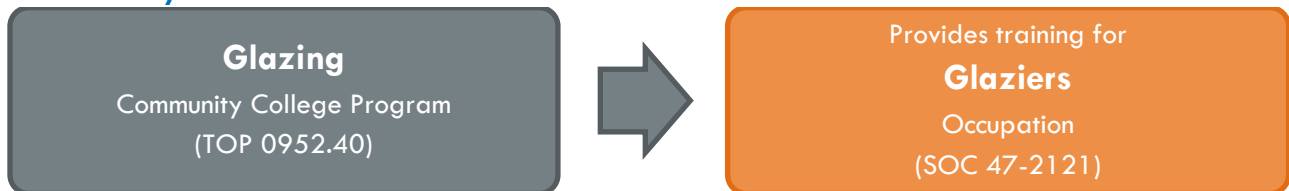


# Glazing

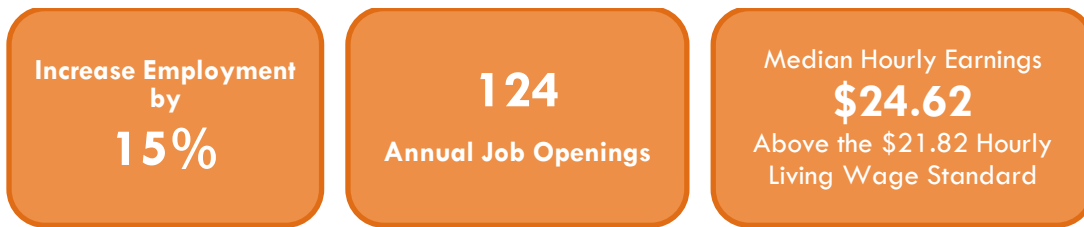
*Inland Empire/Desert Region (Riverside and San Bernardino counties)*

*This workforce demand report uses state and federal job projection data 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 verify their current employment needs.*

## Summary



Over the next five years (2021-2026), glaziers employment is projected to



The Inland Empire/Desert Centers of Excellence  
 **Recommends**  
 Glazier Program Development  
 to meet the need for more workers in the region

## Introduction

California Community College glazing (TOP 0952.40) programs prepare students for employment through the instruction of the theories, principles, methods, technical skills, and use of equipment in glazing (Taxonomy of Programs, 2012). The knowledge, skills, and abilities trained by glazing programs lead to the glaziers occupation (SOC 47-2121).

In 2021, there were 878 glazier jobs in the region. Employment for the glaziers is projected to increase by 15% through 2026; 124 job openings are projected annually. Exhibit 1 displays the job counts, five-year projected job growth, job openings, and the share of incumbent workers aged 55 years and greater in the region.

*Exhibit 1. Five-year projections for glaziers, Inland Empire/Desert Region, 2021-2026*

Occupation	2021 Jobs	2026 Jobs	5-Yr % Change	5-Yr Openings (New + Replacement Jobs)	Annual Openings (New + Replacement Jobs)	% of workers age 55+
Glaziers	878	1,005	15%	618	124	21%

Source: Lightcast 2022.2

An online job ad search for glazier jobs was conducted to reveal the employers seeking these workers, including the time it takes to fill positions, earnings information, and in-demand skills. Exhibit 2 shows the number of job ads posted during the last 12 months, July 2021 through June 2022, and the statewide average time to fill this job. The Centers of Excellence typically seeks to report job ad information for occupations with at least 100 job ads over the last 12 months in the region to ensure that the job ad information in this report is reliable and actionable. Over the previous 12 months, July 2021 through June 2022, there were 86 job ads posted for glaziers in the region and 728 job ads in California. Statewide job ad information for glaziers is displayed in this report. On average, employers in California fill online job ads for glaziers in 46 days.

