



Environmental Horticulture & Design

**Program Report
For Greater South Bay and Peninsula Region
(Santa Clara and San Mateo Counties)**

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Applied Horticulture/Horticulture Operations, General

CIP 2010: A program that focuses on the general production and processing of domesticated plants, shrubs, flowers, foliage, trees, groundcovers, and related plant materials; the management of technical and business operations connected with horticultural services; and the basic scientific principles needed to understand plants and their management and care.

Target Occupations‡

Farmers, Ranchers, and Other Agricultural Managers (11-9013)

First-Line Supervisors of Landscaping, Lawn Service, and Groundskeeping Workers (37-1012)

Landscaping and Groundskeeping Workers (37-3011)




Tree Trimmers and Pruners (37-3013)

Grounds Maintenance Workers, All Other (37-3019)

‡Based on EMSI crosswalk of the Classification of Instructional Programs (CIP) codes with Standard Occupational Classification (SOC) codes as published by the U.S. Department of Education. For this program, the target occupations were modified to include the five listed.

In 2015, the number of environmental horticulture and design jobs in the target occupations in Santa Clara and San Mateo Counties totaled 14,191. The Bureau of Labor Statistics (BLS) expects the total number of positions to increase by 1.6% over the next three years. Regional openings in 2015, which included created jobs and turnover, totaled 462. The 2014 completions in environmental and horticulture design programs totaled 23.

Occupation Summary for Environmental Horticulture & Design

14,191 Jobs (2015)¹ 30% below National average ²	1.6% % Change (2015-2018)³ Nation: 1.5%	\$15.64/hr Median Hourly Earnings Nation: \$12.81/hr
Regional Openings (2015)	462	
Regional Program Completions (2014)	23	
All Regional Completions for Target Occupations (2014)	23	

¹Based on total number of jobs for target occupations in Santa Clara and San Mateo Counties.

²Represents occupation density as compared to national average (national average=1).

³Based on turnover and new jobs.

Target occupations that are mapped to the Environmental Horticulture & Design (Applied Horticulture/Horticulture Operations, General) program are disaggregated to see which occupations are projected to see the highest number of annual openings (Landscaping and Groundskeeping Workers), highest percentage rate of growth over the next three year (Grounds Maintenance Workers, All Other), and the highest median hourly earnings (Farmers, Ranchers, and Other Agricultural Managers). Note that while Tree Trimmers and Pruners are expected to experience a 3% job growth, this occupation is more highly represented and concentrated in our region (Santa Clara and San Mateo Counties) compared to the national average.

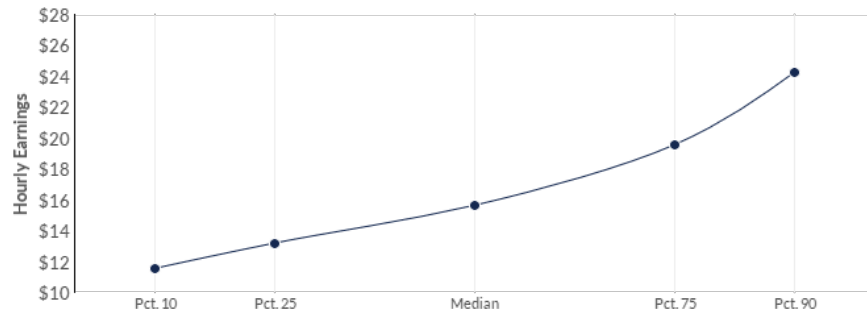
Target Occupations

Occupation	2015 Jobs	Annual Openings	Median Hourly Earnings	Growth (2015 - 2018)	Location Quotient (2015) ²
Landscaping and Groundskeeping Workers	11,191	381	\$14.02/hr	2.52%	0.88
First-Line Supervisors of Landscaping, Lawn Service, and Groundskeeping Workers	1,183	21	\$21.63/hr	1.52%	0.83
Tree Trimmers and Pruners	947	34	\$16.95/hr	3.27%	1.47
Farmers, Ranchers, and Other Agricultural Managers	662	9	\$28.73/hr	-18.28%	0.13
Grounds Maintenance Workers, All Other	207	10	\$15.87/hr	6.28%	0.81

The percentile earnings table shows the range the environmental horticulture & design occupations earn in the region. While the median earnings are \$15.64/hour, wages can range from below \$12/hour to above \$25/hour. Each of the target occupations' range in wages are also displayed.

