

19/20



Employment Training Panel



STRATEGIC PLAN

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ETP's Priority Industries Descriptions

Alternative and Renewable Fuel
and Vehicle Technology Program (ARFVTP)



VISION & MISSION STATEMENTS

The Employment Training Panel will support sustainable economic development and job training in California through strategic partnerships with business, labor, and government.

VISION

The Employment Training Panel provides financial assistance to California businesses to support customized worker training to:

- Attract and retain businesses contributing to a healthy California economy.
- Provide workers secure jobs paying good wages and having opportunities for advancement.
- Assist employers to successfully compete in the global economy.
- Promote benefits and ongoing investment of employee training among employers.

MISSION

INTRODUCTION/ OVERVIEW

Organization

ETP is organized under the Labor and Workforce Development Agency (LWDA) led by a Cabinet-level Secretary which encompasses ETP, the Department of Industrial Relations (DIR), the Employment Development Department (EDD), the Agricultural Labor Relations Board (ALRB), the California Workforce Development Board (CWDB), the Unemployment Appeals Board (UAB), and the Public Employment Relations Board (PERB). ETP retains its autonomy under LWDA, acting independently to disburse funds and set program policy. LWDA promotes opportunities to collaborate and expand workforce training.

ETP is governed by an eight-member labor/management panel, of which, seven are appointed by the Governor and Legislative leaders. The eighth member is the Director of The Governor's Office of Business and Economic Development (GO-Biz) (or a designee) who serves ex-officio as a voting member.² The Panel approves training proposals, adopts program policies and regulations.

Upskilling Californians Since 1982



84 K

businesses have received
received ETP funding

1.2 M

workers trained & retained
for employment

\$1.58B

training funded

Mission

Established in 1982, the Employment Training Panel (ETP) is the state's premier program supporting job creation and retention through training. ETP is funded by a special tax on California employers and differs from other workforce development programs by reimbursing the cost of employer-driven training for incumbent workers and training needed by unemployed workers to re-enter the workforce. ETP-funded training helps ensure California businesses have the skilled workers they need to be competitive. ETP's Annual Reports outline the progress towards its strategic goals. ETP's Annual Reports are available on the ETP website.¹

¹ etp.ca.gov/about-us-2/annual-reports/

² etp.ca.gov/about-us-2/panel-members/

GOALS & OBJECTIVES



1

Enhance Economic Development Coordination

- a. Partner with public and private, State and local economic and workforce development organizations, including GO-Biz, that target projects demonstrating a direct economic impact to the State.
- b. Partner with public and private stakeholders to increase outreach and raise awareness about the ETP program.
- c. Inform legislative members on the availability of training funds for their constituencies.
- d. Work with the Labor and Workforce Development Agency on labor workforce objectives in alignment with the Governor's office.

2

Target Industries that are vital to California's growth

- a. Target program funds to priority industries.
- b. Target program funds to industries contributing to California's growth.
- c. Provide training to California's leading technology sectors.

3

Support for small businesses

- a. Improve outreach to small businesses through partnerships.
- b. Build strategies to guide small businesses towards MECs to improve efficiencies.

4

Support Governor's initiatives

- a. Expand training for all Californians.
- b. Target training projects in rural California, including the Central and Imperial Valleys, and within urban High Unemployment Areas (HUAs).
- c. Support pre-apprenticeship and apprenticeship programs, including expansion to non-traditional sectors.
- d. Support workers returning to/remaining in the labor market.
- e. Expand the Veterans Program.
- f. Support training and job creation to address Climate Change impacts, including supporting green technology and training related to forest fires and drought.
- g. Support integrating formerly incarcerated individuals into the labor market.
- h. Promote industry-recognized certifications and training for career pathways and worker mobility.
- i. Expand services to injured, disabled workers, and workers with barriers to employment.

5

Increase efficiency and effectiveness

- a. Deploy a new data management information system to improve program efficiencies and to ensure comprehensive, seamless data collection and reporting.
- b. Continue to maximize data security and risk management.
- c. Conduct internal evaluation and assessment of program/contracting process.
- d. Partner with the Labor and Workforce Development Agency coordinating workforce services.
- e. Maximize funding through funding priority caps and allocations.

IMPROVEMENTS & FUNDING



Process Improvement & Simplification

ETP is reviewing its policies to improve processes, simplify the program to make it more efficient for customers and stakeholders, and to better align the program with Labor Agency and related programs. Additionally, ETP has contracted with Social Policy Research Associates to evaluate the ETP training programs and survey ETP contractors about their experience with ETP's system and their current and future workforce needs.

ETP is currently developing a new data management information system to improve program efficiencies and ensure comprehensive and seamless data collection and reporting. The consolidation of business systems will also increase the accuracy of reporting data that will allow for the retirement of outdated systems no longer supported by industry, and provide a more efficient and user-friendly experience for both staff and customers.