*Exhibit 2. Job ads and time to fill, California, July 2021-June 2022*

Occupation	Job Ads	Statewide Average Time to Fill (Days)
Glaziers	728	46

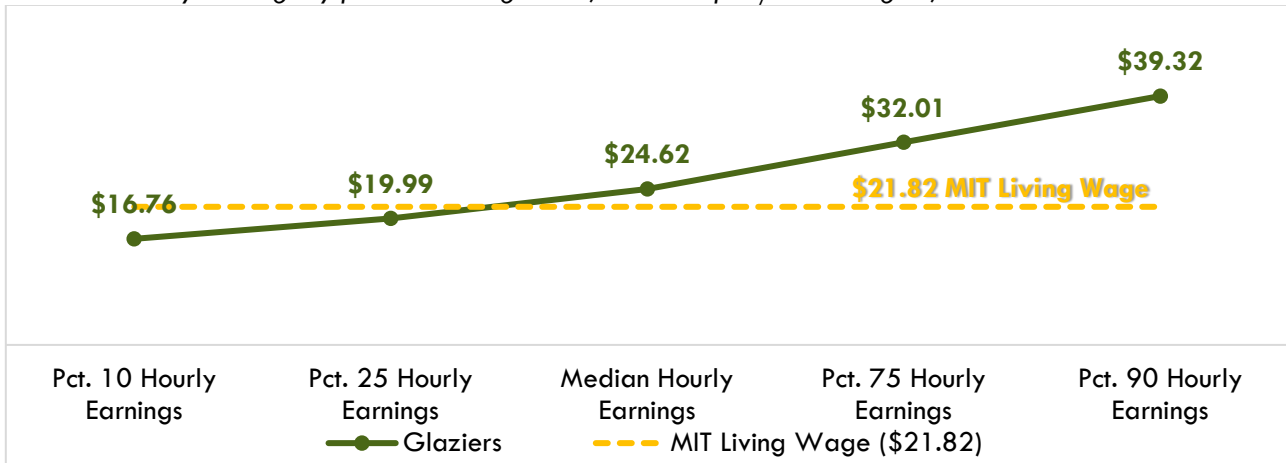
Source: Burning Glass – Labor Insights

### Earnings and Benefits

Community colleges should ensure their training programs lead to employment opportunities that provide a living wage. The MIT living wage calculator estimates that an individual must earn \$21.82 per or \$45,386 annually in California (Glasmeier, 2022).

Exhibit 3 displays the hourly earnings for glaziers. The median hourly earnings for glaziers are above the living wage standard, indicating that at least 50% of workers earn a living wage.

Exhibit 3. Hourly earnings by percentile for glaziers, Inland Empire/Desert Region, 2021



Source: Lightcast 2022.2

Benefits information, provided in the occupational guides developed by the California Labor Market Information Division, reveals that fringe benefits for glaziers may include life and health insurance, holidays, vacations, and retirement plans (Detailed Occupational Guides, 2022).

### Advertised Salary from Online Job Ads

Exhibit 4 displays online job ad salary data for glaziers over the last 12 months. Online job ad salary information reveals that employers are willing to pay glaziers \$54,000 annually, above the region's \$45,386 annual (\$21.82 hourly) living wage standard. The salary figures are prorated to reflect full-time, annual wage status.

Exhibit 4. Advertised salary information, California, July 2021-June 2022

Occupation	Number of job ads	Real-Time Salary Information				Average Annual Salary
		Less than \$35,000	\$35,000 to \$49,999	\$50,000 to \$74,999	More than \$75,000	
Glaziers	586	7%	50%	31%	12%	\$54,000

Source: Burning Glass – Labor Insights

### Employers, Skills, Education, and Work Experience

Exhibit 5 displays the employers that posted the most job ads during the last 12 months. Displaying employer names provides insight into where students may find employment after completing a program. Anderson Windows posted the most job ads for glaziers in California.