Target Occupations Percentile Earnings

\$13.19/hr	\$15.64/hr	\$19.57/hr
25th Percentile Earnings	Median Earnings	75th Percentile Earnings



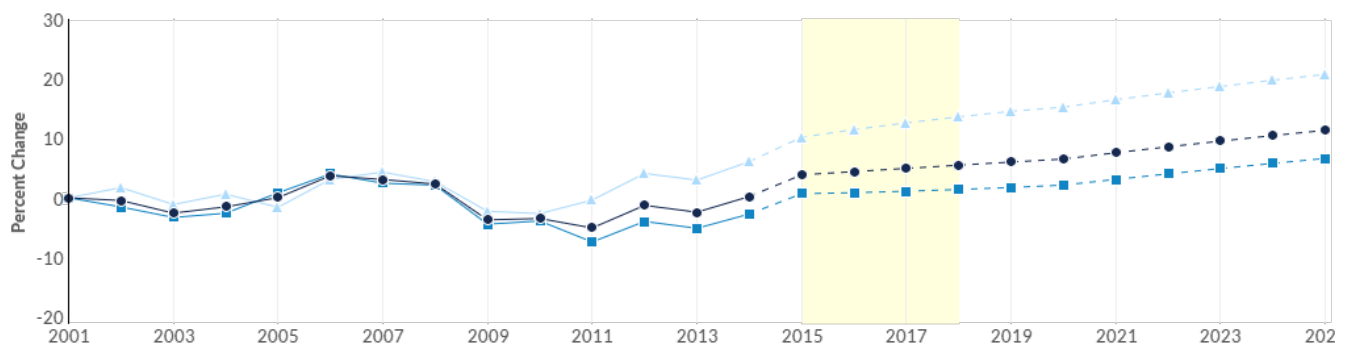
Occupation	25th Percentile Earnings	Median Earnings	75th Percentile Earnings
Farmers, Ranchers, and Other Agricultural Managers (11-9013)	\$25.79	\$28.73	\$31.60
First-Line Supervisors of Landscaping, Lawn Service, and Groundskeeping Workers (37-1012)	\$16.72	\$21.63	\$27.02
Landscaping and Groundskeeping Workers (37-3011)	\$11.87	\$14.02	\$17.73
Tree Trimmers and Pruners (37-3013)	\$14.52	\$16.95	\$22.56
Grounds Maintenance Workers, All Other (37-3019)	\$13.49	\$15.87	\$19.90

Growth in the Environmental Horticulture & Design occupations show how each occupation is projected to increase or decrease in jobs over the next three years. Modest growth is expected for all occupations except for Farmers, Ranchers, and Other Agricultural Managers.

Growth for Environmental Horticulture & Design Occupations

	14,191 2015 Jobs	14,412 2018 Jobs	221 Change (2015-2018)	1.6% % Change (2015-2018)
Occupation	2015 Jobs	2018 Jobs	Change	% Change
Farmers, Ranchers, and Other Agricultural Managers (11-9013)	662	541	-121	-18%
First-Line Supervisors of Landscaping, Lawn Service, and Groundskeeping Workers (37-1012)	1,183	1,201	18	2%
Landscaping and Groundskeeping Workers (37-3011)	11,191	11,473	282	3%
Tree Trimmers and Pruners (37-3013)	947	978	31	3%
Grounds Maintenance Workers, All Other (37-3019)	207	220	13	6%

Regional Trends



	Region	2015 Jobs	2018 Jobs	Change	% Change
●	Region	14,191	14,412	221	1.6%
●	Santa Clara County, CA	9,158	9,223	65	0.7%
●	San Mateo County, CA	5,033	5,190	157	3.1%

Program Completion Data

Program data reviews completion information about awards by institution and types of awards conferred in the region (Santa Clara and San Mateo Counties). Foothill College is the only regional institution that is supporting and preparing for Environmental Horticulture & Design (Applied Horticulture/Horticulture Operations, General) occupations.


Program Summary for Applied Horticulture/Horticulture Operations, General

1	23	885
Regional Institution	Regional Program Completions (2014) Foothill College Completions: 23	Annual Openings (2014)

Regional Completions by Institution

Institution	Certificates (2014)	Degrees (2014)	Total Completions (2014)
Foothill College	14	9	23

Regional Completions by Award Level

Award Level	Completions (2014)	Percent
Award of at least 1 but less than 2 academic years	14	60.9% 
Associates degree	9	39.1% 



Occupational Programs

3	23
Programs (2014)	Completions (2014)
Program	
Applied Horticulture/Horticulture Operations, General	23
Landscaping and Groundskeeping	0
Agricultural Business and Management, General	0








Target Occupations Demographics

The demographics among those employed in Environmental Horticulture & Design occupations in Santa Clara and San Mateo Counties for 2015 show that almost a majority are male (86%) and almost half are between the ages of 35-54 (45%) and Latino (48%).








