



COMMUNITY COLLEGES
SAN DIEGO & IMPERIAL COUNTIES

CAREER EDUCATION

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Prepared by the San Diego & Imperial Center of Excellence

MAPPING OPPORTUNITY PATHWAYS

MAY 2025

# ABOUT THE MAPPING OPPORTUNITIES PATHWAYS PROJECT

This report is part of the Center of Excellence (COE) *Mapping Opportunity Pathways* project, developed to support California's priority sectors and occupational clusters by demonstrating how skills acquired in all jobs, including those often categorized as low-wage or low-mobility, can be leveraged to access more rewarding employment opportunities. In addition to higher wages, these pathways may offer non-monetary benefits such as greater job stability, increased likelihood of full-time work, and more predictable or family-friendly work schedules — factors that significantly improve overall job quality and economic security for workers.

The project is anchored in a state-level analysis that maps occupational transitions based on transferable skills, ensuring a consistent and replicable framework across regions. By establishing these skill-based connections at the state level, regional reports could focus on supporting the pathways, assessing factors such as labor market demand, wage levels, and alignment with education and training infrastructure.

Underlying the mapping is a review of occupational similarities using multiple national and proprietary data tools, including the Federal Reserve Bank of Philadelphia's Occupational Mobility Explorer, Lightcast's Compatibility Index, and the U.S. Department of Labor's O\*NET and Career Trajectories and Occupational Transitions (CTOT) datasets. The COE used these tools to compare skill sets, identify patterns of historical worker movement, and prioritize occupations as source, lateral, or next-level.

Each report attempted to apply the mapping approach to different sectors or occupational clusters to assess the usability of each of these data tools. However, each tool's limitations required some variation in the method. The regional workforce needs assessment that follows the mapping examines whether the occupations are in demand locally, offer living wages, and are supported by community college or workforce training programs in the region.

The state-level mapping and regional needs assessments provide a framework for improving job mobility, targeting educational investments, and addressing equity by illuminating viable, skill-aligned pathways to upward mobility for workers across California.

### **Far North: Food Service Occupations**

This report maps entry-level food service roles — such as dishwashers, fast food workers, and cafeteria attendants — to higher-paying, in-demand occupations that require minimal additional training. It highlights how workers can leverage existing skills to transition into roles like food service managers or institutional cooks that offer greater stability and upward mobility.

### **Bay Area: Childhood Education Occupations**

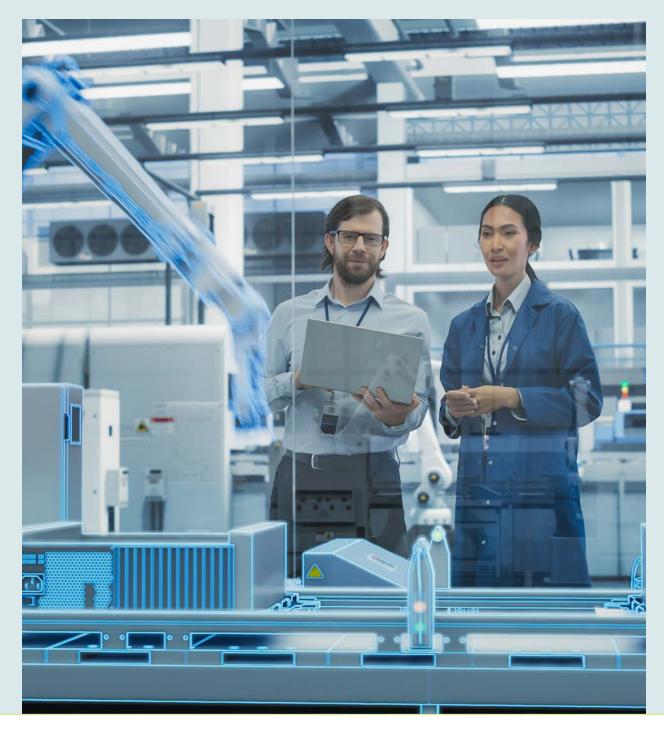
This report focuses on low-wage early childhood education workers and identifies lateral and next-level opportunities aligning with existing skill sets. Pathways into occupations such as library technicians or kindergarten teachers are evaluated based on compatibility, wage improvement, and educational requirements.

## Inland Empire/Desert: Automation-Risk Occupations and Climate-Ready Pathways

This report targets production-sector workers whose jobs may be at high risk due to automation. It identifies viable transitions into climate-ready jobs that offer long-term stability and growth and provides a roadmap for moving from potentially at-risk jobs to more resilient occupations such as wind turbine technicians and environmental technologists.

### San Diego & Imperial: Military-to-Civilian Transitions

This report illuminates how veterans returning to civilian employment can navigate pathways into high-demand, high-wage jobs by analyzing how military experience maps to civilian careers. It highlights occupations where military training aligns directly with regional needs and identifies compatible civilian roles when a direct match is unavailable.



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## **EXECUTIVE SUMMARY**

Across the country, employers continue to struggle with filling key positions amid ongoing labor shortages, exacerbated by a retiring workforce. As jobs evolve with technological advancements, legislative changes, and shifting societal needs, hiring based solely on job titles is no longer sufficient. Instead, employers must focus on candidates' skills and work experience. While skills-based hiring is not a new concept, it remains underutilized. One largely untapped talent pool is transitioning military veterans. While military roles may not directly align with civilian job titles, the skills service members develop—such as leadership, problem-solving, and technical expertise—are highly transferable across industries and bring significant value to the regions they transition to.

In 2020, the San Diego & Imperial region accounted for 36% of all service members exiting the military in California.<sup>3</sup> The large number of military exiters underscores the region's critical role in supporting veterans as they transition into the civilian workforce. To help with these efforts, the San Diego & Imperial Center of Excellence (COE) examined military-to-civilian pathways that align military training and experience with civilian occupations. To do this, the COE reviewed a mapping tool called a crosswalk, which links Military Occupational Classification (MOC) codes—used by the military to describe service member roles—to Standard Occupational Classification (SOC) codes, the system used to define civilian careers. As a result, the COE identified 43 SOC occupations in San Diego County with at least 20 military exiters, and provided data for high-wage, high-demand compatible occupations for roles that failed to meet the living wage threshold and/or demonstrated a surplus of military exiters relative to annual job openings. For Imperial County, the COE identified 27 SOC occupations with at least one military exiter, and also provided high-demand, high-wage compatible occupations.

This report serves as a resource for community colleges and workforce partners by identifying where military exiters are most concentrated, where mismatches exist between military experience and labor market demand, and which occupations offer the greatest potential for long-term career success. The following recommendations outline how educators and counselors can use the data and tools in this report to support veterans in successfully transitioning to the civilian workforce, including leveraging Credit for Prior Learning (CPL) in which veterans can earn college credit for knowledge and skills acquired through military training.

### Recommendations

- Use the "Military Exits by SOC Codes" in this report alongside existing resources to guide veterans into employment opportunities aligned with their skills, training, and experience.
- Use the "Compatible Occupations" in this study to guide military exiters toward highdemand, high-wage occupations that can offer career mobility and economic stability.
- Leverage Credit for Prior Learning (CPL) to recognize veterans' military training and expand work-based learning initiatives to accelerate their transition into the civilian workforce.

By recognizing the value of military service and understanding how veterans' skills align with civilian occupations, employers and educators can tap into a valuable talent pool while helping veterans achieve their educational and career goals.

<sup>&</sup>lt;sup>1</sup> Stephanie Ferguson Melhorn, "Understanding America's labor shortage," U.S. Chamber of Commerce, April 18, 2025, <a href="https://www.uschamber.com/workforce/understanding-americas-labor-shortage">https://www.uschamber.com/workforce/understanding-americas-labor-shortage</a>.

<sup>&</sup>lt;sup>2</sup> Caleigh Wells, "Employers are having trouble finding workers with the right skills," Marketplace, January 16, 2025, <u>marketplace.org/2025/01/16/skilled-workers-employers-jobs-hiring-beige-book</u>.

<sup>&</sup>lt;sup>3</sup> Chmura, Greg, "Military exits fill talent supply gaps," CHMURA (blog), April 28, 2023, chmura.com/blog/military-exits-fill-talent-gaps.

## INTRODUCTION

Across the United States, employers are grappling with persistent labor shortages, compounded by an aging workforce, declining labor force participation, and widening skills gaps. In San Diego and Imperial counties, the retiring workforce (e.g., workers ages 55 and over) made up 28% and 25% in 2024, respectively, and is projected to increase over the next five years. To address these challenges, employers must expand their talent pipelines beyond traditional hiring pools. One largely untapped source of skilled, highly trained workers is military service members transitioning to civilian employment. Research suggests that integrating veterans into the workforce more effectively could unlock up to \$15 billion in economic value over the next decade.

Yet, many employers overlook this talent pool due to misalignment in skills translation, outdated hiring practices, and a limited understanding of military occupational specialties. To bridge this gap, the San Diego & Imperial Center of Excellence (COE) analyzed the veteran workforce in the region, focusing on military exiters and their former occupations while in service. Wherever possible, the COE mapped military occupations to civilian roles. However, not all military-to-civilian transitions aligned with high-demand, high-wage jobs.

To better support the San Diego & Imperial Community Colleges and organizations that serve veterans, this study identifies not only promising military-to-civilian pathways, but also alternative options for military roles that lack direct civilian equivalents in high-demand, high-wage jobs. For these positions, the COE analyzed the underlying skill sets and recommended compatible civilian roles that offer living wages and strong labor market demand. For service members exiting from "military-only" occupations, or specialized occupations with duties and responsibilities unique to the military, this report offers tools and resources that can align credentials, certifications, and licenses to civilian pathways.

The next sections of this report will explore the demographic makeup of veterans in San Diego and Imperial counties, highlight opportunities for veterans based on labor market information in the region, and offer recommendations for leveraging tools and resources aimed at integrating veterans into the regional labor force.



<sup>&</sup>lt;sup>4</sup> Stephanie Ferguson Melhorn, "Understanding America's labor shortage," U.S. Chamber of Commerce, April 18, 2025, <a href="https://www.uschamber.com/workforce/understanding-americas-labor-shortage">https://www.uschamber.com/workforce/understanding-americas-labor-shortage</a>.

<sup>&</sup>lt;sup>5</sup> Caleigh Wells, "Employers are having trouble finding workers with the right skills," Marketplace, January 16, 2025, <u>marketplace.org/2025/01/16/skilled-workers-employers-jobs-hiring-beige-book</u>.

<sup>&</sup>lt;sup>6</sup> Scott Blackburn, Michael Kim, Charlie Lewis, Hannah Oh, and Kallman Parry, "From the military to the workforce: How to leverage veterans' skills," McKinsey & Company, November 8, 2023, mckinsey.com/capabilities/people-and-organizational-performance/our-insights/from-the-military-to-the-workforce-how-to-leverage-veterans-skills.

## VETERAN DEMOGRAPHICS

According to the U.S. Census Bureau, veterans accounted for nearly 8% (194,517) of San Diego County's 2.5 million civilian population aged 18 and older in 2022. In Imperial County, approximately 4% (5,045) of the 128,159 civilian residents aged 18 and older were veterans.<sup>7</sup>



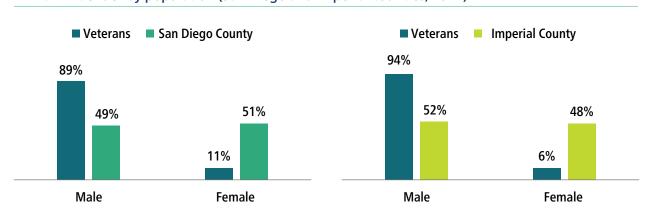
of the civilian adult population (18+) are veterans

Understanding the size and composition of the veteran population is essential for developing effective workforce strategies that support their transition into civilian careers. Therefore, this section examines the veteran landscape in San Diego and Imperial counties, focusing on gender, disability status, race and Hispanic/Latino origin, age, and educational attainment.

#### Gender

Among San Diego County's 194,517 veterans, 89% were male compared to 49% of San Diego County's population overall, while 11% of veterans were female compared to 51% of the overall population. In Imperial County, 94% of the 5,045 veterans were male, compared to 6% female (Exhibit 1).8

Exhibit 1. Gender by population (San Diego and Imperial counties, 2022)



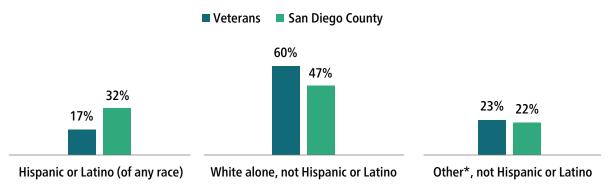
<sup>&</sup>lt;sup>7</sup> U.S. Census Bureau, "Veteran Status," American Community Survey, ACS 5-Year Estimates Subject Tables, Table S2101, 2022, accessed November 13, 2024, data.census.gov/table/ACSST5Y2022.S2101?q=Veterans&g=040XX00US06\$0500000.



### Race and Hispanic/Latino Origin

According to the U.S. Census Bureau, 32% of San Diego County's population identify as Hispanic or Latino, including individuals who also identify with other racial or ethnic groups such as Black or African American, American Indian and Alaska Native, Asian, or Pacific Islander. Within the veteran population, only 17% identify as Hispanic or Latino. Among those who do not identify as Hispanic or Latino, 60% of veterans identify as white only, compared to 47% in the general population (Exhibit 2).

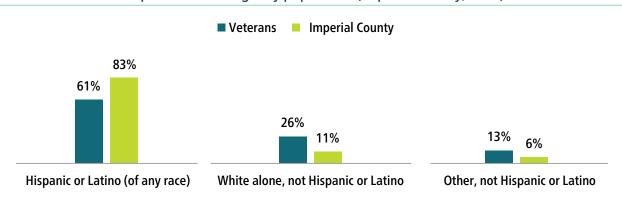
Exhibit 2. Race and Hispanic/Latino origin by population (San Diego County, 2022)9



<sup>\*</sup>Includes other racial and ethnic groups such as Black or African American, American Indian and Alaska Native, Asian, or Pacific Islander.

