

# Regional Economic Analysis Profile

Southern Border Economic Sub-Market San Diego County March 2015







The EDD is an equal opportunity employer/program. Auxiliary aids and services are available upon request to individuals with disabilities. Requests for services, aids, and/or alternate formats need to be made by calling (916) 262-2162 (voice). TTY users, please call the California Relay Service at 711.

This workforce product was funded by a grant awarded by the U.S. Department of Labor's Employment and Training Administration. The product was created by the recipient and does not necessarily reflect the official position of the U.S. Department of Labor. The Department of Labor makes no guarantees, warranties, or assurances of any kind, express or implied, with respect to such information, including any information on linked sites and including, but not limited to, accuracy of the information or its completeness, timeliness, usefulness, adequacy, continued availability, or ownership. This product is copyrighted by the institution that created it. Internal use by an organization and/or personal use by an individual for non-commercial purposes is permissible. All other uses require the prior authorization of the copyright owner.

# TABLE OF CONTENTS

Summary of the San Diego County Economic Sub-Market Industry Clusters1
Industry Cluster Descriptions
Industry Cluster Definitions
Occupational Analysis: Hospitality and Tourism Cluster
What is the Hospitality and Tourism Cluster?7
Top 10 Occupations in the Hospitality and Tourism Cluster
Top 10 Occupations and Recent Job Demand in the Hospitality and Tourism Cluster 8
Top Occupations for the Hospitality and Tourism Cluster by Education Level
Skill Requirements in the Hospitality and Tourism Cluster
Work Activities in the Hospitality and Tourism Cluster
Related Occupations for the Hospitality and Tourism Cluster
Employer Demand for the Hospitality and Tourism Cluster
Instructional Programs for the Top Hospitality and Tourism Cluster Occupations
Geographic Information Systems Maps: Percentage of Total County Establishments: Hospitality and Tourism Cluster
Geographic Information Systems Maps: Percentage of Total County Employment: Hospitality and Tourism Cluster
Occupational Analysis: Retail Cluster
What is the Retail Cluster?
Top 10 Occupations in the Retail Cluster
Top 10 Occupations and Recent Job Demand in the Retail Cluster
Top Occupations for the Retail Cluster by Education Level
Skill Requirements in the Retail Cluster
Work Activities in the Retail Cluster
Related Occupations for the Retail Cluster
Employer Demand for the Retail Cluster
Instructional Programs for the Top Retail Cluster Occupations
Geographic Information Systems Maps: Percentage of Total County Establishments: Retail Cluster

# TABLE OF CONTENTS

Geographic Information Systems Maps: Percentage of Total County Employment: Retail Cluster
Occupational Analysis: Business Services Cluster
What is the Business Services Cluster?
Top 10 Occupations in the Business Services Cluster
Top 10 Occupations and Recent Job Demand in the Business Services Cluster
Top Occupations for the Business Services Cluster by Education Level
Skill Requirements in the Business Services Cluster
Work Activities in the Business Services Cluster
Related Occupations for the Business Services Cluster
Employer Demand for the Business Services Cluster
Instructional Programs for the Top Business Services Cluster Occupations
Geographic Information Systems Maps: Percentage of Total County Establishments: Business Services Cluster
Geographic Information Systems Maps: Percentage of Total County Employment: Business Services Cluster

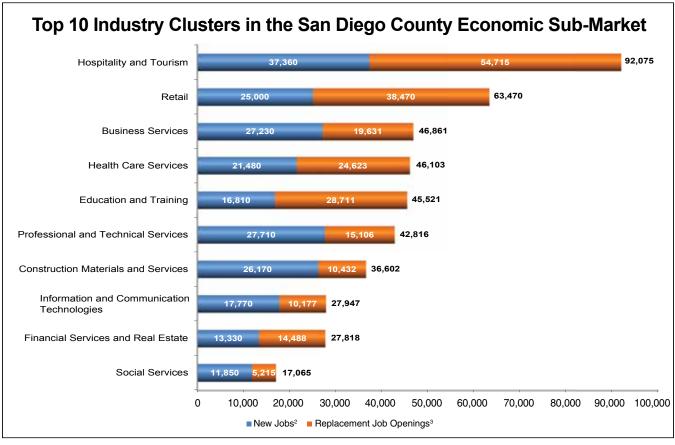
# SUMMARY OF THE SAN DIEGO COUNTY ECONOMIC SUB-MARKET INDUSTRY CLUSTERS

#### What is an Industry Cluster?

Industry clusters are groups of associated industries in an economic market that stimulate the creation of new businesses and job opportunities in a particular field. The application of workforce and economic development resources toward the continual development of industry clusters will help stimulate economic growth and boost the number of employment opportunities for the labor force.

### **Purpose of this Report**

The purpose of this report is to help align the state's workforce institutions and programs around the needs of economic sub-market industry clusters. This report focuses on the future employment demand of economic sub-market industry clusters and features them as primary investment opportunities for the California workforce development system. The goal of this report is to account for industry clusters with the largest number of projected total job openings<sup>1</sup> and help the California workforce development system prepare the state's workforce to compete for these future job opportunities.



Source: California Employment Development Department, Projections of Employment 2012-2022. Industry and occupational employment projections for 2012-2022 in this report may not be directly comparable to the published 2012-2022 employment projections available online at <u>www.labormarketinfo.edd.ca.gov</u>.

<sup>1</sup> Total job openings are the sum of new jobs and replacement job openings.

<sup>2</sup> New jobs are only openings due to growth and do not include job declines. If an occupation's employment change is negative, there is no job growth and new jobs are set to zero.

<sup>3</sup> Replacement job openings estimate the number of job openings created when workers retire or permanently leave an occupation and need to be replaced.

# **INDUSTRY CLUSTER DESCRIPTIONS**

The following are descriptions of the San Diego County Economic Sub-market's top 10 industry clusters followed by a list of the top industries with the highest projected job openings in the cluster.

The **Hospitality and Tourism** industry cluster includes interrelated industries such as eating establishments, hotels and motels, casinos, museums, and sightseeing transportation. During 2013-2014,\* this cluster comprised almost 168,000 workers, or 13.9 percent of the economic sub-market's employment. Industries within this cluster with the most projected job openings include:

- Restaurants and Other Eating Places
- Traveler Accommodation
- Amusement Parks and Arcades
- Other Amusement and Recreation Industries
- Drinking Places (Alcoholic Beverages)

The **Retail** industry cluster includes grocery and department stores, dollar stores, retail pharmacies, and clothing specialty stores. During 2013-2014,\* this cluster employed more than 127,000 workers, or 10.6 percent of the economic sub-market's total employment. Industries projected to have the largest number of jobs (new and replacement) include:

- · Grocery Stores
- Other General Merchandise Stores
- Department Stores
- Clothing Stores
- Automobile Dealers

The **Business Services** industry cluster is comprised of industries that include temporary help agencies, employer organizations, janitorial services, security systems services, and carpet cleaning establishments. This cluster employed about 98,000 people during 2013-2014,\* or 8.1 percent of the economic sub-market's workforce. Top industries in this cluster include:

- Employment Services
- Management of Companies and Enterprises
- · Services to Buildings and Dwellings
- Office Administrative Services
- · Investigation and Security Services

The **Health Care Services** industry cluster includes acute care and outpatient hospitals, nursing homes and rehabilitation centers, adult day care centers, and community service agencies for the elderly. It employed more than 132,000 people in the economic sub-market during 2013-2014,\* accounting for 11 percent of the workforce. Industries in this cluster may include both public and private employment. Top industries within this cluster include:

- Offices of Physicians
- · General Medical and Surgical Hospitals
- Continuing Care Retirement Communities and Assisted Living Facilities for the Elderly
- Nursing Care Facilities (Skilled Nursing Facilities)
- Offices of Dentists

The **Education and Training** industry cluster is comprised of public and private elementary and high schools, community colleges, universities, and professional schools with programs such as dental, law, and medical. Other establishments include English as a Second Language (ESL) programs, test preparation and tutoring, or driving instruction. During 2013-2014,\* this cluster employed more than 123,000 people in the economic sub-market, accounting for 10.2 percent of the workforce. Top industries within this cluster include:

- Elementary and Secondary Schools
- Colleges, Universities, and Professional Schools
- Junior Colleges
- Technical and Trade Schools
- Other Schools and Instruction

\* Quarterly Census of Employment and Wages (QCEW), a federal-state cooperative program, for the period April 2013 through March 2014.

# **INDUSTRY CLUSTER DESCRIPTIONS**

The **Professional and Technical Services** industry cluster is comprised of interrelated industries that include engineering and architectural firms, law offices, advertising companies, and accounting firms. In 2013- 2014,\* nearly 76,000 people were employed in the economic market, or 6.3 percent of the economic sub-market's workforce. Top industries within this cluster include:

- Management, Scientific, and Technical Consulting Services
- · Architectural, Engineering, and Related Services
- Legal Services
- Other Professional, Scientific, and Technical Services
- Accounting, Tax Preparation, Bookkeeping, and Payroll Services

The **Construction Materials and Services** industry cluster is comprised of builders of mechanical systems such as electrical, heating, and water; specialty trades outfits such as drywall, flooring, and painting contractors; residential and commercial builders; and contractors who complete foundation and framing work. During 2013-2014,\* nearly 62,000 workers made up the cluster's employment, representing 5.1 percent of the economic sub-market's total workforce. Industries showing the highest projected job openings include:

- Building Equipment Contractors
- Building Finishing Contractors
- Residential Building Construction
- Foundation, Structure, and Building Exterior Contractors
- Other Specialty Trade Contractors

#### The Information and Communication Technologies

industry cluster includes interdependent industries related to computers and peripheral equipment, as well as software design and manufacturing, computer programming services, installation services, and wireless telecommunications carriers. For 2013-2014,\* this cluster employed nearly 54,000 workers, or 4.5 percent of the economic sub-market's total employment. Industries with the highest number of expected job openings include:

- · Computer Systems Design and Related Services
- Wholesale Electronic Markets and Agents and Brokers
- Wired Telecommunications Carriers
- Software Publishers
- Other Information Services

The **Financial Services and Real Estate** industry cluster includes commercial banks, savings institutions, credit unions, credit card companies, insurance firms, and real estate appraisers or property management companies. In total, the cluster employed about 66,000 people, which accounted for 5.5 percent of the economic sub-market's workforce in 2013-2014.\* Industries showing the highest projected job openings include:

- Insurance Carriers
- Activities Related to Real Estate
- Depository Credit Intermediation
- · Lessors of Real Estate
- Nondepository Credit Intermediation

The **Social Services** industry cluster is comprised of establishments and agencies (public and private) that provide non-residential services for the welfare of children, adults, the elderly, and disabled. Examples include nonmedical in-home care programs, day care centers, and community food banks. In total, the cluster employed more than 38,000 people and accounted for 3.2 percent of the economic sub-market's workforce in 2013-2014.\* Industries include:

- Individual and Family Services
- Child Day Care Services
- Vocational Rehabilitation Services
- Community Food and Housing, and Emergency and Other Relief Services

\* Quarterly Census of Employment and Wages (QCEW), a federal-state cooperative program, for the period April 2013 through March 2014.