Occupation Gender Breakdown

Gender	2015 Jobs	2015 Percent	
Males	12,255	86.4%	
Females	1,936	13.6%	

Occupation Age Breakdown

Age	2015 Jobs	2015 Percent	
14-18	329	2.3%	
19-24	1,386	9.8%	
25-34	2,737	19.3%	
35-44	3,155	22.2%	
45-54	3,276	23.1%	
55-64	2,111	14.9%	
65+	1,197	8.4%	

Occupation Race/Ethnicity Breakdown

Race/Ethnicity	2015 Jobs	2015 Percent	
Hispanic or Latino	6,755	47.6%	
White	5,537	39.0%	
Asian	1,024	7.2%	
Black or African American	580	4.1%	
Two or More Races	158	1.1%	
Native Hawaiian or Other Pacific Islander	89	0.6%	
American Indian or Alaska Native	47	0.3%	

Industries Employing Environmental Horticulture and Design Occupations

A number of industries in Santa Clara and San Mateo Counties employ those trained in Environmental Horticulture & Design and its related occupations. The following table represents a regional industry breakdown of the number of environmental horticulture positions employed, the percentage of environmental horticulture jobs employed by industry and the percentage environmental horticulture jobs represent within all jobs by each industry. While landscaping services employed 69% of all regional environmental horticulture positions in 2015, these positions also represents a majority of the total jobs in that industry (86%).

Top Industries Employing Environmental Horticulture & Design Occupations

Industry	Occupation Group Jobs in Industry (2015)	% of Occupation Group in Industry (2015)	% of Total Jobs in Industry (2015)
Landscaping Services	9,847	69.4%	85.6%
Local Government, Excluding Education and Hospitals	621	4.4%	1.6%
Crop Production	610	4.3%	15.1%
Colleges, Universities, and Professional Schools	372	2.6%	1.1%
Golf Courses and Country Clubs	298	2.1%	11.9%

Appendix A - Data Sources and Calculations

Completers Data

The completers data in this report is taken directly from the national IPEDS database published by the U.S. Department of Education's National Center for Education Statistics.

Institution Data

The institution data in this report is taken directly from the national IPEDS database published by the U.S. Department of Education's National Center for Education Statistics.

Occupation Data

EMSI occupation employment data are based on final EMSI industry data and final EMSI staffing patterns. Wage estimates are based on Occupational Employment Statistics (QCEW and Non-QCEW Employees classes of worker) and the American Community Survey (Self-Employed and Extended Proprietors). Occupational wage estimates also affected by county-level EMSI earnings by industry.

Location Quotient

Location quotient (LQ) is a way of quantifying how concentrated a particular industry, cluster, occupation, or demographic group is in a region as compared to the nation. It can reveal what makes a particular region unique in comparison to the national average.

Industry Data

EMSI industry data have various sources depending on the class of worker. (1) For QCEW Employees, EMSI primarily uses the QCEW (Quarterly Census of Employment and Wages), with supplemental estimates from County Business Patterns and Current Employment Statistics. (2) Non-QCEW employees data are based on a number of sources including QCEW, Current Employment Statistics, County Business Patterns, BEA State and Local Personal Income reports, the National Industry-Occupation Employment Matrix (NIOEM), the American Community Survey, and Railroad Retirement Board statistics. (3) Self-Employed and Extended Proprietor classes of worker data are primarily based on the American Community Survey, Nonemployer Statistics, and BEA State and Local Personal Income Reports. Projections for QCEW and Non-QCEW Employees are informed by NIOEM and long-term industry projections published by individual states.

Staffing Patterns Data

The staffing pattern data in this report are compiled from several sources using a specialized process. For QCEW and Non-QCEW Employees classes of worker, sources include Occupational Employment Statistics, the National Industry-Occupation Employment Matrix, and the American Community Survey. For the Self-Employed and Extended Proprietors classes of worker, the primary source is the American Community Survey, with a small amount of information from Occupational Employment Statistics.

State Data Sources

This report uses state data from the following agencies: California Labor Market Information Department