

Contents

BREIF CONTEXT	1
Impacts of COVID19 – Unemployment	1
RECESSION RESILIENT OCCUPATIONS.....	3
SDCCD Programs that meet Pandemic Resilient Middle-Skill Jobs:.....	3
By greatest labor market demand	3
By SDCCD Institution and then alphabetized by Occupational Title.....	6
RISK OF AUTOMATION	8
High Risk of Automation	8
Medium Risk of Automation	9

BREIF CONTEXT

OUR REGION



Source: <https://www.sandiegobusiness.org/research/>

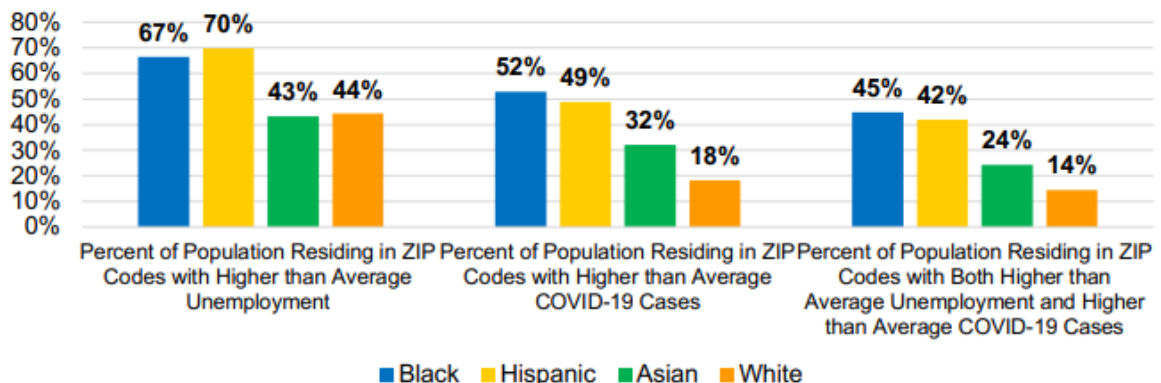


Source: <https://www.sandiegobusiness.org/research/economic-snapshot/>

Impacts of COVID19 – Unemployment

- Nearly 300,000 San Diego County residents lost jobs due to COVID19 (Source: [SANDAG, April 23, 2020, CBS](#))
- Communities in South Bay and central San Diego hit hardest by unemployment (Source: [SANDAG, April 23, 2020, CBS](#))
- Between 22-27% of residents in South Bay and Central San Diego were unemployed in April. (Source: [SANDAG, April 23, 2020, CBS](#))
- As of April, the Logan Heights neighborhood had the highest unemployment rate (26.7%) followed by San Ysidro, City Heights, the College Area, Encanto, Santa Ysabel, and National City. (Source: [SANDAG, April 23, 2020, CBS](#))
- Black and Hispanic Communities Hardest Hit. (Source: https://www.sandag.org/uploads/publicationid/publicationid_4679_27578.pdf)

