



FOR PROGRAM RECOMMENDATION

# PUBLIC SAFETY DISPATCHERS IN THE NORTH FAR NORTH

North (Greater Sacramento)
Center of Excellence

**NOVEMBER 2022** 

# TABLE OF CONTENTS

Summary	3
Introduction	4
Occupational Demand	5
Wages	6
Job Postings	7
Occupations and Job Titles	7
Employers	8
Certifications, Skills, and Experience	10
Education and Training	12
Educational Supply	12
Public Safety Dispatcher Training	12
Findings	15
Recommendations	16
Appendix A. Methodology and Sources	18
Appendix B. Glossary of Key Terms	19

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#### **SUMMARY**

The North (Greater Sacramento) of Excellence for Labor Market Research prepared this report to provide a labor market analysis of educational supply and occupational demand for middle-skilled career pathways in the North (Greater Sacramento) subregion. This report aims to determine if demand in the local labor market is unmet by the supply from existing community college programs and other postsecondary training providers.

This report primarily focuses on training that leads to jobs in middle-skilled occupations - jobs that typically require education beyond a high school diploma but less than a bachelor's degree - but may include higher-skilled occupations for training pathways that lead to a bachelor's degree. Lowered skilled occupations are rarely considered in this analysis due to the lessened barriers for entry-level work, such as no formal education and on-the-job training requirements.

#### Key findings include:

- The North Far North held 1,097 public safety dispatcher jobs in 2021. These jobs are projected to increase by 5% over the next five years, adding 51 new jobs to the region by 2026.
- Over the next five years, public safety dispatcher jobs are projected to have 112 annual openings in the North Far North.
- Analysis of wage data shows that public safety dispatchers in the North and Far North earn an hourly entry-level wage above the single adult living wage.
- According to a 2020 interview with the Sacramento Police Department training coordinator, additional dispatch training programs would be welcome in the region.

#### Recommendations include:

• The North (Greater Sacramento) Center of Excellence recommends caution in developing new public safety dispatcher programs. Community colleges should work closely with local employers to determine the level of training needed for public safety dispatchers in different agencies (police, fire, and emergency medical services).

### INTRODUCTION

The North (Greater Sacramento) Center of Excellence (COE) was asked to provide labor market information for a proposed program at a regional community college. This report focuses on the following Standard Occupational Classification (SOC) occupations and codes:

- These middle-skill occupations require more education and training beyond a high school diploma but less than a four-year degree:
  - o Public Safety Telecommunicators (43-5031)

The Public Safety Telecommunicators' occupation is not formally associated with any current Taxonomy of Programs (TOP) code or Classification of Instructional Programs (CIP) code.

# OCCUPATIONAL DEMAND

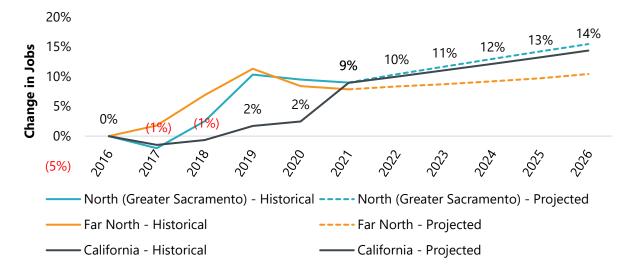
Exhibit 1 summarizes the five-year projected job growth for middle-skill and high-skill occupations in the North, North/Far North, and California.

**Exhibit 1. Employment and projected demand, 2021-2026** 

Occupation	2021 Jobs	2026 Jobs	2021-2026 Change	2021-2026 % Change	2021-2026 Annual Openings
Public Safety Telecommunicators	685	726	41	6%	72
North (Greater Sacramento)	685	726	41	6%	72
Public Safety Telecommunicators	412	422	10	2%	40
Far North	412	422	10	2%	40
Public Safety Telecommunicators	1,097	1,1487	51	5%	112
North Far North	1,097	1,1487	51	5%	112
Public Safety Telecommunicators	7,944	8,339	395	5%	819
California	7,944	8,339	395	5%	819

Exhibit 2 compares the percent change in jobs between 2016 through 2021 and the projected changes through 2026. The rate of change is indexed to the total number of jobs in 2016.