In Imperial County, 61% of veterans identify as Hispanic or Latino (including other races/ethnicities), compared to 83% of the overall population (Exhibit 3).

Exhibit 3. Race and Hispanic/Latino origin by population (Imperial County, 2022)<sup>10</sup>

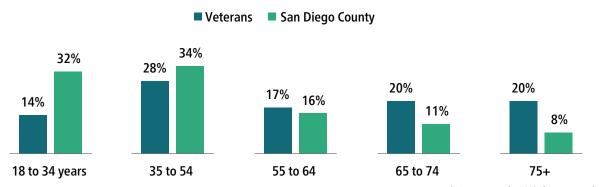


<sup>&</sup>lt;sup>9</sup> U.S. Census Bureau, "Veteran Status," American Community Survey, ACS 5-Year Estimates Subject Tables, Table S2101, 2022, accessed November 13, 2024, data.census.gov/table/ACSST5Y2022.S2101?q=Veterans&g=040XX00US06\$0500000.

### Age

In San Diego County, the majority of the general population is between 18 and 54 years old (66%). In contrast, 57% of veterans are over 55 years old (Exhibit 4).

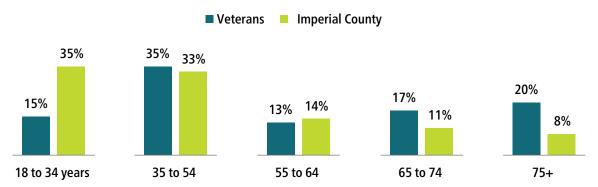
Exhibit 4. Age by population (San Diego County, 2022)<sup>11</sup>



\*May not total 100% due to rounding

The majority of veterans in Imperial County is also older than the general population, with 50% aged 55 and older; comparatively, 68% of the Imperial County adult population are between 18 and 54 years old (Exhibit 5).

Exhibit 5. Age by population (Imperial County, 2022)12



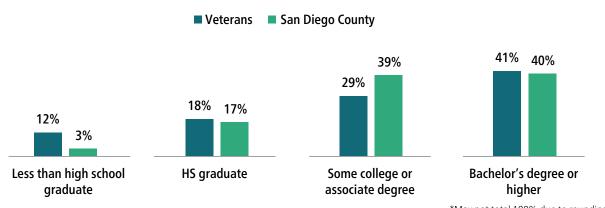
\*May not total 100% due to rounding

<sup>11</sup> U.S. Census Bureau, "Veteran Status," American Community Survey, ACS 5-Year Estimates Subject Tables, Table S2101, 2022, accessed November 13, 2024, <a href="https://data.census.gov/table/ACSST5Y2022.S21017q=Veterans&g=040XX00US06\$0500000">https://data.census.gov/table/ACSST5Y2022.S21017q=Veterans&g=040XX00US06\$0500000</a>.

#### **Educational Attainment**

Regarding educational attainment, 12% of veterans in San Diego County have less than a high school diploma, compared to 3% of the overall population. While 39% of the county's population has some college experience or an associate degree, only 29% of veterans reached this level as their highest educational attainment (Exhibit 6).

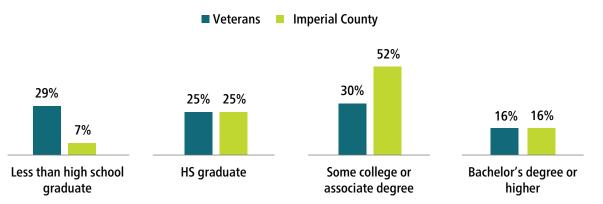
Exhibit 6. Educational attainment by population (San Diego County, 2022)<sup>13</sup>



\*May not total 100% due to rounding

In Imperial County, 29% of veterans have less than a high school diploma—more than four times the rate of the general population at 7%. At the other end of the spectrum, only 30% of veterans have some college or an associate degree, compared to 52% of the overall population (Exhibit 7).

Exhibit 7. Educational attainment by population (Imperial County, 2022)<sup>14</sup>



\*May not total 100% due to rounding

<sup>&</sup>lt;sup>13</sup> U.S. Census Bureau, "Veteran Status," American Community Survey, ACS 5-Year Estimates Subject Tables, Table S2101, 2022, accessed November 13, 2024, data.census.gov/table/ACSST5Y2022.S2101?q=Veterans&g=040XX00US06\$0500000.

### **Disability Status**

Among San Diego County's 194,517 veterans, 24% had a disability—double the 12% disability rate of the county's overall population (Exhibit 8). In Imperial County, 36% of the 5,045 veterans had a disability, compared to 18% of the overall county population.

Exhibit 8. Disability status by population (San Diego and Imperial counties, 2022)<sup>15</sup>





<sup>15</sup> U.S. Census Bureau, "Veteran Status," American Community Survey, ACS 5-Year Estimates Subject Tables, Table S2101, 2022, accessed November 13, 2024, data.census.gov/table/ACSST5Y2022.S2101?q=Veterans&g=040XX00US06\$0500000.

# IDENTIFYING MILITARY TO CIVILIAN PATHWAYS

Successfully transitioning from military service to a civilian career requires an understanding of how military occupations align with the broader traditional labor market. This section examines key aspects of that transition, beginning with an overview of *military exits*, which is defined as the number of service members leaving the military and entering the workforce. This report explores how Military Occupational Classification (MOC) codes correspond to Standard Occupational Classification (SOC) codes, providing a framework for mapping military workforce experience to civilian careers. By understanding this alignment, this analysis can help workforce development professionals, educators, and employers guide and better support veterans as they navigate aligning their prior experience to meaningful, high-wage civilian employment opportunities. For "military-only" occupations, or specialized roles with duties and responsibilities unique to the armed forces and without direct civilian SOC-equivalents, this report offers recommendations and resources to help support veterans' transition to civilian careers.

### **Military Exits**

Every year, more than 150,000 active-duty service members across the nation exit the military, bringing with them extensive technical training, leadership experience, and adaptability—critical competencies that align with in-demand civilian roles. <sup>16, 17, 18</sup> In California, 17,473 active-duty service members exited the military in 2020. Of those exits, 35% were in San Diego County (6,175 military exits), and 1% were in Imperial County (80 military exits) (Exhibit 9). <sup>19</sup> This demonstrates that a large portion, nearly 36%, of the state's military exits take place in the San Diego & Imperial region, further highlighting the critical importance of helping guide veterans through the transition into the regional workforce.

Exhibit 9. Military exits by region, 2020

Region	Number of Military Exits
United States	153,000
California	17,473
San Diego County	6,175
Imperial County	80

<sup>&</sup>lt;sup>16</sup> Meredith Kleykamp, Jeffrey B. Wenger, Elizabeth Hastings Roer, Matthew Kubasak, Travis Hubble, Lauren Skrabala, R. Gordon Rinderknecht, Shaddy K. Saba, Julia Vidal Verástegui, and Kayla M. Williams, "Federal and nonprofit support for veterans transitioning to the civilian workforce," RAND, October 24, 2024, rand.org/pubs/research\_briefs/RBA1363-3.html.

<sup>&</sup>lt;sup>17</sup> David Vergun, "Military well prepared for civilian transition, official says," DOD News, U.S. Department of Defense, October 18, 2023, <u>defense.gov/News/News-Stories/Article/Article/3561651/military-well-prepared-for-civilian-transition-official-says</u>.

<sup>18 &</sup>quot;Transition to Civilian Life: Better Collection and Analysis of Military Service Data Needed to Improve Oversight of the SkillBridge Program," U.S. Government Accountability Office, August 22, 2024, gao.gov/assets/gao-24-107352.pdf.

<sup>&</sup>lt;sup>19</sup> Chmura, Greg, "Military exits fill talent supply gaps," CHMURA (blog), April 28, 2023, chmura.com/blog/military-exits-fill-talent-gaps.

### Military Occupational Classification (MOC) System

Understanding the workforce composition of military exiters requires familiarity with the Military Occupational Classification (MOC) system, a structured framework that the U.S. Armed Forces uses to categorize service members' roles and specialties.<sup>20</sup> While each branch of the military employs its own version of this system, MOC codes are generally grouped into one of three personnel categories: commissioned officer, warrant officer, and enlisted.<sup>21,22</sup>

- **Commissioned officers** are commissioned leaders responsible for planning, decision-making, and commanding enlisted personnel, holding ranks like lieutenant or captain.
- Warrant officers serve as technical experts in specialized fields, positioned between enlisted personnel and commissioned officers in the hierarchy.<sup>23, 24</sup>
- **Enlisted** personnel constitute the majority of service members, performing specific job functions and advancing through ranks such as private or sergeant.

Of the 12,965 MOC codes<sup>25</sup> examined in this study, 6% were commissioned officer roles, 50% were warrant officer roles, and 44% were enlisted roles (Exhibit 10).<sup>26</sup>

Exhibit 10. Military Occupational Classification (MOC) codes by personnel category



<sup>&</sup>lt;sup>20</sup> "Research Military Occupations," Department of Defense Credentialing Opportunities On-Line (DOD COOL), May 1, 2025, accessed May 2, 2025, https://www.cool.osd.mil/research-military-occupations.htm.

<sup>&</sup>lt;sup>21</sup>"Military Occupational Specialty," Marines, 2021, accessed May 2, 2025, <u>marines.com/about-the-marine-corps/roles/military-occupational-specialty.</u>html.

<sup>&</sup>lt;sup>22</sup> "NEOCS/NOOCS Division," MyNavy HR, U.S. Navy, accessed May 2, 2025, https://www.mynavyhr.navy.mil/About-MyNavy-HR/Commands/ NAVMAC/Workforce-Classification/NEOCS-NOOCS-Division/#:~:text=NEOCS%2FNOOCS%20Division&text=NEOCS%20(Navy%20Enlisted%20 Occupational%20Classification,requirements%20associated%20with%20these%20skills.

<sup>&</sup>lt;sup>23</sup> "U.S. Army Ranks," U.S. Army, accessed May 2, 2025, https://www.army.mil/ranks/.

<sup>&</sup>lt;sup>24</sup> "U.S. Military Rank Insignia," U.S. Department of Defense, accessed May 2, 2025, https://www.defense.gov/resources/insignia.

<sup>&</sup>lt;sup>25</sup> onetcenter.org/crosswalks.html

<sup>&</sup>lt;sup>26</sup> "Research Military Occupations," Department of Defense Credentialing Opportunities On-Line (DOD COOL), May 1, 2025, accessed May 2, 2025, <a href="https://www.cool.osd.mil/research-military-occupations.htm">https://www.cool.osd.mil/research-military-occupations.htm</a>.

### **MOC** to Standard Occupational Classification (SOC) Codes

Federal organizations use a crosswalk, a structured mapping tool, to translate MOC codes into civilian roles by linking military occupations to their closest civilian job equivalents.<sup>27</sup> This process maps MOC codes to Standard Occupational Classification (SOC) codes by comparing the skills, duties, and qualifications of military roles with those of civilian occupations. While the U.S. military classifies service members' roles using the MOC system, the U.S. Bureau of Labor Statistics (BLS) categorizes civilian occupations across industries using the SOC system.<sup>28</sup> The San Diego & Imperial COE used a crosswalk to map MOC to SOC codes, and the majority of military occupations had a SOC-equivalent that aligned with the civilian workforce. More information about these occupations and "military-only" occupations, or occupations that are specialized military roles and do not have direct equivalents in the civilian workforce, can be found in Appendix B: Methodology.



<sup>&</sup>lt;sup>27</sup> O\*NET Online is a comprehensive database developed by the U.S. Department of Labor that provides detailed information about civilian occupations, including job descriptions, required skills, education levels, and labor market demand.

<sup>&</sup>lt;sup>28</sup> onetcenter.org/crosswalks.html

### Military Exits vs. Civilian Demand in San Diego County

Using the crosswalk, Exhibit 11 lists SOC-equivalent occupations for military exiters<sup>29</sup> in San Diego County with at least 20 exiters, ranked from highest to lowest based on the number of exiters. A total of 43 SOC occupations met this threshold. The exhibit includes projected civilian labor market demand (measured by annual job openings from 2023 to 2028), a basic gap analysis comparing demand to military exits, and wage data. The gap analysis revealed a surplus of military exiters—meaning more military exiters than annual job openings—for 13 occupations, which are marked with a caret symbol (^) below. This is a conservative estimate of a gap, as it does not account for civilians trained by educational institutions who may also compete for these jobs. Exhibit 11 also indicates that 22 occupations, noted with an asterisk (\*), do not meet San Diego County's living wage of \$26.01 per hour.<sup>30</sup> Of the 43 occupations, only 11 had more labor demand than military supply and met the living wage threshold: Aircraft Mechanics and Service Technicians; Police and Sheriffs Patrol Officers; Firefighters; First-Line Supervisors of Mechanics, Installers, and Repairers; Bus and Truck Mechanics and Diesel Engine Specialists; Engineering Technologists and Technicians, Except Drafters, All Other; Air Traffic Controllers; Human Resources Managers; Operating Engineers and Other Construction Equipment Operators; Airline Pilots, Copilots, and Flight Engineers; and Physician Assistants. For a statewide breakdown of military exits by SOC codes, see Appendix A: Exhibit A1. Exhibit A2 in the appendix lists military exits for "military-only" occupations.