Figure 1: Impacts by Ethnicity and ZIP Code



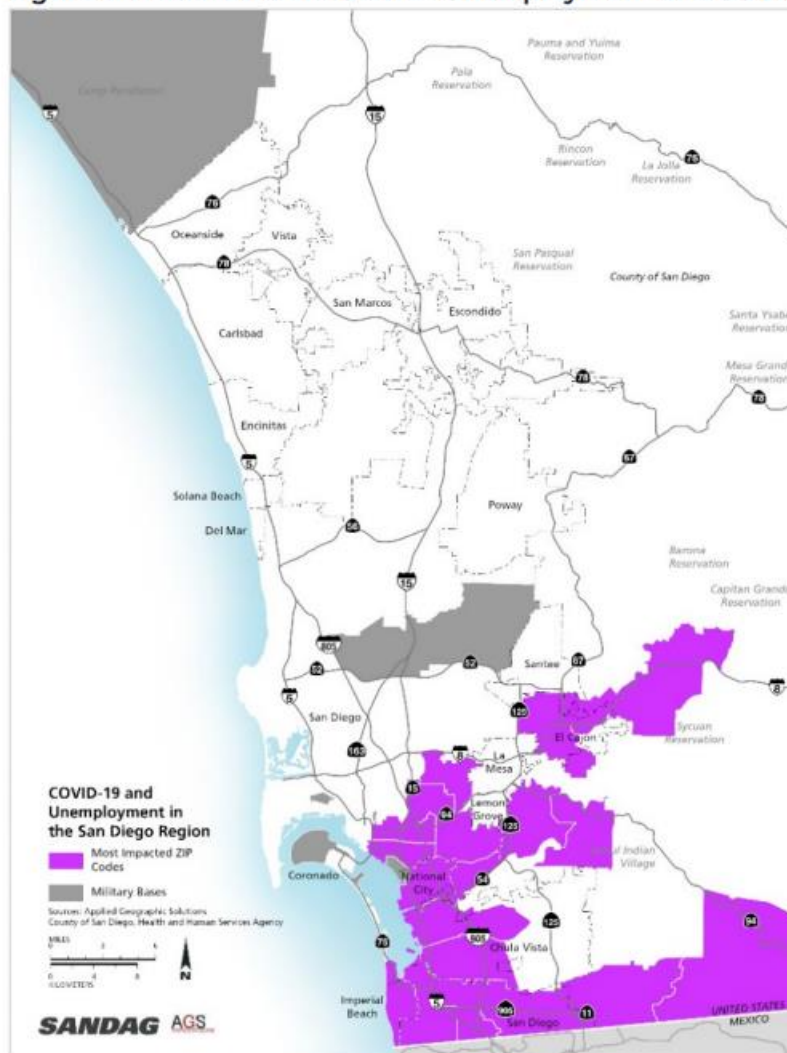
Recession Resilient Jobs - SDCCD Specific Summary

- Most affected zip codes by the level of unemployment (highest is ranked 1) and the percent of COVID19 cases as of SANDAG's June 2020 report. ZIP codes in red denote both above average unemployment rate and above average percentage of COVID-19 cases.

ZIP Codes		Rank Unemployment rate (highest to lowest)	Rank COVID cases (highest % of the population to lowest)
92113	Logan Heights	1	4
92115	College	2	22
92105	City Heights	3	14
92102	Golden Hill	4	8
92173	San Ysidro	5	1
91950	National City	6	3
92054	Oceanside S	7	48
92020	El Cajon	8	6
92114	Encanto	9	7
92096	CSUSM	10	89

(Source: https://www.sandag.org/uploads/publicationid/publicationid_4679_27578.pdf)

Figure 2: Hardest Hit ZIP Codes - Unemployment and COVID-19 Cases



As displayed in Figure 2, SANDAG analysis shows the pandemic has mostly affected residents in the southern part of the county.

This map shows the areas most affected, with both the highest unemployment rates and highest percentage of COVID-19 cases in the region.

ZIP codes most affected:

- 91910 (Chula Vista N)
- 91911 (Chula Vista S)
- 91917 (Dulzura)
- 91932 (Imperial Beach)
- 91950 (National City)
- 91977 (Spring Valley)
- 91978 (Rancho San Diego)
- 92020 (El Cajon)
- 92021 (El Cajon)
- 92102 (Golden Hill)
- 92105 (City Heights)
- 92113 (Logan Heights)
- 92114 (Encanto)
- 92115 (College)
- 92139 (Paradise Hills)
- 92154 (Nestor)
- 92173 (San Ysidro)

Source: Applied Geographic Solutions, Inc., Thousand Oaks, California, Weekly Release June 1, 2020; County of San Diego, Health and Human Services Agency.

