

Project Management

Inland Empire/Desert Region (Riverside and San Bernardino counties combined) & Los Angeles and Orange counties

Note: This workforce demand report uses state and federal job projection data that was developed before the economic impact of COVID-19. The COE is monitoring the situation and will provide more information as it becomes available. Please consult with local employers to understand their current employment needs.

Introduction

In today's economy, industries that were not traditionally project focused are increasingly relying on project managers, coordinators, specialists, and assistants to manage complex projects. The Project Management Institute's (PMI) Project Management Job Growth and Talent Gap report found that project-related job growth in the United States is expected to increase from 6.7 million jobs in 2017 to 8.8 million jobs in 2027, a 31% increase (PMI, 2017). This report utilizes real-time job posting information to approximate demand for project management positions as traditional labor market information is not available for the jobs examined in this report.

This workforce analysis reviews online job postings for project management jobs, including project managers, project coordinators, project specialists, and assistant project managers. A job posting search for these job roles was conducted across the Inland Empire/Desert region (IEDR) and the Los Angeles/Orange County area (LA/OC). The LA/OC area contains approximately ten times more job advertisements than the IEDR, providing additional insight into the certifications, skills, job titles, educational attainment, and work experience sought by employers for these positions. Additionally, the proximity of the LA/OC to the IEDR provides further understanding on opportunities available to residents willing to commute for work.

Job Postings

Over the last 12 months in the IEDR, there were 2,198 job postings for project managers and 576 combined job postings for project coordinators, project specialists, and assistant project managers positions collectively referred to as supplemental project management positions throughout this report. While employer job postings are used as a proxy for job demand in this report, it is important to note their limitations. Job postings data is limited to the information provided by employers and the ability of artificial intelligence search engines to identify this information. Additionally, preliminary calculations by Georgetown Center on Education and the Workforce found that "roughly 70 percent of the total number of job openings available from employers were posted online." Further breaking down job postings by

educational requirement, “40 to 60 percent” of jobs needing a high school diploma, “30 to 40 percent” for those calling for an associate degree, and “80 to 90 percent” for those requesting a bachelor’s degree appeared online (Carnevale Et al., 2014).”

Exhibit 1 and Exhibit 2 display the number of online job postings for project managers and supplemental project management positions in the IEDR and LA/OC between 2010 and 2019. Between 2017 and 2019, there was a significant increase in job postings related to project management, with a 125% increase in the IEDR and a 90% increase in LA/OC.

Exhibit 1: Job ads in the IEDR, 2010 – 2019

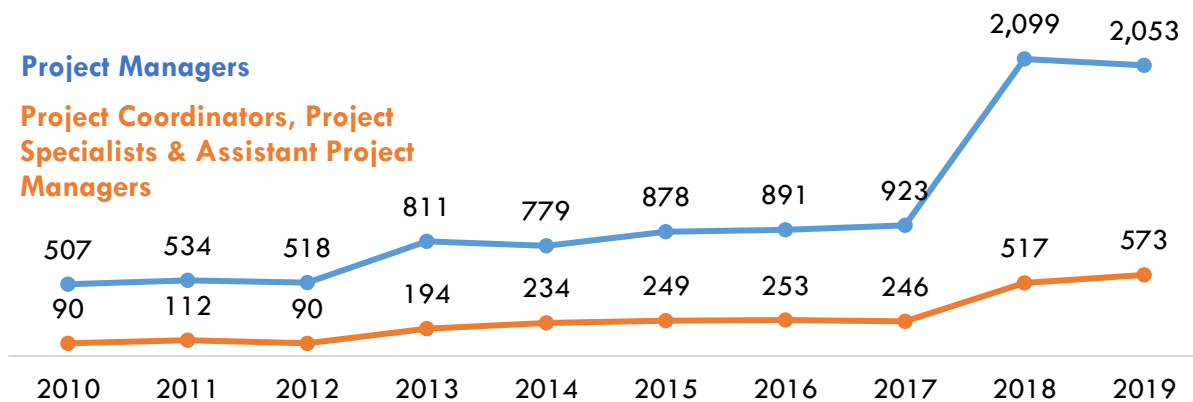
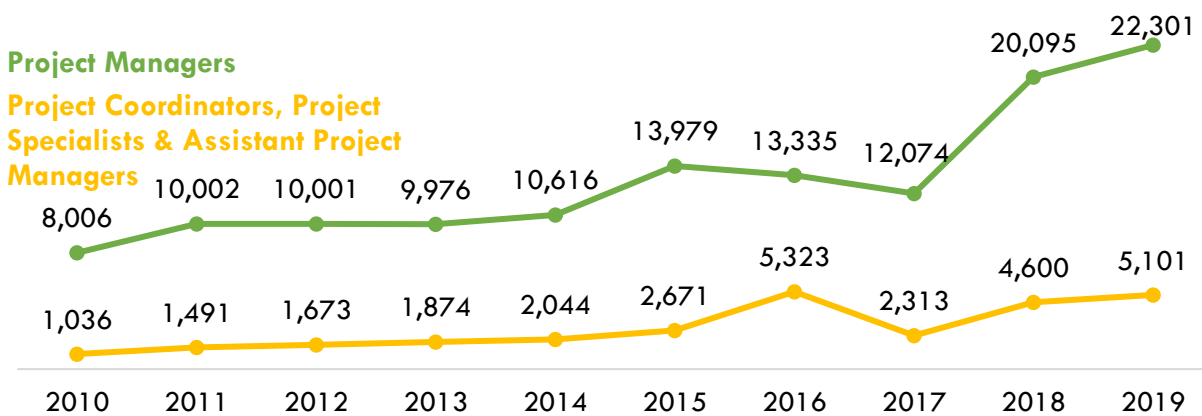