Exhibit 11. Military exits by Standard Occupational Classification (SOC) code (San Diego County, 2020)<sup>31</sup>

SOC Code	SOC Occupation	Civilian Demand (Annual Job Openings)	Military Exits	Gap Analysis (Demand-Exits)	Entry-Level Wages	Median Wages
31-9092	Medical Assistants*	1,693	502	1,191	\$19.56	\$22.49
49-9071	Maintenance and Repair Workers, General*	1,526	317	1,209	\$18.84	\$23.19
49-3011	Aircraft Mechanics and Service Technicians	406	295	111	\$31.43	\$38.38
43-9061	Office Clerks, General*	3,670	225	3,445	\$17.68	\$22.03
49-2091	Avionics Technicians^	113	217	(104)	\$40.32	\$40.32
15-1244	Network and Computer Systems Administrators^	181	201	(20)	\$40.51	\$49.91
53-7065	Stockers and Order Fillers*	4,175	183	3,992	\$17.38	\$18.30
47-5032	Explosives Workers, Ordnance Handling Experts, and Blasters^	45	175	(130)	\$29.24	\$40.62
33-3051	Police and Sheriffs Patrol Officers	705	167	538	\$39.75	\$52.61
49-2094	Electrical and Electronics Repairers, Commercial and Industrial Equipment^	78	158	(80)	\$28.58	\$35.86

<sup>&</sup>lt;sup>29</sup> The San Diego & Imperial COE removed any "unknown" or "military-only" positions from this list, including Infantry (55-3016); Command and Control Center Specialists (55-3015); Artillery and Missile Crew Members (55-3014); Special Forces (55-3018); and Air Crew Members (55-3011). For more information about "military-only" occupations, see the Appendix B: Methodology.

<sup>&</sup>lt;sup>30</sup> "Self-Sufficiency Standard, California," Center for Women's Welfare, University of Washington, 2023, accessed May 2, 2025, <a href="https://selfsufficiencystandard.org/California/">https://selfsufficiencystandard.org/California/</a>.

<sup>&</sup>lt;sup>31</sup> Lightcast 2025.1; QCEW, Non-QCEW, Self-Employed.

SOC Code	SOC Occupation	Civilian Demand (Annual Job Openings)	Military Exits	Gap Analysis (Demand-Exits)	Entry-Level Wages	Median Wages
53-5021	Captains, Mates, and Pilots of Water Vessels^*	90	155	(65)	\$25.41	\$33.43
49-9099	Installation, Maintenance, and Repair Workers, All Other*	321	137	184	\$18.90	\$22.72
49-2093	Electrical and Electronics Installers and Repairers, Transportation Equipment^	19	102	(83)	\$39.19	\$39.37
33-2011	Firefighters	316	97	219	\$26.06	\$33.06
35-2021	Food Preparation Workers*	1,988	92	1,896	\$16.86	\$17.74
43-2099	Communications Equipment Operators, All Other^	70	89	(19)	\$26.28	\$36.51
49-2092	Electric Motor, Power Tool, and Related Repairers^*	17	88	(71)	\$21.88	\$28.43
29-2072	Medical Records Specialists*	151	83	68	\$21.43	\$25.26
53-5011	Sailors and Marine Oilers*	87	82	5	\$18.46	\$21.03
43-5061	Production, Planning, and Expediting Clerks*	581	76	505	\$23.51	\$30.28
53-3032	Heavy and Tractor-Trailer Truck Drivers*	1,520	75	1,445	\$21.17	\$26.66
53-5031	Ship Engineers^	28	67	(39)	\$38.36	\$38.38
49-1011	First-Line Supervisors of Mechanics, Installers, and Repairers	466	66	400	\$30.99	\$38.27
49-3031	Bus and Truck Mechanics and Diesel Engine Specialists	219	62	157	\$26.18	\$31.07
35-2012	Cooks, Institution and Cafeteria*	519	54	465	\$18.30	\$21.34
49-3023	Automotive Service Technicians and Mechanics*	595	49	546	\$17.55	\$26.17
43-5071	Shipping, Receiving, and Inventory Clerks*	734	47	687	\$17.59	\$19.68
47-2152	Plumbers, Pipefitters, and Steamfitters*	561	44	517	\$23.71	\$30.27
53-7072	Pump Operators, Except Wellhead Pumper^*	17	40	(23)	\$20.77	\$25.65
17-3029	Engineering Technologists and Technicians, Except Drafters, All Other	179	39	140	\$30.58	\$39.22
19-2021	Atmospheric and Space Scientists^	13	37	(24)	\$46.62	\$55.65
49-2011	Computer, Automated Teller, and Office Machine Repairers*	81	36	45	\$17.75	\$22.29
53-2021	Air Traffic Controllers	73	36	37	\$61.77	\$79.27
11-3121	Human Resources Managers	234	32	202	\$58.07	\$77.09
29-1224	Radiologists^	7	32	(25)	\$102.68	\$163.47
29-2043	Paramedics*	79	32	47	\$21.10	\$29.96

SOC Code	SOC Occupation	Civilian Demand (Annual Job Openings)	Military Exits	Gap Analysis (Demand-Exits)	Entry-Level Wages	Median Wages
49-2098	Security and Fire Alarm Systems Installers*	102	29	73	\$23.59	\$29.99
31-9093	Medical Equipment Preparers*	90	28	62	\$23.72	\$29.53
47-2073	Operating Engineers and Other Construction Equipment Operators	313	28	285	\$30.33	\$38.52
43-6014	Secretaries and Administrative Assistants, Except Legal, Medical, and Executive*	1,828	26	1,802	\$19.81	\$23.53
53-2011	Airline Pilots, Copilots, and Flight Engineers	258	25	233	\$79.05	\$104.54
29-1071	Physician Assistants	152	21	131	\$59.11	\$66.59
49-2021	Radio, Cellular, and Tower Equipment Installers and Repairers^	17	20	(3)	\$29.68	\$38.75

<sup>^</sup>Surplus of military exiters



<sup>\*</sup>Below the living wage in San Diego County

### **SOC Compatible Occupations in San Diego County**

The San Diego & Imperial COE found that while numerous occupations successfully mapped from MOC to SOC codes, 32 occupations either paid entry-level wages below the living wage or had a surplus of military exiters relative to civilian demand. These factors could significantly limit the likelihood of a sustainable career in these occupations and hinder a successful transition into civilian roles. To help identify viable alternatives, the San Diego & Imperial COE analyzed occupations with available data regarding compatible roles (28 occupations),<sup>32</sup> and identified the top compatible occupations that could translate into promising employment opportunities. Using Lightcast's Compatibility Index, SOC occupations were sorted from highest to lowest compatibility for each occupation. The Compatibility Index is a score created by Lightcast using a proprietary algorithm and O\*NET's data, assessing the compatibility of two occupations based on knowledge, skills, and abilities required to perform the occupation. A score of 100 indicates complete compatibility, while a score of 0 means no compatibility. The San Diego & Imperial COE included occupations with compatibility scores of 80 or higher. For additional details about the methodology, see Appendix B: Methodology.

A key objective of this analysis was to identify high-demand, high-wage occupations among these compatible roles. The San Diego & Imperial COE defined these occupations as having at least 60 projected annual job openings in San Diego County between 2023 and 2028, and paying entry-level wages at or above the living wage of \$26.01 per hour for a single adult. Exhibit 12 lists the top high-demand, high-wage occupations most compatible with the 28 SOC-equivalent occupations for military exiters. A summary of the top five most compatible occupations for each role can be found in Appendix A: Exhibit A3, which includes information on projected annual job openings, typical education level, skill level, and wages.

Exhibit 12. Top high-demand, high-wage occupations compatible with SOC-equivalent occupations<sup>33</sup>

SOC Title	Annual Job Openings (2023-2028)	Entry-Level Wages	# of Compatible SOC-Equivalent Occupations
Radiologic Technologists and Technicians	119	\$36.43	9
Electrical Power-Line Installers and Repairers	72	\$34.92	9
Bus and Truck Mechanics and Diesel Engine Specialists	219	\$26.18	8
Aircraft Mechanics and Service Technicians	406	\$31.43	7
Operating Engineers and Other Construction Equipment Operators	313	\$30.33	7
Electrical and Electronic Engineering Technologists and Technicians	275	\$30.28	7
Sheet Metal Workers	184	\$27.40	7
Telecommunications Equipment Installers and Repairers, Except Line Installers	144	\$27.84	7
Dental Hygienists	227	\$51.80	6
Surgical Technologists	79	\$31.45	6

<sup>&</sup>lt;sup>32</sup> Compatibility Index Scores were not available for the following occupations: Communications Equipment Operators, All Other (SOC 43-2099); Installation, Maintenance, and Repair Workers, All Other (SOC 49-9099); Medical Records Specialists (SOC 29-2072); and Paramedics (SOC 29-2043).

### Military Exits vs. Civilian Demand in Imperial County

The same analysis was conducted for Imperial County, using the crosswalk to map military exiters to SOC-equivalent occupations. Given the smaller number of military exiters in Imperial County, Exhibit 13 includes 27 occupations with at least one exiter, rather than applying a minimum threshold. Similar to San Diego County, the exhibit provides projected civilian labor market demand from 2023 to 2028 in Imperial County, along with entry-level and median wages. The analysis identified seven occupations with a caret symbol (^) and asterisk (\*), indicating a surplus of military exiters relative to projected civilian demand and insufficient wage data to determine whether entry-level wages meet Imperial County's living wage of \$15.14 per hour.<sup>34</sup>

Exhibit 13. Military exits by Standard Occupational Classification (SOC) code (Imperial County, 2020)35

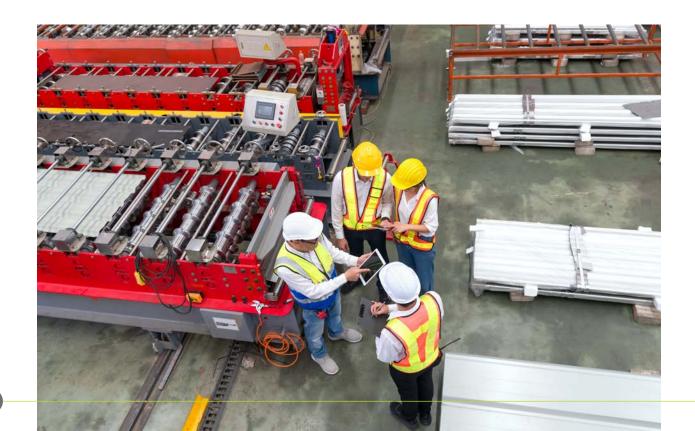
SOC Code	SOC Occupation	Civilian Demand (Annual Job Openings)	Military Exits	Gap Analysis (Demand-Exits)	Entry-Level Wages	Median Wages
33-3051	Police and Sheriffs Patrol Officers	32	7	25	\$30.24	\$38.74
47-5032	Explosives Workers, Ordnance Handling Experts, and Blasters^*	1	6	(5)	Insf. Data	Insf. Data
49-2091	Avionics Technicians^*	0	6	(6)	Insf. Data	Insf. Data
35-2021	Food Preparation Workers	50	3	47	\$16.22	\$17.00
53-2021	Air Traffic Controllers^*	0	3	(3)	Insf. Data	Insf. Data
53-3032	Heavy and Tractor-Trailer Truck Drivers	134	2	132	\$18.82	\$23.39
49-1011	First-Line Supervisors of Mechanics, Installers, and Repairers	21	2	19	\$29.76	\$38.57
49-3031	Bus and Truck Mechanics and Diesel Engine Specialists	13	2	11	\$22.61	\$30.15
29-2043	Paramedics	2	2	0	\$28.22	\$33.09
53-7065	Stockers and Order Fillers	232	1	231	\$17.01	\$18.06
43-9061	Office Clerks, General	144	1	143	\$16.36	\$18.44
31-9092	Medical Assistants	63	1	62	\$17.70	\$18.31
49-3023	Automotive Service Technicians and Mechanics	38	1	37	\$17.86	\$23.52
53-1047	First-Line Supervisors of Transportation and Material Moving Workers	28	1	27	\$21.37	\$27.79
35-2012	Cooks, Institution and Cafeteria	18	1	17	\$18.02	\$21.40
51-8031	Water and Wastewater Treatment Plant and System Operators	9	1	8	\$28.41	\$31.94

<sup>&</sup>lt;sup>34</sup> "Self-Sufficiency Standard, California," Center for Women's Welfare, University of Washington, 2023, accessed May 2, 2025, https://selfsufficiencystandard.org/California/.

<sup>35</sup> Lightcast 2025.1; QCEW, Non-QCEW, Self-Employed.

SOC Code	SOC Occupation	Civilian Demand (Annual Job Openings)	Military Exits	Gap Analysis (Demand-Exits)	Entry-Level Wages	Median Wages
11-3071	Transportation, Storage, and Distribution Managers	8	1	7	\$31.06	\$42.32
13-1081	Logisticians	6	1	5	\$24.86	\$34.20
15-1244	Network and Computer Systems Administrators	5	1	4	\$34.41	\$42.20
49-2022	Telecommunications Equipment Installers and Repairers, Except Line Installers	4	1	3	\$29.04	\$38.00
11-3121	Human Resources Managers	4	1	3	\$57.89	\$65.21
27-3091	Interpreters and Translators	2	1	1	\$20.65	\$28.49
17-3029	Engineering Technologists and Technicians, Except Drafters, All Other	2	1	1	\$31.87	\$41.12
27-4032	Film and Video Editors^*	0	1	(1)	Insf. Data	Insf. Data
49-9069	Precision Instrument and Equipment Repairers, All Other^*	0	1	(1)	Insf. Data	Insf. Data
27-4012	Broadcast Technicians^*	0	1	(1)	Insf. Data	Insf. Data
17-3024	Electro-Mechanical and Mechatronics Technologists and Technicians^*	0	1	(1)	Insf. Data	Insf. Data

<sup>^</sup>Surplus of military exiters



<sup>\*</sup>Below the living wage/insufficient wage data in Imperial County

### **SOC Compatible Occupations in Imperial County**

From the 27 occupations in Imperial County with military exiters, the San Diego & Imperial COE identified compatible roles for occupations where wage data were insufficient, or where there was a surplus of military exiters relative to civilian demand. Similar to the analysis in San Diego County, the San Diego & Imperial COE used Lightcast's Compatibility Index, including only occupations with compatibility scores of 80 or higher. Data regarding compatible occupations was available for six occupations. <sup>36</sup> For additional details about the methodology, see Appendix B: Methodology.