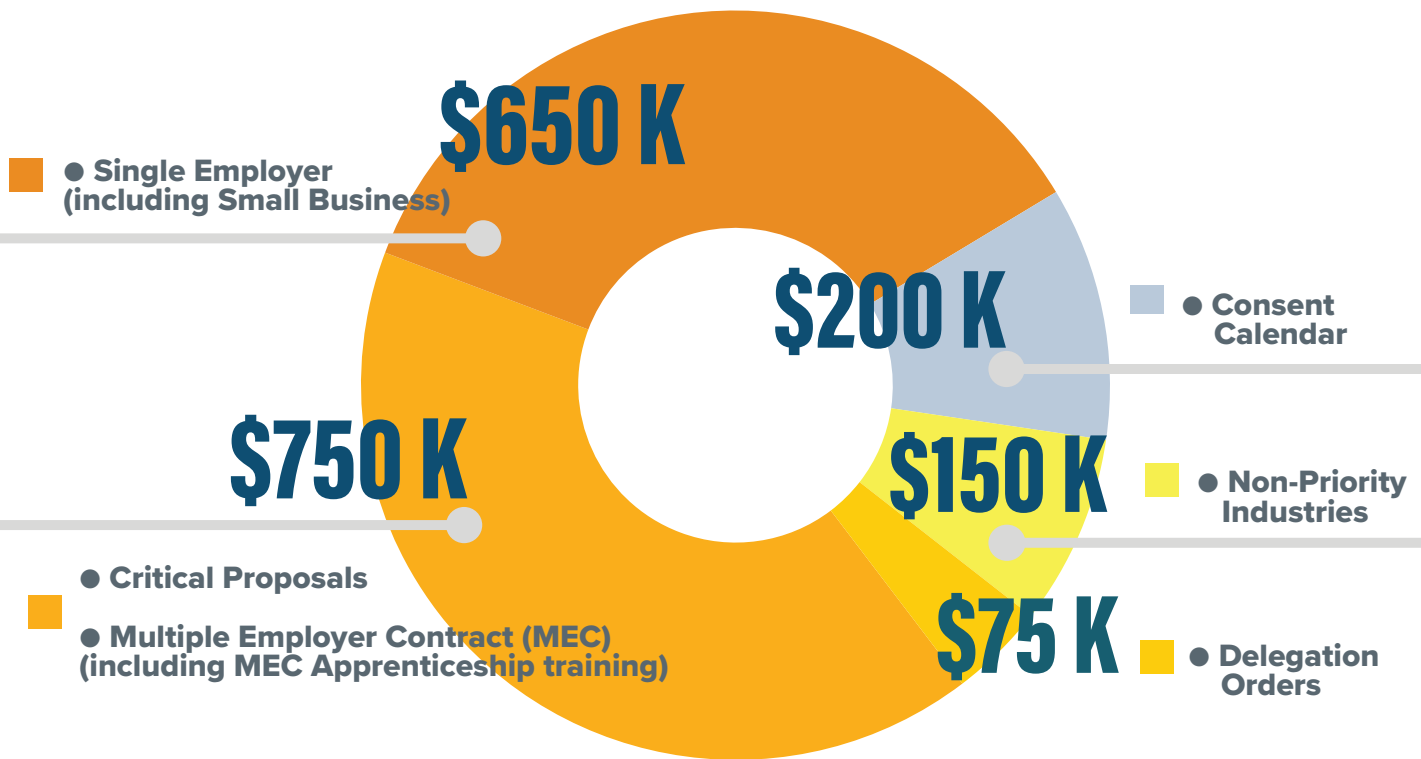
Completed:

- ✓ Formation of ETP Committee to Assist in Policy Making
- ✓ Updated Funding Priorities
- ✓ Established Guidelines for Health Benefits
- ✓ Fixed-Fee Reimbursement Rates
- ✓ Established Repeat Contractor Rule
- ✓ OSHA 10/30 Review
- ✓ Out-of-State Training/Vendor Simplification

In-Progress:

- Assessment of Wage Criteria
- Comprehensive Review of ETP Legislation & Regulations
- Review of Pilots & Guidelines

Funding Caps



AB 118 ARFVTP

Assembly Bill (AB) 118/Alternative Renewable Fuel Vehicle Technology Program (ARFVTP): Caps for this program will be determined on a case-by-case basis.

***DELEGATION ORDER:** An expedited contract approval process by the Executive Director. Proposals approved via Delegation Order are capped at \$75K.

MECs

All MECs are limited to one contract per Fiscal Year.

AMENDMENTS

Amendments must be for Phase II funding only and may only be requested once a contractor has earned 70% on their contract.

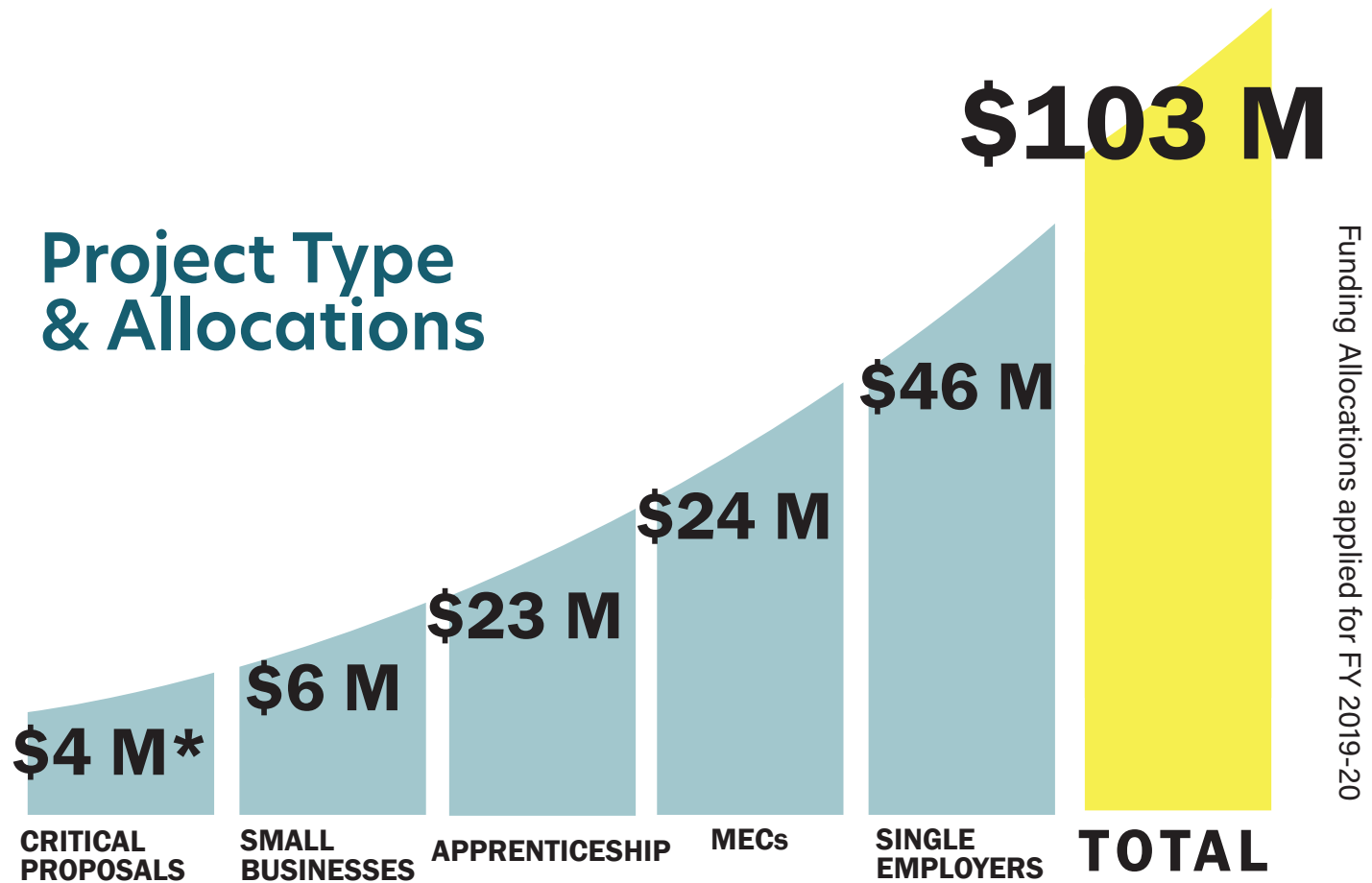
ADJUSTMENTS

The Panel has the authority to adjust caps.

