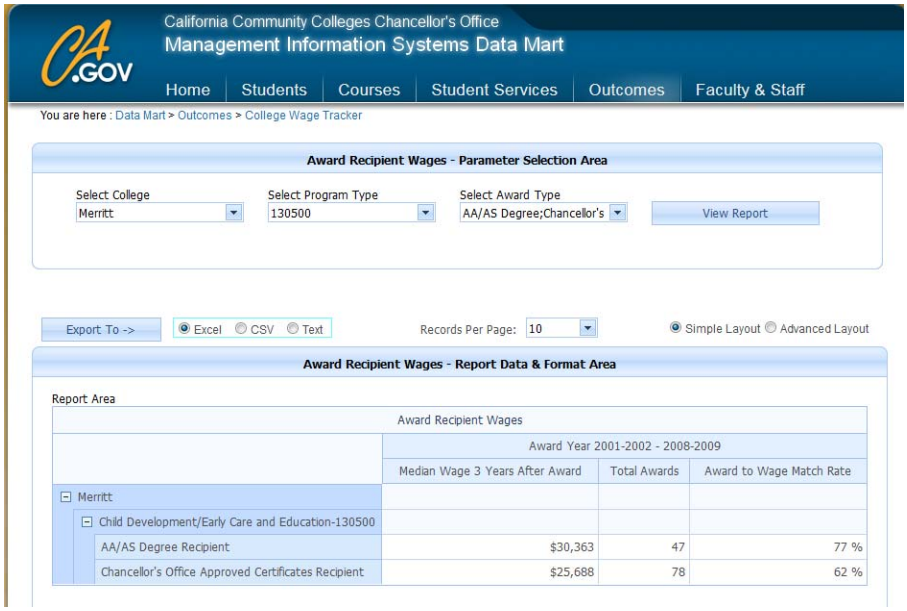
**When to use it:**
- Writing grant applications
- Conducting program review
- Engaging in regional planning

**What to use it for:**
- Evaluating how well programs are training students for the workplace

**Strengths:**
- Shows the total number of awards, plus the number of students who were included in the earnings calculation, to clarify how representative the sample is
- Allows users to select multiple colleges and Taxonomy of Program (TOP) codes, so that sector and regional analyses can be conducted
- Includes locally-issued certificates as well as Chancellor's Office approved certificates

**Limitations:**
- Information is only provided for students who earned a degree or certificate and did not re-enroll in a community college or transfer to a four-year college
- The data sources exclude individuals who were employed by the military or federal government, self-employed, employed out of state, unemployed, or not in the workforce after completion of an award.
- Information on part-time/full-time status or occupation is not available.
- Due to the small number of students who meet the inclusion criteria, data are aggregated and inflation-adjusted over a period of 8 years, so users cannot track the impact of curricular changes or outcomes for a cohort of students
- Often the number of students is still too small to display information for individual programs.

**Screenshot:**


California Community Colleges Chancellor's Office
Management Information Systems Data Mart
Home
Students
Courses
Student Services
Outcomes
Faculty & Staff
You are here : Data Mart > Outcomes > College Wage Tracker
Award Recipient Wages - Parameter Selection Area
Select College
Merritt
Select Program Type
130500
Select Award Type
AA/AS Degree;Chancellor's
View Report
Export To ->
Excel
CSV
Text
Records Per Page:
10
Simple Layout
Advanced Layout
Award Recipient Wages - Report Data & Format Area
Report Area
Award Recipient Wages
Award Year 2001-2002 - 2008-2009
Median Wage 3 Years After Award
Total Awards
Award to Wage Match Rate
Merritt
Child Development/Early Care and Education-130500
AA/AS Degree Recipient
$30,363
47
77 %
Chancellor's Office Approved Certificates Recipient
$25,688
78
62 %