To identify high-demand, high-wage occupations in Imperial County, the San Diego & Imperial COE defined these occupations as having at least 13 projected annual job openings between 2023 and 2028 and paying entry-level wages at or above Imperial County's living wage of \$15.14 per hour for a single adult. Exhibit 14 lists the top high-demand, high-wage occupations that are most compatible with the SOC-equivalent occupations for military exiters. A summary of the top five most compatible occupations for each role can be found in Appendix A: Exhibit 4A.

Exhibit 14. Top high-demand, high-wage occupations compatible with SOC-equivalent occupations<sup>37</sup>

SOC Title	Annual Openings	Entry-Level Wages	# of Compatible SOC-Equivalent Occupations
Power Plant Operators	19	\$37.46	3
Compliance Officers	63	\$31.77	2
Automotive Service Technicians and Mechanics	38	\$17.86	2
First-Line Supervisors of Production and Operating Workers	19	\$28.03	2
First-Line Supervisors of Construction Trades and Extraction Workers	19	\$30.03	2
Heating, Air Conditioning, and Refrigeration Mechanics and Installers	16	\$21.60	2
Inspectors, Testers, Sorters, Samplers, and Weighers	14	\$17.42	2
Computer User Support Specialists	13	\$24.46	2
Industrial Machinery Mechanics	13	\$25.10	2
Secondary School Teachers, Except Special and Career/Technical Education	61	\$38.50	1

<sup>36</sup> Compatibility Index Scores were not available for the following occupation: Precision Instrument and Equipment Repairers, All Other (SOC 49-9069). <sup>37</sup> Lightcast 2025.1; QCEW, Non-QCEW, Self-Employed.

### **Estimated Education Levels of Military Exiters**

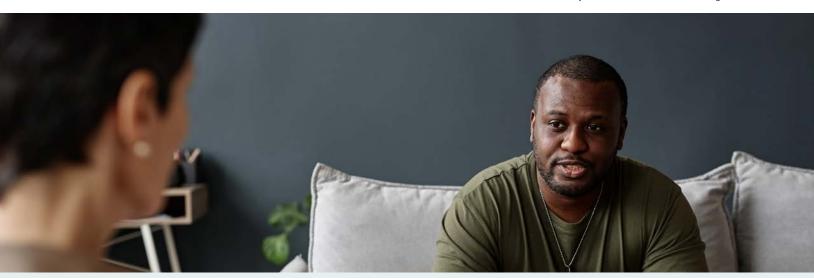
Mapping MOC codes to SOC codes offers valuable insight into the educational equivalency of military occupations in the civilian workforce. Since MOC codes do not indicate specific education levels, aligning them with SOC codes allows for an estimation of the entry-level education requirements typically associated with these roles in the civilian workforce.

Among MOC codes mapped to SOC codes, 45% correspond to enlisted occupations that typically require less than an associate degree, compared to 24% of officer positions and 4% of warrant officer positions (Exhibit 15). This suggests that a substantial portion of civilian occupations that aligned with enlisted military roles typically do not require a postsecondary degree, highlighting an opportunity for community colleges to support military exiters from these positions who may wish to pursue higher education.

Exhibit 15. Educational attainment by Military Occupational Classification (MOC) personnel category<sup>38</sup>

	М	MOC Personnel Category				
Typical Entry-level Education	Enlisted (n=5,704)	Officar		Total* (n=12,965)		
None	4%			2%		
High school diploma or equivalent	23%	20%	4%	14%		
Some college, no degree	1%			0%		
Postsecondary non-degree	17%	4%	0%	8%		
Associate degree	12%	1%	0%	6%		
Bachelor's degree	26%	56%	58%	44%		
Master's degree	1%	1%	6%	3%		
Doctoral or professional	0%	3%	23%	12%		
Other or Not Applicable (N/A)	16%	15%	8%	12%		

\*May not total 100 % due to rounding



### INSIGHTS AND RECOMMENDATIONS

According to the Department of Defense, the military is "a microcosm of the civilian workforce and has a wide variety of occupations with related civilian credentials." To better understand this landscape, this study examined where military exiters are most concentrated, where job market mismatches exist, and which occupations offer the greatest opportunity for long-term career success.

In this report, the San Diego & Imperial COE found that a substantial portion of civilian occupations that aligned with enlisted military roles typically require an associate degree or less, suggesting that military exiters in these positions could benefit from opportunities to pursue higher education through community colleges and may be eligible for Credit For Prior Learning. Community colleges are well-positioned to play a key role in supporting veterans who wish to further their education and training, as they are GI Bill-approved institutions, and veterans can use their benefits to pay for tuition costs, educational costs, and housing.<sup>40</sup> The Post-9/11 GI Bill generally covers up to 36 months of education benefits for eligible veterans and service members.<sup>41</sup> In California, veterans, active-duty service members, reservists, and their dependents also receive priority registration<sup>42</sup> at community colleges, along with access to dedicated veteran resource centers (Exhibit 16).

Exhibit 16. Veterans resource centers at community colleges in San Diego and Imperial counties

Cuyamaca College <sup>43</sup>	San Diego City College <sup>44</sup>
Grossmont College <sup>45</sup>	San Diego College of Continuing Education <sup>46</sup>
Imperial Valley College <sup>47</sup>	San Diego Mesa College <sup>48</sup>
MiraCosta College <sup>49</sup>	San Diego Miramar College <sup>50</sup>
Palomar College <sup>51</sup>	Southwestern College <sup>52</sup>

<sup>&</sup>lt;sup>39</sup> "Information for Credentialing Organizations," Department of Defense Credentialing Opportunities On-Line (DOD COOL), January 6, 2025, accessed May 2, 2025, <a href="https://www.cool.osd.mil/info/info\_for\_credentialing\_organizations.htm">https://www.cool.osd.mil/info/info\_for\_credentialing\_organizations.htm</a>.

<sup>&</sup>lt;sup>40"</sup>How to Use Your GI Bill Benefits," U.S. Department of Veterans Affairs, December 6, 2024, accessed May 2, 2025, <u>va.gov/education/about-gi-bill-benefits/how-to-use-benefits</u>.

<sup>&</sup>lt;sup>41</sup>"Post-9/11 GI Bill (Chapter 33)" U.S. Department of Veterans Affairs, February 26, 2025, accessed May 2, 2025, <a href="https://www.va.gov/education/about-gi-bill-benefits/post-9-11/">https://www.va.gov/education/about-gi-bill-benefits/post-9-11/</a>.

<sup>&</sup>lt;sup>42</sup>"Veterans Resource Centers Help People Returning from Active Duty," California Community Colleges, 2025, accessed May 2, 2025, <a href="https://icangotocollege.com/student-support-services/veteran-student-success">https://icangotocollege.com/student-support-services/veteran-student-success</a>.

<sup>&</sup>lt;sup>43</sup>"Veterans Center," Cuyamaca College, 2025, accessed May 2, 2025, <u>cuyamaca.edu/student-support/additional-support-and-assistance-programs/veterans-center/index.php</u>.

<sup>44&</sup>quot;Military and Veterans," San Diego City College, 2025, accessed May 2, 2025, https://www.sdcity.edu/students/military/index.aspx.

<sup>45&</sup>quot; Veterans Services, "Grossmont College, 2025, accessed May 2, 2025, grossmont.edu/student-support/veterans-services/index.php.

<sup>46&</sup>quot; Veterans Services, "San Diego College of Continuing Education, accessed May 2, 2025, https://www.sdcce.edu/services/veteran-services.

<sup>&</sup>lt;sup>47</sup>"Military and Veteran Success Center," Imperial Valley College, 2025, accessed May 2, 2025, <a href="https://imperial.edu/students/military-and-veterans-success-center/index.html">https://imperial.edu/students/military-and-veterans-success-center/index.html</a>.

<sup>&</sup>lt;sup>48</sup>"Veterans Services," San Diego Mesa College, 2015, accessed May 2, 2025, <u>sdmesa.edu/student-support/veterans-services/index.shtml</u>.

<sup>&</sup>lt;sup>49</sup>"Military and Veterans Services," MiraCosta College, 2025, accessed May 2, 2025, miracosta.edu/student-services/veterans-services/index.html.

<sup>&</sup>lt;sup>50</sup>"Veterans Affairs," San Diego Miramar College, 2025, accessed May 2, 2025, sdmiramar.edu/services/veterans.

<sup>51&</sup>quot;Veterans Services," Palomar College, accessed May 2, 2025, https://www.palomar.edu/veterans/.

<sup>52&</sup>quot;Veterans Services," Southwestern College, 2025, accessed May 2, 2025, swccd.edu/student-support/more-services/veterans-services/index.aspx.



These centers assist with academic and career counseling, selecting educational programs, and navigating financial support, as they expand the array of services offered.<sup>53,54</sup> Many centers also provide guides, checklists, and handbooks to support veterans, including <u>San Diego Community College District's Veterans Handbook</u>,<sup>55</sup> <u>Imperial Valley College's Student Handbook and Checklist</u>,<sup>56</sup> and <u>MiraCosta's Veteran Services Handbook</u>.<sup>57</sup> To support veteran resource centers, counselors, and educators in their ongoing efforts, the following recommendations outline how to incorporate labor market information from this report into existing practices to strengthen support for veterans transitioning into the civilian workforce.

Use the "Military Exits by SOC Codes" in this report alongside existing resources to guide veterans into employment opportunities aligned with their skills, training, and experience.

In 2020, active-duty service members exiting the military in the San Diego & Imperial region accounted for 36% of all military exits in California.<sup>58</sup> As these individuals transition to the regional workforce, they often need support in translating their military experience into civilian careers.<sup>59</sup> Several tools are available to help guide veterans through this transition. For example, the MOC-to-SOC crosswalk,<sup>60</sup> Explore Pathways by Military Occupation tool,<sup>61</sup> and O\*NET<sup>62</sup> provide information about the skills, tasks and work activities, and employment

<sup>&</sup>lt;sup>53</sup> "Veterans Services," California Community Colleges Chancellor's Office, 2025, accessed May 2, 2025, <u>cccco.edu/About-Us/Chancellors-Office/Divisions/Educational-Services-and-Support/Student-Service/What-we-do/Veterans-Education-and-Transition-Services#:~:text=With%20an%20estimated%201.8%20million,and%20earn%20a%20bachelor's%20degree.</u>

<sup>54 &</sup>quot;CA Community Colleges (CCC)," CalVet, 2025, accessed May 2, 2025, calvet.ca.gov/VetServices/Pages/CA-Community-Colleges. aspx#:~:text=Veterans%20Resource%20Centers%20are%20located,aid%20and%20other%20support%20services.

<sup>&</sup>lt;sup>555</sup> "2023-2024 Student Veterans Handbook," City College, Mesa College, Miramar College, and College of Continuing Education, 2023-24, https://sdccd.edu/docs/SSDept/OUTREACH/Veterans/Draft\_Veteran%20Handbook%202023-24%203.0.pdf.

<sup>56 &</sup>quot;Student Handbook," Military and Veteran Success Center, Imperial Valley College, imperial.edu/ivc/files/MVSC/MVSC\_Book.pdf.

<sup>&</sup>lt;sup>57</sup> "Student Veterans Handbook," MiraCosta College, July 2021, <u>miracosta.edu/student-services/veterans-services/\_docs/student-veterans-handbook.pdf</u>.

<sup>58</sup> Chmura, Greg, "Military exits fill talent supply gaps," CHMURA (blog), April 28, 2023, chmura.com/blog/military-exits-fill-talent-gaps.

<sup>&</sup>lt;sup>59</sup> Kim Parker, Ruth Igielnik, Amanda Barroso, and Anthony Cilliffo, "The American Veteran Experience and the Post-9/11 Generation," Pew Research Center, September 10, 2019, pewresearch.org/social-trends/2019/09/10/the-american-veteran-experience-and-the-post-9-11-generation.

<sup>60 &</sup>quot;Crosswalk Files," O\*NET Resource Center, April 8, 2025, accessed May 2, 2025, onetcenter.org/crosswalks.html#soc.

<sup>&</sup>lt;sup>61</sup> "Explore Pathways by Military Occupation," MIL Gears, U.S. Department of Defense, April 7, 2025, accessed May 2, 2025, milgears.osd.mil/explore-careers/moc.

<sup>62 &</sup>quot;Military Crosswalk Search," O\*NET OnLine, April 8, 2025, accessed May 2, 2025, onetonline.org/crosswalk/MOC.

trends associated with military-aligned occupations. Similarly, the <u>Department of Defense</u> (<u>DOD</u>) <u>Credentialing Opportunities On-Line (COOL</u>)<sup>63</sup> helps service members—particularly those transitioning from "military-only" occupations without direct civilian SOC-equivalents—identify how credentials, certifications, and licenses align with civilian careers. Another resource is the <u>Military Occupations Explorer</u>, <sup>64</sup> which allows users to search by SOC code, industry, or keyword to find related MOC codes and titles, branch of service, and occupational information from COOL.

To prepare service members for civilian life, the U.S. Department of Defense also developed the Transition Assistance Program (TAP), which begins with Individualized Initial Counseling (IC) between the service member and a TAP counselor to assess their unique needs and goals. A key component of TAP, the <u>TAP Curriculum</u>, <sup>65</sup> provides guidance on using the MOC Crosswalk, accessing financial assistance, and identifying support resources. It has worksheets to help veterans assess their skills, training, and credentials—pinpointing areas where additional education or upskilling may be needed. It also includes the <u>Verification of Military Experience</u> and <u>Training (VMET)</u>, an official record of a service member's military roles and experience—useful for resume development and job applications. <sup>66</sup> In California, the California Department of Veterans Affairs (CalVet) publishes the <u>Veterans Resource Book</u>, <sup>67</sup> which summarizes state benefits for healthcare, employment, housing, and education.

