## SUMMARY



# OPPORTUNITIES FOR CAREER EDUCATION TO CLOSE THE MIDDLE-SKILL JOBS GAP 

## IMPERIAL COUNTY



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## THE MIDDLE-SKILL JOB MARKET IN IMPERIAL COUNTY

This summary highlights key points from the study, Opportunities for Career Education to Close the Middle-Skill Jobs Gap. The study explores where the middle-skill job opportunities are in Imperial County and identifies job gaps that could potentially be filled with public Career Education programs.

Middle-skill jobs constitute a significant portion of the Imperial County labor market. In 2017, 36\% of the 69,859 jobs in Imperial County were middle-skill jobs.

Jobs Breakdown in Imperial County, 2017


Above-Middle-
Skill Jobs
15\% (10.4K)

## What is a Middle-Skill Job?

A middle-skill job has the following training requirements:
> Some college coursework, a postsecondary certificate, and/or an associate degree; or
> High school diploma or equivalent with on-the-job training greater than 12 months; or
> Apprenticeship; or
> Bachelor's degree if at least $33 \%$ of workers in the occupation, age 25 or older, have completed, as their highest level of education, some college coursework or an associate degree.

Number of People Employed in Middle-Skill and Above-Middle-Skill Jobs in Imperial County

Between 2017 and 2022, the number of middle-skill jobs in the region is projected to increase by 2,409 jobs or 10\%.

10\% Projected Growth

27.6K

Middle-Skill Jobs


## TOP 100 MIDDLE-SKILL JOBS

There are 298 Standard Occupational Classification (SOC) codes that define middle-skill jobs. This study analyzes the top 100 SOC codes for middle-skill jobs that have the most labor market demand, stable employment growth, and entry-level wages at or above the Self-Sufficiency Standard. ${ }^{1}$

## 90

The number of top middle-skill jobs with supply gaps in the region.

## 2,260

The number of job openings per year between 2017 and 2022 for the top 100 middle-skill jobs.

## 1,861

The number of awards that training providers will need to generate to close the supply gap for the top 100 middle-skill jobs.

[^0]
## TOP 100 MIDDLE-SKILL JOBS

A comparison of labor market demand (annual job openings) with labor supply (program awards) from the region's educational institutions indicates that there are 91 top middle-skill jobs with supply gaps. Occupations with an asterisk (*) indicate an oversupply.

| Administrative Services Managers* | Heating, Air Conditioning, and Refrigeration Mechanics and Installers* |
| :---: | :---: |
| Automotive Body and Related Repairers | Heavy and Tractor-Trailer Truck Drivers |
| Bookkeeping, Accounting, and Auditing Clerks | Human Resources Assistants, Except Payroll and Timekeeping |
| Bus and Truck Mechanics and Diesel Engine Specialists | Industrial Machinery Mechanics |
| Bus Drivers, School or Special Client | Industrial Production Managers |
| Bus Drivers, Transit and Intercity | Insurance Sales Agents |
| Business Operations Specialists, All Other | Interpreters and Translators |
| Carpenters | Legal Secretaries |
| Chefs and Head Cooks | Library Technicians |
| Claims Adjusters, Examiners, and Investigators | Licensed Practical and Licensed Vocational Nurses |
| Community Health Workers | Loan Interviewers and Clerks |
| Computer Network Support Specialists | Loan Officers |
| Computer Occupations, All Other | Machinists |
| Computer User Support Specialists* | Maintenance and Repair Workers, General |
| Computer, Automated Teller, and Office Machine Repairers | Massage Therapists |
| Construction and Building Inspectors | Medical and Clinical Laboratory Technicians |
| Construction Managers | Medical Assistants |
| Correctional Officers and Jailers | Medical Records and Health Information Technicians |
| Cost Estimators* | Medical Secretaries |
| Customer Service Representatives | Mobile Heavy Equipment Mechanics, Except Engines |
| Data Entry Keyers | Network and Computer Systems Administrators |
| Dental Assistants | Nursing Assistants |
| Detectives and Criminal Investigators | Operating Engineers and Other Construction Equipment Operators |
| Electrical and Electronics Repairers, Powerhouse, Substation, and Relay* | Paralegals and Legal Assistants |
| Electrical Power-Line Installers and Repairers | Payroll and Timekeeping Clerks |
| Electricians | Pesticide Handlers, Sprayers, and Applicators, Vegetation |
| Emergency Medical Technicians and Paramedics | Pharmacy Technicians* |
| Executive Secretaries and Executive Administrative Assistants | Phlebotomists |
| Farm Equipment Mechanics and Service Technicians | Plumbers, Pipefitters, and Steamfitters |
| Firefighters | Police and Sheriff's Patrol Officers |
| First-Line Supervisors of Construction Trades and Extraction Workers | Power Plant Operators |
| First-Line Supervisors of Correctional Officers | Preschool Teachers, Except Special Education* |
| First-Line Supervisors of Farming, Fishing, and Forestry Workers | Production, Planning, and Expediting Clerks |
| First-Line Supervisors of Fire Fighting and Prevention Workers | Property, Real Estate, and Community Association Managers |
| First-Line Supervisors of Helpers, Laborers, and Material Movers, Hand | Purchasing Agents, Except Wholesale, Retail, and Farm Products |
| First-Line Supervisors of Housekeeping and Janitorial Workers | Radiologic Technologists |
| First-Line Supervisors of Landscaping, Lawn Service, and Groundskeeping Workers | Real Estate Sales Agents |
| First-Line Supervisors of Mechanics, Installers, and Repairers | Registered Nurses |
| First-Line Supervisors of Non-Retail Sales Workers | Sales and Related Workers, All Other |
| First-Line Supervisors of Office and Administrative Support Workers | Sales Representatives, Services, All Other |
| First-Line Supervisors of Personal Service Workers | Sales Representatives, Wholesale and Manufacturing, Except Technical and Scientific Products |
| First-Line Supervisors of Production and Operating Workers | Secretaries and Administrative Assistants, Except Legal, Medical, and Executive |
| First-Line Supervisors of Protective Service Workers, All Other | Social and Human Service Assistants |
| First-Line Supervisors of Retail Sales Workers | Telecommunications Equipment Installers and Repairers, Except Line Installers |
| First-Line Supervisors of Transportation and Material-Moving Machine and Vehicle Operators | Tellers |
| Fitness Trainers and Aerobics Instructors | Training and Development Specialists |
| Forest and Conservation Technicians | Transportation, Storage, and Distribution Managers |
| Graphic Designers | Water and Wastewater Treatment Plant and System Operators* |
| Health Technologists and Technicians, All Other | Welders, Cutters, Solderers, and Brazers |
| Healthcare Support Workers, All Other | Wholesale and Retail Buyers, Except Farm Products |