NOTE:

Caps may be adjusted during the fiscal year based on revenue projections.

Funding Allocations



*Critical Proposals may exceed cap on a case-by-case basis with appropriate justification.

Lowest Funding Priorities

- Adult Entertainment - This includes the design, manufacture, distribution, servicing, management or sale of products or services in adult entertainment.
- Car Dealerships - Limited to training mechanics only for Core Funding
- Commission Sales occupations in Retail Trade
- Gambling
- Mortgage Banking – This includes financial and collections institutes.
- Multi-Level Marketing
- Partners & Principals in Professional Firms This includes legal, architectural, engineering, accounting, and tax advising firms.
- Training for Employees of Training Agencies
- Truck Driving Schools

Lowest Funding Priorities are placed on moratorium unless funded by alternate funds (i.e. California Energy Commission funding).



Other Limitations

Repeat Contractor Rules (Pilot)

- Contractors may have 2 contracts without any waiting period.
- After the end of 2nd contract term, contractor must wait 9 months before applying (Pre-Application) for 3rd contract.
- If performance on any contract is below 75%, amount of new contract will be no more than the amount earned under prior contract.
- Both 1st and 2nd contract must reach at least a 75% completion rate before a new Pre-App for a 3rd contract will be accepted
- Repeat Contractor Rule described above starts over with 3rd contract.
- Contractor may earn a maximum of \$2.5M over 4 contracts.
- Critical Proposals, Alternatively Funded Projects, Small Business Projects, and MECs (including JATCs) are exempt from the Repeat Contractor Rule. Any Contractor desiring exemption from the rule may request an exemption with Executive Staff.
- Since MECs are exempt, they must have at least four (4) Participating Employers identified on their contract.

Support Costs

- Multiple Employer Contract (MEC) support costs will be 8% of training costs for retraining and 12% for new hire training.
- Applicants must justify the need for and amount of support costs.

Vendor/Subcontractor

- Vendor/Subcontractor are prohibited from providing both training – and project development or administration.
- This limitation applies to all ETP contractors and training vendors or a vendor that has received an exemption from Executive Staff.

Single Employers

- A maximum of two amendments to add funds to any contract is allowable.
- Total project amount, inclusive of amendments, may not exceed relevant project cap.
- Amendments may not be requested until contractor has earned 70% of contract amount.
- Amendments may be for Phase II funding (new funds and new trainees) only; and ,
- Panel may reduce the requested Amendment amount.

Employer Demand in a MEC

- Multiple Employer Contractors requesting funds for retraining must demonstrate employer demand based on the MEC's prior performance.
- "If prior performance is 80% or more, must demonstrate 60% demand for funding; if prior performance is less than 80%, must demonstrate 80% demand for funding.