Alongside these valuable resources, this report helps community colleges and organizations focus their efforts by highlighting the occupations with the highest number of military exiters in the San Diego & Imperial region. Using the MOC-to-SOC<sup>68</sup> crosswalk, the San Diego & Imperial COE identified 43 SOC-equivalent occupations with at least 20 military exiters<sup>69</sup> in San Diego County (Exhibit 11), and 27 SOC-equivalent occupations with at least one military exiter in Imperial County (Exhibit 13). These "Military Exits by SOC Codes" lists give counselors and educators a targeted starting point to help service members explore civilian careers that closely align with their military experience. By entering these SOC codes into tools such O\*NET,70 for example, counselors and educators can help veterans translate their military roles into civilian terms — making it easier for exiting service members to draft resumes and pursue employment opportunities that match their skills and experience. For service members exiting from "militaryonly" occupations, tools like COOL and the TAP Curriculum can assist community college counselors and educators in identifying the credentials and training needed to prepare for and access civilian careers. Furthermore, stronger collaboration between community colleges and TAP counselors can help ensure a smooth handoff of support, enabling community colleges to better understand and address the unique educational and career needs of veterans once TAP services end.

<sup>&</sup>lt;sup>63</sup> "Welcome to DOD COOL," Department of Defense Credentialing Opportunities On-Line (DOD COOL), May 1, 2025, accessed May 2, 2025, cool.osd. mil/index.htm.

<sup>&</sup>lt;sup>64</sup>"Research Military Occupations," Department of Defense Credentialing Opportunities On-Line (DOD COOL), May 1, 2025, accessed May 2, 2025, <a href="https://www.cool.osd.mil/research-military-occupations.htm">https://www.cool.osd.mil/research-military-occupations.htm</a>.

<sup>&</sup>lt;sup>65"</sup>2025 TAP Curriculum: Military Occupational Codes Crosswalk," U.S. Department of Defense, 2025, <u>tapevents.mil/Assets/ResourceContent/TAP/MOC\_Crosswalk.pdf</u>.

<sup>66 &</sup>quot;Verification of Military Experience and Training (VMET)," milConnect, accessed May 2, 2025, milconnect.dmdc.osd.mil/milconnect/public/faq/ Training-VMET.

<sup>&</sup>lt;sup>67</sup> "California Veterans Resource Book," California Department of Veterans Affairs, January 2019, <u>calvet.ca.gov/VetServices/Documents/Veteran\_%20</u> Resource %20Book.pdf.

<sup>68 &</sup>quot;Military Crosswalk Search," O\*NET OnLine, April 8, 2025, accessed May 2, 2025, onetonline.org/crosswalk/MOC.

<sup>&</sup>lt;sup>69</sup> The San Diego & Imperial COE removed any "unknown" or military-only positions from this list, including Infantry (55-3016); Command and Control Center Specialists (55-3015); Artillery and Missile Crew Members (55-3014); Special Forces (55-3018); and Air Crew Members (55-3011). For more information about "military-only" occupations, see the Appendix B: Methodology.

<sup>&</sup>lt;sup>70</sup> "Military Crosswalk Search," O\*NET OnLine, April 8, 2025, accessed May 2, 2025, onetonline.org/crosswalk/MOC.

## Use the "Compatible Occupations" in this study to guide military exiters toward high-demand, high-wage occupations that can offer career mobility and economic stability.

Understanding how MOC codes align with SOC codes is essential to effectively supporting veterans as they exit the military and transition to civilian careers. Exhibit 17 summarizes the research process used in this study to identify SOC-equivalent occupations held by military exiters in the region, as well as compatible civilian roles. Please note that the San Diego & Imperial COE recognizes the need for improved data about military service members as they transition into the civilian workforce, including distinctions between those planning to work versus those exiting due to retirement, disability, or other reasons and do not plan to re-enter the workforce.

Exhibit 17. Research process for MOC and SOC code alignment conducted in this study



Based on this analysis, only 11 of the 43 SOC codes with at least 20 military exiters in San Diego County met the high-demand, high-wage criteria for this report. This suggests that 74% of occupations most closely aligned<sup>71</sup> with veterans' military experience may offer limited employment opportunities and economic stability. In Imperial County, of the 27 SOC-equivalent occupations, seven failed to meet the county's living wage in Imperial County and showed a surplus of military exiters.

To address these gaps, the study identified compatible career pathways that align with the skills, training, and experience of these SOC-equivalent roles, while also being high-demand, high-wage jobs. In a January 2025 report published by the San Diego & Imperial COE,<sup>72</sup> high-demand, high-wage occupations were defined as occupations that had at least 60 projected annual job openings over five years and paid entry-level wages above the living wage. Exhibit 12 lists the top compatible occupations in San Diego County that meet these criteria, including roles such as Radiologic Technologists and Technicians, Electrical Power-Line Installers and Repairers, and Bus and Truck Mechanics and Diesel Engine Specialists. Similarly, Exhibit 14 highlights the top compatible occupations in Imperial County, including Power Plant Operators, Compliance Officers, and Automotive Service Technicians and Mechanics. These compatible occupations align closely with many of those listed in the "Military Exits by SOC Codes" (Exhibit 11 and Exhibit 13), allowing veterans from any of those identified roles to explore alternative career pathways.

<sup>&</sup>lt;sup>71</sup> Aligned based on the MOC to SOC crosswalk.

<sup>&</sup>lt;sup>72</sup> "Priority Jobs and Programs: Addressing Equity Gaps for a Diverse Workforce (San Diego)," San Diego & Imperial COE, January 2025, accessed April 1, 2025, <a href="https://coecc.net/san-diego-imperial/2024/12/priority-jobs-and-programs-addressing-equity-gaps-for-a-diverse-workforce/">https://coecc.net/san-diego-imperial/2024/12/priority-jobs-and-programs-addressing-equity-gaps-for-a-diverse-workforce/</a>.

For those interested in exploring compatible occupations for each of the 43 SOC codes in San Diego County with the most military exits, Exhibit A3 in the appendix provides the top five high-demand, high-wage matches for each role. Similarly, Exhibit A4 in Appendix A also features the top five compatible occupations for each SOC-equivalent role in Imperial County. Each occupation includes information on typical educational requirements, helping veterans understand what additional training may be needed to successfully transition into these roles. These insights are valuable for community colleges and counselors seeking to support veterans in selecting promising careers.

Leverage Credit for Prior Learning (CPL) to recognize veterans' military training and expand work-based learning initiatives to accelerate their transition into the civilian workforce.

To enhance educational access and opportunities for veterans, the California Community Colleges Chancellor's Office launched an initiative to expand Credit for Prior Learning (CPL) across the community college system by 2030.73 CPL allows students to earn college credit for knowledge and skills gained outside the classroom—such as through military service, work experience, or industry certifications. Developed as part of this initiative, Mapping Articulated Pathways (MAP) recognizes and validates veterans' diverse learning experiences by analyzing their Joint Services Transcripts (JST) for credit eligibility. The first phase of MAP focuses on awarding course credit for Basic Training, increasing the number of credits granted to veterans. The second phase involves providing JST-based recommendations tailored to each student based on their military experience and training. In the San Diego & Imperial region, Palomar College received a grant to develop an institutional model for CPL, identifying over 200 CPL-eligible courses that incorporate portfolio review, credit by exam, industry certification, and military transcripts. 74 Key elements of the process included collaboration with faculty, counselors, articulation officers, and curriculum committees, as well as developing a searchable database of eligible courses. 75 Building on this framework, other community colleges should expand their CPL efforts by aligning with existing MAP efforts. To support CPL, the San Diego & Imperial Regional Consortium set goals for 2023 to 2027 to: 1) develop regional support for local CPL development; 2) identify resources for CPL implementation; and 3) provide CPL professional development for faculty and staff.<sup>76</sup> To fully realize CPL's potential, community colleges must engage in these initiatives, establish clear processes, and leverage existing frameworks to scale and sustain these efforts. Educational institutions could also explore ways to enable dual enrollment opportunities for service members while they are still enlisted, providing a critical head start on their postsecondary education. A similar model exists in California Senate Bill 554 (SB 554),77 which allows adult learners enrolled in high school diploma or equivalency programs to take credit-level courses tuition-free at community colleges. Adapting a similar approach for active-duty military personnel could promote access to earning credentials and training, particularly for those in roles that would benefit from furthering their education or whose military roles do not directly align with civilian pathways.

<sup>&</sup>lt;sup>73</sup> "MAP Initiative," California MAP Initative, 2022, map.rccd.edu.

<sup>74 &</sup>quot;Credit for Prior Learning Transitions," Career Ladders Project, Palomar College, 2025, <u>careerladdersproject.org/story/palomar-college-credit-for-prior-learning-transitions</u>.

<sup>75 &</sup>quot;Credit for Prior Learning at Palomar," Palomar College, accessed May 2, 2025, https://www.palomar.edu/cpl/credit-for-prior-learning-course-list/.

<sup>&</sup>lt;sup>76</sup> "Credit for Prior Learning," San Diego & Imperial Regional Consortium, accessed May 2, 2025, <u>sdiregionalconsortium.org/strong-workforce-program/committees-workgroups/credit-for-prior-learning</u>.

<sup>&</sup>lt;sup>777</sup>Senate Bill 554 Public Schools: Adult School Students - Advanced Scholastic and Vocational Training Program," California Community Colleges, accessed May 2, 2025, https://www.cccco.edu/-/media/CCCCO-Website/About-Us/Divisions/Educational-Services-and-Support/Academic-Affairs/What-we-do/Curriculum-and-Instruction-Unit/Middle-College-High-School/2020-08-19-sb-554-memo-a11y.pdf.

In terms of work-based learning, the San Diego & Imperial COE published a report, Opportunities for Apprenticeships in San Diego & Imperial Counties, 78 to support the state's goal of training 500,000 registered apprentices by 2029. As part of that study, the COE identified 136 high-demand, high-wage "apprenticeable" occupations in San Diego County and 129 in Imperial County, 79 which are occupations that have already been approved by the Division of Apprenticeship Standards (DAS), the state agency responsible for regulating and approving apprenticeship programs. A comparison between "apprenticeable" occupations and the "Military Exiters by SOC" and "Compatible Occupations" lists, revealed significant overlap, with 26 occupations appearing on both lists in San Diego County and Imperial County (Appendix A: Exhibit A5 and Exhibit A6, respectively). This alignment presents an opportunity for community colleges to expand apprenticeship programs and other WBL opportunities. As a starting point, the DOD SkillBridge Program<sup>80</sup> allows active-duty service members to participate in employer-sponsored job training programs in their final six months of service, including preapprenticeships, apprenticeships, fellowships, and internships. For employers, it offers access to highly skilled workers at no cost, as participants continue to receive military compensation and benefits while gaining civilian work experience.<sup>81</sup> In the region, the SkillBridge Locations Map lists employers with over 9,000 internships, job training programs, or apprenticeship opportunities. While the program is geared toward active-duty service members, community colleges can collaborate with regional employers already engaged in SkillBridge to explore ways to integrate veterans into apprenticeship pathways, which would help the region move closer to meeting state apprenticeship expansion goals.



<sup>&</sup>lt;sup>78</sup> "Opportunities for Apprenticeships in San Diego & Imperial Counties," San Diego & Imperial Center of Excellence, February 2024, coeccc.net/sandiego-imperial/2024/02/opportunities-for-apprenticeships-in-san-diego-imperial-counties.

<sup>&</sup>lt;sup>79</sup> To download data for the 136 and 129 "apprenticeable" occupations, explore the dashboard: Apprenticeable Occupations in San Diego & Imperial Counties, lookerstudio.google.com/u/0/reporting/f76fee61-4cb6-4610-876b-e29b90b6f1f2/page/3Pm4E.

<sup>80 &</sup>quot;DOD SkillBridge," U.S. Department of Defense, 2025, accessed May 2, 2025, skillbridge.osd.mil.

<sup>81 &</sup>quot;Program Overview," U.S. Department of Defense, 2025, accessed May 2, 2025, skillbridge.osd.mil/program-overview.htm.

## CONCLUSION

Many enlisted service members struggle to find stable, well-paying civilian employment after separation from the military.<sup>82</sup> Nearly half of veterans who sought work reported that it took more than six months to find their first post-military job.<sup>83</sup>

The San Diego & Imperial COE conducted this study to help community colleges, workforce organizations, and veteran-serving agencies better leverage labor market data to guide veterans and transitioning service members into meaningful civilian careers.

We hope this report serves as a practical resource—providing data-driven insights and tools to support those on the front lines of veteran employment services. By aligning military experience with high-demand, high-wage civilian opportunities, we can improve employment outcomes, strengthen the regional workforce, and unlock the full economic potential of this highly skilled labor pool.



<sup>82</sup> Rich Morin, "The difficult transition from military to civilian life," Pew Research Center, December 2011, <a href="mailto:pewresearch.org/wp-content/uploads/sites/20/2011/12/The-Difficult-Transition-from-Military-to-Civilian-Life.pdf">pewresearch.org/wp-content/uploads/sites/20/2011/12/The-Difficult-Transition-from-Military-to-Civilian-Life.pdf</a>.

<sup>&</sup>lt;sup>83</sup> Kim Parker, Ruth Igielnik, Amanda Barroso, and Anthony Cilliffo, "The American Veteran Experience and the Post-9/11 Generation," Pew Research Center, September 10, 2019, pewresearch.org/social-trends/2019/09/10/the-american-veteran-experience-and-the-post-9-11-generation.