Exhibit 2: Job ads in LA/OC, 2010 – 2019



Certifications

Project Management Professional (PMP), provided by the Project Management Institute (PMI), is a well-known project management certification and sets standards for project management job roles. To qualify for the PMP certification examination, an individual must have a significant level of education (bachelor’s degree) and training (e.g., 4,500 to 7,500 hours of project management work experience). The Certified Associate in Project Management (CAPM) could be considered the entry-level project management

certification as it has fewer prerequisites than the PMP. Employers mentioned the CAPM certification in less than 1% of job ads in the combined IEDR and LA/OC areas. For more information regarding PMI certifications, visit the PMI website (PMI, 2020).

Exhibits 3 and 4 display the certifications most frequently requested or required by employers in job postings for project managers and supplemental project management positions in the IEDR and LA/OC over the last 12 months. Project management certification is a generic term used by employers that did not identify a specific certification by name.

Exhibit 3: Most frequently requested certifications in the IEDR, Apr 2019 – Mar 2020

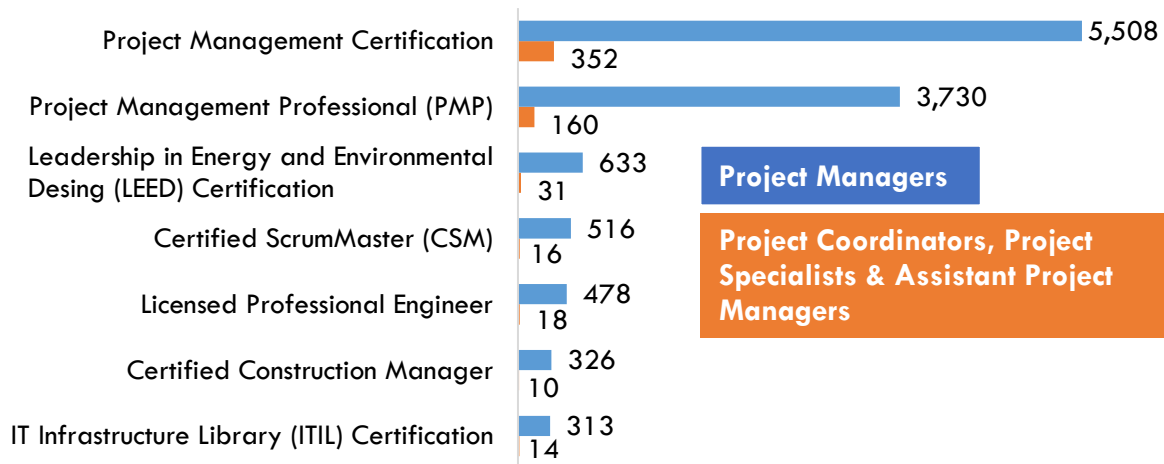
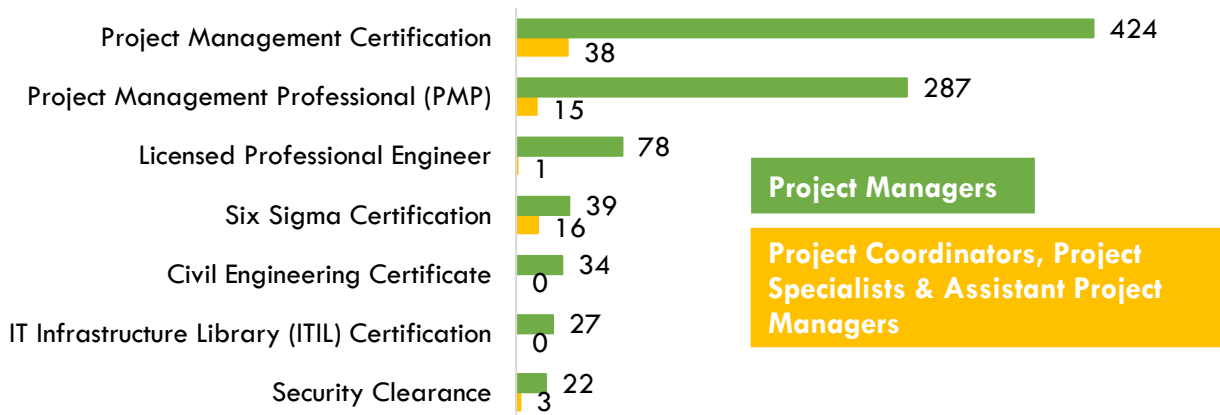