*Exhibit 5. Employers posting the most job ads for glaziers, California, July 2021-June 2022*

Occupation	Top Employers
Glaziers (n=728)	<ul style="list-style-type: none"> <li>• Anderson Windows</li> <li>• The Shade Store</li> <li>• Newman Windows and Doors</li> <li>• Hardy Windows</li> <li>• Dreamstyle Remodeling</li> <li>• Simmons Glass</li> <li>• Majestic Glass</li> </ul>

Source: Burning Glass – Labor Insights

Exhibit 6 lists a sample of specialized and employability skills employers seek when seeking workers to fill glazier positions. Specialized skills are occupation-specific skills that employers request for industry or job competency. Employability skills are foundational skills that transcend industries and occupations; this category is often referred to as "soft skills." The skills requested in job ads may be utilized to guide curriculum development.

*Exhibit 6. Sample of in-demand skills from employer job ads, California, July 2021-June 2022*

Occupation	Specialized skills	Employability skills
Glaziers (n=463)	<ul style="list-style-type: none"> <li>• Lifting Ability</li> <li>• Customer Service</li> <li>• Power Tools</li> <li>• Door/Window Installation</li> <li>• Repair</li> </ul>	<ul style="list-style-type: none"> <li>• Communication Skills</li> <li>• Problem Solving</li> <li>• Teamwork/Collaboration</li> <li>• Detail-Oriented</li> <li>• Troubleshooting</li> </ul>

Source: Burning Glass – Labor Insights

Exhibit 7 displays the typical entry-level education, educational attainment, and minimum advertised education requirements for glaziers. According to the Bureau of Labor Statistics, 29% of incumbent workers in this field hold a community college-level of educational attainment; "some college, no degree," and an "associate degree." All employers posting job ads for glaziers sought candidates with a high school diploma or vocational training.

*Exhibit 7: Typical entry-level education, educational attainment, and minimum advertised education requirements, California, July 2021-June 2022*

Occupation	Typical Entry-Level Education Requirement (National)	CC-Level Educational Attainment* (National)	Real-Time Minimum Advertised Education Requirement			
			Number of Job Ads	High school or vocational training	Associate degree	Bachelor's degree or higher
Glaziers	High school diploma or equivalent	29%	170	100%	-	-

Source: Lightcast 2022.2, Burning Glass – Labor Insights

\*Percentage of incumbent workers with a Community College Award or Some Postsecondary Coursework

Exhibit 8 displays the work experience typically required for glaziers and the real-time work experience requirements from employer job ads. Approximately 59% of employers sought glaziers with zero and two years of previous work experience.

*Exhibit 8: Work experience required and real-time work experience requirements, California, July 2021-June 2022*

Occupation	Work Experience Typically Required	Real-Time Work Experience			
		Number of job ads	0 – 2 years	3 – 5 years	6+ years
Glaziers	None	440	59%	38%	3%

Source: Lightcast 2022.2, Burning Glass – Labor Insights

### Student Completions and Programs Outcomes

Regional community colleges do not currently offer glazing programs (TOP 0952.40). Other postsecondary education institutions in the region have not issued awards in programs related to glazing.

### Summary of Findings

The knowledge, skills, and abilities trained by glazing programs (TOP 0952.40) lead to the glazier occupation. Glaziers are projected to increase employment by 15%, with 124 job openings available annually. The median earnings for glaziers is \$24.62 per hour, above the living wage standard for the region (\$21.83 per hour). This indicates that at least 50% of workers in this occupation earn a living wage.

Regional community colleges do not currently offer glazing programs. Other postsecondary educational institutions in the region have not issued awards related to glazing over the last three academic years.

The Centers of Excellence recommends developing glazing programs to meet the regional demand for more workers. Colleges considering this program should partner with relevant employers and confirm their demand for glaziers and the skills needed for students to secure work in this field shortly after exiting the program.