Recession Resilient Jobs - SDCCD Specific Summary

- As of April, the Logan Heights neighborhood had the highest unemployment rate (26.7%) followed by San Ysidro, City Heights, the College Area, Encanto, Santa Ysabel, and National City.
- Communities in South Bay and central San Diego hit hardest by unemployment. Between 22-27% of residents in South Bay and Central San Diego were unemployed in April
- “Despite the drop in topline U.S. unemployment rate in June, the number of people whose unemployment shifted from temporary to permanent increased by nearly 600,000, bringing the number of permanently laid off workers to a six-year high. If a similar trend takes hold in San Diego, then the jobs recovery could take longer, because permanently laid off workers are more likely to become discouraged, drop out of the labor force, and lose valuable skills, making them significantly less likely to re-enter the job market. As such, **it is crucial that these workers have ample access to job training to enhance their skills, keep them engaged, and increase the chances that the coming recovery leads to a more inclusive and resilient San Diego economy going forward.**” (source: <https://www.sandiegobusiness.org/blog/economy-in-crisis-another-round-of-uncertainty/>)

RECESSION RESILIENT OCCUPATIONS

Recession-Resilient Jobs - Defined as:

- Annual openings at or above regional average
- Median hourly earners at or above \$15.99
- Less than 6% employment decline between 2007-2010

Based on recent analysis, 64 out of 800 occupational code in the Standard Occupation Classification (SOC) systems met these criteria. 36 of the 64 are middle-skill jobs or jobs that could be trained by community college programs.

Middle-skill Jobs – Defined generally as occupations that require less than a bachelor’s degree but more than a high school diploma as the typical entry-level education.

SDCCD Programs that meet Pandemic Resilient Middle-Skill Jobs:

By greatest labor market demand

Listed in order of *occupations that have the greatest labor market demand* (i.e. annual job openings):

Occupational Title	Related TOP Code & Title	SDCCD Institution
Secretaries and Administrative Assistants, Except Legal, Medical, and Executive	0514.00 Office Technology/Office Computer Applications	San Diego City College San Diego Mesa College San Diego Miramar College San Diego Continuing Education
Registered Nurses	1230.10 Registered Nurses	San Diego City College
Business Operations Specialists	0506.40 Small Business and Entrepreneurship	San Diego City College San Diego Mesa College San Diego Continuing Education
	0506.5 Retail Store Operations and Management	Mesa College

Recession Resilient Jobs - SDCCD Specific Summary

First-Line Supervisors of Office and Administrative Support Workers	1306.00 Nutrition, Foods, and Culinary	San Diego Mesa College San Diego Miramar College San Diego Continuing Education
	1306.30 Culinary Arts	San Diego Mesa College San Diego Continuing Education
Medical Secretaries	0514.20 Medical Office Technology	San Diego Mesa College San Diego Continuing Education
	1208.20 Administrative Medical Assisting	San Diego Continuing Education
Medical Assistants	1208.00 Medical Assisting	San Diego Mesa College
Software Developers, System Software	0707.00 Computer Software Development	San Diego Continuing Education
Police and Sheriff's Patrol Officers	2105.50 Police Academy	San Diego Miramar College
Billing and Posting Clerks	0502.00 Accounting	San Diego City College San Diego Mesa College San Diego Miramar College San Diego Continuing Education
	0504.00 Banking and Finance	San Diego Miramar College
Fitness Trainer and Aerobics Instructors	0835.20 Fitness Trainer	San Diego City College San Diego Mesa College San Diego Miramar College
Inspectors, Testers, Sorters, Samplers, and Weighers	0430.00 Biotechnology and Biomedical Technology	San Diego Miramar College
	0956.00 Manufacturing and Industrial Technology	San Diego City College San Diego Continuing Education
Software Developers, Applications	0702.10 Software Applications	San Diego City College San Diego Continuing Education
Dental Assistants	1240.10 Dental Assistant	San Diego Mesa College
Aircraft Mechanics and Service Technicians	0950.00 Aeronautical & Aviation Technology	San Diego Miramar College
	0950.10 Aviation Airframe Mechanics	San Diego Miramar College
	0950.20 Aviation Powerplant Mechanics	San Diego Miramar College
Computer Occupations, All Other	0614.20 Electronic Game Design	San Diego Mesa College
	0702.00 Computer Information Systems	San Diego Mesa College San Diego Miramar College
	0799.00 Other Information Technology	San Diego Continuing Education
	2206.10 Geographic Information Systems	San Diego Mesa College
Machinists	0956.00 Manufacturing and Industrial Technology	San Diego City College San Diego Continuing Education