Exhibit 2. Changes in employment, 2016-2026



#### **WAGES**

Exhibit 3 compares the entry-level, median, and experienced wages for the selected occupations to the North (Greater Sacramento) living wage<sup>1</sup> for a single adult (\$14.53 per hour) and a small family<sup>2</sup> (\$28.12 per hour).

Exhibit 3. Comparison of wages by occupation, 2021



<sup>&</sup>lt;sup>1</sup> Living wage is defined as the level of income a single adult with no children must earn to meet basic needs, including food, housing, transportation, healthcare, taxes, and other miscellaneous basic needs. Please note that the 25th-percentile and 75th-percentile hourly wages are used as proxy for entry-level and experienced-level wages.

<sup>2</sup> A small family is defined as a single adult and one school aged child (between the ages of 5 and 12 years).

#### JOB POSTINGS

This section analyzes recent data from online job postings (real-time LMI). Online job postings may provide additional insight into recent changes in the labor market that are not captured by historical trends.

The North COE identified 227 online job postings for public safety dispatchers across the North Far North region. Job posting data comes from Lightcast (formerly Emsi Burning Glass Labor) and represents new listings posted online within the last year, from December 1, 2021, to November 30, 2022.

#### Occupations and Job Titles

Exhibit 4 details the number of online job postings for the selected occupations.

**Exhibit 4.** Number of job postings by occupation

Occupation	Job Postings	Share of Job Postings
Public Safety Telecommunicators	227	100%
Total Job Postings	227	100%

Exhibit 5 shows the number and share of job postings by county in the North and the Far North subregions.

**Exhibit 5.** Job postings by North Far North county

North	Job Postings	Far North	Job Postings
Sacramento	96	Humboldt	14
Yolo	36	Plumas	7
El Dorado	17	Butte	7
Sutter	8	Mendocino	6
Placer	7	Siskiyou	5
Nevada	6	Colusa	5
Yuba	1	Shasta	3
		Lake	3

North	Job Postings	Far North	Job Postings
		Tehama	2
		Sierra	1
		Lassen	1
		Glenn	1
		Del Norte	1
North Totals	171	Far North Totals	56

#### **Employers**

Exhibit 6 shows the top 10 employers with the most job postings in the North and Far North subregions.

**Exhibit 6.** Employers with the most job postings

North	Job Postings	Far North	Job Postings
City of Sacramento	9	State of California	13
County Of El Dorado	8	County of Colusa	5
City Of Elk Grove	8	Enloe Medical Center	5
Transdev, Inc	8	City of Eureka	4
United Ambulance Corporation	7	Lake County	3
California State University, Sacramento	7	Cal Poly Humboldt	3
State of California	6	Tehama County	2
Sacramento Sheriff's Department	5	City Of Oroville	2
Los Rios Community College District	5	City of Arcata	2

North	Job Postings	Far North	Job Postings
Cache Creek Casino Resort	5	Butte County Environmental Health	2

Exhibit 7 shows the top 10 job titles with the most postings by subregion.

**Exhibit 7. Top jobs titles** 

North	Job Postings	Far North	Job Postings
Dispatcher	19	Public Safety Dispatcher, Highway Patrol	13
Dispatcher/Road Supervisor	12	Public Safety Dispatcher	6
Dispatcher I	9	Communications Dispatcher	4
Public Safety Dispatcher, Highway Patrol	8	Public Safety Dispatcher I/II	3
Public Safety Dispatcher	6	Dispatcher Entry Level	2
Dispatch Officer	5	Dispatcher, University Police Department	2
Dispatcher I/II	5	Emergency Vehicle Dispatcher Ems Comm Specialist I	2
Sheriff Public Safety Dispatcher I/II	5	Ems Communications Specialist I	2
Ambulance Dispatcher	4	Police Dispatcher	2
Dispatcher II Lateral	4	Communications Dispatcher - Lateral	1

#### Certifications, Skills, and Experience

Exhibit 8 shows the most relevant certifications requested by employers for the selected occupations.