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 July 2022

## References

Burning Glass Technologies. (2022). *Labor Insights/Jobs*. Retrieved from <https://www.burning-glass.com/>

California Community Colleges Chancellor's Office. (2022). *Chancellor's Office Curriculum Inventory (COCI), version 3.0*. Retrieved from <https://coci2.ccctechcenter.org/programs>

California Community Colleges Chancellor's Office Management Information Systems (MIS) Data Mart. (2022). *Data Mart*. Retrieved from <https://datamart.cccco.edu/datamart.aspx>

California Community Colleges Chancellor's Office, Curriculum and Instructional Unit, Academic Affairs Division. (2012). *Taxonomy of Programs, 6<sup>th</sup> Edition, Corrected Version*. Retrieved from <https://www.cccco.edu/-/media/CCCCO-Website/About-Us/Divisions/Digital-Innovation-and-Infrastructure/Research/Files/TOPmanual6200909corrected12513.ashx?la=en&hash=94C709CA83C0380828415579395A5F536736C7C1>

Carnevale, A. P., Jayasundera, T., & Repnikov, D. (n.d.). Understanding Online Job Ads Data. Retrieved from [https://cew.georgetown.edu/wp-content/uploads/2014/11/OCLM.Tech\\_Web.pdf](https://cew.georgetown.edu/wp-content/uploads/2014/11/OCLM.Tech_Web.pdf)

Glasmeier, A. K. (2022). Massachusetts Institute of Technology. Living Wage Calculator. *Living Wage Calculation for California*. Retrieved from <https://livingwage.mit.edu/states/06>

Labor Market Information Division. Employment Development Department of California. (2022). *Detailed Occupational Guides*. Retrieved from <https://www.labormarketinfo.edd.ca.gov/OccGuides/Search.aspx>

Lightcast. (2022). *Datarun 2022.2*. Retrieved from <https://www.economicmodeling.com/>

National Center for O\*NET Development. (2022). O\*NET OnLine. Retrieved from <https://www.onetonline.org/>

U.S. Department of Education. Institute of Education Sciences, National Center for Education Statistics. Integrated Postsecondary Education System (IPEDS). (2022). Retrieved from <https://nces.ed.gov/ipeds/use-the-data>

## Appendix: Occupation definitions, sample job titles, five-year projections, and earnings for glaziers

### **Occupation Definitions (SOC code), Education and Training Requirement, Community College Education Attainment**

#### **Glaziers (47-2121)**

Install glass in windows, skylights, store fronts, and display cases, or on surfaces, such as building fronts, interior walls, ceilings, and tabletops.

**Sample job titles:** Automobile Glass Technician, Commercial Glazier, Glass Installer, Glass Technician, Glazer, Glazier

*Entry-Level Educational Requirement: High school diploma or equivalent*

*Training Requirement: Apprenticeship*

*Work Experience: None*

*Incumbent workers with a Community College Award or Some Postsecondary Coursework: 29%*

## Appendix: Methodology

Job ad 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 "just 30 to 40 percent of openings for candidates with some college or an associate degree, and only 40 to 60 percent of openings for high school diploma holders appear online" (Carnevale et al., 2014). Online job ads often do not reveal employers' hiring intentions; it is unknown if employers plan to hire one or multiple workers from a single online job ad or collecting resumes for future hiring needs. A closed job ad may not be the result of a hired worker.

Table 1. 2021 to 2026 job growth, wages, entry-level education, training, and work experience required for glaziers in the Inland Empire/Desert Region (Riverside and San Bernardino Counties combined)

Occupation (SOC)	2021 Jobs	5-Year Change	5-Year % Change	Annual Openings (New + Replacement Jobs)	Entry-Experienced Hourly Wage (10 <sup>th</sup> to 90 <sup>th</sup> percentile)	Median Hourly Wage (50 <sup>th</sup> percentile)	Average Annual Earnings	Entry-Level Education & On-The-Job-Training	Work Experience Required
Glaziers (47-2121)	878	127	15%	124	\$16.76 to \$39.32	\$24.62	\$56,100	High school diploma or equivalent & Apprenticeship	None

Source: Lightcast 2022.2