Recession Resilient Jobs - SDCCD Specific Summary

	0956.30 Machining and Machine Tools	San Diego City College San Diego Continuing Education
Computer User Support Specialists	0702.00 Computer Information Systems	San Diego Mesa College San Diego Miramar College
	0708.00 Computer Infrastructure and Support	San Diego City College San Diego Continuing Education
	0708.10 Computer Networking	San Diego Continuing Education
	0708.20 Computer Support	San Diego Continuing Education
Clinical Laboratory Technologists and Technicians	0430.00 Biotechnology and Biomedical Technology	San Diego Miramar College
	1205.00 Medical Laboratory Technology	San Diego Miramar College
Installation, Maintenance, and Repair Workers, All Other	0934.00 Electronics and Electric Technology	San Diego City College San Diego Continuing Education
Electrical and Electronics Engineering Technicians	0924.20 Computer Electronics	San Diego City College
	0943.40 Electrical Systems and Power Transmission	San Diego City College
Social and Human Service Assistants	1261.00 Community Health Care Worker	San Diego City College
	2104.00 Human Services	San Diego City College
	2104.40 Alcohol and Controlled Substances	San Diego City College
Paralegals and Legal Assistants	1402.00 Paralegal	San Diego Miramar College
Biological Technicians	0430.00 Biotechnology and Biomedical Technology	San Diego Miramar College
Administrative Services Managers	0501.00 Business and Commerce, General	San Diego Mesa College
	0506.40 Small Business and Entrepreneurship	San Diego City College San Diego Mesa College San Diego Continuing Education
	0514.40 Office Management	San Diego Mesa College
Network and Computer Systems Administrators	0702.00 Computer Information Systems	San Diego Mesa College San Diego Miramar College
	0708.00 Computer Infrastructure and Support	San Diego City College San Diego Continuing Education
	0708.10 Computer Networking	San Diego Continuing Education
	0708.20 Computer Support	San Diego Continuing Education
	0709.00 World Wide Web Administration	San Diego Continuing Education
	0934.30 Telecommunications Technology	San Diego City College

Recession Resilient Jobs - SDCCD Specific Summary

By SDCCD Institution and then alphabetized by Occupational Title

Same content as above list, but organized by SDCCD institution and then alphabetized by occupational title (no longer listed by demand)

SDCCD Institution	Occupational Title	Related TOP Code & Title
San Diego City College	Administrative Services Managers	0506.40 Small Business and Entrepreneurship
	Billing and Posting Clerks	0502.00 Accounting
	Business Operations Specialists	0506.40 Small Business and Entrepreneurship
	Computer User Support Specialists	0708.00 Computer Infrastructure and Support
	Electrical and Electronics Engineering Technicians	0924.20 Computer Electronics
		0943.40 Electrical Systems and Power Transmission
	Fitness Trainer and Aerobics Instructors	0835.20 Fitness Trainer
	Inspectors, Testers, Sorters, Samplers, and Weighers	0956.00 Manufacturing and Industrial Technology
	Installation, Maintenance, and Repair Workers, All Other	0934.00 Electronics and Electric Technology
	Machinists	0956.00 Manufacturing and Industrial Technology
		0956.30 Machining and Machine Tools
	Network and Computer Systems Administrators	0708.00 Computer Infrastructure and Support
		0934.30 Telecommunications Technology
	Registered Nurses	1230.10 Registered Nurses
	Secretaries and Administrative Assistants, Except Legal, Medical, and Executive	0514.00 Office Technology/Office Computer Applications
		1261.00 Community Health Care Worker
		2104.00 Human Services
	Social and Human Service Assistants	2104.40 Alcohol and Controlled Substances
		0702.10 Software Applications
San Diego Mesa College	Software Developers, Applications	0702.10 Software Applications
	Billing and Posting Clerks	0502.00 Accounting
	Administrative Services Managers	0501.00 Business and Commerce, General
		0506.40 Small Business and Entrepreneurship
		0514.40 Office Management
	Business Operations Specialists	0506.40 Small Business and Entrepreneurship
		0506.5 Retail Store Operations and Management
	Computer Occupations, All Other	0614.20 Electronic Game Design
		0702.00 Computer Information Systems
		2206.10 Geographic Information Systems
	Computer User Support Specialists	0702.00 Computer Information Systems
	Dental Assistants	1240.10 Dental Assistant
	First-Line Supervisors of Office and Administrative Support Workers	1306.00 Nutrition, Foods, and Culinary
		1306.30 Culinary Arts