All MECs are limited to 1 contract per Fiscal Year

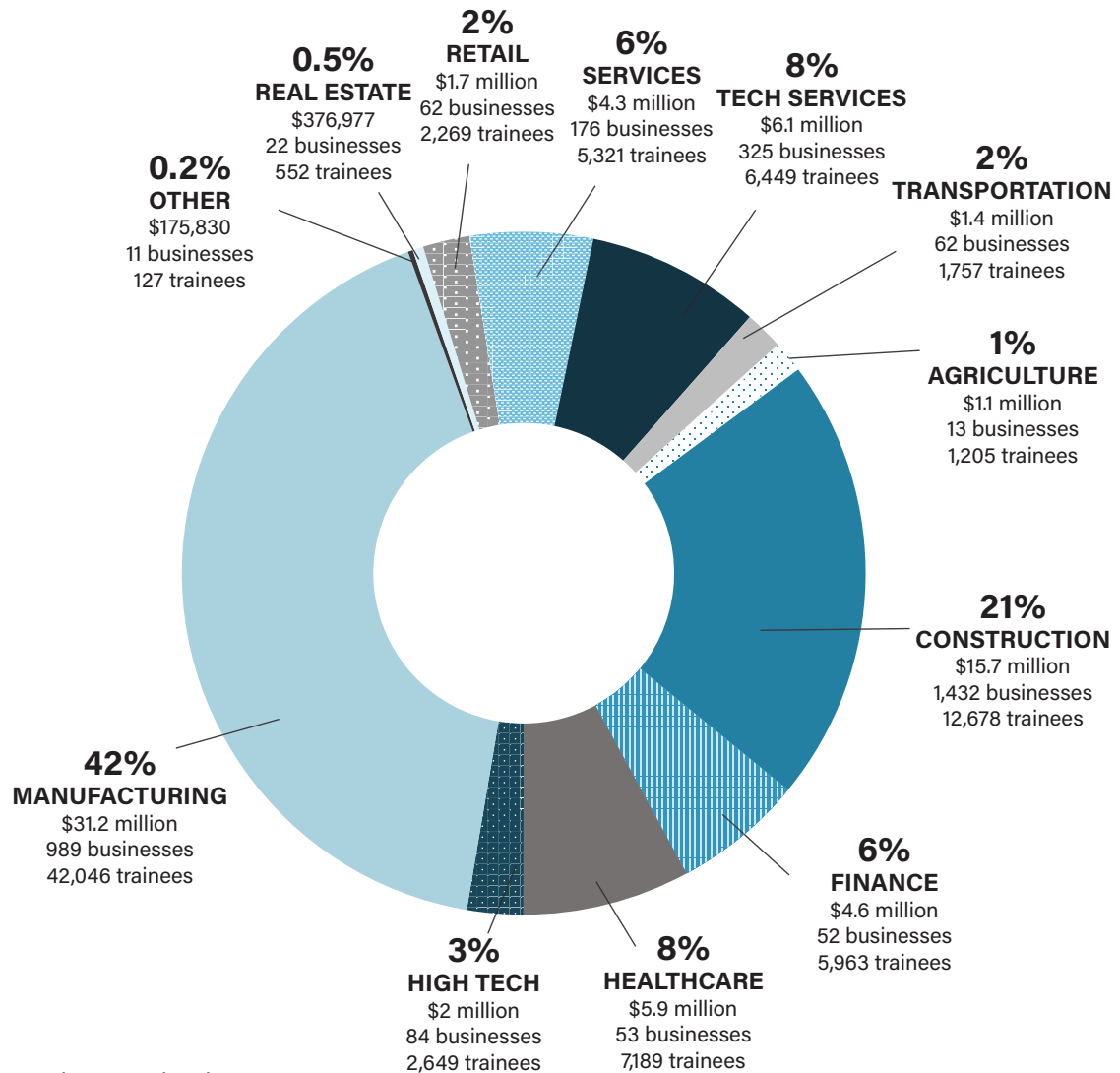
PRIORITY INDUSTRIES

ETP prioritizes industries most vital to California's economic growth and recovery. Projects serving these industries receive a higher fixed-fee training reimbursement rate.

- Agriculture
- Biotechnology and Life Sciences
- Construction
- Goods Movement and Transportation Logistics
- Green/Clean Technology
- Healthcare
- Information Technology Services
- Manufacturing/Food Production
- Multimedia/Entertainment
- Technical Services



Percentage of Funding Earned by Industry



Based on FY 2017-18 funding dollars, the last complete year of data before publication (including non-priority industries).

LABOR FORCE PRIORITY POPULATIONS

ETP prioritizes key labor force populations, reimbursing employers at a higher rate for delivered training.

New Hire and Retrainee - Job Creation Program

- The Panel incentivizes training and retention for unemployed workers (i.e., New Hires).
- The Retrainee-Job Creation Pilot Program targets Employers:
 - training newly hired employees;
 - expanding or opening new facilities;
 - purchasing new equipment; or
 - making other measureable investments in hiring workers and expanding their California workforce.

Critical Proposals

- ETP partners with GO-Biz on critical proposals with emphasis on creating new jobs in California.
- Critical proposals target industries with a growth mode and occupations associated with a company's business expansion or new location.

Small Businesses (SB)

- California small businesses employ 48.8% of the private workforce, with firms with fewer than 100 employees having the largest share of small business employment.³
- ETP incentivizes training for SB, works in partnership with the Small Business Association (SBA), GO-Biz, and CCCCO for Small Business Development Center (SBDC) programs to incentivize training for small businesses statewide.

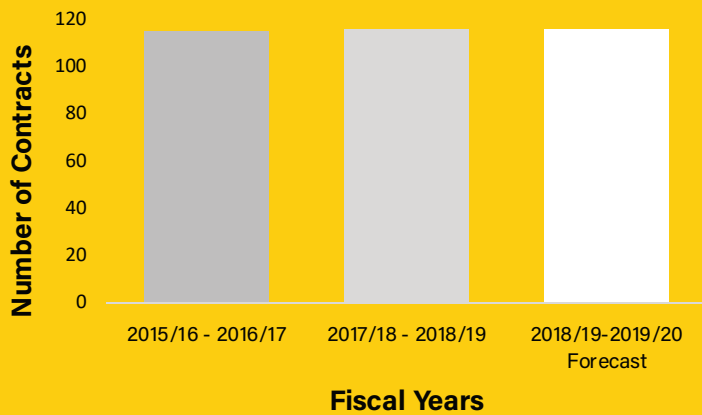


³ United States, Small Business Administration, Office of Advocacy. "2018 Small Business Profile." *California*, 2018, <https://www.sba.gov/sites/default/files/advocacy/2018-Small-Business-Profiles-US.pdf>

Veterans Program

- ETP incentivizes training to help veterans pursue high-skill, high-wage jobs.
- The number of projects serving veterans increased dramatically since the middle of this decade, with the annual total remaining strong in recent years.

Approved Veteran Contracts



Pre-Apprentices, Apprentices, and Journeymen

- ETP supports training of Pre-apprentices, Apprentices, and Journeymen demonstrating its commitment to the retention and expansion of high-wage, high-skill jobs in California.
- The Apprenticeship Training Program supports traditional construction programs.
- ETP also supports non-traditional apprenticeship programs, including the California Community College Chancellor's Office (CCCCO) California Apprenticeship Initiatives grantees.



Medical Skills and Certified Nursing Assistant (CNA) to Licensed Vocational Nurse (LVN)

- ETP is committed to training professionals in the healthcare field.
- Launched to address California's critical nursing shortage, the CNA to LVN program increases advancement opportunities and job security through training of CNAs and caregivers.
- Offering assistance and support to individuals through high quality training leading to wage progression.



Zero Emission Vehicles and Renewable Fuel Technology

- Through its partnership with the California Energy Commission (CEC), the Alternative and Renewable Fuel and Vehicle Technology Program (ARFVTP) provides workforce training in new transportation technologies for companies engaged in the development or deployment of alternative fuels and vehicle technologies.
- ETP has exhausted \$11.5 million in funding through an Interagency Agreement and is continuing its partnership with CEC beyond the term of the initial Agreement to support contracts currently in process.
- ETP participates on the Governor's Interagency Working Group on Zero-Emission Vehicles leveraging CEC funds to support workforce training in this emerging sector to expand vehicle charging infrastructure.
- Additional information is available in the [Appendices/ARFVTP](#).

Ex-Offender/At-Risk Youth Program

- ETP provides critical job skills training to ex-offenders and at-risk-youth of becoming involved in gangs and/or criminal activities, supporting hard-to-serve populations.
- Training is emphasized to support long-term job preparation and job security to assist at-risk youth in learning work skills, enabling them to find and succeed in a career path.
- Pre-apprenticeship training is a priority, targeting occupations trained under the Governor's Career Technology Education Initiative: electricians, welders, certified nurse assistant, drafter, machine operator and computer operator.