**Exhibit 8. Most in-demand certifications** 

Certification	Job Postings	Share of Job Postings
Typing Certification	37	16%
Public Safety Certificate	18	8%
First Aid Cpr Aed	16	7%
Emergency Medical Dispatcher	4	2%
Certified Emergency Medical Dispatch	2	1%
Aircraft Dispatcher License	2	1%
Certified Dispatcher	1	0%

Exhibit 9 shows the top 10 skills across three categories for the studied occupations: specialized, foundational, and technical.

**Exhibit 9. Most in-demand specialized skills** 

Top 10 Specialized Skills	Top 10 Foundational Skills	Top 10 Technical Skills
Public Health and Safety	Typing	Computer-Aided Dispatch (CAD)
Computer-Aided Dispatch (CAD)	Communication Skills	Word Processing
Customer Service	Writing	Microsoft Office
Scheduling	Physical Abilities	
Telecommunications	Building Effective Relationships	
Data Entry	Multi-Tasking	
Record Keeping	Computer Literacy	
Warrants	Planning	

Top 10 Specialized Skills	Top 10 Foundational Skills	Top 10 Technical Skills
Emergency Services	Telephone Skills	
Two-Way Radio Operation	Word Processing	

Exhibit 10 shows employers' minimum level of education for job postings for the selected occupations.

**Exhibit 10.** Employer-preferred minimum education levels

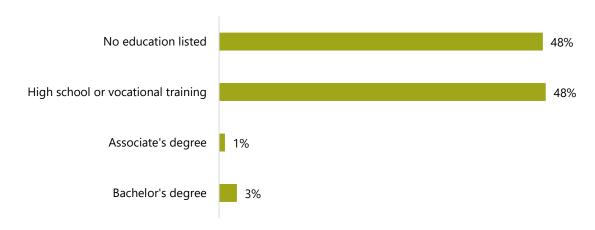
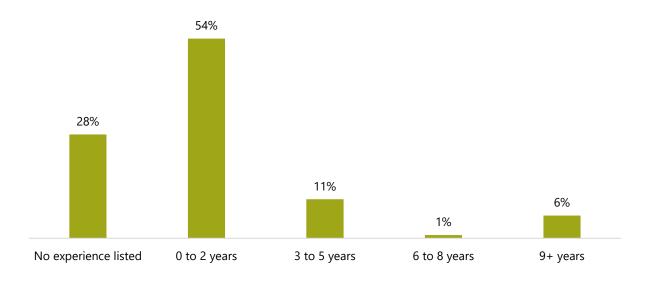


Exhibit 11 shows the experience levels required by employers for job postings for the selected occupations.

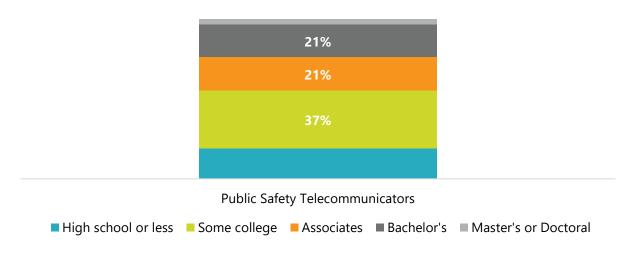
**Exhibit 11. Employer-preferred experience levels** 



#### **EDUCATION AND TRAINING**

The U.S. Census Bureau collects education data from workers employed in occupations. Exhibit 12 shows the state-level educational attainment of the current workforce in the selected occupations.

Exhibit 12. California worker educational attainment for selected occupations, 2019



The Bureau of Labor Statistics (BLS) uses a system to assign categories for entry-level education, work experience in a related occupation, and typical on-the-job training to each occupation for which the BLS publishes projections data. Exhibit 13 shows the selected occupations' entry-level job requirements.

Exhibit 13. Typical education, work experience, and on-the-job training requirements

Occupation	Typical Entry-level	Work Experience	On-the-job Training
	Education	Required	Required
Public Safety	High school diploma	None	Moderate-term on-
Telecommunicators	or equivalent		the-job training

#### **EDUCATIONAL SUPPLY**

#### **Public Safety Dispatcher Training**

The Public Safety Telecommunicators occupation is not formally associated with any current Taxonomy of Programs (TOP) code or Classification of Instructional Programs (CIP) code. A survey of North Far North community colleges, the Chancellor's Office Curriculum Inventory

System (COCI), and the California Commission on Peace Officer Standards and Training (POST) revealed several regional and state training programs.