# **INDUSTRY CLUSTER DEFINITIONS**

The following is a list of the North American Industry Classification System (NAICS) codes and corresponding industries that fall under each of the top 10 industry clusters in the San Diego County Economic Sub-Market.

#### **Hospitality and Tourism**

- 4871 Scenic and Sightseeing Transportation, Land
- 4872 Scenic and Sightseeing Transportation, Water
- 4879 Scenic and Sightseeing Transportation, Other
- 5615 Travel Arrangement and Reservation Services
- 7121 Museums, Historical Sites, and Similar Institutions
- 7131 Amusement Parks and Arcades
- 7132 Gambling Industries
- 7139 Other Amusement and Recreation Industries
- 7211 Traveler Accommodation
- 7212 RV (Recreational Vehicle) Parks and Recreational Camps
- 7213 Rooming and Boarding Houses
- 7223 Special Food Services
- 7224 Drinking Places (Alcoholic Beverages)
- 7225 Restaurants and Other Eating Places

#### Retail

- 4411 Automobile Dealers
- 4412 Other Motor Vehicle Dealers
- 4413 Automotive Parts, Accessories, and Tire Stores
- 4431 Electronics and Appliance Stores
- 4441 Building Material and Supplies Dealers
- 4451 Grocery Stores
- 4452 Specialty Food Stores
- 4453 Beer, Wine, and Liquor Stores
- 4461 Health and Personal Care Stores
- 4471 Gasoline Stations
- 4481 Clothing Stores
- 4482 Shoe Stores
- 4483 Jewelry, Luggage, and Leather Goods Stores
- 4511 Sporting Goods, Hobby, and Musical Instrument Stores
- 4521 Department Stores
- 4529 Other General Merchandise Stores
- 4532 Office Supplies, Stationery, and Gift Stores
- 4533 Used Merchandise Stores
- 4542 Vending Machine Operators

#### **Business Services**

- 5511 Management of Companies and Enterprises
- 5611 Office Administrative Services
- 5612 Facilities Support Services
- 5613 Employment Services
- 5614 Business Support Services
- 5616 Investigation and Security Services
- 5617 Services to Buildings and Dwellings
- 5619 Other Support Services
- 5621 Waste Collection
- 5622 Waste Treatment and Disposal
- 5629 Remediation and Other Waste Management Services

#### **Health Care Services**

- 6211 Offices of Physicians
- 6212 Offices of Dentists
- 6213 Offices of Other Health Practitioners
- 6214 Outpatient Care Centers
- 6215 Medical and Diagnostic Laboratories
- 6216 Home Health Care Services
- 6219 Other Ambulatory Health Care Services
- 6221 General Medical and Surgical Hospitals
- 6222 Psychiatric and Substance Abuse Hospitals
- 6223 Specialty (except Psychiatric and Substance Abuse) Hospitals
- 6231 Nursing Care Facilities (Skilled Nursing Facilities)
- 6232 Residential Intellectual and Developmental Disability, Mental Health, and Substance Abuse Facilities
- 6233 Continuing Care Retirement Communities and Assisted Living Facilities for the Elderly
- 6239 Other Residential Care Facilities

#### **Education and Training**

- 6111 Elementary and Secondary Schools
- 6112 Junior Colleges
- 6113 Colleges, Universities, and Professional Schools
- 6114 Business Schools and Computer and Management Training
- 6115 Technical and Trade Schools
- 6116 Other Schools and Instruction
- 6117 Educational Support Services

# **INDUSTRY CLUSTER DEFINITIONS**

#### **Professional and Technical Services**

- 5411 Legal Services
- 5412 Accounting, Tax Preparation, Bookkeeping, and Payroll Services
- 5413 Architectural, Engineering, and Related Services
- 5414 Specialized Design Services
- 5416 Management, Scientific, and Technical Consulting Services
- 5418 Advertising, Public Relations, and Related Services
- 5419 Other Professional, Scientific, and Technical Services

#### **Construction Materials and Services**

- 2123 Nonmetallic Mineral Mining and Quarrying
- 2213 Water, Sewage and Other Systems
- 2361 Residential Building Construction
- 2362 Nonresidential Building Construction
- 2372 Land Subdivision
- 2373 Highway, Street, and Bridge Construction
- 2379 Other Heavy and Civil Engineering Construction
- 2381 Foundation, Structure, and Building Exterior Contractors
- 2382 Building Equipment Contractors
- 2383 Building Finishing Contractors
- 2389 Other Specialty Trade Contractors
- 3211 Sawmills and Wood Preservation
- 3271 Clay Product and Refractory Manufacturing
- 3272 Glass and Glass Product Manufacturing
- 3273 Cement and Concrete Product Manufacturing
- 3274 Lime and Gypsum Product Manufacturing
- 3279 Other Nonmetallic Mineral Product Manufacturing
- 3339 Other General Purpose Machinery Manufacturing
- 3351 Electric Lighting Equipment Manufacturing

#### Information and Communication Technologies

- 3341 Computer and Peripheral Equipment Manufacturing
- 3342 Communications Equipment Manufacturing
- 3344 Semiconductor and Other Electronic Component Manufacturing
- 3359 Other Electrical Equipment and Component Manufacturing
- 4251 Wholesale Electronic Markets and Agents and Brokers
- 5112 Software Publishers
- 5171 Wired Telecommunications Carriers
- 5172 Wireless Telecommunications Carriers (except Satellite)
- 5174 Satellite Telecommunications
- 5179 Other Telecommunications
- 5182 Data Processing, Hosting, and Related Services
- 5191 Other Information Services
- 5415 Computer Systems Design and Related Services
- 8112 Electronic and Precision Equipment Repair and Maintenance

#### **Financial Services and Real Estate**

- 5211 Monetary Authorities-Central Bank
- 5221 Depository Credit Intermediation
- 5222 Nondepository Credit Intermediation
- 5223 Activities Related to Credit Intermediation
- 5231 Securities and Commodity Contracts Intermediation and Brokerage
- 5232 Securities and Commodity Exchanges
- 5239 Other Financial Investment Activities
- 5241 Insurance Carriers
- 5242 Agencies, Brokerages, and Other Insurance Related Activities
- 5251 Insurance and Employee Benefit Funds
- 5259 Other Investment Pools and Funds
- 5311 Lessors of Real Estate
- 5312 Offices of Real Estate Agents and Brokers
- 5313 Activities Related to Real Estate

#### **Social Services**

- 6241 Individual and Family Services
- 6242 Community Food and Housing, and Emergency and Other Relief Services
- 6243 Vocational Rehabilitation Services
- 6244 Child Day Care Services



# Occupational Analysis: Hospitality and Tourism Cluster

Southern Border Economic Sub-Market

San Diego County

March 2015



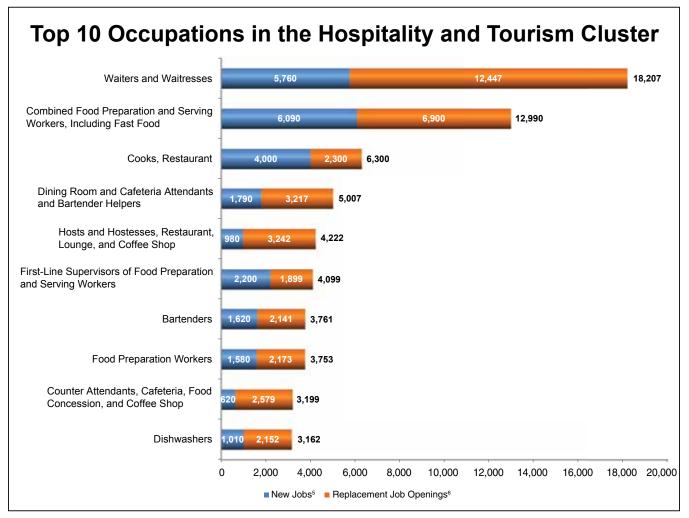


### What is the Hospitality and Tourism Cluster?

The Hospitality and Tourism cluster is comprised of 14 industries that provide goods and services related to lodging, food, recreation, travel, and sightseeing transportation. Establishments in this cluster include restaurants, hotels, casinos, golf courses, marinas, and fitness centers. The workers employed within this cluster share skills and work activities both within the cluster and in many other industry clusters, suggesting the potential for skills transference and upward mobility with additional training.

#### Top 10 Occupations in the Hospitality and Tourism Cluster

The graph below identifies the top 10 occupations in the Hospitality and Tourism cluster, based on the San Diego County Economic Sub-Market's new job growth plus replacement openings. In sum, these 10 occupations represents almost three-quarters of 92,075 total job openings projected in this cluster between 2012 and 2022. Moreover, many share the same required skills such as active listening, coordination, reading comprehension, social perceptiveness, and speaking.<sup>4</sup>



Source: California Employment Development Department, Projections of Employment 2012-2022. Industry and occupational employment projections for 2012-2022 in this report may not be directly comparable to the published 2012-2022 employment projections available online at <u>www.labormarketinfo.edd.ca.gov</u>.

7

<sup>&</sup>lt;sup>4</sup> U.S. Department of Labor's Occupational Information Network (O\*NET) at www.onetonline.org.

<sup>&</sup>lt;sup>5</sup> New jobs are only openings due to growth and do not include job declines. If an occupation's employment change is negative, there is no job growth and new jobs are set to zero.

<sup>&</sup>lt;sup>6</sup> Replacement job openings estimate the number of job openings created when workers retire or permanently leave an occupation and need to be replaced.

#### Top 10 Occupations and Recent Job Demand in the Hospitality and Tourism Cluster

The table below further profiles the San Diego County Economic Sub-Market's top 10 occupations in the Hospitality and Tourism cluster by listing the total job openings for 2012-2022, median hourly and annual wages, and entry-level education requirements. Also included are online job advertisements extracted from The Conference Board Help Wanted OnLine<sup>™</sup> (HWOL) data series over a 120-day period. HWOL compiles, analyzes, and categorizes job advertisements from numerous online job boards, including CalJOBS<sup>SM</sup> (www. caljobs.ca.gov), California's online job listing system.

Occupations	Total Job Openings <sup>7</sup> (2012-2022)	Median Hourly Wage (2014)	Median Annual Wage (2014)	Entry Level Education <sup>8</sup>	HWOL Job Ads <sup>9</sup> (120 days)
Waiters and Waitresses	18,207	\$9.24	\$19,217	Less than high school	817
Combined Food Preparation and Serving Workers, Including Fast Food	12,990	\$9.43	\$19,617	Less than high school	874
Cooks, Restaurant	6,300	\$11.89	\$24,731	Less than high school	840
Dining Room and Cafeteria Attendants and Bartender Helpers	5,007	\$9.09	\$18,906	Less than high school	240
Hosts and Hostesses, Restaurant, Lounge, and Coffee Shop	4,222	\$9.27	\$19,283	Less than high school	252
First-Line Supervisors of Food Preparation and Serving Workers	4,099	\$13.80	\$28,705	High school diploma or equivalent	1,515
Bartenders	3,761	\$9.43	\$19,629	Less than high school	177
Food Preparation Workers	3,753	\$9.91	\$20,620	Less than high school	255
Counter Attendants, Cafeteria, Food Concession, and Coffee Shop	3,199	\$9.70	\$20,168	Less than high school	204
Dishwashers	3,162	\$9.41	\$19,576	Less than high school	357

Source: California Employment Development Department, Projections of Employment 2012-2022; Occupational Employment Statistics Wage Survey, updated to 4th Q, 2014; The Conference Board Help Wanted OnLine™ (HWOL) Data Series, 120-day period ending February 9, 2015.

