



Program Endorsement Brief:

College of the Redwoods: Automotive Maintenance and Light Repair
North/Far North Center of Excellence, January 2019

INTRODUCTION

College of the Redwoods is considering a new, one-year Automotive Maintenance and Light Repair Certificate of Achievement that stacks onto their two-year Advanced Automotive Certificate. This program would include the skills and knowledge necessary for students to gain entry into the industry. This report provides a brief overview of labor market demand and supply for automotive service technicians and mechanics in the North/Far North regions and the sub-region comprising Del Norte, Humboldt, Mendocino, and Trinity counties.

Key findings include:

- Projected occupational growth is modest at 4% for the four-county sub region and the Far North.
- Entry-level and median hourly wages for both occupations are below the Humboldt county average living wage, though 75th percentile wages approach living wage.
- Based on the three-year average number of program completions for colleges in the Far North region (54 certificates and 19 degrees) and projected annual openings of 215 through 2022, there appears to be a gap in supply.

Findings in this report were determined using labor market data from EMSI and Burning Glass. Education supply data is sourced from the Community College Chancellor's Office MIS via Datamart and Launchboard.

This report contains the following sections:

- Occupational demand
- Wages and job postings
- Most requested skills
- Educational attainment and supply, and
- Findings and recommendations

OCCUPATIONAL DEMAND

The following Standard Occupational Classification (SOC) code was analyzed in relation to the proposed program¹:

49-3023: Automotive Service Technicians and Mechanics

Diagnose, adjust, repair, or overhaul automotive vehicles

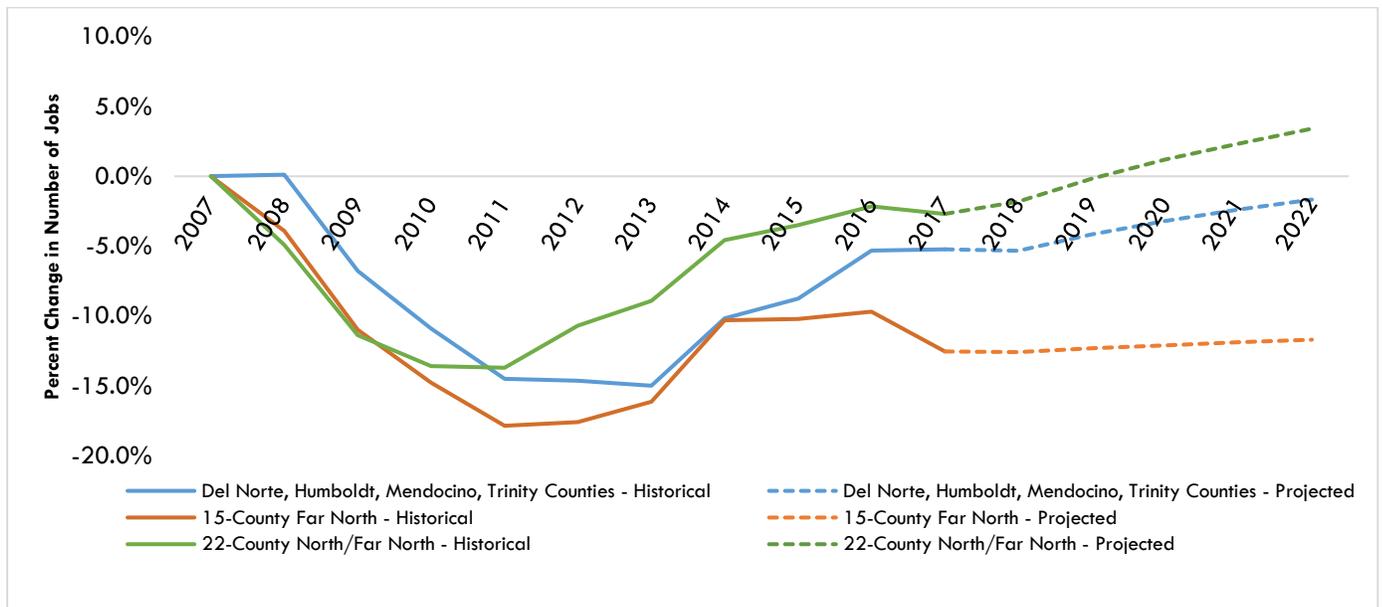
Exhibit 1 summarizes job trends per the SOC code in Del Norte, Humboldt, Mendocino, and Trinity counties, the 15-county Far North region, and the 22-county North/Far North region.