- American River College (North subregion) offers several dispatcher programs through its
   <u>Public Safety Training Center</u>. Classes include a six-unit POST-certified basic public safety
   dispatch course, advanced dispatch courses, and specialty radio and communications
   training certifications. However, most of these courses are for law enforcement-affiliated
   job candidates.
- Butte College (Far North subregion) offers a program through its <u>Public Safety Education</u>
   <u>& Training Center</u>, a <u>6.5-unit POST dispatcher course</u>. This course is for law enforcement-affiliated job candidates only.
- Napa Valley College (Bay area) offers a 15-unit <u>911 Dispatcher</u> certificate through its Administration of Justice department.
- Moreno Valley College (Inland Empire) offers a 6-unit <u>120-hour public safety dispatch</u> <u>academy</u> in collaboration with the Riverside Sheriff's Department and POST. The training is for entry-level law enforcement dispatchers and complaint desk telephone operators.

The California Commission on Peace Officer Standards and Training (POST) maintains a list of 120-hour basic public safety dispatcher courses. Exhibit 14 is a summary of upcoming classes through September 2023. Many of these courses are affiliated with a California Community College, and most are not certificate programs.

Exhibit 14. Upcoming POST 120-hour Basic Public Safety Dispatcher courses, 2023<sup>3</sup>

Location	CCCCO Region	Training Provider	Dates
Oroville	Far North	Butte College	1/3/2023
Sacramento	North (Greater Sacramento)	Sacramento Police Department	1/9/2023
Whittier	Los Angeles	Rio Hondo Regional Training Center	1/17/2023 4/3/2023
San Jose	Bay Area	South Bay Regional Training Consortium	1/23/2023 2/27/2023 4/17/2023
San Diego	San-Diego Imperial	San Diego County Sheriff's Department	1/23/2023

<sup>&</sup>lt;sup>3</sup> Source: California POST Course Catalog, "Dispatcher, Public Safety (Basic) courses," accessed December 5, 2022. <a href="https://catalog.post.ca.gov/Default.aspx">https://catalog.post.ca.gov/Default.aspx</a>

Location	CCCCO Region	Training Provider	Dates
Windsor	Bay Area	Santa Rosa Junior College Public Safety Training Center	2/27/2023 9/11/2023
Riverside	Inland Empire/Desert	Riverside County Sheriff's Department	3/6/2023 5/1/2023
Fresno	Central Valley-Motherlode	State Center Regional Training Facility Fresno City College	3/6/2023
ONLINE Webinar	Orange County	Golden West College – Regional CJTC	5/8/2023
Napa	Bay Area	Napa Valley College – Criminal Justice Training Center	5/8/2023

#### **FINDINGS**

- This report focuses on one occupation in the dispatcher career pathway: public safety telecommunicators, also known as public safety dispatchers.
- The North Far North held 1,097 public safety dispatcher jobs in 2021. These jobs are projected to increase by 5% over the next five years, adding 51 new jobs to the region by 2026.
  - About 60% of public safety dispatcher jobs are in the North (Greater Sacramento) subregion, while 40% are in the Far North.
  - Jobs for public safety dispatchers are projected to grow faster in the North (6%) than in the Far North (2%).
- Jobs for public safety dispatchers are projected to grow at the same rate in the North Far North as in California.
- Over the next five years, public safety dispatcher jobs are projected to have 112 annual openings in the North Far North.
  - There will be 72 annual job openings for public safety dispatchers in the North subregion.
  - There will be 40 annual job openings for public safety dispatchers in the Far North.
- Analysis of wage data shows that public safety dispatchers in the North and Far North earn an hourly entry-level wage above the single adult living wage, \$27.90 and \$20.39, respectively.
- According to real-time labor market information, there were about 141 online job postings for public safety dispatchers between November 1, 2021, and October 31, 2022.
  - Twenty-three percent of job postings were in the Far North, while the remaining 76% were in the North (Greater Sacramento).
  - Most job postings (52%) are considered entry-level, with fewer than two years of work experience required.
- Employers with the most job postings for public safety dispatchers are overwhelmingly
  governmental or public-serving agencies, like the City of Elk Grove in the North or Cal
  Poly Humbodlt in the Far North. Although public institutions seem to carry the most
  demand for public safety dispatchers, job postings were also found with healthcare and
  transportation/logistics employers.
- Commonly requested skills across the job postings include knowledge of public health and safety systems (including geographical boundaries of the service area), typing (minimum of 40-45 words per minute), and the ability to use Computer-Aided