<sup>&</sup>lt;sup>7</sup> Total job openings are the sum of new jobs and replacement job openings.

<sup>&</sup>lt;sup>8</sup> U.S. Department of Labor, Bureau of Labor Statistics (BLS) 2012 education levels.

<sup>&</sup>lt;sup>9</sup> Totals represent job advertisements from employers in all industries. One job opening may be represented in more than one job advertisement.

### Top Occupations for the Hospitality and Tourism Cluster by Education Level

The table below identifies the occupations with the most total job openings, categorized by Bureau of Labor Statistics (BLS) 2012 entry-level education requirements, within the Hospitality and Tourism cluster. The table includes the San Diego County Economic Sub-Market's projected total job openings and median hourly and annual wages. In addition, recent totals of online job advertisements over 120-day period are included. Grouping occupations by education levels allows individuals to better gauge the potential for skills transference and upward mobility within the cluster.

Occupations	Total Job Openings <sup>10</sup> (2012-2022)	Median Hourly Wage (2014)	Median Annual Wage (2014)	HWOL Job Ads (120 days)
Requires a Bachelor's Degree or High	ner			
General and Operations Managers	457	\$49.95	\$103,895	557
Coaches and Scouts	325	N/A	\$28,822	227
Accountants and Auditors	201	\$34.85	\$72,476	1,994
Meeting, Convention, and Event Planners	174	\$22.09	\$45,957	154
Recreation Workers	82	\$11.53	\$23,972	158
Requires Some College, Postseconda	ary Non-Degree	Award, or Asso	ociate's Degree	
Massage Therapists	78	\$9.72	\$20,213	241
Audio and Video Equipment Technicians	53	\$18.08	\$37,605	102
Preschool Teachers, Except Special Education	48	N/A	\$32,974	457
Skincare Specialists	47	\$9.48	\$19,729	67
Actors	46	\$20.78	N/A	206
Requires a High School Diploma or E	quivalent or Le	SS		
Waiters and Waitresses	18,207	\$9.24	\$19,217	817
Combined Food Preparation and Serving Workers, Including Fast Food	12,990	\$9.43	\$19,617	874
Cooks, Restaurant	6,300	\$11.89	\$24,731	840
Dining Room and Cafeteria Attendants and Bartender Helpers	5,007	\$9.09	\$18,906	240
Hosts and Hostesses, Restaurant, Lounge, and Coffee Shop	4,222	\$9.27	\$19,283	252

Source: California Employment Development Department, Projections of Employment 2012-2022; Occupational Employment Statistics Wage Survey, updated to 4th Q, 2014; The Conference Board Help Wanted OnLine™ (HWOL) Data Series, 120-day period ending February 9, 2015.

<sup>10</sup> Total job openings are the sum of new jobs and replacement job openings.

## Skill Requirements in the Hospitality and Tourism Cluster

The table below lists the 10 top skills required for top occupations in the Hospitality and Tourism cluster, categorized by entry-level education requirements. Active listening and speaking are the most commonly shared skills, followed by critical thinking, monitoring, and reading comprehension. The skills and work activities identified for each occupation are from the U.S. Department of Labor's Occupational Information Network (O\*NET).

											S	kil	ls									
Occupations	Active Learning	Active Listening	Coordination	Critical Thinking	Instructing	Judgment and Decision Making	Learning Strategies	Management of Personnel Resources	Mathematics	Monitoring	Negotiation	Operation Monitoring	Persuasion	Quality Control Analysis	Reading Comprehension	Service Orientation	Social Perceptiveness	Speaking	Systems Analysis	Systems Evaluation	Time Management	Writing
Requires a Bachelor's Degree or Higher	1	1	1	1	1																	
General and Operations Managers	•	•	•	•				•		•					•		•	•				•
Coaches and Scouts		•		•	•	•	•	•		•							•	•		•		
Accountants and Auditors <sup>11</sup>	•	•		•		•			•	•					•			•	•			•
Meeting, Convention, and Event Planners		•	•	•						•	•				•	•	•	•			•	
Recreation Workers		•	•	•	•			•		•					•	•	•	•				
Requires Some College, Postsecondary Non-Degre	e /	٩w	arc	l, c	or /	\s	soc	cia	te'	s C	)ec	gre	е									
Massage Therapists	•	•		•		•				•					•	•	•	•				•
Audio and Video Equipment Technicians	•	•	•	•	•					•		•			•			•				•
Preschool Teachers, Except Special Education		•	•	•			•			•					•	•	•	•			•	
Skincare Specialists	•	•	•	•											•	•	•	•				
Actors	•	•	•	•									•		•		•	•				•
Requires a High School Diploma or Equivalent or L	es	s																				
Waiters and Waitresses		•	•	•			•			•			•		•	•	•	•				
Combined Food Preparation and Serving Workers, Including Fast Food		•	•	•	•		•						•		•	•	•	•				
Cooks, Restaurant	•	•	•	•	•					•				•				•			•	•
Dining Room and Cafeteria Attendants and Bartender Helpers		•	•	•		•				•					•	•	•	•			•	
Hosts and Hostesses, Restaurant, Lounge, and Coffee Shop		•	•								•		•		•	•	•	•			•	•

Source: U.S. Department of Labor's Occupational Information Network (O\*NET) at www.onetonline.org.

<sup>11</sup> Skills listed represent Accountants, a specialty occupation of Accountants and Auditors.

### Work Activities in the Hospitality and Tourism Cluster

The table below lists the 10 top work activities required for top occupations in the Hospitality and Tourism cluster, categorized by entry-level education requirements. The most common include establishing and maintaining interpersonal relationships; communicating with supervisors, peers, or subordinates; and organizing, planning, and prioritizing work.

													Wc	ork	A	cti	vi	tie	s				-						
Occupations	Analyzing Data or Information	Assisting and Caring for Others	Coaching and Developing Others	Communicating with Persons Outside Organization	Communicating with Supervisors, Peers, or Subordinates	Controlling Machines and Processes	Coordinating the Work and Activities of Others	Establishing and Maintaining Interpersonal Relationships	Evaluating Information to Determine Compliance with Standards	Getting Information	Handling and Moving Objects	Identifying Objects, Actions, and Events	Interacting With Computers	Interpreting the Meaning of Information for Others	Judging the Qualities of Things, Services, or People	Making Decisions and Solving Problems	Monitor Processes, Materials, or Surroundings	Monitoring and Controlling Resources	Organizing, Planning, and Prioritizing Work	Performing Administrative Activities	Performing for or Working Directly with the Public	Performing General Physical Activities	Processing Information	Resolving Conflicts and Negotiating with Others	Scheduling Work and Activities	Selling or Influencing Others	Thinking Creatively	Training and Teaching Others	Updating and Using Relevant Knowledge
Requires a Bachelor's Degree or Highe			•		0		0	-		0	-	_	_	-	,	-	-	-	0	-	-	-	_	-	0,	0,	'		
General and Operations Managers				•	•	T	•	•								•		•	•					•	•		•		
Coaches and Scouts			•				•	•				•			•				•			•		•	•			•	
Accountants and Auditors <sup>12</sup>	•				•			•	•	•						•			•	•			•						•
Meeting, Convention, and Event Planners				•	•			•		•	•	•							•		•				•				•
Recreation Workers		•	•		•		•	•											•		•	•			•		•		
Requires Some College, Postsecondar	'y I	No	n-I	De	gre	ee	A۱	wa	rd	, 0	r A	s	500	cia	te	's l	De	gr	ee										
Massage Therapists		•		•				•		•		•				•			•		•	•							•
Audio and Video Equipment Technicians					•	•		•				•	•			•	•								•		•		•
Preschool Teachers, Except Special Education		•			•											•	•		•						•		•		
Skincare Specialists		•					•	•			•						•		•		•					•	•		•
Actors				•	•			•						•	•	•			•		•	•					•		
Requires a High School Diploma or Eq	ui	val	en	t c	or L	Les	ss																						
Waiters and Waitresses					•		•	•		•	•	•									•	•		•		•			
Combined Food Preparation and Serving Workers, Including Fast Food			•		•		•	•		•	•	•									•			•				•	
Cooks, Restaurant					•		•	•			•	•				•		•	•			•						•	
Dining Room and Cafeteria Attendants and Bartender Helpers		•		•	•			•		•	•	•					•				•			•					
Hosts and Hostesses, Restaurant, Lounge, and Coffee Shop				•	•		•	•			•	•				•			•		•			•					

Source: U.S. Department of Labor's Occupational Information Network (O\*NET) at www.onetonline.org.

<sup>12</sup> Work Activities listed represent Accountants, a specialty occupation of Accountants and Auditors.

## **Related Occupations for the Hospitality and Tourism Cluster**

The table below lists top occupations in the Hospitality and Tourism cluster by entry-level education requirements and provides a sample of related occupations. These related occupations match many of the skills, education, and work experience needed for the top Hospitality and Tourism cluster occupations.

Hospitality and Tourism Occupations	Related Occupations
Requires a Bachelor's Degree	e or Higher
General and Operations Managers	<ul> <li>First-Line Supervisors of Office and Administrative Support Workers</li> <li>Logistics Managers</li> <li>Storage and Distribution Managers</li> </ul>
Coaches and Scouts	<ul> <li>Health Educators</li> <li>Recreation Workers</li> <li>Secondary School Teachers, Except Special and Career/Technical Education</li> </ul>
Accountants and Auditors	<ul> <li>Financial Analysts</li> <li>Insurance Underwriters</li> <li>Personal Financial Advisors</li> </ul>
Meeting, Convention, and Event Planners	<ul> <li>Advertising and Promotion Managers</li> <li>Human Resources Specialists</li> <li>Public Relations Specialists</li> </ul>
Recreation Workers	<ul> <li>Education Administrators, Preschool and Childcare Center/Program</li> <li>Preschool Teachers, Except Special Education</li> <li>Recreation Therapists</li> </ul>
Requires Some College, Post	secondary Non-Degree Award, or Associate's Degree
Massage Therapists	<ul> <li>Hairdressers, Hairstylists, and Cosmetologists</li> <li>Manicurists and Pedicurists</li> <li>Skincare Specialists</li> </ul>
Audio and Video Equipment Technicians	<ul> <li>Audio-Visual and Multimedia Collections Specialists</li> <li>Computer User Support Specialists</li> <li>Sound Engineering Technicians</li> </ul>
Preschool Teachers, Except Special Education	<ul> <li>Childcare Workers</li> <li>Nannies</li> <li>Teacher Assistants</li> </ul>
Skincare Specialists	<ul> <li>Hairdressers, Hairstylists, and Cosmetologists</li> <li>Manicurists and Pedicurists</li> <li>Massage Therapists</li> </ul>
Actors	<ul> <li>Concierges</li> <li>Radio and Television Announcers</li> <li>Singers</li> </ul>
<b>Requires a High School Diplo</b>	ma or Equivalent or Less
Waiters and Waitresses	<ul> <li>Food Servers, Nonrestaurant</li> <li>Hosts and Hostesses, Restaurant, Lounge, and Coffee Shop</li> <li>Ushers, Lobby Attendants, and Ticket Takers</li> </ul>
Combined Food Preparation and Serving Workers, Including Fast Food	<ul> <li>Cooks, Fast Food</li> <li>Counter Attendants, Cafeteria, Food Concession, and Coffee Shop</li> <li>Food Preparation Workers</li> </ul>
Cooks, Restaurant	<ul> <li>Cooks, Fast Food</li> <li>Cooks, Institution and Cafeteria</li> <li>Food Preparation Workers</li> </ul>
Dining Room and Cafeteria Attendants and Bartender Helpers	<ul> <li>Food Servers, Nonrestaurant</li> <li>Maids and Housekeeping Cleaners</li> <li>Waiters and Waitresses</li> </ul>
Hosts and Hostesses, Restaurant, Lounge, and Coffee Shop	<ul> <li>Cashiers</li> <li>Ushers, Lobby Attendants, and Ticket Takers</li> <li>Waiters and Waitresses</li> </ul>

Source: U.S. Department of Labor's Occupational Information Network (O\*NET) at www.onetonline.org.