Exhibit 1: Auto Service Technicians and Mechanics employment and occupational demand²

| Geography | 2007 Jobs | 2017 Jobs | 2022 Jobs | 2017-22 Jobs % Change | Annual Openings |
|--|-----------|-----------|-----------|-----------------------|-----------------|
| Del Norte, Humboldt, Mendocino, and Trinity counties | 759 | 720 | 747 | 4% | 73 |
| 15-County Far North Region | 2,515 | 2,199 | 2,220 | 4% | 215 |
| 22-County North/Far North Region | 8,562 | 8,332 | 8,854 | 6% | 898 |

Exhibit 2 shows the percentage change in number of jobs between 2007 through 2017 and occupational projections from 2017 through 2022. The rate of change is indexed to the total number of jobs in 2007 as the base year and compares Del Norte, Humboldt, Mendocino, and Trinity Counties, the 15-county Far North region, and the 22-county North/Far North region.

Exhibit 2: Rate of change for selected occupations³



¹ <https://www.onetonline.org>

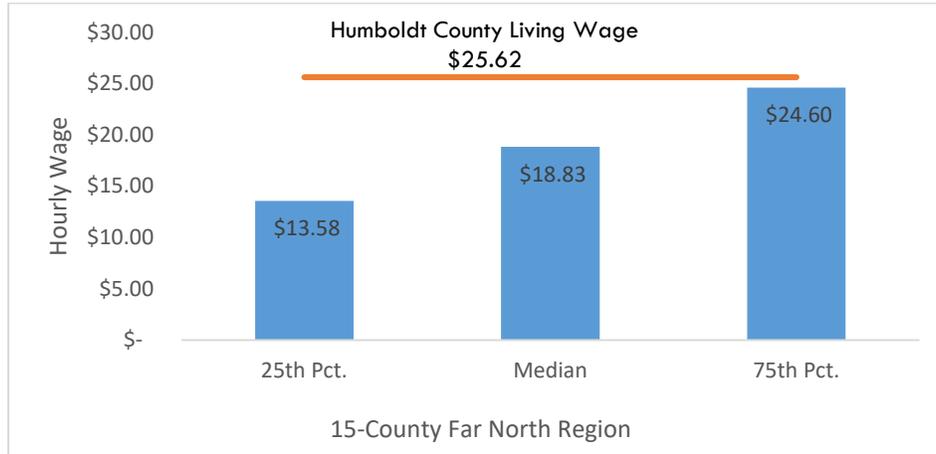
² Emsi 2018.4; QCEW Employees, Non-QCEW Employees and Self-Employed. The fifteen-county Far North region includes Butte, Colusa, Del Norte, Glenn, Humboldt, Lake, Lassen, Mendocino, Modoc, Plumas, Shasta, Sierra, Siskiyou, Tehama and Trinity. The 22-county North/Far North region includes the aforementioned counties as well as El Dorado, Placer, Nevada, Sacramento, Sutter, Yolo and Yuba.

³ Ibid.

WAGES AND JOB POSTINGS

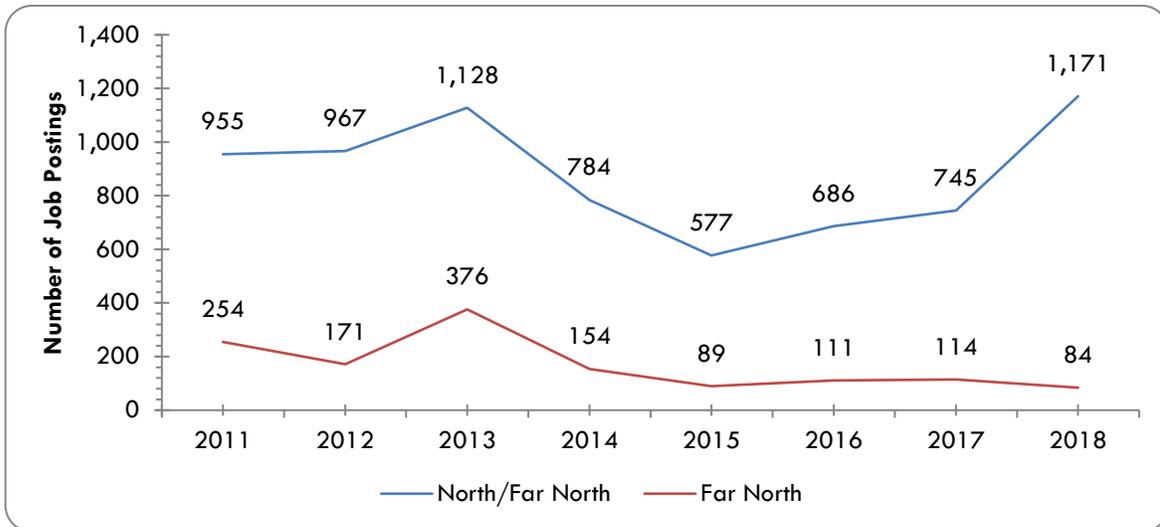
Exhibit 3 displays hourly wages for auto technicians in the Far North region compared to the Humboldt County living wage for a one-adult, one-child household.⁴ In the Far North region, 75th percentile wages are just below the average living wage.

