Labor Market Analysis for Program Recommendation
Parks and Tree Services Occupations
Merritt College

Prepared by the San Francisco Bay Center of Excellence for Labor Market Research

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Recommendation

Based on all available data, there appears to be an "undersupply" of Parks and Tree Services workers compared to the demand for this cluster of occupations in the Bay region and in the East Bay sub-region (Alameda, Contra Costa counties). There is a projected annual gap of about 394 students in the Bay region and 95 students in the East Bay Sub-Region.

Introduction

This report provides student outcomes data on employment and earnings for TOP 0109.00 - Horticulture programs in the state and region. It is recommended that these data be reviewed to better understand how outcomes for students taking courses on this TOP code compare to potentially similar programs at colleges in the state and region, as well as to outcomes across all CTE programs at Merritt College and in the region.

This report profiles Parks and Tree Services Occupations in the 12 county Bay region and in the East Bay sub-region for a proposed new Oakland Public Works Parks and Tree Services, Level 1 program at Merritt College.

- **First-Line Supervisors of Landscaping, Lawn Service, and Groundskeeping Workers (37-1012):** Directly supervise and coordinate activities of workers engaged in landscaping or groundskeeping activities. Work may involve reviewing contracts to ascertain service, machine, and workforce requirements; answering inquiries from potential customers regarding methods, material, and price ranges; and preparing estimates according to labor, material, and machine costs.
    Entry-Level Educational Requirement: NA
    Training Requirement: NA
    Percentage of Community College Award Holders or Some Postsecondary Coursework: 30%

- **Pesticide Handlers, Sprayers, and Applicators, Vegetation (37-3012):** Mix or apply pesticides, herbicides, fungicides, or insecticides through sprays, dusts, vapors, soil incorporation, or chemical application on trees, shrubs, lawns, or botanical crops. Usually requires specific training and State or Federal certification. Excludes "Commercial Pilots" (53-2012) who dust or spray crops from aircraft.
    Entry-Level Educational Requirement: NA
    Training Requirement: NA
    Percentage of Community College Award Holders or Some Postsecondary Coursework: 21%

Occupational Demand

Table 1. Employment Outlook for Parks and Tree Services Occupations in Bay Region

Occupation	2021 Jobs	2026 Jobs	5-yr Change	5-yr % Change	5-yr Total Openings	Annual Openings	25% Hourly Earning	Median Hourly Wage
First-Line Supervisors of Landscaping, Lawn Service, and Groundskeeping Workers	2,721	3,019	297	11%	1,791	358	$24	$31
Pesticide Handlers, Sprayers, and Applicators, Vegetation	622	684	61	10%	482	96	$17	$20
Total	**3,344**	**3,702**	**359**	**11%**	**2,273**	**454**		

Source: Lightcast 2022.3

Bay Region includes: Alameda, Contra Costa, Marin, Monterey, Napa, San Benito, San Francisco, San Mateo, Santa Clara, Santa Cruz, Solano and Sonoma Counties

Table 2. Employment Outlook for Parks and Tree Services Occupations in East Bay Sub-region

Occupation	2021 Jobs	2026 Jobs	5-yr Change	5-yr % Change	5-yr Total Openings	Annual Openings	25% Hourly Earning	Median Hourly Wage
First-Line Supervisors of Landscaping, Lawn Service, and Groundskeeping Workers	782	836	53	7%	474	95	$23	$29
Pesticide Handlers, Sprayers, and Applicators, Vegetation	112	117	5	5%	79	16	$19	$21
Total	**895**	**953**	**59**	**7%**	**554**	**111**		

Source: Lightcast 2022.3

East Bay Sub-Region includes: Alameda, Contra Costa Counties

Job Postings in Bay Region and East Bay Sub-Region

Table 3. Number of Job Postings by Occupation for latest 12 months (Mar. 2022 - Feb. 2023)

Occupation	Bay Region	East Bay
First-Line Supervisors of Landscaping, Lawn Service, and Groundskeeping Workers	126	55
Pesticide Handlers, Sprayers, and Applicators, Vegetation	44	24