Exhibit 4: Most frequently requested certifications in LA/OC, Apr 2019 – Mar 2020

Source: Burning Glass – Labor Insights



Source: Burning Glass – Labor Insights

Employers

Exhibit 5 displays the employers posting the most project management job ads during the last 12 months in the IEDR and LA/OC.

Exhibit 5: Employers posting the most project management job ads, Apr 2019 – Mar 2020

Region	Job Title	Employers
IEDR	Project Managers (n=1,491)	<ul style="list-style-type: none"> San Manuel Band of Mission Indians Kimley-Horn and Associates Esri Starbucks Coffee Company Anthem Blue Cross
	Project Coordinators, Project Specialists & Assistant Project Managers (n=394)	<ul style="list-style-type: none"> Michael Baker International Loma Linda University Health Kaiser Permanente FirstCarbon Solutions
LA/OC	Project Managers (n=15,547)	<ul style="list-style-type: none"> Wieland Company Inc. University of California, Riverside McCarthy Building Companies Homecare Architects
	Project Coordinators, Project Specialists & Assistant Project Managers (n=3,811)	<ul style="list-style-type: none"> CBRE Disney AECOM Technology Corporation Kaiser Permanente Edison International Northrop Grumman Jones Lang LaSalle (JLL), Inc. Jacobs Engineering Group Inc. Psomas and Associates
		<ul style="list-style-type: none"> University of California, Los Angeles University of Southern California Disney IQVIA The Aerospace Corporation Northrop Grumman Cumming STV Group The Boeing Company

Source: Burning Glass – Labor Insights

Skills

Exhibit 6 displays a sample of specialized, employability, and software and programming skills that employers are seeking to fill project management positions in each area. Occupation-specific specialized skills are abilities that employers are requesting for industry or job competency. Employability skills are foundational skills that transcend industries and occupations; this category is commonly referred to as “soft skills.” The skills requested in job postings may be utilized as a helpful guide for curriculum development. The software and programming skill, Microsoft Office, represents a suite of Microsoft products, including

Excel, Word, Project, PowerPoint, and Outlook. Approximately 18% of job postings in both regions were seeking candidates with Microsoft Project skills.

Exhibit 6: Sample of in-demand skills from employer job ads, Apr 2019 – Mar 2020

Region	Job Title	Specialized Skills	Employability Skills	Software and Programming Skills
IEDR	Project Managers (n=2,096)	<ul style="list-style-type: none"> Budgeting Scheduling Project Planning and Development Skills Construction Management 	<ul style="list-style-type: none"> Communication Skills Planning Organizational Skills Teamwork/ Collaboration 	<ul style="list-style-type: none"> Microsoft Office AutoCAD
	Project Coordinators, Project Specialists & Assistant Project Managers (n=547)	<ul style="list-style-type: none"> Scheduling Budgeting Customer Service Construction Management 	<ul style="list-style-type: none"> Communication Skills Organizational Skills Planning Detail-Oriented 	<ul style="list-style-type: none"> Microsoft Office
LA/OC	Project Managers (n=22,834)	<ul style="list-style-type: none"> Budgeting Scheduling Project Planning and Development Skills Construction Management 	<ul style="list-style-type: none"> Communication Skills Planning Teamwork/ Collaboration Organizational Skills 	<ul style="list-style-type: none"> Microsoft Office Atlassian Jira AutoCAD
	Project Coordinators, Project Specialists & Assistant Project Managers (n=5,183)	<ul style="list-style-type: none"> Scheduling Budgeting Project Planning and Development Skills Customer Service 	<ul style="list-style-type: none"> Communication Skills Organizational Skills Detail-Oriented Teamwork/ Collaboration 	<ul style="list-style-type: none"> Microsoft Office AutoCAD

Source: Burning Glass – Labor Insights

Job Titles

Exhibit 7 displays the job titles most frequently mentioned in project management job advertisements in the IEDR and LA/OC.