STRATEGIC PARTNERSHIPS

ETP is legislatively mandated to coordinate with local workforce investment boards, the CWDB, and other partners in the Workforce Innovation and Opportunity Act (WIOA) to achieve effective delivery of the state's workforce resources.



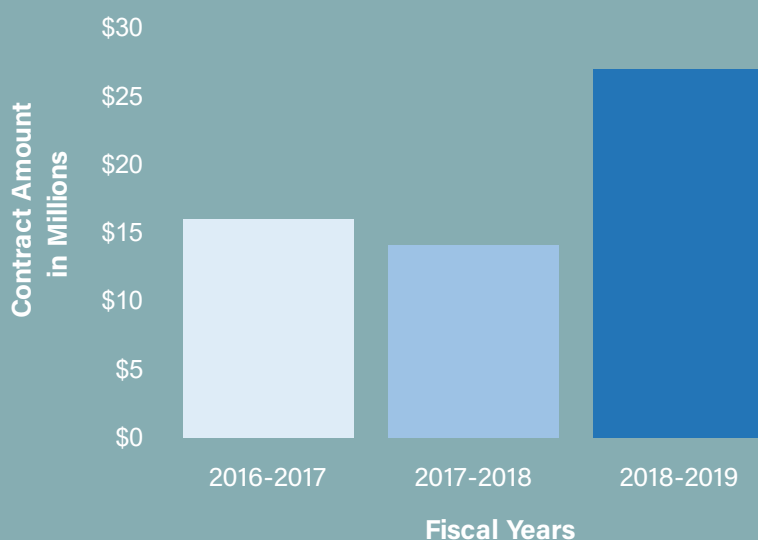
ETP partners with LWDA, GO-Biz, CWDB, EDD, DAS, CCCC, CEC, and others at the State and local level in coordinating resources and services to assist industries and businesses. ETP continues to seek new partners with whom to collaborate, such as the Office of Planning and Research and local workforce investment boards, and leverage additional resources, such as AB 118 funding.

Apprenticeship Training Program

Implemented in 2012, ETP's Apprenticeship Training Program provides funds for pre-apprenticeship, apprenticeship, and journeyworker classroom training. To date, (FY 2012-13 to FY 2018-19), the program has approved over \$100.4 million for 197 contracts to train over 56,000 trainees.

ETP funding allows Joint Apprenticeship Training Committees (JATCs) or other program sponsors to supplement the Related Supplemental Instruction (RSI) portion of training. The program funds up to 200 hours of RSI training, plus 10 hours of OSHA10 training for apprentices in their second year and beyond. ETP also funds Pre-Apprenticeship and Journeyman training.

Approved Funding for the Apprenticeship Training Program





ETP participates on the LWDA Apprenticeship Task Force and works with state partners to expand the Apprenticeship model to new, non-traditional industry sectors, such as manufacturing and healthcare. Additionally, ETP is coordinating with the California Labor Federation and the State Building and Construction Trades Council, as well as other interested union and non-union partners, to continue the Apprenticeship Training Program. Through this partnership, the Labor Federation and the State Building Council assist ETP in marketing the program among JATCs. ETP continues to work closely with the Division of Apprenticeship Standards and participate in the California Apprenticeship Council and the Interagency Advisory Committee on Apprenticeship.

ETP also coordinates with two other government programs specific to apprenticeship funding:

- As part of a nationwide effort, the federal Department of Labor released grant funds for apprenticeships in September 2016. The State Department of Industrial

Relations was awarded \$1.8 million to fund "California's Future" aimed at expanding apprenticeship programs overall with an emphasis on non-traditional and "diversity" enrollment over a 10-year grant cycle. Key partners include the California Workforce Development Board, the State Building and Construction Trades Council, the California Labor Federation, and ETP.

- Under the Governor's Budget, \$15 million in funding was appropriated to CCCCO from the General Fund (Prop 98) during each of the past three years for the California Apprenticeship Initiative (CAI). The CCCCO disbursed the funding via competitive grants, which require grantees to expend the funds over 3-5 years. This funding is dedicated to new and innovative apprenticeship and pre-apprenticeship programs in Advanced Manufacturing, Healthcare, IT, and other priority industries. ETP will support the strongest or well performing of these programs in contract with the community college system after the CAI funding is exhausted if the programs meet basic funding criteria.

RURAL & HIGH UNEMPLOYMENT AREAS

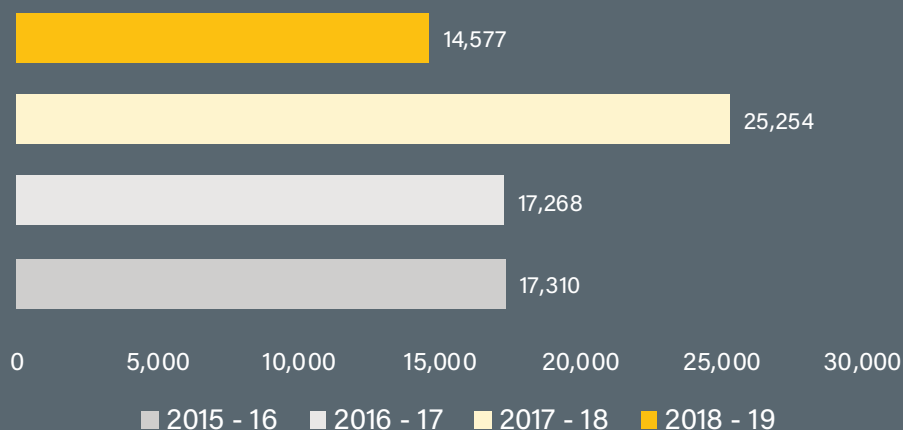
Rural Areas

- Some of the of highest unemployment areas are rural regions, including the Central Valley, San Joaquin, and Imperial Valley. These areas trail the rest of the state in family income, educational achievement, healthcare access, and employment.

HUAs

- ETP funded training for companies in HUAs helps stimulate local economies, serving workers who have full-time jobs and stable employment but earn low wages and lack job skills necessary to improve their employment.
- The Panel also serves populations with multiple barriers to employment in HUAs.
- ETP incentivizes training in HUAs (areas with unemployment rates at least 15% higher than the state average), waiving some standard program criteria to provide flexible retention and a lowered wage requirement.
- Though there was a decline in the funding of HUAs in 2018-19, caused by low unemployment rates, ETP continues its mission to serve the HUA populations.