Recession Resilient Jobs - SDCCD Specific Summary

	Fitness Trainer and Aerobics Instructors	0835.20 Fitness Trainer
	Medical Assistants	1208.00 Medical Assisting
	Medical Secretaries	0514.20 Medical Office Technology
	Network and Computer Systems Administrators	0702.00 Computer Information Systems
	Secretaries and Administrative Assistants, Except Legal, Medical, and Executive	0514.00 Office Technology/Office Computer Applications
San Diego Miramar College	Billing and Posting Clerks	0502.00 Accounting
	Aircraft Mechanics and Service Technicians	0950.00 Aeronautical & Aviation Technology
		0950.10 Aviation Airframe Mechanics
		0950.20 Aviation Powerplant Mechanics
	Billing and Posting Clerks	0504.00 Banking and Finance
	Biological Technicians	0430.00 Biotechnology and Biomedical Technology
	Clinical Laboratory Technologists and Technicians	0430.00 Biotechnology and Biomedical Technology
		1205.00 Medical Laboratory Technology
	Computer Occupations, All Other	0702.00 Computer Information Systems
	Computer User Support Specialists	0702.00 Computer Information Systems
	First-Line Supervisors of Office and Administrative Support Workers	1306.00 Nutrition, Foods, and Culinary
	Fitness Trainer and Aerobics Instructors	0835.20 Fitness Trainer
	Inspectors, Testers, Sorters, Samplers, and Weighers	0430.00 Biotechnology and Biomedical Technology
	Network and Computer Systems Administrators	0702.00 Computer Information Systems
	Paralegals and Legal Assistants	1402.00 Paralegal
	Police and Sheriff's Patrol Officers	2105.50 Police Academy
	Secretaries and Administrative Assistants, Except Legal, Medical, and Executive	0514.00 Office Technology/Office Computer Applications
San Diego Continuing Education	Billing and Posting Clerks	0502.00 Accounting
	Administrative Services Managers	0506.40 Small Business and Entrepreneurship
	Business Operations Specialists	0506.40 Small Business and Entrepreneurship
	Computer Occupations, All Other	0799.00 Other Information Technology
	Computer User Support Specialists	0708.00 Computer Infrastructure and Support
		0708.10 Computer Networking
		0708.20 Computer Support
	First-Line Supervisors of Office and Administrative Support Workers	1306.00 Nutrition, Foods, and Culinary
		1306.30 Culinary Arts

Recession Resilient Jobs - SDCCD Specific Summary

	Inspectors, Testers, Sorters, Samplers, and Weighers	0956.00 Manufacturing and Industrial Technology
	Installation, Maintenance, and Repair Workers, All Other	0934.00 Electronics and Electric Technology
	Machinists	0956.00 Manufacturing and Industrial Technology
		0956.30 Machining and Machine Tools
	Medical Secretaries	0514.20 Medical Office Technology
		1208.20 Administrative Medical Assisting
	Network and Computer Systems Administrators	0708.00 Computer Infrastructure and Support
		0708.10 Computer Networking
		0708.20 Computer Support
		0709.00 World Wide Web Administration
	Secretaries and Administrative Assistants, Except Legal, Medical, and Executive	0514.00 Office Technology/Office Computer Applications
	Software Developers, Applications	0702.10 Software Applications
	Software Developers, System Software	0707.00 Computer Software Development

RISK OF AUTOMATION

Recession Resilient Occupations assessed through Burning Glass for “risk of automation”. Burning Glass categorizes occupations by high, medium, and low risk based on their probability of computerization.