## KEY FINDINGS

Training for the top 100 middle-skill jobs can provide job seekers with opportunities for income mobility: The average median hourly wage of all middle-skill jobs is $\$ 19.25$, the average median hourly wage of all jobs in the region is $\$ 14.42$, and the SelfSufficiency Standard is $\$ 11.32$. The average median hourly earnings of the top 100 middle-skill jobs analyzed in this study is $\$ 23.96$, which is higher than all three.

## Median Hourly Earnings (Annual Salary) vs. Self-Sufficiency Standard

| $\$ 23.96$ <br> $(\$ 49.8 \mathrm{~K})$ | $\$ 19.25$ |  |  |
| :--- | ---: | ---: | ---: |
|  | $(\$ 40.0 \mathrm{~K})$ | $\$ 14.42$ | $(\$ 11.32$ |
|  |  |  | $(\$ 23.5 \mathrm{~K})$ |
|  |  |  |  |
| Top 100 Middle-Skill Jobs | Middle-Skill Jobs | All Jobs | Self-Sufficiency Standard |

Of the top 100 middleskill jobs identified in this study, 90 have supply gaps, 8 have labor surpluses (an oversupply of labor), and 2 have neither. Comparatively, the top 100 above-middle-skill jobs have 70 supply gaps, suggesting that middle-skill jobs have more opportunities to develop programs than above-middle-skill jobs.


The top 100 middle-skill jobs have a labor market demand of 2,260 annual job openings and a program supply of 399 awards. That is a difference of 1,861 awards that could be produced by the region to meet labor market demand.

Not all middle-skill jobs require an associate degree. Of the 2,260 annual job openings, $18 \%$ are related to supervisorial or management roles, $15 \%$ are related to administrative or secretarial roles, and $13 \%$ are related to sales roles. The majority of these occupations require less than an associate degree as their typical entry-level education. This suggests that there are opportunities for short-term certificate programs that can fill these roles. Short-term certificate programs require less than two years to complete.