Trainees from HUAs



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Want more details?

See the following sections for additional information on:

- ◆ **ETP's Priority Industries Descriptions**
- ◆ **Alternative and Renewable Fuel and Vehicle Technology Program (ARFVTP)**

ETP's Priority Industries Descriptions

Agriculture

California is the nation's largest agricultural producer and exporter. ¹ For the 2017 crop year, California agricultural exports totaled \$20.56 billion. ² Over 27 percent of California farms generated commodity sales over \$100,000, greater than the national average of 20 percent. The State's 76,700 farms and ranches received over \$50 billion for their output; this revenue was led by the dairy industry followed by grapes and almonds. Of the top 57 commodities exported, 21 showed an increase in export value of 5 percent or more. California remained the leading state in cash farm receipts in 2017 with combined commodities accounting for over 14 percent of the U.S. total. California's leading crops remained fruits, nuts and vegetables. ³

Allied Healthcare

Allied healthcare occupations generally support nurses and certified skilled medical workers. Many employees work at the bedside or behind the scenes to provide laboratory, imaging, and other critical services to diagnose and treat patients for a variety of conditions including substance abuse. Drug and alcohol rehabilitation is an important part of the industry as opioid addiction is epidemic.

Healthcare is one of the state's highest growth industries. By 2050, California's population is projected to reach 50 million people. ⁴ An aging baby boomer population, coupled with the passage of the Affordable Care Act (ACA), means more people in need of care and less people to deliver it.

The Affordable Care Act now provides millions of Californians with health coverage, including rural and disadvantaged communities, where access to quality healthcare services can often be limited.

Many of those covered are foreign born. Thus, it is critical to provide relevant, regional training and education that prepares healthcare workers to deliver high-quality health services to diverse populations in all areas of the state.

Biotechnology and Life Sciences

California is a global leader in biotechnology and medical technology. California is home to the largest life sciences cluster in the world and is a source of the greatest number of products in clinical development. California leads the nation with 3,249 life science companies employing close to 298,709 people, and earning \$169 billion in annual revenues. California also has the highest concentration of world-class research institutions with an impressive \$6.7 billion attracted in venture capital in 2017, which ranks number one in the nation. ⁵ Continued job growth is projected in biotechnology and life sciences. Additionally, the biotechnology industry is converging with green technology, conducting biological research relevant to renewable energy sources including the development of sustainable, cellulosic fuels (bio-fuels) for transportation and energy needs.

¹ California Department of Food and Agriculture Strategic Plan 2013-2018, *California Department of Food and Agriculture*, p 5, <https://www.cdfa.ca.gov/statistics/PDFs/2017-18AgExports.pdf>

² "California Agricultural Production Statistics, 2016 Crop Year Report," *California Department of Food and Agriculture*, <http://www.cdfa.ca.gov/statistics/PDFs/2016Report.pdf>. Accessed 7 June 2018.

³ California Agricultural Statistics Review 2016-2017, *California Department of Food and Agriculture*, p 2, <http://www.cdfa.ca.gov/Statistics/PDFs/2016-17AgReport.pdf>

⁴ "California's Population," *Public Policy Institute of California*, par 1, 2018, <https://www.ppic.org/publication/californias-population/>

⁵ 2018 California Life Sciences Industry Report, *California Life Sciences Association*, 2017, <http://info.califesciences.org/2018report>. Accessed 12 June 2018.

Construction

Since 2017, California's construction industry has steadily gained jobs, with growth projected to continue at an annual average growth rate of 7.7 percent – the fastest growth rate among the major industry sectors.⁶ Due to the improving housing market across the state, the construction industry is expected to gain 201,700 jobs between 2012 and 2022.⁷ The Employment Development Department's Labor Market Information Division (LMID) reports the greatest concentration of job gains within the construction sector is projected for building equipment contractors, building finishing contractors, and residential building construction.⁸

In recent years, federal stimulus funds and bonds have brought new transportation infrastructure investments, fueling high-priority transportation corridor improvements, trade infrastructure and port security projects, transit and passenger rail improvements, state and local partnership transportation projects, and improvements to streets, levees, and roads.⁹ Over the next ten years, labor needs for highway and transportation infrastructure improvements and nonresidential and public works projects will remain a priority and are expected to increase to support the demands of a growing population.

In 2012, voter approval of Proposition 39, the California Clean Energy Jobs Act (Chapter 250) directed revenues for five fiscal years (beginning with FY 2013-14) to eligible energy projects such as energy efficiency upgrades and clean energy generation at schools.¹⁰ With the "greening" of the construction industry, opportunities are emerging in green construction jobs. Along with new construction projects there are many buildings being weatherized and retrofitted to achieve the Leadership in Energy and Environmental Design (LEED) certification.¹¹ Green construction occupations encompass all aspects of the building trades and provide opportunities for workers at various skill levels, from apprentice to journey-level. As California continues to lead the nation in the development of new technologies, renewable energy, and the sustainable design and construction of more efficient buildings, the demand for skilled workers in green building trades will continue to rise.

⁶ California Economy at a Glance, *Bureau of Labor Statistics*, 2018, www.bls.gov/eag/eag.ca.htm. Accessed 13 June 2018.

⁷ California Industry Employment Projections Between 2012-2022, Fig 1, Projected Employment Percent Change by Major Industry Sectors Between 2012-2022, p 1, 19 September 2014, *Employment Development Department*, [www.labormarketinfo.edd.ca.gov/file/indproj/cal\\$indnarr.pdf](http://www.labormarketinfo.edd.ca.gov/file/indproj/cal$indnarr.pdf). Accessed 13 June 2018.

⁸ California Industry Employment Projections Between 2012-2022, Fig 4, Projected Employment Percent Change by Major Industry Sectors Between 2012-2022, p 3, 19 September 2014, *Employment Development Department*, [https://www.labormarketinfo.edd.ca.gov/file/occproj/cal\\$occnarr.pdf](https://www.labormarketinfo.edd.ca.gov/file/occproj/cal$occnarr.pdf). Accessed 13 June 2018.

⁹ California Department of Transportation, Strategic Growth Plan, par 1, *Bond Accountability*, www.bondaccountability.ca.gov/.