- Dispatching (CAD) systems. Other frequently mentioned skills include Applying emergency medical and fire dispatching techniques and procedures and demonstrating the ability to operate a radio, computer, and telecommunications equipment.
- Fifty-eight percent of incumbent public safety dispatchers in California have educational attainment levels consistent with community college offerings (some college or associate degrees).
- The public safety telecommunicator occupation is not formally associated with any current Taxonomy of Programs (TOP) code or Classification of Instructional Programs (CIP) code. However, American River College and Butte College in the North Far North region offer a 6-unit POST-certified basic public dispatcher course through their public safety training centers.
- A 2020 analysis of public safety dispatcher programs in the Greater Sacramento region found that American River and Butte college's basic dispatch programs were offered twice a year with space for 32 students in each course. However, these students can come from different parts of the state as law enforcement agencies send job candidates to training centers with open seats. Time is also a factor; law enforcement agencies will send candidates to the soonest available training option.
- The 2020 analysis also found that individuals not affiliated with law enforcement often have to wait for spaces to become available at public safety training centers, as priority is given to law enforcement-affiliated job candidates.

#### **RECOMMENDATIONS**

- There seems to be skill overlap for public safety dispatchers (law enforcement, fire, and medical) and non-public safety dispatchers, suggesting that both occupations could be trained in the same program. However, training requirements for law enforcement dispatchers are governed by state law (<u>CCR 1018</u>) and managed by the California Commission on Peace Officer Standards and Training (<u>POST</u>).
  - Law enforcement dispatchers must complete a minimum of 120 hours of training.
     Law enforcement-affiliated dispatcher candidates and entry-level hires must
     attend and complete a POST-certified public safety dispatch course.
  - Not all fire and emergency medical dispatcher job postings require POST certification. However, many Far North postings show a preference for the certification, and some employers (like the City of Eureka) offer higher wages for intermediate and advanced POST public safety dispatcher certifications.

- The training requirements for non-public safety dispatchers seem to be less formal. Among these job postings, many entry-level positions (such as those for call takers) indicated that on-the-job training would be the primary means of learning to perform job functions. According to these job postings, the ideal candidate has a minimum of one year of customer service experience and at least one year of dispatch experience.
- According to a 2020 interview with the Sacramento Police Department training
  coordinator, another dispatch training program would be welcome in the region. Few
  public safety centers offer training to non-affiliated job candidates, and the waitlist for
  these candidates can be years long. Public safety agencies seem to need additional
  training options, and program enrollment could come from different parts of the state,
  depending on agency training needs.
- The North (Greater Sacramento) Center of Excellence recommends community colleges work with local public safety agencies to determine the level of training needed for public safety dispatchers.
- The North (Greater Sacramento) Center of Excellence recommends community colleges proceed with caution in developing new public safety dispatcher training programs.

New Program Recommendation				
Move forward with the new program	Proceed with caution	A new program is not recommended		
	$\boxtimes$			

#### APPENDIX A. METHODOLOGY AND SOURCES

This report identified Occupations using the Center of Excellence TOP-to-CIP-to-SOC crosswalk and O\*Net OnLine. This report's findings were determined using labor market data from the Bureau of Labor Statistics (BLS), U.S. Census Bureau data from Emsi, and jobs posting data from Burning Glass.