## APPENDIX A: DATA TABLES

The same analysis was conducted for the state of California, using the crosswalk to map military exiters in 2020 to SOC-equivalent occupations. Only occupations with at least 70 exiters are included. Exhibit A1 provides projected civilian labor market demand from 2023 to 2028, along with entry-level and median wages. Four occupations indicate a surplus of military exiters relative to available civilian demand (^), while 26 occupations have entry-level wages that do not meet the state's living wage of \$28.72 per hour for a single adult (\*).84

Exhibit A1. Military exits by Standard Occupational Classification (SOC) code (California, 2020)85

SOC Code	SOC Occupation	Civilian Demand (Annual Job Openings)	Military Exits	Gap Analysis (Demand-Exits)	Entry-Level Wages	Median Wages
49-3011	Aircraft Mechanics and Service Technicians	1,896	892	1,004	\$30.12	\$38.41
49-2091	Avionics Technicians^	387	635	(248)	\$38.67	\$41.02
31-9092	Medical Assistants*	17,346	594	16,752	\$18.83	\$22.40
33-3051	Police and Sheriffs Patrol Officers	7,062	559	6,503	\$43.65	\$54.51
53-7065	Stockers and Order Fillers*	50,499	556	49,943	\$17.47	\$18.67
49-9071	Maintenance and Repair Workers, General*	15,778	438	15,340	\$19.99	\$24.42
15-1244	Network and Computer Systems Administrators	2,006	437	1,569	\$38.88	\$50.99
53-3032	Heavy and Tractor-Trailer Truck Drivers*	28,284	435	27,849	\$21.47	\$27.57
47-5032	Explosives Workers, Ordnance Handling Experts, and Blasters^*	117	378	(261)	\$26.47	\$37.03
43-9061	Office Clerks, General*	38,219	377	37,842	\$18.12	\$22.16
49-1011	First-Line Supervisors of Mechanics, Installers, and Repairers	5,304	367	4,937	\$31.43	\$40.09
49-2094	Electrical and Electronics Repairers, Commercial and Industrial Equipment*	641	336	305	\$23.77	\$32.90
49-9099	Installation, Maintenance, and Repair Workers, All Other*	3,019	315	2,704	\$18.42	\$22.71
29-2043	Paramedics*	560	269	291	\$27.09	\$30.97
49-3031	Bus and Truck Mechanics and Diesel Engine Specialists*	2,856	246	2,610	\$27.09	\$32.78
49-3023	Automotive Service Technicians and Mechanics*	6,753	245	6,508	\$18.93	\$27.17
43-2099	Communications Equipment Operators, All Other^*	160	231	(71)	\$26.27	\$36.54
35-2021	Food Preparation Workers*	20,506	191	20,315	\$16.89	\$17.83
43-5061	Production, Planning, and Expediting Clerks*	6,332	166	6,166	\$22.84	\$28.89
53-5021	Captains, Mates, and Pilots of Water Vessels*	422	158	264	\$25.09	\$33.47

<sup>&</sup>lt;sup>84</sup> "Living Wage Calculation for California," Massachusetts Institute of Technology, accessed April 1, 2025, livingwage.mit.edu/states/06.

<sup>85</sup> Lightcast 2025.1; QCEW, Non-QCEW, Self-Employed.

SOC Code	SOC Occupation	Civilian Demand (Annual Job Openings)	Military Exits	Gap Analysis (Demand-Exits)	Entry-Level Wages	Median Wages
33-2011	Firefighters	2,789	144	2,645	\$30.93	\$38.62
35-2012	Cooks, Institution and Cafeteria*	5,292	142	5,150	\$18.36	\$21.55
17-2051	Civil Engineers	3,625	138	3,487	\$39.55	\$50.44
11-3121	Human Resources Managers	2,467	133	2,334	\$60.88	\$79.92
11-3071	Transportation, Storage, and Distribution Managers	2,922	130	2,792	\$37.13	\$48.31
43-5071	Shipping, Receiving, and Inventory Clerks*	10,289	125	10,164	\$17.97	\$20.39
53-2021	Air Traffic Controllers	322	122	200	\$53.65	\$77.16
29-2072	Medical Records Specialists*	1,751	119	1,632	\$20.71	\$25.80
47-2073	Operating Engineers and Other Construction Equipment Operators	3,554	107	3,447	\$29.29	\$38.96
49-2093	Electrical and Electronics Installers and Repairers, Transportation Equipment^	84	107	(23)	\$37.80	\$39.37
53-2011	Airline Pilots, Copilots, and Flight Engineers	1,781	107	1,674	\$77.32	\$122.72
17-3029	Engineering Technologists and Technicians, Except Drafters, All Other	1,005	105	900	\$29.45	\$37.90
47-2031	Carpenters*	12,355	103	12,252	\$22.64	\$30.28
13-1081	Logisticians	3,318	101	3,217	\$31.85	\$43.04
49-2021	Radio, Cellular, and Tower Equipment Installers and Repairers*	132	96	36	\$27.35	\$38.54
53-5011	Sailors and Marine Oilers*	370	96	274	\$18.93	\$24.45
49-2092	Electric Motor, Power Tool, and Related Repairers*	124	93	31	\$23.95	\$28.92
49-2011	Computer, Automated Teller, and Office Machine Repairers*	1,111	89	1,022	\$19.30	\$23.57
47-1011	First-Line Supervisors of Construction Trades and Extraction Workers	7,592	80	7,512	\$32.70	\$42.61
29-2061	Licensed Practical and Licensed Vocational Nurses	8,028	76	7,952	\$31.25	\$36.31
47-2152	Plumbers, Pipefitters, and Steamfitters*	4,860	76	4,784	\$23.36	\$29.46
47-4041	Hazardous Materials Removal Workers*	893	71	822	\$21.30	\$23.37
27-4012	Broadcast Technicians*	749	70	679	\$28.35	\$48.21
53-5031	Ship Engineers	104	70	34	\$45.82	\$48.73
53-5031	Ship Engineers	104	70	34	\$45.82	\$48.73

<sup>^</sup>Surplus of military exiters
\* Entry-level wage below the living wage in California

Exhibit A2. Military exits for "military-only" occupations<sup>86</sup>

SOC Code	SOC Occupation	California Military Exits	San Diego County Military Exits	Imperial County Military Exits
55-3016	Infantry	1,830	201	9
55-3014	Artillery and Missile Crew Members	611	162	3
55-3015	Command and Control Center Specialists	472	181	1
55-3013	Armored Assault Vehicle Crew Members	351	45	1
55-3019	Military Enlisted Tactical Operations and Air/Weapons Specialists and Crew Members, All Other	153	72	-
55-1015	Command and Control Center Officers	126	92	-
55-3018	Special Forces	125	100	-
55-3011	Air Crew Members	124	86	-
55-1019	Military Officer Special and Tactical Operations Leaders, All Other	78	61	-
55-1014	Artillery and Missile Officers	38	3	1
55-3012	Aircraft Launch and Recovery Specialists	29	24	-
55-2012	First-Line Supervisors of Weapons Specialists/Crew Members	28	7	-
55-1013	Armored Assault Vehicle Officers	20	3	-
55-1016	Infantry Officers	19	1	-
55-2013	First-Line Supervisors of All Other Tactical Operations Specialists	13	5	-
55-1017	Special Forces Officers	10	1	-
55-2011	First-Line Supervisors of Air Crew Members	2	-	-

Exhibit A3. High-demand, high-wage compatible occupations for SOC-equivalent occupations, San Diego County $^{87,\,88}$ 

SOC Code	SOC Occupation	Annual Job Openings, 2023-2028	Entry-Level Wages	2023 Jobs	Typical Entry- Level Education	Skill Level	Compatibility Index
19-2021	Atmospheric and Space Scientists				Bachelor's	Above MS	
19-2041	Environmental Scientists and Specialists, Including Health	105	\$35.34	1,187	Bachelor's	Above MS	90
15-2031	Operations Research Analysts	88	\$35.68	1,144	Bachelor's	Above MS	89
13-1161	Market Research Analysts and Marketing Specialists	992	\$27.96	9,539	Bachelor's	Above MS	87
13-1141	Compensation, Benefits, and Job Analysis Specialists	79	\$32.67	1,091	Bachelor's	Above MS	87
15-1212	Information Security Analysts	148	\$39.95	1,899	Bachelor's	Above MS	86
49-3023	Automotive Service Technicians and Mechanics				Postsecondary non-degree	MS	
49-3031	Bus and Truck Mechanics and Diesel Engine Specialists	219	\$26.18	2,425	HS or equivalent	MS	95
49-3042	Mobile Heavy Equipment Mechanics, Except Engines	117	\$28.47	1,267	HS or equivalent	MS	95
49-3011	Aircraft Mechanics and Service Technicians	406	\$31.43	5,161	Postsecondary non-degree	MS	92
47-2073	Operating Engineers and Other Construction Equipment Operators	313	\$30.33	3,287	HS or equivalent	MS	92
49-9051	Electrical Power-Line Installers and Repairers	72	\$34.92	916	HS or equivalent	MS	91
49-2091	Avionics Technicians				Associate	MS	
17-3023	Electrical and Electronic Engineering Technologists and Technicians	275	\$30.28	2,826	Associate	MS	95
49-3011	Aircraft Mechanics and Service Technicians	406	\$31.43	5,161	Postsecondary non-degree	MS	93
49-2022	Telecommunications Equipment Installers and Repairers, Except Line Installers	144	\$27.84	1,430	Postsecondary non-degree	MS	92
15-1231	Computer Network Support Specialists	95	\$29.95	1,340	Associate	MS	91
17-3026	Industrial Engineering Technologists and Technicians	60	\$28.32	627	Associate	MS	88
53-5021	Captains, Mates, and Pilots of Water Vessels				Postsecondary non-degree	MS	
33-2011	Firefighters	316	\$26.06	3,370	Postsecondary non-degree	MS	90
11-3013	Facilities Managers	158	\$36.52	1,854	Bachelor's	MS	89
49-2022	Telecommunications Equipment Installers and Repairers, Except Line Installers	144	\$27.84	1,430	Postsecondary non-degree	MS	88

 <sup>87</sup> Lightcast 2025.1; QCEW, Non-QCEW, Self-Employed.
 88 Compatibility Index Scores were not available for the following occupations: Communications Equipment Operators, All Other (SOC 43-2099);
 Installation, Maintenance, and Repair Workers, All Other (SOC 49-9099); Medical Records Specialists (SOC 29-2072); and Paramedics (SOC 29-2043).

SOC Code	SOC Occupation	Annual Job Openings, 2023-2028	Entry-Level Wages	2023 Jobs	Typical Entry- Level Education	Skill Level	Compatibility Index
29-2055	Surgical Technologists	79	\$31.45	947	Postsecondary non-degree	MS	87
49-3011	Aircraft Mechanics and Service Technicians	406	\$31.43	5,161	Postsecondary non-degree	MS	86
49-2011	Computer, Automated Teller, and Office Machine Repairers				Some college	MS	
49-2022	Telecommunications Equipment Installers and Repairers, Except Line Installers	144	\$27.84	1,430	Postsecondary non-degree	MS	90
15-1231	Computer Network Support Specialists	95	\$29.95	1,340	Associate	MS	89
17-3023	Electrical and Electronic Engineering Technologists and Technicians	275	\$30.28	2,826	Associate	MS	88
29-2055	Surgical Technologists	79	\$31.45	947	Postsecondary non-degree	MS	85
29-2034	Radiologic Technologists and Technicians	119	\$36.43	1,598	Associate	MS	83
35-2012	Cooks, Institution and Cafeteria				None	Below MS	
29-1292	Dental Hygienists	227	\$51.80	2,626	Associate	MS	90
53-2031	Flight Attendants	133	\$33.06	760	HS or equivalent	MS	89
29-2034	Radiologic Technologists and Technicians	119	\$36.43	1,598	Associate	MS	88
29-2055	Surgical Technologists	79	\$31.45	947	Postsecondary non-degree	MS	87
51-1011	First-Line Supervisors of Production and Operating Workers	471	\$27.07	4,843	HS or equivalent	MS	85
49-2092	Electric Motor, Power Tool, and Related Repairers				HS or equivalent	MS	
49-3042	Mobile Heavy Equipment Mechanics, Except Engines	117	\$28.47	1,267	HS or equivalent	MS	97
49-3031	Bus and Truck Mechanics and Diesel Engine Specialists	219	\$26.18	2,425	HS or equivalent	MS	95
49-3011	Aircraft Mechanics and Service Technicians	406	\$31.43	5,161	Postsecondary non-degree	MS	94
47-2211	Sheet Metal Workers	184	\$27.40	1,854	HS or equivalent	MS	94
49-9051	Electrical Power-Line Installers and Repairers	72	\$34.92	916	HS or equivalent	MS	93
49-2093	Electrical and Electronics Installers and Repairers, Transportation Equipment				Postsecondary non-degree	MS	
17-3023	Electrical and Electronic Engineering Technologists and Technicians	275	\$30.28	2,826	Associate	MS	94
49-2022	Telecommunications Equipment Installers and Repairers, Except Line Installers	144	\$27.84	1,430	Postsecondary non-degree	MS	92
15-1231	Computer Network Support Specialists	95	\$29.95	1,340	Associate	MS	88

SOC Code	SOC Occupation	Annual Job Openings, 2023-2028	Entry-Level Wages	2023 Jobs	Typical Entry- Level Education	Skill Level	Compatibility Index
49-3011	Aircraft Mechanics and Service Technicians	406	\$31.43	5,161	Postsecondary non-degree	MS	87
29-2034	Radiologic Technologists and Technicians	119	\$36.43	1,598	Associate	MS	87
49-2094	Electrical and Electronics Repairers, Commercial and Industrial Equipment				Postsecondary	MS	
49-3011	Aircraft Mechanics and Service Technicians	406	\$31.43	5,161	Postsecondary non-degree	MS	94
17-3023	Electrical and Electronic Engineering Technologists and Technicians	275	\$30.28	2,826	Associate	MS	94
49-2022	Telecommunications Equipment Installers and Repairers, Except Line Installers	144	\$27.84	1,430	Postsecondary non-degree	MS	93
15-1231	Computer Network Support Specialists	95	\$29.95	1,340	Associate	MS	89
17-3026	Industrial Engineering Technologists and Technicians	60	\$28.32	627	Associate	MS	88
47-5032	Explosives Workers, Ordnance Handling Experts, and Blasters				HS or equivalent	MS	
49-9051	Electrical Power-Line Installers and Repairers	72	\$34.92	916	HS or equivalent	MS	93
47-1011	First-Line Supervisors of Construction Trades and Extraction Workers	802	\$32.96	8,596	HS or equivalent	MS	93
51-8031	Water and Wastewater Treatment Plant and System Operators	106	\$27.37	1017	HS or equivalent	MS	92
49-3031	Bus and Truck Mechanics and Diesel Engine Specialists	219	\$26.18	2,425	HS or equivalent	MS	91
51-1011	First-Line Supervisors of Production and Operating Workers	471	\$27.07	4,843	HS or equivalent	MS	91
35-2021	Food Preparation Workers89				None	Below MS	
47-2081	Drywall and Ceiling Tile Installers	258	\$27.24	3,490	None	Below MS	81
29-1292	Dental Hygienists	227	\$51.80	2,626	Associate	MS	80
53-3032	Heavy and Tractor-Trailer Truck Drivers				Postsecondary	MS	
47-2073	Operating Engineers and Other Construction Equipment Operators	313	\$30.33	3,287	HS or equivalent	MS	96
49-9052	Telecommunications Line Installers and Repairers	97	\$27.02	1,109	HS or equivalent	MS	91