Source: Lightcast

Table 4a. Top Job Titles for Parks and Tree Services Occupations for latest 12 months (Mar. 2022 - Feb. 2023) Bay Region

Title	Bay	Title	Bay
Landscape Foremen	32	Plant Care Specialists	5
Inspection Managers	25	Spray Technicians	4
Crew Leaders	12	Year 1 Teachers	4
Climbing Arborists	11	Landscape Maintenance Foremen	3
Landscape Managers	10	Applicators	2

Title	Bay	Title	Bay
Landscapers	9	Arborists Crew Leader	2
Landscape Crew Leaders	8	Clinical Monitors	2
Landscape Construction Foremen	6	Enhancement Crew Leaders	2
Management Trainees	6	Groundskeepers	2

Source: Lightcast

Table 4b. Top Job Titles for Parks and Tree Services Occupations for latest 12 months (Mar. 2022 - Feb. 2023) East Bay Sub-Region

Title	East Bay	Title	East Bay
Landscape Foremen	22	Clinical Monitors	2
Inspection Managers	11	Lawn Care Specialists	2
Crew Leaders	7	Spray Technicians	2
Landscape Crew Leaders	6	Arborists Crew Leader	1
Plant Care Specialists	4	Enhancement Crew Leaders	1
Year 1 Teachers	4	Horticultural Assistants	1
Landscapers	3	Landscape Construction Foremen	1
Management Trainees	3	Landscape Contractors	1
Climbing Arborists	2	Landscape Maintenance Foremen	1

Source: Lightcast

Industry Concentration

Table 5. Industries hiring Parks and Tree Services Workers in Bay Region

Industry - 6 Digit NAICS (No. American Industry Classification) Codes	Jobs in Industry (2021)	Jobs in Industry (2026)	% Change (2021-26)	% Occupation Group in Industry (2022)
Landscaping Services	2,095	2,309	10%	62%
Local Government, Excluding Education and Hospitals	273	286	5%	8%
Farm Labor Contractors and Crew Leaders	104	122	17%	3%
Golf Courses and Country Clubs	88	108	22%	3%
Exterminating and Pest Control Services	78	84	8%	2%
All Other Amusement and Recreation Industries	47	67	42%	2%
Postharvest Crop Activities (except Cotton Ginning)	47	55	17%	1%
Hotels (except Casino Hotels) and Motels	35	44	26%	1%
Crop Production	35	35	1%	1%

Industry - 6 Digit NAICS (No. American Industry Classification) Codes	Jobs in Industry (2021)	Jobs in Industry (2026)	% Change (2021-26)	% Occupation Group in Industry (2022)
Colleges, Universities, and Professional Schools	26	29	11%	1%

Source: Lightcast 2022.3

Table 6. Top Employers Posting Parks and Tree Services Occupations in Bay Region and East Bay Sub-Region (Mar. 2022 - Feb. 2023)

Employer	Bay	Employer	East Bay
The Davey Tree Expert Company	23	Monarch Landscaping	12
Monarch Landscaping	21	Terracare Associates	12
Terracare Associates	16	The Davey Tree Expert Company	7
Brightview	12	Brightview	6
ACRT Pacific	7	ACRT Pacific	5
ACRT Services	6	ACRT Services	5
Orkin	6	Orkin	3
Davey Resource Group	4	University of California	3
University of California	4	TruGreen	2
Cagwin & Dorward	3	A Plus Tree Service	1

Source: Lightcast

Educational Supply

There are eight (8) community colleges in the Bay Region issuing 60 awards on average annually (last 3 years ending 2019-20) on TOP 0109.00 - Horticulture. In the East Bay Sub-Region, there are three (3) community colleges that issued 16 awards on average annually (last 3 years) on this TOP code.