## **Employer Demand for the Hospitality and Tourism Cluster**

The following table lists the San Diego County Economic Sub-Market employers in the Hospitality and Tourism cluster who posted the most job advertisements during the 120-day period ending February 9, 2015. The table also includes the number of job advertisements from the previous year's period, as well as the numerical change and year-over percent change in these postings for the same 120-day period.

Hospitality and Tourism Cluster Employers	Recent Job Advertisements <sup>13</sup> (120-day period)	Prior Year Job Advertisements (120-day period)	Numerical Change	Year-Over Percent Change (HWOL Job Advertisements)
Hilton Hotels & Resorts	208	199	9	4.5%
Wyndham Hotel Group	178	16	162	1,012.5%
Hyatt	144	135	9	6.7%
Marriott	133	188	-55	-29.3%
Chipotle	116	24	92	383.3%
Sodexo Inc.	99	71	28	39.4%
San Diego Zoo	89	60	29	48.3%
Legoland California	80	90	-10	-11.1%
Omni Hotels	68	60	8	13.3%
24 Hour Fitness	55	184	-129	-70.1%
Loews Corporation	51	43	8	18.6%
Paradise Point Resort & Spa	47	6	41	683.3%
Destination Hotels	42	8	34	425.0%
Evans Hotels	41	1	40	4,000.0%
Benihana	40	3	37	1,233.3%
Med Travelers	39	28	11	39.3%
Boston Market Corporation	36	5	31	620.0%
Taco Bell	35	0	35	_
SeaWorld Parks & Entertainment, Inc.	31	26	5	19.2%
W San Diego	29	0	29	

Source: The Conference Board Help Wanted OnLine™ (HWOL) Data Series: Period ending February 9, 2015.

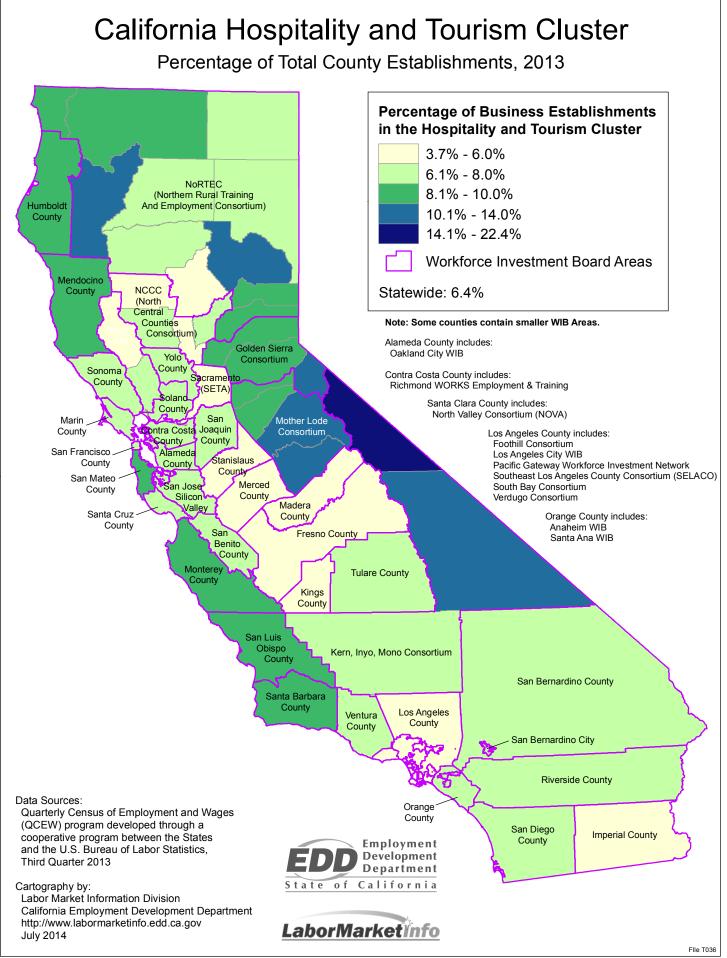
<sup>13</sup> Totals do not include employers with anonymous job advertisements.

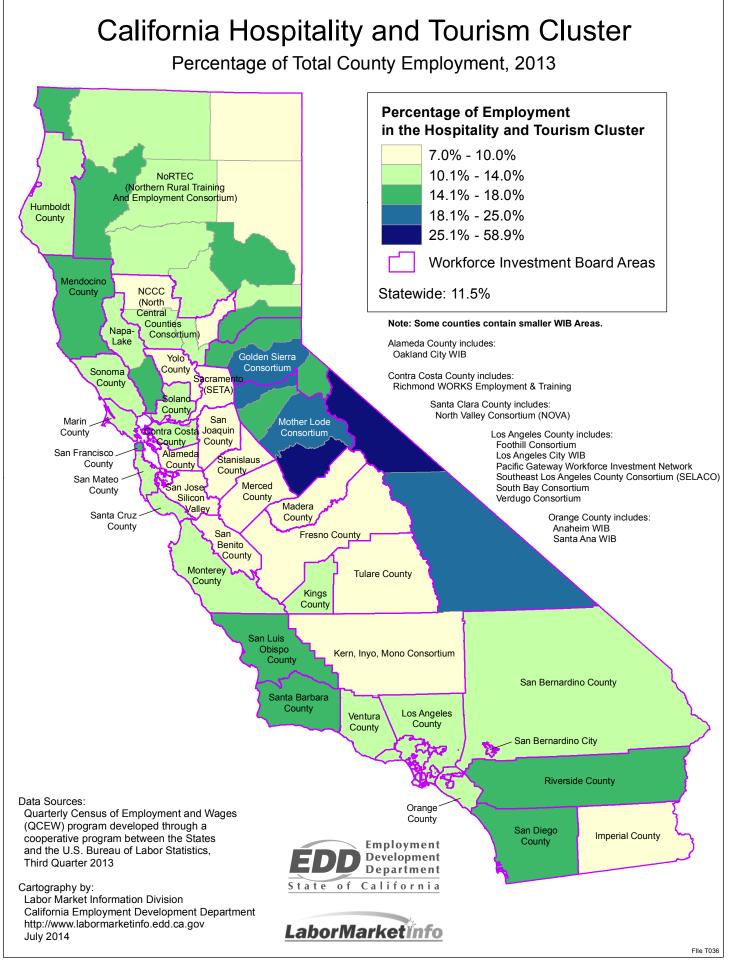
#### Instructional Programs for the Top Hospitality and Tourism Cluster Occupations

The table below provides examples of instructional programs related to some of the top occupations in the Hospitality and Tourism cluster, particularly those that require less than a bachelor's degree. These programs train individuals for occupations throughout many industries and are not limited to the Hospitality and Tourism cluster. To view a more complete list of training programs, select the source links under the table below. The Taxonomy of Programs categorizes and describes instructional programs only for California Community Colleges.

Occupations	Classifie	cation of Instructional Program (CIP)	Та	xonomy of Programs (TOP)
	CIP Code	CIP Title	TOP Code	TOP Title
Maaaaa Thammista	51.3501	Massage Therapy/Therapeutic Massage	126200	Massage Therapy
Massage Therapists	51.3502	Asian Bodywork Therapy		
	51.3503	Somatic Bodywork		
	01.0802	Agricultural Communication/ Journalism	100500 101200	Commercial Music Applied Photography
Audio and Video Equipment Technicians	10.0201	Photographic and Film/Video Technology/Technician and Assistant		
	10.0203 Recording A Technician			
Preschool Teachers,	13.1209	Kindergarten/Preschool Education and Teaching	130580	Child Development Administration and
Except Special Education	13.1210	Early Childhood Education and Teaching		Management
	19.0708	Child Care and Support Services Management		
	12.0401	Cosmetology/Cosmetologist, General	300700	Cosmetology and Barbering
Skincare Specialists	12.0408	Facial Treatment Specialist/ Facialist		
	12.0409	Aesthetician/Esthetician and Skin Care Specialist		
	50.0501	Drama and Dramatics/Theatre Arts, General	100700	Dramatic Arts
Actors	50.0506	Acting		
50.0507 Directing and Theatrical Production				
12.0500Cooking and Related CulinaryCooks, RestaurantArts, General		130630	Culinary Arts	
	12.0503			

Source: U.S. Department of Education <u>Integrated Postsecondary Education Data System (IPEDS)</u> at www.nces.ed.gov; <u>California</u> <u>Community Colleges TOP-to-CIP Crosswalk</u> 7th Edition (2010), www.cccco.edu.







# Occupational Analysis: Retail Cluster

Southern Border Economic Sub-Market San Diego County March 2015





#### What is the Retail Cluster?

The Retail cluster is composed of 19 industries involved in the sales of goods both familiar and esoteric, everything from groceries and automobiles to musical instruments and surfboards. The workers employed within this cluster span all skill levels and share skills and work activities both within the cluster and in many other industry clusters, suggesting the potential for skills transference and upward mobility with additional training.

#### Top 10 Occupations in the Retail Cluster

The graph below identifies the top 10 occupations in the Retail cluster, based on the San Diego County Economic Sub-Market's new job growth plus replacement openings. In sum, these 10 occupations represent three-quarters of the 63,470 total job openings projected in this cluster between 2012 and 2022. Moreover, many share the same required skills such as active listening, critical thinking, reading comprehension, and speaking.<sup>14</sup>



Source: California Employment Development Department, Projections of Employment 2012-2022. Industry and occupational employment projections for 2012-2022 in this report may not be directly comparable to the published 2012-2022 employment projections available online at <u>www.labormarketinfo.edd.ca.gov</u>.

<sup>&</sup>lt;sup>14</sup> U.S. Department of Labor's <u>Occupational Information Network (O\*NET</u>) at www.onetonline.org.