SOC Code	SOC Occupation	Annual Job Openings, 2023-2028	Entry-Level Wages	2023 Jobs	Typical Entry- Level Education	Skill Level	Compatibility Index
49-9051	Electrical Power-Line Installers and Repairers	72	\$34.92	916	HS or equivalent	MS	89
49-3031	Bus and Truck Mechanics and Diesel Engine Specialists	219	\$26.18	2,425	HS or equivalent	MS	89
47-2211	Sheet Metal Workers	184	\$27.40	1,854	HS or equivalent	MS	88
31-9092	Medical Assistants				Postsecondary non-degree	MS	
31-2021	Physical Therapist Assistants	127	\$35.14	723	Associate	MS	95
29-2061	Licensed Practical and Licensed Vocational Nurses	687	\$30.93	7,031	Postsecondary non-degree	MS	94
29-1292	Dental Hygienists	227	\$51.80	2,626	Associate	MS	93
29-2034	Radiologic Technologists and Technicians	119	\$36.43	1,598	Associate	MS	93
29-2055	Surgical Technologists	79	\$31.45	947	Postsecondary	MS	90
49-9071	Maintenance and Repair Workers, General				HS or equivalent	Below MS	
49-9051	Electrical Power-Line Installers and Repairers	72	\$34.92	916	HS or equivalent	MS	95
49-3042	Mobile Heavy Equipment Mechanics, Except Engines	117	\$28.47	1,267	HS or equivalent	MS	95
47-2211	Sheet Metal Workers	184	\$27.40	1,854	HS or equivalent	MS	95
49-3031	Bus and Truck Mechanics and Diesel Engine Specialists	219	\$26.18	2,425	HS or equivalent	MS	94
47-2073	Operating Engineers and Other Construction Equipment Operators	313	\$30.33	3,287	HS or equivalent	MS	93
31-9093	Medical Equipment Preparers				HS or equivalent	MS	
29-2034	Radiologic Technologists and Technicians	119	\$36.43	1,598	Associate	MS	92
29-2055	Surgical Technologists	79	\$31.45	947	Postsecondary non-degree	MS	92
29-1292	Dental Hygienists	227	\$51.80	2,626	Associate	MS	91
49-9052	Telecommunications Line Installers and Repairers	97	\$27.02	1,109	HS or equivalent	MS	91
47-2073	Operating Engineers and Other Construction Equipment Operators	313	\$30.33	3,287	HS or equivalent	MS	89
15-1244	Network and Computer Systems Administrators				Bachelor's	MS	
15-1241	Computer Network Architects	88	\$43.43	1,711	Bachelor's	MS	96
15-1211	Computer Systems Analysts	328	\$42.16	5,198	Bachelor's	Above MS	94
11-3021	Computer and Information Systems Managers	543	\$75.65	7,452	Bachelor's	Above MS	91
17-2072	Electronics Engineers, Except Computer	146	\$51.02	2,695	Bachelor's	Above MS	91
15-1254	Web Developers	62	\$28.32	872	Bachelor's	MS	90
43-9061	Office Clerks, General				HS or equivalent	MS	

SOC Code	SOC Occupation	Annual Job Openings, 2023-2028	Entry-Level Wages	2023 Jobs	Typical Entry- Level Education	Skill Level	Compatibility Index
43-6011	Executive Secretaries and Executive Administrative Assistants	581	\$32.04	5,882	HS or equivalent	MS	95
23-2011	Paralegals and Legal Assistants	569	\$26.21	4,942	Associate	MS	93
13-1031	Claims Adjusters, Examiners, and Investigators	232	\$29.53	3,518	HS or equivalent	MS	87
43-1011	First-Line Supervisors of Office and Administrative Support Workers	1,470	\$26.81	15,402	HS or equivalent	MS	86
11-3012	Administrative Services Managers	229	\$38.82	2,692	Bachelor's	MS	85
47-2152	Plumbers, Pipefitters, and Steamfitters				HS or equivalent	MS	
47-2211	Sheet Metal Workers	184	\$27.40	1,854	HS or equivalent	MS	96
49-9051	Electrical Power-Line Installers and Repairers	72	\$34.92	916	HS or equivalent	MS	95
49-3031	Bus and Truck Mechanics and Diesel Engine Specialists	219	\$26.18	2,425	HS or equivalent	MS	92
47-1011	First-Line Supervisors of Construction Trades and Extraction Workers	802	\$32.96	8,596	HS or equivalent	MS	91
49-3042	Mobile Heavy Equipment Mechanics, Except Engines	117	\$28.47	1,267	HS or equivalent	MS	91
43-5061	Production, Planning, and Expediting Clerk				HS or equivalent	MS	
43-6011	Executive Secretaries and Executive Administrative Assistants	581	\$32.04	5,882	HS or equivalent	MS	93
11-3012	Administrative Services Managers	229	\$38.82	2,692	Bachelor's	MS	90
43-1011	First-Line Supervisors of Office and Administrative Support Workers	1,470	\$26.81	15,402	HS or equivalent	MS	90
23-2011	Paralegals and Legal Assistants	569	\$26.21	4,942	Associate	MS	89
13-1031	Claims Adjusters, Examiners, and Investigators	232	\$29.53	3,518	HS or equivalent	MS	88
53-7072	Pump Operators, Except Wellhead Pumper				HS or equivalent	Below MS	
47-2073	Operating Engineers and Other Construction Equipment Operators	313	\$30.33	3,287	HS or equivalent	MS	95
47-2211	Sheet Metal Workers	184	\$27.40	1,854	HS or equivalent	MS	94
51-8031	Water and Wastewater Treatment Plant and System Operators	106	\$27.37	1017	HS or equivalent	MS	94
49-3031	Bus and Truck Mechanics and Diesel Engine Specialists	219	\$26.18	2,425	HS or equivalent	MS	93
49-9051	Electrical Power-Line Installers and Repairers	72	\$34.92	916	HS or equivalent	MS	92

SOC Code	SOC Occupation	Annual Job Openings, 2023-2028	Entry-Level Wages	2023 Jobs	Typical Entry- Level Education	Skill Level	Compatibility Index
49-2021	Radio, Cellular, and Tower Equipment Installers and Repairers				Associate	MS	
17-3023	Electrical and Electronic Engineering Technologists and Technicians	275	\$30.28	2,826	Associate	MS	92
15-1231	Computer Network Support Specialists	95	\$29.95	1,340	Associate	MS	89
29-2034	Radiologic Technologists and Technicians	119	\$36.43	1,598	Associate	MS	87
11-3013	Facilities Managers	158	\$36.52	1,854	Bachelor's	MS	85
17-3011	Architectural and Civil Drafters	133	\$29.59	1,334	Associate	MS	81
29-1224	Radiologists <sup>90</sup>				Doctoral or professional	Above MS	
19-2041	Environmental Scientists and Specialists, Including Health	105	\$35.34	1,187	Bachelor's	Above MS	88
19-5011	Occupational Health and Safety Specialists	169	\$37.57	1,361	Bachelor's	Above MS	84
15-1212	Information Security Analysts	148	\$39.95	1,899	Bachelor's	Above MS	84
19-2031	Chemists	120	\$37.61	1,614	Bachelor's	Above MS	83
29-1031	Dietitians and Nutritionists	75	\$33.68	827	Bachelor's	Above MS	83
53-5011	Sailors and Marine Oilers				None	Below MS	
47-2073	Operating Engineers and Other Construction Equipment Operators	313	\$30.33	3,287	HS or equivalent	MS	95
49-3031	Bus and Truck Mechanics and Diesel Engine Specialists	219	\$26.18	2,425	HS or equivalent	MS	92
49-9051	Electrical Power-Line Installers and Repairers	72	\$34.92	916	HS or equivalent	MS	92
49-3042	Mobile Heavy Equipment Mechanics, Except Engines	117	\$28.47	1,267	HS or equivalent	MS	90
47-2211	Sheet Metal Workers	184	\$27.40	1,854	HS or equivalent	MS	89
43-6014	Secretaries and Administrative Assistants, Except Legal, Medical, and Executive				HS or equivalent	MS	
43-6011	Executive Secretaries and Executive Administrative Assistants	581	\$32.04	5,882	HS or equivalent	MS	97
23-2011	Paralegals and Legal Assistants	569	\$26.21	4,942	Associate	MS	96
13-1031	Claims Adjusters, Examiners, and Investigators	232	\$29.53	3,518	HS or equivalent	MS	91
43-1011	First-Line Supervisors of Office and Administrative Support Workers	1,470	\$26.81	15,402	HS or equivalent	MS	89
11-3012	Administrative Services Managers	229	\$38.82	2,692	Bachelor's	MS	89

<sup>&</sup>lt;sup>90</sup> The typical entry-level education for this occupation was a doctoral or professional degree and no other compatible occupations required this level of educational attainment. Therefore, the San Diego & Imperial COE included compatible occupations with a typical entry-level education of a bachelor's degree.

SOC Code	SOC Occupation	Annual Job Openings, 2023-2028	Entry-Level Wages	2023 Jobs	Typical Entry- Level Education	Skill Level	Compatibility Index
49-2098	Security and Fire Alarm Systems Installers				HS or equivalent	MS	
49-9052	Telecommunications Line Installers and Repairers	97	\$27.02	1,109	HS or equivalent	MS	97
49-2022	Telecommunications Equipment Installers and Repairers, Except Line Installers	144	\$27.84	1,430	Postsecondary non-degree	MS	95
47-2211	Sheet Metal Workers	184	\$27.40	1,854	HS or equivalent	MS	93
49-9051	Electrical Power-Line Installers and Repairers	72	\$34.92	916	HS or equivalent	MS	92
17-3023	Electrical and Electronic Engineering Technologists and Technicians	275	\$30.28	2,826	Associate	MS	91
53-5031	Ship Engineers				Postsecondary non-degree	MS	
49-3011	Aircraft Mechanics and Service Technicians	406	\$31.43	5,161	Postsecondary non-degree	MS	95
49-2022	Telecommunications Equipment Installers and Repairers, Except Line Installers	144	\$27.84	1,430	Postsecondary non-degree	MS	92
17-3023	Electrical and Electronic Engineering Technologists and Technicians	275	\$30.28	2,826	Associate	MS	90
29-2055	Surgical Technologists	79	\$31.45	947	Postsecondary non-degree	MS	86
29-2034	Radiologic Technologists and Technicians	119	\$36.43	1,598	Associate	MS	86
43-5071	Shipping, Receiving, and Inventory Clerks				HS or equivalent	Below MS	
53-2031	Flight Attendants	133	\$33.06	760	HS or equivalent	MS	89
29-2034	Radiologic Technologists and Technicians	119	\$36.43	1,598	Associate	MS	88
43-6011	Executive Secretaries and Executive Administrative Assistants	581	\$32.04	5,882	HS or equivalent	MS	87
29-1292	Dental Hygienists	227	\$51.80	2,626	Associate	MS	87
33-3012	Correctional Officers and Jailers	293	\$32.47	3,154	HS or equivalent	MS	87
53-7065	Stockers and Order Fillers				HS or equivalent	Below MS	
29-1292	Dental Hygienists	227	\$51.80	2,626	Associate	MS	88
53-2031	Flight Attendants	133	\$33.06	760	HS or equivalent	MS	86
29-2034	Radiologic Technologists and Technicians	119	\$36.43	1,598	Associate	MS	85
49-9052	Telecommunications Line Installers and Repairers	97	\$27.02	1,109	HS or equivalent	MS	84
47-2073	Operating Engineers and Other Construction Equipment Operators	313	\$30.33	3,287	HS or equivalent	MS	83

Exhibit A4. High-demand, high-wage compatible occupations for SOC-equivalent occupations, Imperial County  $^{91,\,92}$ 

SOC Code	SOC Occupation	Annual Job Openings, 2023-2028	Entry-Level Wages	2023 Jobs	Typical Entry-Level Education	Skill Level	Compatibility Index
53-2021	Air Traffic Controllers				Associate	MS	
33-9031	Gambling Surveillance Officers and Gambling Investigators	15	\$19.80	94	HS or equivalent	MS	84
13-1041	Compliance Officers	63	\$31.77	755	Bachelor's	Above MS	82
25-2031	Secondary School Teachers, Except Special and Career/ Technical Education	61	\$38.50	650	Bachelor's	Above MS	81
43-1011	First-Line Supervisors of Office and Administrative Support Workers	48	\$23.79	493	HS or equivalent	MS	81
25-9044	Teaching Assistants, Postsecondary	30	\$19.40	225	Bachelor's	MS	80
49-2091	Avionics Technicians				Associate	MS	
49-3023	Automotive Service Technicians and Mechanics	38	\$17.86	377	Postsecondary non-degree	MS	91
49-9021	Heating, Air Conditioning, and Refrigeration Mechanics and Installers	16	\$21.60	147	Postsecondary non-degree	MS	89
51-9061	Inspectors, Testers, Sorters, Samplers, and Weighers	14	\$17.42	109	HS or equivalent	MS	89
49-9041	Industrial Machinery Mechanics	13	\$25.10	139	HS or equivalent	MS	88
15-1232	Computer User Support Specialists	13	\$24.46	143	Some college	MS	87
27-4012	Broadcast Technicians				Associate	MS	
51-9061	Inspectors, Testers, Sorters, Samplers, and Weighers	14	\$17.42	109	HS or equivalent	MS	90
15-1232	Computer User Support Specialists	13	\$24.46	143	Some college	MS	90
51-8013	Power Plant Operators	19	\$37.46	120	HS or equivalent	MS	89
51-1011	First-Line Supervisors of Production and Operating Workers	19	\$28.03	184	HS or equivalent	MS	89
47-1011	First-Line Supervisors of Construction Trades and Extraction Workers	19	\$30.03	195	HS or equivalent	MS	87
17-3024	Electro-Mechanical and Mechatronics Technologists and Technicians				Associate	MS	
49-9041	Industrial Machinery Mechanics	13	\$25.10	139	HS or equivalent	MS	94
51-8013	Power Plant Operators	19	\$37.46	120	HS or equivalent	MS	91
49-3023	Automotive Service Technicians and Mechanics	38	\$17.86	377	Postsecondary non-degree	MS	90
47-2111	Electricians	25	\$26.06	205	HS or equivalent	MS	88
49-9021	Heating, Air Conditioning, and Refrigeration Mechanics and Installers	16	\$21.60	147	Postsecondary non-degree	MS	87

<sup>&</sup>lt;sup>91</sup> Lightcast 2025.1; QCEW, Non-QCEW, Self-Employed. <sup>92</sup> Compatibility Index Scores were not available for the following occupation: Precision Instrument and Equipment Repairers, All Other (SOC 49-9069).