¹⁰ Press Release, *Office of Governor Edmund G. Brown Jr.*, par 1, October 27, 2014, <https://www.ca.gov/archive/gov39/2014/10/page/2/index.html>

¹¹ "LEED is Transforming the Way," *USGBC Central California*, 2015, www.usgbccc.org/LEED. Accessed 12 June 2018.

Goods Movement and Transportation Logistics

California supports one of the largest trade networks in the nation and serves as a major gateway for products entering and leaving the United States. In 2017, California exported \$172 billion in products – a 5 percent increase from 2016.¹² The state's prosperity is tied to exports and imports of both goods and services by California-based companies, to exports and imports through California's transportation gateways, and to movement of human and capital resources.¹³ With the passage of Senate Bill 1 in 2017 and the establishment of the Trade Corridor Enhancement Program, California will fund approximately \$300 million per year to infrastructure improvement projects for this vital industry. These projects will more efficiently enhance the movement of goods along corridors that have a high freight volume.¹⁴ Freight movement generates about a third of California's \$2.2 trillion economy with more than 5 million California jobs in freight-dependent industry.¹⁵ As California's goods movement industry expands and transportation logistics technologies advance, they will remain among the state's highest priorities and a source of high-wage jobs.

Green/Clean Technology

California is committed to increasing energy efficiency and the sustainable use of resources. The California Energy Commission's Renewables Portfolio Standard (RPS) guides the State's conversion of retail and public utilities to renewable sources. Since 2006, California's Governors have set increasingly aggressive benchmarks demanding higher percentages of California's electricity to be produced by renewable sources. In 2015, Governor Brown signed legislation (DeLeon, Chapter 547) requiring retail sellers and publicly owned utilities to procure 50 percent of their electricity from renewable resources by 2030.¹⁶ In 2017, the Governor approved a bill, enacting a cap-and-trade type system, to be in effect until 2030 (AB 398, Garcia, Chapter 135).

California's pioneering clean energy movement is advancing a strong economy by simultaneously increasing revenues and employment gains while sustaining a healthy environment. Green/clean technology encompasses innovation, creating a vibrant and clean market, growing efficiency savings for businesses, and leveling the playing field for renewal energy to compete fairly with polluting sources of energy. Industries with significant presence in the state include: Advanced Grid Technologies, Advanced Electricity Generation, Building Energy Efficiency, Advanced Transportation and Advanced Fuels.¹⁷ California's commitment to clean tech have resulted in 7.5 percent increase in employment in 2013-14, with an influx of over \$27 billion in venture capital and other financing since the introduction of AB 32 in 2006.¹⁸ The Bureau of Labor Statistics (BLS) estimates more than 500,000 Californians are currently working in the green economy, with a projected growth of 1.2 million by 2020. According to the Association of Energy Engineers, growth in advanced energy generated new jobs at 3 percent of growth, six times the rate of the California economy overall.¹⁹ Sixty percent of California's energy economy are employed in Energy Efficiency, with thirty percent performing jobs in the Advanced Electricity Generation segment and the remainder performing jobs in Advanced Transportation, Advanced Grid and the Advanced Fuel sectors. Driven by strong supporting policies and a remarkable industry growth, the Green/clean sector continues to reinforce California's solid economy and lead the United States in the clean tech market.

¹² State Exports from California, *United States Census Bureau*, 21 May 2018, <https://www.census.gov/foreign-trade/statistics/state/data/ca.html>

¹³ Trade Statistics, *California Chamber of Commerce*, 2018, <https://advocacy.calchamber.com/international/trade/trade-statistics/>

¹⁴ Senate Bill (SB) 1, *California Transportation Commission*, 2018, www.catc.ca.gov/programs/sb1/tcep/

¹⁵ Trade Corridor Improvements, *Rebuilding California*, SB1, 2018, <http://rebuildingca.ca.gov/trade-corridor.html>

¹⁶ Renewables Portfolio Standard (RPS), *California Energy Commission*, www.energy.ca.gov/portfolio/. Accessed 11 June 2018.

¹⁷ "Advanced Energy Generated New Jobs At Six Times the Rate of the Overall California Economy," *Advanced Energy Jobs in California* 2016, <http://info.aee.net/hubfs/PDF/california-jobs-report-2016.pdf?t=1462473190835>

¹⁸ Winkler, Matthew A., "Best State for Business? Yes, California," *Bloomberg View*, 12 March 2015, <https://www.bloomberg.com/opinion/articles/2015-03-12/best-state-for-business-yes-california>

¹⁹ Current Employment Statistics State and Area Employment, total nonfarm, *Bureau of Labor Statistics*, Jan 2016, https://data.bls.gov/cew/apps/data_views/data_views.htm, www.census.gov/eos/www/naics/

Information Technology Services

All industries must utilize advanced information technology to ensure competitiveness in the worldwide economy. For example, the agricultural industry is becoming “high tech” as it incorporates sophisticated tools such as Geographic Information Systems (GIS) and Global Positioning Systems (GPS) to assist in growing crops.²⁰

In 2017, California continued its rank as the nation’s leading cyber-state.²¹ California ranked #1 in:

- High-tech employment of 1,749,400 workers, with 43,600 net jobs added from 2016 - 17
- Highest tech wages nationally, with annual average wage of \$161,900
- High-tech payroll of \$385.8 billion
- High-tech businesses: 51,356, and
- Highest Innovation Per Capita.

Information Technology Services is a fast-growing industry, with employment in computer systems design and related services projected to increase by 56.4 percent by 2024.²² The Bureau of Labor Statistics (BLS) expects tremendous employment opportunities in the industry as the demand for computer-related occupations face significant growth due to rapid advances in computer technology, development of new computer applications, and the growing significance of information security.

Manufacturing/Food Production

Manufacturing spurs job creation up and down the supply chain. Growth in the manufacturing industry has a job multiplier effect that favorably impacts other industries. In 2009, following the lowest point in the recession and after a decade of steady declines in California manufacturing jobs (which dropped nearly 33 percent between 2000 and 2010), the rate of manufacturing decline began to slow. However, in 2015, the manufacturing industry experienced a growth increase, generating \$229.9 billion, and leading the nation with the highest rate of employment in its sector. With the top ten manufacturing employers based in California, its workforce accounted for a total of over 1.2 million employees, producing more manufacturing jobs than any other state.²³ California is the highest ranking state for manufacturing jobs in the country, with an output of 11.7 percent and an employment rate of 9 percent of the state’s workforce.²⁴ In 2016, California’s manufacturing industry experienced a heavy growth in demand for highly skilled and technology-intensive manufacturing processes due to the steep growth in the state’s technology sector.