Exhibit 7: Most frequently requested project management job titles, Apr 2019 – Mar 2020

Region	Job Title	Job Titles
IEDR	Project Managers (n=2,198)	<ul style="list-style-type: none"> Project Manager Construction Manager Assistant Manager Information Technology Program Manager
	Project Coordinators, Project Specialists & Assistant Project Managers (n=547)	<ul style="list-style-type: none"> Senior Project Manager Project Estimator Civil Engineering Project Manager Technical Project Manager Project Coordinator Assistant Manager Construction Manager Project Specialist Administrative Coordinator
LA/OC	Project Managers (n=23,749)	<ul style="list-style-type: none"> Project Manager Construction Manager Senior Project Manager Information Technology Project Manager
	Project Coordinators, Project Specialists & Assistant Project Managers (n=5,431)	<ul style="list-style-type: none"> Technical Project Manager Assistant Manager Architectural Project Manager Infrastructure Project Manager Project Coordinator Assistant Manager Project Specialist Information Technology Project Coordinator Construction Manager Construction Project Coordinator Administrative Coordinator Marketing Coordinator

Source: Burning Glass – Labor Insights

Educational Attainment and Work Experience

Exhibit 8 displays the minimum advertised education requirement from employer job ads. Each area examined in the report have similar distributions of minimum advertised education requirements for project management positing, with the majority seeking a candidates with a bachelor’s degree or higher.

Exhibit 8: Minimum advertised education requirements for project management positions, Apr 2019 – Mar 2020

Region	Job Title	Minimum Advertised Education Requirement from Job Ads			
		Number of Job Ads (n=)	High school diploma or vocational training	Associate degree	Bachelor’s degree or higher
IEDR	Project Managers	1,375	8%	4%	88%
	Project Coordinators, Project Specialists & Assistant Project Managers	341	27%	10%	63%
LA/OC	Project Managers	15,068	6%	2%	92%
	Project Coordinators, Project Specialists & Assistant Project Managers	3,498	21%	9%	70%

Source: Burning Glass – Labor Insights

Exhibit 9 displays real-time work experience requirements. The majority of employers prefer project managers with more than three years of previous work experience. Supplemental project management positions typically require less than five years of prior work experience.

Exhibit 9: Real-time work experience requirements, Apr 2019 – Mar 2020

Region	Job Title	Real-Time Work Experience			
		Number of job postings	0 – 2 years	3 – 5 years	6+ years
IEDR	Project Managers	1,589	13%	55%	32%
	Project Coordinators, Project Specialists & Assistant Project Managers	317	39%	55%	6%
LA/OC	Project Managers	17,303	11%	53%	36%
	Project Coordinators, Project Specialists & Assistant Project Managers	3,395	48%	46%	6%

Source: Burning Glass – Labor Insights

Project Management Programs

A review of a program inventory, developed by the Center of Excellence and the 12 IEDR colleges, does not identify any project management programs currently offered in the region. The California Community College Chancellor’s Office Curriculum Inventory (COCI) identifies 11 programs related to project management throughout the state. Of these, three are offered as noncredit programs, and eight are offered as certificate programs. Seven of the 11 programs are coded as Business Management (TOP 0506.00) programs, two are Office Technology/Office Computer Application (TOP 0514.00), and the other two programs are related to computer information systems (California Community Colleges Chancellor’s Office, 2020). The divide between management and computer-based training programs emphasizes the breadth of knowledge needed to work in project management as it requires a traditional understanding of business management as well as a deep understanding of team management through information technology.

Folsom Lake College, located near Sacramento, offers a project management certificate program that provides technical project management training for business professionals. The program description of this project management program may be helpful for curriculum development. Folsom Lake College’s program description is displayed below (Folsom Lake College, p. 335):

The project management curriculum is highly relevant to the emerging market of project management in professional services like health care, pharmacy, human resources, finance, manufacturing, construction, and information technology, which is largely being driven by government modernization and large scale outsourcing. This dynamic curriculum provides advanced skills and practical instruction on the processes, organizational structure, and tools that assure that project work yields the desired business results. This is



an online program and is thus ideal for professionals who want to enhance their ability to integrate complex projects, motivate people, and achieve cost-effective results.

This program is suitable for graduates who wish to pursue a career in project management, project managers who wish to develop their professional practice and gain a qualification in this specialist area, and people from a range of disciplines who undertake project management as part of their job role or who wish to move into this professional discipline.

Community college project management programs may provide the 35 hours of project management training that is needed to gain a professional project management certification from the Project Management Institute.

Acknowledgment

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