### MAPPING OPPORTUNITY PATHWAYS

SOC Code	SOC Occupation	Annual Job Openings, 2023-2028	Entry-Level Wages	2023 Jobs	Typical Entry-Level Education	Skill Level	Compatibility Index
47-5032	Explosives Workers, Ordnance Handling Experts, and Blasters				HS or equivalent	MS	
47-1011	First-Line Supervisors of Construction Trades and Extraction Workers	19	\$30.03	195	HS or equivalent	MS	93
47-2031	Carpenters	22	\$18.32	255	HS or equivalent	MS	93
45-1011	First-Line Supervisors of Farming, Fishing, and Forestry Workers	41	\$16.81	314	HS or equivalent	MS	92
51-8013	Power Plant Operators	19	\$37.46	120	HS or equivalent	MS	92
51-1011	First-Line Supervisors of Production and Operating Workers	19	\$28.03	184	HS or equivalent	MS	91
27-4032	Film and Video Editors				Bachelor's	Above MS	
13-1041	Compliance Officers	63	\$31.77	755	Bachelor's	Above MS	86
41-4011	Sales Representatives, Wholesale and Manufacturing, Technical and Scientific Products	22	\$31.11	237	Bachelor's	Above MS	86
25-3041	Tutors	39	\$21.00	207	Bachelor's	Above MS	84
13-1071	Human Resources Specialists	22	\$27.40	202	Bachelor's	Above MS	83
25-2022	Middle School Teachers, Except Special and Career/Technical Education	30	\$40.52	282	Bachelor's	Above MS	83

# Exhibit A5. High-demand, high-wage "apprenticeable" occupations, 26 identified, San Diego County $^{93}$

SOC Code	SOC Occupation	Sector
11-3012	Administrative Services Managers	Business & Entrepreneurship
49-3031	Bus and Truck Mechanics and Diesel Engine Specialists	Advanced Transportation & Logistics
11-3021	Computer and Information Systems Managers	ICT and Digital Media
15-1231	Computer Network Support Specialists	ICT and Digital Media
33-3012	Correctional Officers and Jailers	Government/ or Public Safety
17-3023	Electrical and Electronic Engineering Technologists and Technicians	Advanced Manufacturing
49-9051	Electrical Power-Line Installers and Repairers	ICT and Digital Media
17-3029	Engineering Technologists and Technicians, Except Drafters, All Other	Advanced Manufacturing
43-6011	Executive Secretaries and Executive Administrative Assistants	Business & Entrepreneurship
33-2011	Firefighters	Government/ or Public Safety
49-1011	First-Line Supervisors of Mechanics, Installers, and Repairers	Advanced Transportation & Logistics
43-1011	First-Line Supervisors of Office and Administrative Support Workers	Business & Entrepreneurship
51-1011	First-Line Supervisors of Production and Operating Workers	Advanced Manufacturing
17-3026	Industrial Engineering Technologists and Technicians	Advanced Manufacturing
15-1212	Information Security Analysts	ICT and Digital Media
29-2061	Licensed Practical and Licensed Vocational Nurses	Health Care
13-1161	Market Research Analysts and Marketing Specialists	Business & Entrepreneurship
49-3042	Mobile Heavy Equipment Mechanics, Except Engines	Advanced Transportation & Logistics
47-2073	Operating Engineers and Other Construction Equipment Operators	Energy, Construction and Utilities
29-2034	Radiologic Technologists and Technicians	Health Care
47-2211	Sheet Metal Workers	Advanced Manufacturing
49-2022	Telecommunications Equipment Installers and Repairers, Except Line Installers	ICT and Digital Media
33-3051	Police and Sheriff's Patrol Officers	Government/ or Public Safety
29-2055	Surgical Technologists	Health Care
49-9052	Telecommunications Line Installers and Repairers	ICT and Digital Media
51-8031	Water and Wastewater Treatment Plant and System Operators	Agriculture, Water and Environmental Technologies

<sup>&</sup>lt;sup>93</sup> "Opportunities for Apprenticeships in San Diego & Imperial Counties," San Diego & Imperial Center of Excellence, February 2024, <a href="coeccc.net/san-diego-imperial/2024/02/opportunities-for-apprenticeships-in-san-diego-imperial-counties">coeccc.net/san-diego-imperial/2024/02/opportunities-for-apprenticeships-in-san-diego-imperial-counties</a>.

# Exhibit A6. High-demand, high-wage "apprenticeable" occupations, 27 identified, Imperial County<sup>94</sup>

SOC Code	SOC Occupation	Sector
49-3023	Automotive Service Technicians and Mechanics	Advanced Transportation & Logistics
49-3031	Bus and Truck Mechanics and Diesel Engine Specialists	Advanced Transportation & Logistics
47-2031	Carpenters	Energy, Construction and Utilities
13-1041	Compliance Officers	Business & Entrepreneurship
15-1232	Computer User Support Specialists	ICT and Digital Media
35-2012	Cooks, Institution and Cafeteria	Retail, Hospitality and Tourism
47-2111	Electricians	Energy, Construction and Utilities
17-3029	Engineering Technologists and Technicians, Except Drafters, All Other	Advanced Manufacturing
49-1011	First-Line Supervisors of Mechanics, Installers, and Repairers	Advanced Transportation & Logistics
43-1011	First-Line Supervisors of Office and Administrative Support Workers	Business & Entrepreneurship
51-1011	First-Line Supervisors of Production and Operating Workers	Advanced Manufacturing
53-1047	First-Line Supervisors of Transportation and Material Moving Workers, Except Aircraft Cargo Handling Supervisors	Advanced Transportation & Logistics
49-9021	Heating, Air Conditioning, and Refrigeration Mechanics and Installers	Energy, Construction and Utilities
53-3032	Heavy and Tractor-Trailer Truck Drivers	Advanced Transportation & Logistics
13-1071	Human Resources Specialists	Business & Entrepreneurship
49-9041	Industrial Machinery Mechanics	Advanced Manufacturing
51-9061	Inspectors, Testers, Sorters, Samplers, and Weighers	Life Sciences
31-9092	Medical Assistants	Health Care
15-1244	Network and Computer Systems Administrators	ICT and Digital Media
43-9061	Office Clerks, General	Health Care
33-3051	Police and Sheriff's Patrol Officers	Government/ or Public Safety
51-8013	Power Plant Operators	Energy, Construction and Utilities
41-4011	Sales Representatives, Wholesale and Manufacturing, Technical and Scientific Products	Retail, Hospitality and Tourism
53-7065	Stockers and Order Fillers	Advanced Transportation & Logistics
49-2022	Telecommunications Equipment Installers and Repairers, Except Line Installers	ICT and Digital Media
11-3071	Transportation, Storage, and Distribution Managers	Advanced Transportation & Logistics
51-8031	Water and Wastewater Treatment Plant and System Operators	Agriculture, Water and Environmental Technologies

## APPENDIX B: METHODOLOGY

To create alignment between Military Occupational Classification (MOC) codes and Standard Occupational Classification (SOC) codes, the San Diego & Imperial COE referenced a crosswalk available in the Occupational Information Network, or O\*NET.<sup>95, 96</sup> The Standard Occupational Classification (SOC) system is used by federal statistical agencies to classify workers into occupational categories for the purpose of collecting, calculating or disseminating data, and the report used those titles, while MOC codes are a standardized system used by the military to categorize and identify various jobs and specialties within each military branch.<sup>97</sup> Occupations with duties, skills, and responsibilities that are unique to military operations and do not align with civilian (SOC) occupational categories, were grouped into "military-only" occupations (SOC 55-0000).<sup>98,99</sup> Examples include positions like Armored Assault Vehicle Officers, Infantry Officers, Artillery and Missile Officers, or First-Line Supervisors of Weapons Specialists/Crew Members, to name a few.

The Service Branch (SVC) codes were first converted to their corresponding terms for clarity. Next, the SOC codes and titles in the crosswalk file were updated to align with Lightcast's SOC taxonomy, which includes 798 SOC codes. The Military Personnel Category (MPC) column was re-coded from acronyms to full descriptive terms. Using this refined crosswalk, the San Diego & Imperial COE calculated the MPC percentage for each SOC code. Finally, relevant labor market data such as annual job openings from 2023 to 2028, entry-level and median wages, and typical entry-level education requirements were downloaded from Lightcast 2025.1 for all SOC codes to complete the crosswalk analysis. The crosswalk was accessed July 2024 and may have been updated since the publication of this study. To assess military exiters, the San Diego & Imperial COE used a resource published by CHMURA. To assess military exiters, the San Diego & Imperial COE used a resource published by CHMURA. To Data was pulled for California, Imperial County, and San Diego County in July 2024. This resource showed that 77% of military exits in California, 83% in San Diego County, and 81% in Imperial County aligned with occupations in the civilian workforce. Exhibit A2 in Appendix A shows the number of military exits for "military-only" occupations. Please note that the availability of this data may have changed since the publication of this report.

The San Diego & Imperial COE used data from the U.S. Census Bureau to assess veteran demographics and resident demographics in San Diego and Imperial counties. <sup>101</sup> Using the Advanced Search and the "Geographies" section, we selected "California" and then chose "All Counties within California" to gather data for both the state and each individual county. In the "Topics" section, we selected "Veterans" to focus the data on veteran demographics. <sup>102</sup> We then selected the dataset for 2022 and chose ACS 5-Year Estimates. For the purpose of the report, the 5-Year Estimates were selected to ensure more comprehensive coverage across all areas and a larger sample size. Once all selections are made, the data was exported into a preferred spreadsheet format, either Excel or CSV. <sup>103</sup> This data was accessed November 2024.

<sup>95 &</sup>quot;Crosswalk Files," O\*NET Resource Center, April 8, 2025, accessed May 2, 2025, onetcenter.org/crosswalks.html#soc.

<sup>96</sup> onetcenter.org/dl\_files/2019/military\_crosswalk.zip

<sup>&</sup>lt;sup>97</sup> "Standard Occupational Classification," U.S. Bureau of Labor Statistics, accessed May 2, 2025, bls.gov/soc.

<sup>98</sup> bls.gov/soc/2018/major\_groups.htm#55-0000

<sup>99 &</sup>quot;Occupational Listings," O\*NET Resource Center, April 8, 2025, accessed May 2, 2025, onetcenter.org/taxonomy/2019/military.html.

<sup>100</sup> Chmura, Greg, "Military exits fill talent supply gaps," CHMURA (blog), April 28, 2023, chmura.com/blog/military-exits-fill-talent-gaps.

<sup>&</sup>lt;sup>101</sup> data.census.gov/advanced.

<sup>&</sup>lt;sup>102</sup> U.S. Census Bureau. "Veteran Status." American Community Survey, ACS 5-Year Estimates Subject Tables, Table S2101, 2022, <u>data.census.gov/table/ACSST5Y2022.S21017q=Veterans&g=040XX00US06\$0500000</u>. Accessed on November 13, 2024.

<sup>103</sup> bls.gov/cps/cps-veterans-faq.htm#Defined.

To identify compatible occupations with the SOC-equivalent occupations in this report, the San Diego & Imperial COE used Lightcast's Compatibility Index. The Compatibility Index is a score created by Lightcast using a proprietary algorithm and O\*NET's data, and includes the compatibility of two occupations in terms of the knowledge, skills, and abilities required to perform the occupation; a score of 100 means complete compatibility, while a score of 0 means no compatibility. The San Diego & Imperial COE included occupations with compatibility scores of 80 or higher for each occupation. Please note that compatibility scores were not available for all occupations. To ensure that the compatible occupations matched in terms of skill level, the San Diego & Imperial COE categorized jobs into below middle skill, middle skill, or above middle skill. Below-middle-skill occupations typically require a high school diploma or less. Middle-skill jobs are traditionally defined as occupations that require education beyond a high school diploma, but less than a bachelor's degree, such as some college, an associate degree, or apprenticeship training. In recent years, however, the definition has expanded to include occupations that historically required an associate degree but now often require a bachelor's degree (e.g., registered nurses) as well as other jobs trainable by community colleges. Abovemiddle-skill occupations typically require a bachelor's degree or higher, unless it is considered a middle-skill occupation. In San Diego County, the COE selected compatible occupations based on similar or higher skill levels to reflect lateral career moves or opportunities for career advancement, and that had equivalent or higher typical educational requirements. For example, if the original job required an associate degree, the COE summarized compatible occupations that also required an associate degree or bachelor's degree. If the typical educational requirement was a high school diploma, postsecondary non-degree, and some college, no degree, these educational requirements were grouped. This approach ensured that compatible occupations had similar or higher educational requirements. Please note that due to limited data in Imperial County, the COE prioritized Compatibility Index Scores and skill level; therefore, some compatible occupations had educational requirements below the SOCequivalent occupation.

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