<sup>&</sup>lt;sup>15</sup> New jobs are only openings due to growth and do not include job declines. If an occupation's employment change is negative, there is no job growth and new jobs are set to zero.

<sup>&</sup>lt;sup>16</sup> Replacement job openings estimate the number of job openings created when workers retire or permanently leave an occupation and need to be replaced.

### Top 10 Occupations and Recent Job Demand in the Retail Cluster

The table below further profiles the San Diego County Economic Sub-Market's top 10 occupations in the Retail cluster by listing the total job openings for 2012-2022, median hourly and annual wages, and entry-level education requirements. Also included are online job advertisements extracted from The Conference Board Help Wanted OnLine<sup>™</sup> (HWOL) data series over a 120-day period. HWOL compiles, analyzes, and categorizes job advertisements from numerous online job boards, including CalJOBS<sup>SM</sup> (www.caljobs.ca.gov), California's online job listing system.

Occupations	Total Job Openings <sup>17</sup> (2012-2022)	Median Hourly Wage (2014)	Median Annual Wage (2014)	Entry Level Education <sup>18</sup>	HWOL Job Ads <sup>19</sup> (120 days)
Retail Salespersons	17,698	\$10.98	\$22,847	Less than high school	2,458
Cashiers	14,575	\$10.37	\$21,556	Less than high school	577
Stock Clerks and Order Fillers	4,233	\$11.69	\$24,304	Less than high school	655
First-Line Supervisors of Retail Sales Workers	3,931	\$20.81	\$43,267	High school diploma or equivalent	1,713
Laborers and Freight, Stock, and Material Movers, Hand	1,865	\$11.67	\$24,255	Less than high school	513
Combined Food Preparation and Serving Workers, Including Fast Food	1,832	\$9.43	\$19,617	Less than high school	874
Automotive Service Technicians and Mechanics	1,261	\$21.18	\$44,055	High school diploma or equivalent	616
Customer Service Representatives	869	\$18.07	\$37,590	High school diploma or equivalent	2,611
Butchers and Meat Cutters	853	\$12.35	\$25,685	Less than high school	7
General and Operations Managers	810	\$49.95	\$103,895	Bachelor's degree	557

Source: California Employment Development Department, Projections of Employment 2012-2022; Occupational Employment Statistics Wage Survey, updated to 4th Q, 2014; The Conference Board Help Wanted OnLine™ (HWOL) Data Series, 120-day period ending February 9, 2015.

<sup>18</sup> U.S. Department of Labor, Bureau of Labor Statistics (BLS) 2012 education levels.

<sup>19</sup> Totals represent job advertisements from employers in all industries. One job opening may be represented in more than one job advertisement.

<sup>&</sup>lt;sup>17</sup> Total job openings are the sum of new jobs and replacement job openings.

### Top Occupations for the Retail Cluster by Education Level

The table below identifies the occupations with the most total job openings, categorized by Bureau of Labor Statistics (BLS) 2012 entry-level education requirements, within the Retail cluster. The table includes the San Diego County Economic Sub-Market's projected total job openings and median hourly and annual wages. In addition, recent totals of online job advertisements over 120-day period are included. Grouping occupations by education levels allows individuals to better gauge the potential for skills transference and upward mobility within the cluster.

Occupations	Total Job Openings <sup>20</sup> (2012-2022)	Median Hourly Wage (2014)	Median Annual Wage (2014)	HWOL Job Ads (120 days)
Requires a Bachelor's Degree or Higher				
General and Operations Managers	810	\$49.95	\$103,895	557
Pharmacists	440	\$65.76	\$136,779	178
Sales Managers	291	\$56.36	\$117,222	811
Loan Officers	155	\$31.62	\$65,769	618
Accountants and Auditors	77	\$34.85	\$72,476	1,994
Requires Some College, Postsecondary N	on-Degree Awa	rd, or Associat	e's Degree	
Computer, Automated Teller, and Office Machine Repairers	136	\$20.13	\$41,868	3
First-Line Supervisors of Production and Operating Workers	98	\$29.59	\$61,552	660
Hairdressers, Hairstylists, and Cosmetologists	96	\$12.71	\$26,438	385
Heavy and Tractor-Trailer Truck Drivers	74	\$19.89	\$41,376	1,051
Skincare Specialists	46	\$9.48	\$19,729	67
Requires a High School Diploma or Equiv	alent or Less			
Retail Salespersons	17,698	\$10.98	\$22,847	2,458
Cashiers	14,575	\$10.37	\$21,556	577
Stock Clerks and Order Fillers	4,233	\$11.69	\$24,304	655
First-Line Supervisors of Retail Sales Workers	3,931	\$20.81	\$43,267	1,713
Laborers and Freight, Stock, and Material Movers, Hand	1,865	\$11.67	\$24,255	513

Source: California Employment Development Department, Projections of Employment 2012-2022; Occupational Employment Statistics Wage Survey, updated to 4th Q, 2014; The Conference Board Help Wanted OnLine™ (HWOL) Data Series, 120-day period ending February 9, 2015.

<sup>20</sup> Total job openings are the sum of new jobs and replacement job openings.

### **Skill Requirements in the Retail Cluster**

The table below lists the 10 top skills required for top occupations in the Retail cluster, categorized by entry-level education requirements. Critical thinking and speaking are the most commonly shared skills, followed by monitoring and active listening. The skills and work activities identified for each occupation are from the U.S. Department of Labor's Occupational Information Network (O\*NET).

													S	kil	ls											
Occupations	Active Learning	Active Listening	Complex Problem Solving	Coordination	Critical Thinking	Equipment Maintenance	Instructing	Judgment and Decision Making	Learning Strategies	Management of Personnel Resources	Mathematics	Monitoring	Negotiation	Operation and Control	Operation Monitoring	Persuasion	Reading Comprehension	Repairing	Science	Service Orientation	Social Perceptiveness	Speaking	Systems Analysis	Time Management	Troubleshooting	Writing
Requires a Bachelor's Degree or Highe	_														[											
General and Operations Managers	•	•		•	•					•		•					•				•	•			$ \rightarrow $	•
Pharmacists	•	•			•		•					•					•		•		•	•			$ \rightarrow$	•
Sales Managers				•	•			•		•		•				•					•	•		•	$\rightarrow$	•
Loan Officers	•	•	•		•			•			•						•			•		•				•
Accountants and Auditors <sup>21</sup>	•	•			•			•			•	•					•					•	•			•
Requires Some College, Postsecondary	/ N	on	-D	eg	ree	e A	wa	rd	, 0	r A	SS	oci	ate	e's	De	egr	ee									
Computer, Automated Teller, and Office Machine Repairers	•	•			•							•		•	•		•	•				•			•	
First-Line Supervisors of Production and Operating Workers		•		•	•					•		•					•				•	•		•		•
Cosmetologists	•	•			•		•		•			•				•				•	•	•				
Heavy and Tractor-Trailer Truck Drivers		•	•		•	•						•		•	•		•					•		•		
Skincare Specialists	•	•		•	•			•				•					•			•	•	•				
Requires a High School Diploma or Equ	viu	ale	ent	or	Le	ess	;																			
Retail Salespersons		•			•							•	•			•	•			•	•	•				•
Cashiers		•		•	•							•					•			•	•	•		•		•
Stock Clerks and Order Fillers <sup>22</sup>		•	•	•	•							•	•			•				•		•		•		
First-Line Supervisors of Retail Sales Workers					•		•			•		•	•			•	•				•	•		•		
Laborers and Freight, Stock, and Material Movers, Hand		•	•	•	•							•		•	•		•					•			•	

Source: U.S. Department of Labor's Occupational Information Network (O\*NET) at www.onetonline.org.

<sup>21</sup> Skills listed represent Accountants, a specialty occupation of Accountants and Auditors.

<sup>22</sup> Skills listed represent Stock Clerks- Stockroom, Warehouse, or Storage Yard, a specialty occupation of Stock Clerks and Order Fillers.

### Work Activities in the Retail Cluster

The table below lists the 10 top work activities required for top occupations in the Retail cluster, categorized by entry-level education requirements. The most common include establishing and maintaining interpersonal relationships; organizing, planning, and prioritizing work; and communicating with supervisors, peers, or subordinates.

														V	Vor	k /	Ac	tiv	itie	es												
Occupations	Analyzing Data or Information	Assisting and Caring for Others	Coaching and Developing Others	Communicating with Persons Outside Organization	Communicating with Supervisors, Peers, or Subordinates	Controlling Machines and Processes	Coordinating the Work and Activities of Others	Establishing and Maintaining Interpersonal Relationships	Evaluating Information to Determine Compliance with Standards	Getting Information	Guiding, Directing, and Motivating Subordinates	Handling and Moving Objects	Identifying Objects, Actions, and Events	Inspecting Equipment, Structures, or Material	Interacting With Computers	Making Decisions and Solving Problems	Monitor Processes, Materials, or Surroundings	Monitoring and Controlling Resources	Operating Vehicles, Mechanized Devices, or Equipment	Organizing, Planning, and Prioritizing Work	Performing Administrative Activities	Performing for or Working Directly with the Public	Performing General Physical Activities	Processing Information	Provide Consultation and Advice to Others	Repairing and Maintaining Electronic Equipment	Repairing and Maintaining Mechanical Equipment	Resolving Conflicts and Negotiating with Others	Scheduling Work and Activities	Selling or Influencing Others	Thinking Creatively	Updating and Using Relevant Knowledge
Requires a Bachelor's Degr	ee	or	H	igh	her													1														
General and Operations Managers				•	•		•	•								•		•		•								•	•		•	
Pharmacists	•	•						•	•				•				•			•		•		•								•
Sales Managers			•	•	•		•	•			•					•				•								•		•		
Loan Officers				•				•		•						•				•		•		•	•			•				•
Accountants and Auditors <sup>23</sup>	•				•			•	•	•						•				•	•			•								•
Requires Some College, Po	sts	sec	on	nda	ary	N	on	-D	egı	ee	A e	wa	rd	, o	r A	ss	00	ia	te's	s D	eg	jre	е	1					1			
Computer, Automated Teller, and Office Machine Repairers					•			•					•		•	•				•						•	•				•	•
First-Line Supervisors of Production and Operating Workers			•		•	•	•	•			•	•													•			•	•			
Hairdressers, Hairstylists, and Cosmetologists		•		•				•				•								•		•			•						•	•
Heavy and Tractor-Trailer Truck Drivers						•		•		•		•	•	•		•			•	•			•									
Skincare Specialists		•					•	•				•					•			•		•								•	•	•
Requires a High School Dip	lo	ma	0		qu	iva	ale	nt	or	Le	ss													1								
Retail Salespersons				•	•			•				•				•				•		•								•	•	•
Cashiers				•	•			•		•		•				•						•	•					•		•	Щ	
Stock Clerks and Order Fillers <sup>24</sup>					•	•		•		•		•	•							•		•	•	•							Щ	
First-Line Supervisors of Retail Sales Workers			•		•			•		•		•				•				•		•						•	•			
Laborers and Freight, Stock, and Material Movers, Hand					•	•		•	•			•	•				•		•	•			•									

Source: U.S. Department of Labor's Occupational Information Network (O\*NET) at www.onetonline.org.