Exhibit 3: Wages for selected occupations⁵



Burning Glass data for job postings for the representative SOC code identified a pool of 1,214 listings in the North/Far North region during the past year. The majority of job postings in the North/Far North region are located in the Greater Sacramento area. Exhibit 4 shows job posting trends since 2011 by occupation for each region.

Exhibit 4. Job posting trends for selected occupations⁶



⁴ Living Wage Calculator: Counties and Metropolitan Statistical Areas in California, <http://livingwage.mit.edu/states/06/locations>.

⁵ Emsi 2018.4.

⁶ Burning Glass.

Exhibit 5 displays the skills most requested by employers in the 15-county Far North region during the 12 month period of February 2018 through January 2019. Of the 87 postings, there were 81 records that included skills data. As a result, the table below may not be representative of the full sample.

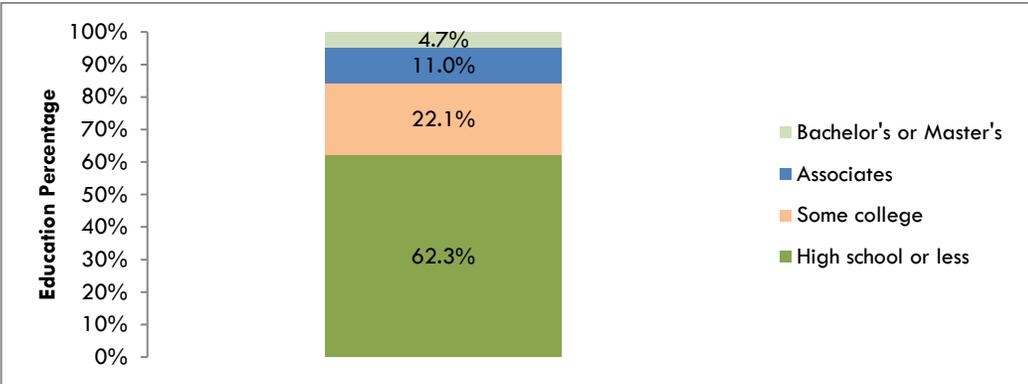
Exhibit 5. Top skills desired for auto technicians⁷

| Most requested skills | Percent (n=81) |
|--|----------------|
| Repair | 79% |
| Auto Repair | 50% |
| Customer Service | 33% |
| Automotive Services Industry Knowledge | 31% |
| Vehicle Maintenance | 21% |
| Customer Contact | 15% |
| Automotive Industry Knowledge | 14% |
| Hand Tools | 10% |
| Predictive/Preventative Maintenance | 10% |
| Lifting Ability | 8% |
| Battery Testing and Installation | 7% |

EDUCATIONAL ATTAINMENT AND SUPPLY

At the national level, auto technicians are not required to have advanced education for an entry-level position. Exhibit 6 shows educational attainment percentages of all workers in the industry.

Exhibit 6. Typical educational attainment for selected occupations nationally⁸



To estimate supply, this study used the Taxonomy of Programs (TOP) code that relates to auto technicians, Automotive Technology (0948.00). There are 5 schools in the Far North region that awarded certificates or associate degrees related to this TOP code during the previous three years. The present supply data does not show results from private training providers.

⁷ Ibid.

⁸ Current Population Survey, Educational Attainment for Workers 25 Years and Older by Detailed Occupation, 2016-17, https://www.bls.gov/emp/ep_table_111.htm.

Exhibits 7a and 7b show the number of awards conferred by Far North community colleges during the past three academic years. Certificates are the primary award received by students.