High Risk of Automation

Recession Resilient Occupations at High Risk of Automation: *(listed in order of regional demand)*

- Secretaries and Administrative Assistants, Except Legal, Medical, and Executive
- Billing and Posting Clerks
- Inspectors, Testers, Sorters, Samplers, and Weighers
- Paralegals & Legal Assistants

SDCCD Existing Programs Tied to Recession Resilient Occupations at High Risk of Automation		
SDCCD Institution	Occupational Title	Related TOP Code & Title
City College	Billing and Posting Clerks	0502.00 Accounting
	Inspectors, Testers, Sorters, Samplers, and Weighers	0956.00 Manufacturing and Industrial Technology
	Secretaries and Administrative Assistants, Except Legal, Medical, and Executive	0514.00 Office Technology/Office Computer Applications
	Billing and Posting Clerks	0502.00 Accounting

Recession Resilient Jobs - SDCCD Specific Summary

San Diego Mesa College	Secretaries and Administrative Assistants, Except Legal, Medical, and Executive	0514.00 Office Technology/Office Computer Applications
San Diego Miramar College	Billing and Posting Clerks	0502.00 Accounting
		0504.00 Banking and Finance
	Inspectors, Testers, Sorters, Samplers, and Weighers	0430.00 Biotechnology and Biomedical Technology
	Paralegals and Legal Assistants	1402.00 Paralegal
San Diego Continuing Education	Secretaries and Administrative Assistants, Except Legal, Medical, and Executive	0514.00 Office Technology/Office Computer Applications
	Billing and Posting Clerks	0502.00 Accounting
	Inspectors, Testers, Sorters, Samplers, and Weighers	0956.00 Manufacturing and Industrial Technology
	Secretaries and Administrative Assistants, Except Legal, Medical, and Executive	0514.00 Office Technology/Office Computer Applications

Medium Risk of Automation

Recession Resilient Occupations at Medium Risk of Automation: *(listed in order of regional demand)*

- Dental Assistants
- Aircraft Mechanics and Service Technicians
- Machinists
- Clinical Laboratory Technologists and Technicians
- Installation, Maintenance, and Repair Workers, All Other
- Electrical and Electronics Engineering Technicians
- Admin Services Manager

SDCCD Existing Programs Tied to Recession Resilient Occupations At Medium Risk of Automation		
SDCCD Institution	Occupational Title	Related TOP Code & Title
San Diego City College	Administrative Services Managers	0506.40 Small Business and Entrepreneurship
	Electrical and Electronics Engineering Technicians Installation, Maintenance, and Repair Workers, All Other	0924.20 Computer Electronics
		0943.40 Electrical Systems and Power Transmission
		0934.00 Electronics and Electric Technology
	Administrative Services Managers	0501.00 Business and Commerce, General
		0506.40 Small Business and Entrepreneurship
		0514.40 Office Management
	Dental Assistants	1240.10 Dental Assistant
	Aircraft Mechanics and Service Technicians	0950.00 Aeronautical & Aviation Technology
		0950.10 Aviation Airframe Mechanics
		0950.20 Aviation Powerplant Mechanics

Recession Resilient Jobs - SDCCD Specific Summary

	Clinical Laboratory Technologists and Technicians	0430.00 Biotechnology and Biomedical Technology
		1205.00 Medical Laboratory Technology
	Administrative Services Managers	0506.40 Small Business and Entrepreneurship
	Installation, Maintenance, and Repair Workers, All Other	0934.00 Electronics and Electric Technology
	Machinists	0956.00 Manufacturing and Industrial Technology
		0956.30 Machining and Machine Tools