<sup>23</sup> Work Activities listed represent Accountants, a specialty occupation of Accountants and Auditors.

<sup>24</sup> Work Activities listed represent Stock Clerks- Stockroom, Warehouse, or Storage Yard, a specialty occupation of Stock Clerks and Order Fillers.

22

### **Related Occupations for the Retail Cluster**

The table below lists top occupations in the Retail cluster by entry-level education requirements and provides a sample of related occupations. These related occupations match many of the skills, education, and work experience needed for the top Retail cluster occupations.

Retail Occupations	Related Occupations
Requires a Bachelor's Degree or	Higher
General and Operations Managers	<ul> <li>First-Line Supervisors of Office and Administrative Support Workers</li> <li>Logistics Managers</li> <li>Storage and Distribution Managers</li> </ul>
Pharmacists	<ul> <li>Health Specialties Teachers, Postsecondary</li> <li>Medical Scientists, Except Epidemiologists</li> <li>Nursing Instructors and Teachers, Postsecondary</li> </ul>
Sales Managers	<ul> <li>Financial Managers, Branch or Department</li> <li>Marketing Managers</li> <li>Sales Representatives, Wholesale and Manufacturing, Technical and Scientific Products</li> </ul>
Loan Officers	<ul> <li>Insurance Sales Agents</li> <li>Personal Financial Advisors</li> <li>Sales Agents, Financial Services</li> </ul>
Accountants and Auditors	<ul> <li>Bookkeeping, Accounting, and Auditing Clerks</li> <li>Financial Analysts</li> <li>Personal Financial Advisors</li> </ul>
Requires Some College, Postsec	ondary Non-Degree Award, or Associate's Degree
Computer, Automated Teller, and Office Machine Repairers	<ul> <li>Computer User Support Specialists</li> <li>Electrical Engineering Technicians</li> <li>Home Appliance Repairers</li> </ul>
First-Line Supervisors of Production and Operating Workers	<ul> <li>Non-Destructive Testing Specialists</li> <li>First-Line Supervisors of Construction Trades and Extraction Workers</li> <li>First-Line Supervisors of Mechanics, Installers, and Repairers</li> </ul>
Hairdressers, Hairstylists, and Cosmetologists	<ul> <li>Massage Therapists</li> <li>Dental Assistants</li> <li>Skincare Specialists</li> </ul>
Heavy and Tractor-Trailer Truck Drivers	<ul> <li>Light Truck or Delivery Services Drivers</li> <li>Pile-Driver Operators</li> <li>Service Unit Operators, Oil, Gas, and Mining</li> </ul>
Skincare Specialists	<ul><li>Barbers</li><li>Manicurists and Pedicurists</li><li>Medical Assistants</li></ul>
Requires a High School Diploma	or Equivalent or Less
Retail Salespersons	<ul> <li>Bartenders</li> <li>Hotel, Motel, and Resort Desk Clerks</li> <li>Tellers</li> </ul>
Cashiers	<ul> <li>Combined Food Preparation and Serving Workers, Including Fast Food</li> <li>Hosts and Hostesses, Restaurant, Lounge, and Coffee Shop</li> <li>Waiters and Waitresses</li> </ul>
Stock Clerks and Order Fillers	<ul> <li>Food Servers, Nonrestaurant</li> <li>Janitors and Cleaners, Except Maids and Housekeeping Cleaners</li> <li>Stock Clerks, Sales Floor</li> </ul>
First-Line Supervisors of Retail Sales Workers	<ul> <li>Dispatchers, Except Police, Fire, and Ambulance</li> <li>First-Line Supervisors of Food Preparation and Serving Workers</li> <li>Wholesale and Retail Buyers, Except Farm Products</li> </ul>
Laborers and Freight, Stock, and Material Movers, Hand	<ul> <li>Fence Erectors</li> <li>Industrial Truck and Tractor Operators</li> <li>Rail-Track Laying and Maintenance Equipment Operators</li> </ul>

Source: U.S. Department of Labor's <u>Occupational Information Network (O\*NET)</u> at www.onetonline.org.

#### **Employer Demand for the Retail Cluster**

The following table lists the San Diego County Economic Sub-Market employers in the Retail cluster who posted the most job advertisements during the 120-day period ending February 9, 2015. The table also includes the number of job advertisements from the previous year's period, as well as the numerical change and year-over percent change in these postings for the same 120-day period.

Retail Cluster Employers	Recent Job Advertisements <sup>21</sup> (120-day period)	Prior Year Job Advertisements (120-day period)	Numerical Change	Year-Over Percent Change (HWOL Job Advertisements)
Macy's	320	202	118	58.4%
Safeway Companies	202	11	191	1,736.4%
Nordstrom	140	191	-51	-26.7%
Home Depot	133	78	55	70.5%
Teradata	128	74	54	73.0%
Lowe's	122	117	5	4.3%
Sears Holdings Corporation	120	222	-102	-45.9%
Whole Foods	75	86	-11	-12.8%
Staples	69	43	26	60.5%
Dollar Tree Stores, Inc.	68	10	58	580.0%
Target Corporation	67	20	47	235.0%
Toys"R"Us	60	162	-102	-63.0%
Bloomingdale's	54	16	38	237.5%
T-Mobile	49	88	-39	-44.3%
Ross Stores	45	0	45	-
Office Depot	43	28	15	53.6%
Reebok	40	39	1	2.6%
Rite Aid	37	18	19	105.6%
Harbor Freight Tools	28	51	-23	-45.1%
JCPenney	26	15	11	73.3%

Source: The Conference Board Help Wanted OnLine™ (HWOL) Data Series: Period ending February 9, 2015.

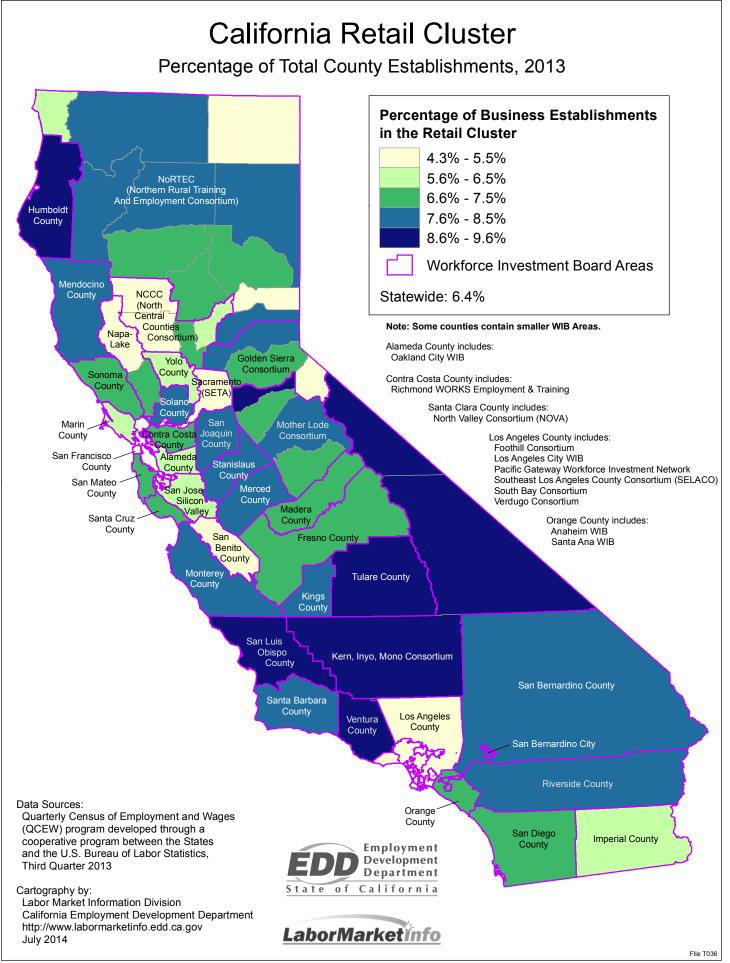
<sup>21</sup> Totals do not include employers with anonymous job advertisements.

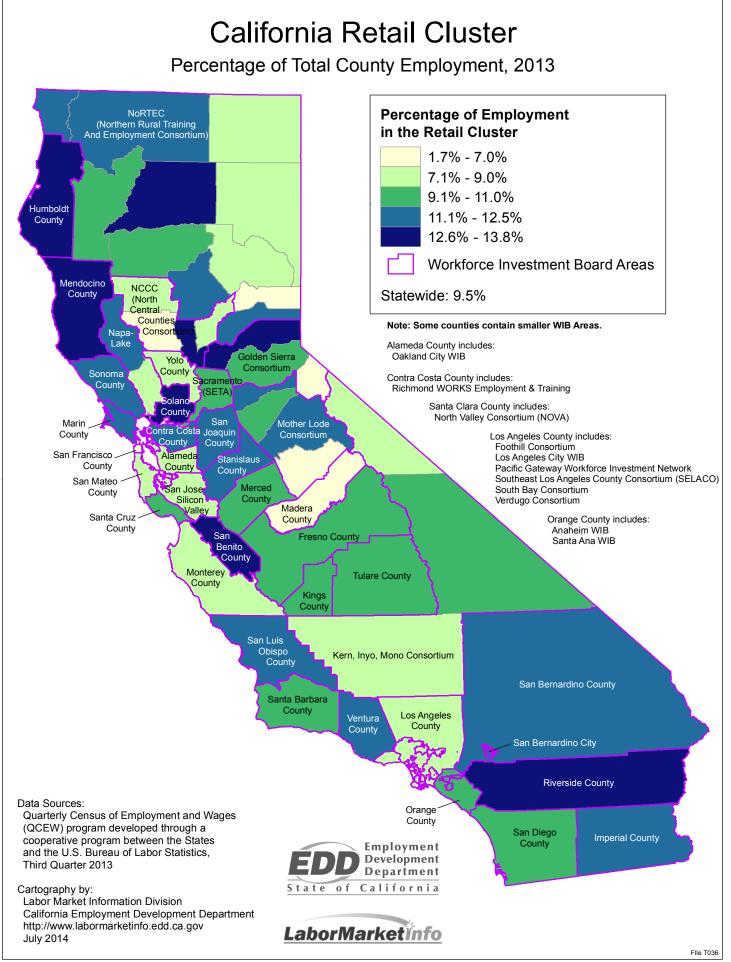
#### Instructional Programs for the Top Retail Cluster Occupations

The table below provides examples of instructional programs related to some of the top occupations in the Retail cluster, particularly those that require less than a bachelor's degree. These programs train individuals for occupations throughout many industries and are not limited to the Retail cluster. To view a more complete list of training programs, select the source links under the table below. The Taxonomy of Programs categorizes and describes instructional programs only for California Community Colleges.