- Lightcast (Formerly EMSI/Burning Glass) 2022.3; QCEW Employees, Non-QCEW Employees, and Self-Employed. <a href="https://www.economicmodeling.com/">https://www.economicmodeling.com/</a>. Note: EMSI occupational 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).
- Integrated Postsecondary Education Data System (IPEDS). National Center for Education Statistics. U.S. Department of Education. <a href="https://nces.ed.gov/ipeds/">https://nces.ed.gov/ipeds/</a>.
- Labor Market Information Division. California Employment Development Department. <a href="https://labormarketinfo.edd.ca.gov/">https://labormarketinfo.edd.ca.gov/</a>.
- Management Information Systems (MIS) Data Mart. California Community Colleges Chancellor's Office. <a href="https://datamart.ccco.edu/">https://datamart.ccco.edu/</a>.
- O\*NET OnLine. U.S. Department of Labor/Employment and Training Administration (DOL ETA). <a href="https://www.onetonline.org/">https://www.onetonline.org/</a>.
- Public Use Microdata Sample (PUMS). U.S. Census Bureau American Community Survey (ACS). <a href="https://www.census.gov/programs-surveys/acs/microdata.html">https://www.census.gov/programs-surveys/acs/microdata.html</a>
- Self-Sufficiency Standard Tool for California. The University of Washington. http://www.selfsufficiencystandard.org/
- "Taxonomy of Programs." California Community Colleges Chancellor's Office. June 2012, 6<sup>th</sup>
  Edition. <a href="https://www.ccco.edu/-/media/CCCCO-Website/About-Us/Divisions/Educational-Services-and-Support/Academic-Affairs/What-we-do/Curriculum-and-Instruction-Unit/Files/TOPmanual6200909corrected12513pdf.ashx</a>
- "TOP-CIP-SOC Crosswalk." Centers of Excellence for Labor Market Research. June 2021 Edition. <a href="http://coeccc.net/">http://coeccc.net/</a>

## APPENDIX B. GLOSSARY OF KEY TERMS

Key Terms	Definition
Occupation	Occupation refers to professions, or careers, in the workforce. Occupations differ from jobs in that jobs show the number of positions held in a given occupation.
Jobs	A job is any position where a worker provides labor for monetary compensation.  Job numbers include employees (those who work for businesses) and proprietors
	(those who work for themselves). Full- and part-time jobs are included and counted equally (i.e., not adjusted to full-time equivalents). Data for jobs, or employment, are annual averages.
Job Change	Job change is the net increase or decrease of jobs over a given timeframe.
Job Openings	Job openings are the projected number of positions available for workers entering an occupation.
	Openings include growth and replacement jobs. Growth jobs are the positive change in the total number of workers employed. Replacement jobs are the estimates of new workers needed to replace workers permanently leaving the occupation.
Wages	Wages, or compensation, show workers' percentile and average earnings in a given occupation. The 25th-percentile and 75th-percentile hourly wages are used as a proxy for entry-level and experienced-level wages.
Living Wage	The living wage is the level of income a single adult with no children must earn to meet basic needs. The living wage is calculated using basic levels of allowances for food, housing, transportation, healthcare, taxes, and other miscellaneous basic needs.
Educational Attainment	Educational attainment is the level of education achieved by workers in a given occupation. The data includes workers aged 25 years and older.
Typical Entry-level Education	The education level generally required for employment in an occupation. It may differ from the actual educational levels attained by workers in any given occupation.
Work Experience Required	The level of prior experience a worker needs to enter a job in a given occupation.
On-the-job Training Required	The level of on-the-job training a worker needs to obtain competency in a given occupation.
Awards	Awards are the number of certificates and degrees conferred for a specific course of study in a given year. Awards counts "papers" and, as a result, may be greater than the actual number of students who complete a program.

**COVID-19 Statement:** This report includes employment projection data by EMSI. EMSI's projections are modeled on recorded (historical) employment figures and incorporate several underlying assumptions, including the assumption that the economy during the projection period will be at approximately full employment or potential output. To the extent that a recession or labor shock, such as the economic effects of COVID-19, can cause long-term structural change, they may impact the projections. At this time, it is not possible to quantify the impact of COVID-19 on projections of industry and occupational employment. Other measures such as unemployment rates and monthly industry employment estimates will reflect the most recent information on employment and jobs in the state and, in combination with input from local employers, may help validate current and future employment needs as depicted here.



Important Disclaimer: All representations included in this report have been produced from primary research and/or secondary review of publicly and/or privately available data and/or research reports. Efforts have been made to qualify and validate the accuracy of the data and the reported findings; however, neither the Centers of Excellence, COE host District, nor California Community Colleges Chancellor's Office are responsible for applications or decisions made by recipient community colleges or their representatives based upon components or recommendations contained in this study.

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