## Percentage of Annual Job Openings with Management, Sales or Administrative Job Titles ${ }^{3}$ (Top 100 Middle-Skill Jobs)



[^1]
## RECOMMENDATIONS FOR MORE PROGRAM SUPPLY

Career Education programs can help fill the supply gaps with short-term certificates or associate degrees. The following list of six-digit Taxonomy of Programs (TOP6) codes are recommended for increased awards to close the supply gap. The TOP system is used at the state level to collect and report information on community college programs. TOP6 programs that train for occupations with a supply gap of at least 5 job openings are included below. Programs with an asterisk (*) may be suitable for short-term certificate programs.

| TOP6 | TOP6 Program Tifle | TOP6 | TOP6 Program Tifle |
| :---: | :---: | :---: | :---: |
| 010300 | Plant Science | 095220 | Electrical |
| 010310 | Agricultural Pest Control Adviser and Operator (Licensed)* | 095230 | Plumbing, Pipefitting, and Steamfitting |
| 010930 | Nursery Technology* | 095600 | Manufacturing and Industrial Technology |
| 011400 | Forestry | 095630 | Machining and Machine Tools |
| 011600 | Agricultural Power Equipment Technology | 095650 | Welding Technology |
| 050200 | Accounting | 095700 | Civil and Construction Management Technology |
| 050400 | Banking and Finance* | 120510 | Phlebotomy* |
| 050630 | Management Development and Supervision* | 120800 | Medical Assisting |
| 050640 | Small Business and Entrepreneurship | 120810 | Clinical Medical Assisting |
| 050650 | Retail Store Operations and Management* | 120820 | Administrative Medical Assisting* |
| 050800 | International Business and Trade* | 120830 | Health Facility Unit Coordinator* |
| 050900 | Marketing and Distribution* | 122000 | Speech/Language Pathology and Audiology* |
| 050920 | Purchasing | 122300 | Health Information Technology* |
| 050940 | Sales and Salesmanship* | 122310 | Health Information Coding* |
| 050970 | E-Commerce (Business Emphasis)* | 122500 | Radiologic Technology |
| 051000 | Logistics and Materials Transportation* | 123000 | Nursing |
| 051100 | Real Estate* | 123010 | Registered Nursing |
| 051110 | Escrow | 123020 | Licensed Vocational Nursing |
| 051200 | Insurance* | 123030 | Certified Nurse Assistant |
| 051400 | Office Technology/Office Computer Applications* | 124010 | Dental Assistant |
| 051410 | Legal Office Technology* | 126200 | Massage Therapy* |
| 051420 | Medical Office Technology* | 130600 | Nutrition, Foods, and Culinary Arts* |
| 051440 | Office Management | 130630 | Culinary Arts* |
| 086000 | Educational Technology | 130710 | Restaurant and Food Services and Management* |
| 093430 | Telecommunications Technology | 140200 | Paralegal |
| 093440 | Electrical Systems and Power Transmission | 160200 | Library Technician (Aide)* |
| 094500 | Industrial Systems Technology and Maintenance | 210400 | Human Services* |
| 094700 | Diesel Technology | 210440 | Alcohol and Controlled Substances* |
| 094720 | Heavy Equipment Maintenance | 210510 | Corrections |
| 094730 | Heavy Equipment Operation | 210540 | Forensics, Evidence, and Investigation* |
| 094740 | Railroad and Light Rail Operations | 210550 | Police Academy |
| 094750 | Truck and Bus Driving* | 213300 | Fire Technology |
| 094900 | Automotive Collision Repair* | 213350 | Fire Academy |
| 095200 | Construction Crafts Technology | 219900 | Other Public and Protective Services* |
| 095210 | Carpentry | 300700 | Cosmetology and Barbering* |

## RECOMMENDATIONS FOR FURTHER ANALYSIS

Further research coupled with this labor market study may help with decision-making in regard to programs and course offerings:
> Conduct primary research to validate these recommendations with employers: This study provides lists of recommended TOP codes for short-term certificate and associate degree programs. However, the recommendations have not been validated by industry or businesses. Collecting primary data directly from employers will help further confirm program recommendations.
> Examine how well existing programs currently meet labor market needs: While this study makes recommendations for program development based on labor market information, it lacks information about the programs themselves. By conducting a program evaluation, the community colleges can gain insight as to why so many programs exist in the region for the top 100 middle-skill jobs, but supply from each program is low.
> Validate whether the recommended TOP codes for short-term certificate programs currently train skills-builders: Many of the TOP codes that this study recommends for short-term certificate programs may already train for skills-builders in the region. Skills-builders are students who take higher-level Career Education courses, but do not complete a community college program or transfer to a fouryear institution. These skills-builders may take a college course to obtain new skills and/or to increase their earnings, but do not need to complete an associate degree program to achieve those goals. By understanding what programs train skills-builders, colleges in the region may want to consider which courses, rather than programs, to market to students and working professionals.

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[^0]:    The Self-Sufficiency Standard is the hourly wage (\$11.32) that a single adult in a two-adult household with two children needs to earn to meet basic needs in Imperial County.

[^1]:    ${ }^{2}$ There is insufficient data to calculate the supply gap for 13 occupational codes in the above-middle-skill jobs category
    ${ }^{3}$ These percentages have some overlap because an occupation may have more than one role: For example, First-Line Supervisors of Office and Administrative Support Workers are both supervisorial and administrative positions.