Occupations	Classif	ication of Instructional Program (CIP)	Taxonomy of Programs (TOP)						
	CIP Code	CIP Title	TOP Code	TOP Title					
Computer, Automated	47.0102	Business Machine Repair	093410	Computer Electronics					
Teller, and Office Machine Repairers	47.0104	Computer Installation and Repair Technology/Technician							
First-Line Supervisors of Production and Operating Workers	52.0205	Operations Management and Supervision	N/A	N/A					
Hairdressers,	12.0401	Cosmetology/Cosmetologist, General	300700	Cosmetology and Barbering					
Hairstylists, and	12.0406	Make-Up Artist/Specialist							
Cosmetologists	12.0412	Salon/Beauty Salon Management/ Manager							
Heavy and Tractor- Trailer Truck Drivers	49.0205	Truck and Bus Driver/Commercial Vehicle Operator and Instructor	094750	Truck and Bus Driving					
	12.0401	Cosmetology/Cosmetologist, General	300700	Cosmetology and Barbering					
Skincare Specialists	12.0408	Facial Treatment Specialist/ Facialist							
	12.0409	Aesthetician/Esthetician and Skin Care Specialist							
First Line Supervisors	19.0203	Consumer Merchandising/Retailing Management	050650	Retail Store Operations and Management					
First-Line Supervisors of Retail Sales Workers	52.1804	Selling Skills and Sales Operations	050940	Sales and Salesmanship					
	52.1909	Special Products Marketing Operations	050970	E-Commerce (business emphasis)					

Source: U.S. Department of Education <u>Integrated Postsecondary Education Data System (IPEDS)</u> at www.nces.ed.gov; <u>California</u> <u>Community Colleges TOP-to-CIP Crosswalk</u> 7th Edition (2010), www.cccco.edu.







# Occupational Analysis: Business Services Cluster

Southern Border Economic Sub-Market San Diego County March 2015



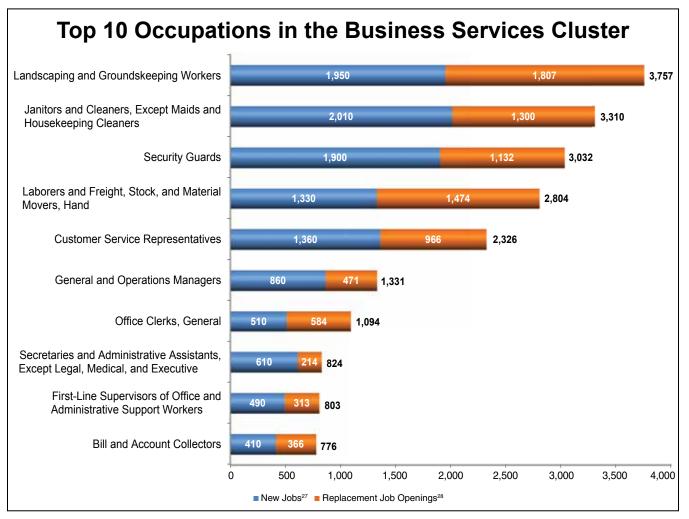


#### What is the Business Services Cluster?

The Business Services cluster is comprised of 11 industries that provide services to other organizations and businesses. Employers in this cluster include temporary agencies, janitorial and landscaping businesses, corporate offices and holding companies, private investigation services, and billing services. Establishments in this cluster also include technical consultants, housecleaning services, and pest control firms. Workers employed within this cluster often share skills and work activities both within the cluster and in many other industry clusters, suggesting the potential for skills transference and upward mobility with additional training.

#### Top 10 Occupations in the Business Services Cluster

The graph below identifies the top 10 occupations in the Business Services cluster, based on the San Diego County Economic Sub-Market's new job growth plus replacement openings. In sum, these 10 occupations represent almost half of the 46,861 total job openings projected in this cluster between 2012 and 2022. Moreover, many share the same required skills such as active listening, critical thinking, monitoring, reading comprehension, social perceptiveness, and speaking.<sup>26</sup>



Source: California Employment Development Department, Projections of Employment 2012-2022. Industry and occupational employment projections for 2012-2022 in this report may not be directly comparable to the published 2012-2022 employment projections available online at <u>www.labormarketinfo.edd.ca.gov</u>.

- <sup>26</sup> U.S. Department of Labor's <u>Occupational Information Network (O\*NET)</u> at www.onetonline.org.
- <sup>27</sup> New jobs are only openings due to growth and do not include job declines. If an occupation's employment change is negative, there is no job growth and new jobs are set to zero.
- <sup>28</sup> Replacement job openings estimate the number of job openings created when workers retire or permanently leave an occupation and need to be replaced.

#### Top 10 Occupations and Recent Job Demand in the Business Services Cluster

The table below further profiles the San Diego County Economic Sub-Market's top 10 occupations in the Business Services cluster by listing the total job openings for 2012-2022, median hourly and annual wages, and entry-level education requirements. Also included are online job advertisements extracted from The Conference Board Help Wanted OnLine<sup>™</sup> (HWOL) data series over a 120-day period. HWOL compiles, analyzes, and categorizes job advertisements from numerous online job boards, including CalJOBS<sup>SM</sup> (www.caljobs.ca.gov), California's online job listing system.

Occupations	Total Job Openings <sup>29</sup> (2012-2022)	Median Hourly Wage (2014)	Median Annual Wage (2014)	Entry Level Education <sup>30</sup>	HWOL Job Ads <sup>31</sup> (120 days)
Landscaping and Groundskeeping Workers	3,757	\$12.00	\$24,955	Less than high school	339
Janitors and Cleaners, Except Maids and Housekeeping Cleaners	3,310	\$12.14	\$25,250	Less than high school	756
Security Guards	3,032	\$11.83	\$24,616	High school diploma or equivalent	889
Laborers and Freight, Stock, and Material Movers, Hand	2,804	\$11.67	\$24,255	Less than high school	513
Customer Service Representatives	2,326	\$18.07	\$37,590	High school diploma or equivalent	2,611
General and Operations Managers	1,331	\$49.95	\$103,895	Bachelor's degree	557
Office Clerks, General	1,094	\$14.30	\$29,756	High school diploma or equivalent	854
Secretaries and Administrative Assistants, Except Legal, Medical, and Executive	824	\$18.47	\$38,425	High school diploma or equivalent	1,096
First-Line Supervisors of Office and Administrative Support Workers	803	\$25.60	\$53,251	High school diploma or equivalent	1,789
Bill and Account Collectors	776	\$18.00	\$37,441	High school diploma or equivalent	237

Source: California Employment Development Department, Projections of Employment 2012-2022; Occupational Employment Statistics Wage Survey, updated to 4th Q, 2014; The Conference Board Help Wanted OnLine™ (HWOL) Data Series, 120-day period ending February 9, 2015.

<sup>&</sup>lt;sup>29</sup> Total job openings are the sum of new jobs and replacement job openings.

<sup>&</sup>lt;sup>30</sup> U.S. Department of Labor, Bureau of Labor Statistics (BLS) 2012 education levels.

<sup>&</sup>lt;sup>31</sup> Totals represent job advertisements from employers in all industries. One job opening may be represented in more than one job advertisement.

## Top Occupations for the Business Services Cluster by Education Level

The table below identifies the occupations with the most total job openings, categorized by Bureau of Labor Statistics (BLS) 2012 entry-level education requirements, within the Business Services cluster. The table includes the San Diego County Economic Sub-Market's projected total job openings and median hourly and annual wages. In addition, recent totals of online job advertisements over 120-day period are included. Grouping occupations by education levels allows individuals to better gauge the potential for skills transference and upward mobility within the cluster.

Occupations	Total Job Openings <sup>28</sup> (2012-2022)	Median Hourly Wage (2014)	Median Annual Wage (2014)	HWOL Job Ads (120 days)
Requires a Bachelor's Degree or High	er			
General and Operations Managers	1,331	\$49.95	\$103,895	557
Accountants and Auditors	626	\$34.85	\$72,476	1,994
Human Resources Specialists	578	\$29.98	\$62,352	527
Market Research Analysts and Marketing Specialists	536	\$29.62	\$61,622	628
Financial Managers	429	\$58.25	\$121,164	754
Requires Some College, Postseconda	ry Non-Degree	Award, or Asso	ciate's Degree	
Computer User Support Specialists	384	\$23.86	\$49,627	3,384
Registered Nurses	384	\$41.08	\$85,450	1,748
Licensed Practical and Licensed Vocational Nurses	255	\$23.81	\$49,519	570
Nursing Assistants	163	\$13.65	\$28,397	298
Computer Network Support Specialists	121	\$35.39	\$73,622	16
Requires a High School Diploma or Ec	uivalent or Les	S		
Landscaping and Groundskeeping Workers	3,757	\$12.00	\$24,955	339
Janitors and Cleaners, Except Maids and Housekeeping Cleaners	3,310	\$12.14	\$25,250	756
Security Guards	3,032	\$11.83	\$24,616	889
Laborers and Freight, Stock, and Material Movers, Hand	2,804	\$11.67	\$24,255	513
Customer Service Representatives	2,326	\$18.07	\$37,590	2,611

Source: California Employment Development Department, Projections of Employment 2012-2022; Occupational Employment Statistics Wage Survey, updated to 4th Q, 2014; The Conference Board Help Wanted OnLine™ (HWOL) Data Series, 120-day period ending February 9, 2015.

<sup>32</sup> Total job openings are the sum of new jobs and replacement job openings.

### **Skill Requirements in the Business Services Cluster**

The table below lists the 10 top skills required for top occupations in the Business Services cluster, categorized by entry-level education requirements. Active listening, reading comprehension, and speaking are the most commonly shared skills, followed by critical thinking and monitoring. The skills and work activities identified for each occupation are from the U.S. Department of Labor's Occupational Information Network (O\*NET).

												Sk	ills										
Occupations	Active Learning	Active Listening	Complex Problem Solving	Coordination	Critical Thinking	Instructing	Judgment and Decision Making	Learning Strategies	Management of Personnel Resources	Mathematics	Monitoring	Operation and Control	Operation Monitoring	Persuasion	Reading Comprehension	Service Orientation	Social Perceptiveness	Speaking	Systems Analysis	Systems Evaluation	Time Management	Troubleshooting	Writing
Requires a Bachelor's Degree or High	ghe	er																					
General and Operations Managers	•	•		•	•				•		•				•		•	•					•
Accountants and Auditors <sup>33</sup>	•	•			•		•			•	•				•			•	•				•
Human Resources Specialists	•	•		•	•						•				•	•	•	•					•
Market Research Analysts and Marketing Specialists	•	•			•		•				•				•			•	•	•			•
Financial Managers <sup>34</sup>	•	•			•			•			•			•	•		•	•					•
Requires Some College, Postsecon	dar	уN	lon	-De	gre	ee A	wa	ırd,	or	As	soc	ciat	e's	De	gre	е		1	1	,	1		
Computer User Support Specialists	•	•		•	•	•					•				•	•		•					•
Registered Nurses	•	•		•	•			•			•				•	•	•	•					
Licensed Practical and Licensed Vocational Nurses		•		•	•						•				•	•	•	•			•		•
Nursing Assistants	•	•		•	•						•				•	•	•	•					•
Computer Network Support Specialists	•	•			•		•	•			•				•			•	•				•
Requires a High School Diploma or	Eq	uiv	ale	nt d	or L	.es	s																
Landscaping and Groundskeeping Workers		•	•				•				•	•	•		•		•	•			•		
Janitors and Cleaners, Except Maids and Housekeeping Cleaners	•	•		•	•		•								•	•	•	•			•		
Security Guards		•		•	•						•			•	•	•	•	•					•
Laborers and Freight, Stock, and Material Movers, Hand		•	•	•	•						•	•	•		•			•				•	
Customer Service Representatives		•		•	•						•			•	•	•	•	•					•

Source: U.S. Department of Labor's Occupational Information Network (O\*NET) at www.onetonline.org.