Table 7. Community College Awards on TOP 0109.00 - Horticulture in Bay Region

College	Subregion	Associate Degree	High unit Certificate	Low unit Certificate	Total
Cabrillo	SC-Monterey	4	2	7	13
Diablo Valley	East Bay	0	0	8	8
Foothill	Silicon Valley	8	6	4	18
Las Positas	East Bay	1	0	3	4
Merritt	East Bay	0	0	4	4
Monterey	SC-Monterey	2	0	3	5
San Francisco	Mid-Peninsula	2	1	1	4
Solano	North Bay	2	0	2	4
Total		**19**	**9**	**32**	**60**

Source: Data Mart

Note: The annual average for awards is 2017-18 to 2019-20.

Gap Analysis

Based on the data included in this report, there is a labor market gap in the Bay region with 454 annual openings for the Parks and Tree Services occupational cluster and 60 annual (3-year average) awards for an annual undersupply of 394 students. In the East Bay Sub-Region, there is also a gap with 111 annual openings and 16 annual (3-year average) awards for an annual undersupply of 95 students.

Student Outcomes

Table 8. Four Employment Outcomes Metrics for Students Who Took Courses on TOP 0109.00 - Horticulture

Metric Outcomes	Bay All CTE Programs	Merritt All CTE Programs	State 0109.00	Bay 0109.00	East Bay 0109.00	Merritt 0109.00
Students with a Job Closely Related to Their Field of Study	74%	71%	68%	70%	70%	71%
Median Annual Earnings for SWP Exiting Students	$48,926	$41,988	$33,980	$42,034	$44,622	$54,958
Median Change in Earnings for SWP Exiting Students	23%	9%	20%	17%	7%	5%
Exiting Students Who Attained the Living Wage	50%	47%	42%	43%	51%	60%

Source: Launchboard Strong Workforce Program Median of 2018 to 2021.

Skills, Certifications and Education

Table 9. Top Skills for Parks and Tree Services Occupations in Bay Region (Mar. 2022 - Feb. 2023)

Skill	Posting	Skill	Posting
Landscaping	71	Customer Relationship Management	25
Pruning	60	Landscape Maintenance	25
Irrigation (Landscaping And Agriculture)	50	Chainsaws	20
Billing	39	Safety Training	17
Construction	36	Contractor Safety	15
Forestry	34	Emergency Response	15
Mowing	33	Environmental Science	15
Horticulture	31	Traffic Control	15
Bilingual (Spanish/English)	27	Trimming	15
Arboriculture	26	Urban Forestry	15

Source: Lightcast

Table 10. Certifications for Parks and Tree Services Occupations in Bay Region (Mar. 2022 - Feb. 2023)

Certification	Posting	Certification	Posting
Valid Driver's License	68	CDL Class A License	2
Certified Arborist	43	CDL Class B License	2
Cardiopulmonary Resuscitation (CPR) Certification	19	30-Hour OSHA Construction Card	1
First Aid Certification	17	30-Hour OSHA General Industry Card	1
CDL Class C License	15	Landscape Architect License	1
Certified First Responder	13	LEED Accredited Professional (AP)	1
Commercial Driver's License (CDL)	5	Project Management Professional Certification	1
Pesticide Applicator License	5		

Source: Lightcast

Table 11. Education Requirements for Parks and Tree Services Occupations in Bay Region

Education Level	Job Postings	% of Total
High school or GED	36	31%
Associate degree	36	31%
Bachelor's degree & higher	44	38%

Source: Lightcast

Note: 58% of records have been excluded because they do not include a degree level. As a result, the chart above may not be representative of the full sample.

Methodology

Occupations for this report were identified by use of job descriptions and skills listed in O*Net. Labor demand data is sourced from Lightcast occupation and job postings data. Educational supply and student outcomes data is retrieved from multiple sources, including CCCCO Data Mart and CTE Launchboard.

Sources

O*Net Online
Lightcast
CTE LaunchBoard www.calpassplus.org
Launchboard
Statewide CTE Outcomes Survey
Employment Development Department Unemployment Insurance Dataset
Living Insight Center for Community Economic Development
Chancellor's Office MIS system

Contacts

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