Multimedia/Entertainment

Multimedia/Entertainment and the motion picture industries remain a staple of the State’s economy, providing significant employment multiplier effects on the economy, creating high-wage, high-skill jobs which extend beyond the motion picture industry as an essential source of economic activity, tax revenue and tourism in California. This industry contributes roughly \$50 billion dollars annually to our state’s economy, supporting 145,000 well-paying entertainment industry jobs.²⁵

²⁰ Precision Agriculture, *High Tech Heads for the Farm*, Sept. 2013, <https://www.caseyresearch.com/articles/high-tech-heads-for-the-farm/> Accessed 13 June 2018.

²¹ California: State of Technology Summary, *Cyberstates 2018*, CompTIA Research Report, p 20, March 2018, https://www.cyberstates.org/pdf/CompTIA_Cyberstates_2019.pdf. Accessed 13 June 2018.

²² Wolf, Michael and Dalton Terrell, “The High-Tech Industry, What is it and Why it Matters to Our Economic Future,” *Beyond the Numbers: Employment & Unemployment*, vol. 5, no. 8 (U.S. Bureau of Labor Statistics, May 2016), www.bls.gov/opub/btn/volume-5/the-high-tech-industry-what-is-it-and-why-it-matters-to-our-economic-future.htm.

²³ May 2017 State Occupational Employment and Wage Estimates. *Bureau of Labor Statistics*, 2017, www.bls.gov/oes/current/oes_ca.htm.

²⁴ Occupational Employment Statistics. *Bureau of Labor Statistics*, 2017, www.bls.gov/iag/tgs/iag54.htm.

²⁵ Background, *Legislative Analyst’s Office*, 29 September 2016, www.lao.ca.gov/Publications/Report/3502.

California's multimedia and motion picture industry is becoming more competitive, projected to bring more filmmakers to the State in the upcoming years. Enacted in January 2015, the five-year program increased fiscal year funding from \$100 million to \$330 million annually through FY 2019-20. Within two years under Program 2.0, California has attracted or retained 100 film and television projects generating an estimated \$3.7 billion in direct spending to the state - including \$1.4 billion in below-the-line wages.²⁶

Technical Services

According to the US Bureau of Labor Statistics (BLS), "the technical services sector comprises establishments that specialize in performing professional, scientific, and technical activities for others."²⁷ California, in particular the Silicon Valley, is home to many of the world's largest high-tech companies providing technical services to various industries. Some major technical services industries include architectural services, engineering services, computer systems design, and research & development services. Architecture and engineering are driven by residential and commercial construction activity, as well as by corporate and government spending.

In 2017, California reported nearly 1.2 million workers employed in these industry sectors, the highest employment level compared to other states in the nation.²⁸ Civil engineering also continues to demonstrate growth, with the BLS projecting civil engineering employment to increase nationally at a faster-than-average rate of 11 percent over the decade ending in 2026.²⁹ The California Employment Development Department (EDD) estimates a 12.2 percent increase in civil engineering employment in California over the same period.³⁰

In a March 2017 report by Forbes, California ranked first in the nation in technology and innovation. A remarkable surge in growth, driven by social media and business applications for technology, has led to a demand of highly skilled workers. Home to the San Francisco Bay Area and Silicon Valley, employment in the tech sector surged to 90 percent from 2006 to 2016 in the San Francisco Bay Area alone. Silicon Valley accounts for a 75 percent higher concentration of tech industry workers than upstart San Francisco, with employment up 80 percent.³¹

²⁶ Executive Summary, *California Film Commission*, p 3, September 2017,

<https://film.ca.gov/wp-content/uploads/CA-Tax-Credit-Progress-Report-09-2017-FINAL.pdf>

²⁷ Occupational Employment Statistics, *Bureau of Labor Statistics*, 3 April 2017, www.bls.gov/iag/tgs/iag54.htm

²⁸ "Tech Earnings, Jobs Blow Away Rest of the Labor Market," *U.S. News and World Report*, 2017, www.usnews.com/news/articles/2017-04-03.

²⁹ Occupational Outlook Handbook, Civil Engineers, *Bureau of Labor Statistics*, 2017, www.bls.gov/ooh/architecture-and-engineering/civil-engineers.htm.

³⁰ Estimated Employment and Projected Growth, *State of California Employment Development Department*, <https://www.labormarketinfo.edd.ca.gov/data/employment-projections.html>. Accessed 11 June 2018.

³¹ Otkin, Joel. "The Cities Creating the Most Tech Jobs 2017," *Forbes*, 2017, <https://www.forbes.com/sites/joelkotkin/2017/03/16/technology-jobs-2017-san-francisco-charlotte-detroit/#75edd91d38f6>

Alternative and Renewable Fuel and Vehicle Technology Program (ARFVTP)

Created in 2007 and administered by the California Energy Commission (CEC), ARFVTP strives to transform California's fuel and vehicle types to meet the state's climate change policies. ETP's partnership with CEC was established to implement a training program in alignment with the goals and objectives of AB 118.

ETP has exhausted \$11.5 million in funding through an Interagency Agreement and is continuing its partnership with CEC beyond the term of the initial Agreement to support contracts currently in process. In FY 2019-20, ETP will receive ongoing reimbursable authority of \$3 million.

Governor's Interagency Working Group on Zero-Emission Vehicles

On January 26, 2018, Governor Brown signed a Zero-Emission Vehicle (ZEV) Executive Order, which implements his call for a new target of 5 million ZEVs in California by 2030, which will help significantly expand the vehicle-charging infrastructure. Coordinated by GO-Biz, ETP participates on the Governor's Interagency Working Group by supporting job training in this sector with CEC funds from the ARFVTP program and advises the working group on workforce development policy.



Employment Training Panel

19/20

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The Strategic Plan is available on-line at the Employment Training Panel's website:

<http://www.etp.ca.gov/>

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