<sup>33</sup> Skills listed represent Financial Managers, Branch or Department, a specialty occupation of Financial Managers.

<sup>34</sup> Skills listed represent Accountants, a specialty occupation of Accountants and Auditors.

### Work Activities in the Business Services Cluster

The table below lists the 10 top work activities required for top occupations in the Business Services cluster, categorized by entry-level education requirements. The most common include establishing and maintaining interpersonal relationships; communicating with supervisors, peers, or subordinates; and organizing, planning, and prioritizing work.

														V	Vo	rk	Α	cti	vi	tie	s												
Occupations	Analyzing Data or Information	Assisting and Caring for Others	Coaching and Developing Others	Communicating with Persons Outside Organization	Communicating with Supervisors, Peers, or Subordinates	Controlling Machines and Processes	Coordinating the Work and Activities of Others	Documenting/Recording Information	Establishing and Maintaining Interpersonal Relationships	Evaluating Information to Determine Compliance with Standards	Getting Information	Guiding, Directing, and Motivating Subordinates	Handling and Moving Objects	Identifying Objects, Actions, and Events	Inspecting Equipment, Structures, or Material	Interacting With Computers	Judging the Qualities of Things, Services, or People	Making Decisions and Solving Problems	Monitor Processes, Materials, or Surroundings		Operating Vehicles, Mechanized Devices, or Equipment	Organizing, Planning, and Prioritizing Work	Performing Administrative Activities	Performing for or Working Directly with the Public	Performing General Physical Activities	Processing Information	Provide Consultation and Advice to Others	Repairing and Maintaining Mechanical Equipment	Resolving Conflicts and Negotiating with Others	Scheduling Work and Activities	Staffing Organizational Units	Thinking Creatively	Updating and Using Relevant Knowledge
Requires a Bachelor's Degree or	Hi	gh	er														-					-			<u> </u>								
General and Operations Managers				•	•				•									•		•		•							•	•		•	
Accountants and Auditors <sup>35</sup>	•				٠				•	•	•							•				•	•			•							•
Human Resources Specialists				•	•				•		•							•				•	•						•	•	•		
Market Research Analysts and Marketing Specialists	•			•	•				•		•			•				•				•				•							•
Financial Managers <sup>36</sup>			•		•		•		•			•				•		•				•							•				•
Requires Some College, Postsec	on	da	ry	N	on	I-D	)eg	jre	e .	Av	vai	rd,	0	r A	s	500	cia	te	's	De	g	ree	e										
Computer User Support Specialists					•				•		•			•		•		•				•				•						•	•
Registered Nurses		•			•				•		•			•				•	•			•				•							•
Licensed Practical and Licensed Vocational Nurses		•			•			•	•				•	•				•	•			•											•
Nursing Assistants		•			•				•		•		•	•				•	•			•				•							
Computer Network Support Specialists					•				•		•					•			•			•				•	•					•	•
<b>Requires a High School Diploma</b>	or	E	qu	iva	ale	ent	: 0	r L	.es	s																							
Landscaping and Groundskeeping Workers						•			•				•		•				•		•	•			•			•			Τ		•
Janitors and Cleaners, Except Maids and Housekeeping Cleaners					•	•			•				•		•			•	•			•		•	•								
Security Guards		•			•		•		•	•	•						•	•	•												$\uparrow$	1	
Laborers and Freight, Stock, and Material Movers, Hand					•	•			•	•			•	•					•		•	•			•								
Customer Service Representatives				•	•				•		•			•				•				•				•			•				•

Source: U.S. Department of Labor's Occupational Information Network (O\*NET) at www.onetonline.org.

<sup>35</sup> Work Activities listed represent Financial Managers, Branch or Department, a specialty occupation of Financial Managers.

<sup>36</sup> Work Activities listed represent Accountants, a specialty occupation of Accountants and Auditors.

#### **Related Occupations for the Business Services Cluster**

The table below lists top occupations in the Business Services cluster by entry-level education requirements and provides a sample of related occupations. These related occupations match many of the skills, education, and work experience needed for the top Business Services cluster occupations.

<b>Business Services Occupations</b>	Related Occupations
Requires a Bachelor's Degree or	Higher
General and Operations Managers	<ul> <li>First-Line Supervisors of Office and Administrative Support Workers</li> <li>Logistics Managers</li> <li>Storage and Distribution Managers</li> </ul>
Accountants and Auditors	<ul><li>Financial Analysts</li><li>Personal Financial Advisors</li><li>Risk Management Specialists</li></ul>
Human Resources Specialists	<ul> <li>Fraud Examiners, Investigators and Analysts</li> <li>Management Analysts</li> <li>Market Research Analysts and Marketing Specialists</li> </ul>
Market Research Analysts and Marketing Specialists	<ul> <li>Management Analysts</li> <li>Regulatory Affairs Specialists</li> <li>Risk Management Specialists</li> </ul>
Financial Managers	<ul> <li>Human Resources Specialists</li> <li>Sales Agents, Financial Services</li> <li>Sales Agents, Securities and Commodities</li> </ul>
Requires Some College, Postseco	ondary Non-Degree Award, or Associate's Degree
Computer User Support Specialists	<ul> <li>Computer, Automated Teller, and Office Machine Repairers</li> <li>Electrical Engineering Technicians</li> <li>Web Administrators</li> </ul>
Registered Nurses	<ul> <li>Emergency Medical Technicians and Paramedics</li> <li>Licensed Practical and Licensed Vocational Nurses</li> <li>Medical Assistants</li> </ul>
Licensed Practical and Licensed Vocational Nurses	<ul> <li>Occupational Therapy Assistants</li> <li>Physical Therapist Assistants</li> <li>Social and Human Service Assistants</li> </ul>
Nursing Assistants <sup>37</sup>	• N/A
Computer Network Support Specialists <sup>37</sup>	• N/A
Requires a High School Diploma	or Equivalent or Less
Landscaping and Groundskeeping Workers	<ul> <li>Construction Laborers</li> <li>HelpersProduction Workers</li> <li>Nursery Workers</li> </ul>
Janitors and Cleaners, Except Maids and Housekeeping Cleaners	<ul><li>Dishwashers</li><li>Food Preparation Workers</li><li>Food Servers, Nonrestaurant</li></ul>
Security Guards	<ul> <li>Lifeguards, Ski Patrol, and Other Recreational Protective Service Workers</li> <li>Postal Service Mail Carriers</li> <li>Shipping, Receiving, and Traffic Clerks</li> </ul>
Laborers and Freight, Stock, and Material Movers, Hand	<ul> <li>Fence Erectors</li> <li>Industrial Truck and Tractor Operators</li> <li>Rail-Track Laying and Maintenance Equipment Operators</li> </ul>
Customer Service Representatives	<ul> <li>Bill and Account Collectors</li> <li>Hotel, Motel, and Resort Desk Clerks</li> <li>Medical Records and Health Information Technicians</li> </ul>

Source: U.S. Department of Labor's Occupational Information Network (O\*NET) at www.onetonline.org.

<sup>37</sup> Currently no related occupations reported by O\*NET.

#### **Employer Demand for the Business Services Cluster**

The following table lists the San Diego County Economic Sub-Market employers in the Business Services cluster who posted the most job advertisements during the 120-day period ending February 9, 2015. The table also includes the number of job advertisements from the previous year's period, as well as the numerical change and year-over percent change in these postings for the same 120-day period.

Business Services Cluster Employers	Recent Job Advertisements <sup>38</sup> (120-day period)	Prior Year Job Advertisements (120-day period)	Numerical Change	Year-Over Percent Change (HWOL Job Advertisements)
Robert Half International	1,032	598	434	72.6%
Aerotek	445	490	-45	-9.2%
Kforce Professional Staffing, Inc.	434	379	55	14.5%
Volt Workforce Solutions	427	693	-266	-38.4%
Randstad	366	231	135	58.4%
Trustaff	338	164	174	106.1%
Accountemps	328	219	109	49.8%
Appleone	321	304	17	5.6%
Kelly Services	235	172	63	36.6%
Manpower	198	125	73	58.4%
Supplemental Health Care	172	85	87	102.4%
Department Of Defense	140	0	140	_
Adecco	136	462	-326	-70.6%
Universal Protection Service	127	168	-41	-24.4%
TalentBurst	110	64	46	71.9%
TEKsystems	104	111	-7	-6.3%
Vaco	103	90	13	14.4%
Verizon	102	0	102	_
Select Staffing	93	42	51	121.4%
UPS	89	53	36	67.9%

Source: The Conference Board Help Wanted OnLine™ (HWOL) Data Series: Period ending February 9, 2015.

<sup>38</sup> Totals do not include employers with anonymous job advertisements.

## Instructional Programs for the Top Business Services Cluster Occupations

The table below provides examples of instructional programs related to some of the top occupations in the Business Services cluster, particularly those that require less than a bachelor's degree. These programs train individuals for occupations throughout many industries and are not limited to the Business Services cluster. To view a more complete list of training programs, select the source links under the table below. The Taxonomy of Programs categorizes and describes instructional programs only for California Community Colleges.

Occupations	Classific	cation of Instructional Program (CIP)	Taxonomy of Programs (TOP)							
	CIP Code	CIP Title	TOP Code	TOP Title						
	01.0106	Agricultural Business Technology	070820	Computer Support						
Computer User Support	11.1006	Computer Support Specialist								
Specialists	51.0709	Medical Office Computer Specialist/Assistant								
	51.3801	Registered Nursing/Registered Nurse	123000	Nursing						
Registered Nurses	51.3802	Nursing Administration	123010	Registered Nursing						
	51.3803	Adult Health Nurse/Nursing								
Licensed Practical and	51.3901	Licensed Practical/Vocational Nurse Training	123020	Licensed Vocational Nursing						
Licensed Vocational Nurses	51.3999	Practical Nursing, Vocational Nursing and Nursing Assistants, Other								
	51.2601	Health Aide	123030	Certified Nurse Assistant						
Nursing Assistants	51.3902	Nursing Assistant/Aide and Patient Care Assistant/Aide								
	51.3999	Practical Nursing, Vocational Nursing and Nursing Assistants, Other								
	11.0201	Computer Programming/ Programmer, General	070700	Computer Software Development						
Computer Network Support Specialists	11.0501	Computer Systems Analysis/ Analyst	070710	Computer Programming						
	11.0701	Computer Science	070730	Computer Systems Analysis						
Customer Service	52.0406	Receptionist	051800	Customer Service						
Representatives	52.0411	Customer Service Support/Call Center/Teleservice Operation								

Source: U.S. Department of Education <u>Integrated Postsecondary Education Data System (IPEDS)</u> at www.nces.ed.gov; <u>California</u> <u>Community Colleges TOP-to-CIP Crosswalk</u> 7th Edition (2010), www.cccco.edu.