Exhibit 7a: Total awards conferred by Far North community colleges, 2015-2018⁹

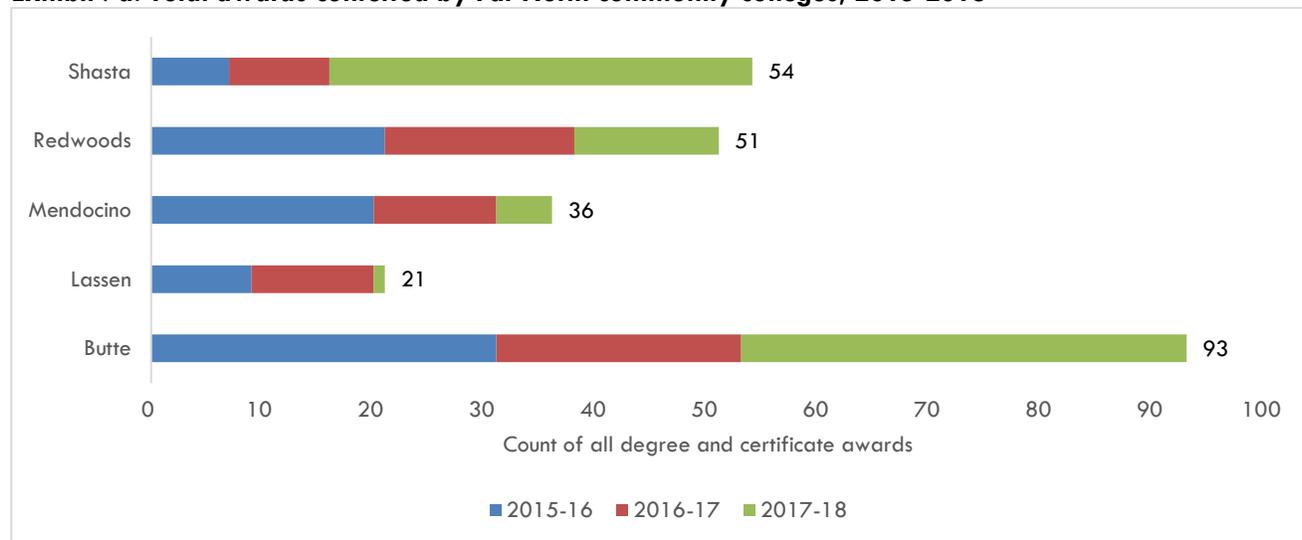


Exhibit 7b: Annual awards conferred by Far North community colleges, 2015-2018¹⁰

| | Certificate | | | | Associate Degree | | | |
|--------------|-------------|-----------|-----------|-----------|------------------|-----------|-----------|-----------|
| | 2015-16 | 2016-17 | 2017-18 | 3-Yr Avg | 2015-16 | 2016-17 | 2017-18 | 3-Yr Avg |
| Butte | 23 | 15 | 28 | 23 | 8 | 7 | 12 | 8 |
| Lassen | 3 | 5 | 0 | 3 | 6 | 6 | 1 | 4 |
| Mendocino | 16 | 5 | 4 | 8 | 3 | 2 | 1 | 2 |
| Redwoods | 11 | 2 | 2 | 5 | 2 | 0 | 1 | 1 |
| Shasta | 7 | 6 | 34 | 16 | 0 | 3 | 4 | 3 |
| Total | 60 | 33 | 68 | 54 | 19 | 18 | 19 | 19 |

FINDINGS AND RECOMMENDATION

- Demand for automotive service technicians and mechanics is projected to be steady through 2022.
- Projected growth for this occupation in the four-county Del Norte, Humboldt, Mendocino, and Trinity county sub-region is stronger than in the Far North.
- The average annual number of awards by colleges in the Far North is 73, which is the same number of projected annual openings for the four-county sub-region. However, annual job openings for the Far North region is projected to be 215, indicating a gap in supply.

⁹ California Community Colleges Chancellor's Office Data Mart, 2/8/19.

¹⁰ Ibid.

COE Recommendation

- Move forward with program
- Program is not recommended
- Additional information needed

APPENDIX A: SOURCES

Sources used for data analysis purposes in this report include:

- U.S. Department of Labor/Employment and Training Administration (DOLETA) O*NET Online
- Burning Glass, Labor Insight/Jobs
- Economic Modeling Specialists, International (EMSI)
- California Employment Development Department, Labor Market Information Division (EDD, LMID)
- California Community Colleges Chancellor's Office Management Information Systems (MIS Datamart)
- California Community Colleges Chancellor's Office, Cal-PASS Plus LaunchBoard

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