Workforce Data Expansion Task Force Recommendations

Background

During the planning process of the Cradle-to-Career Data System (C2C), state agency representatives and community members recommended that the P20W analytical data set include information on workforce training to deepen understanding about ways that adults prepare for jobs and to identify how education and workforce training relate to employment and earnings.

In 2025, C2C convened a task force made up of community members who are workforce data experts to identify priority questions and information required to answer those queries. Task force members included:

- Lisa Catanzarite, UNITE-LA
- Lisa Countryman-Quiroz, Jewish Vocational Services
- Annelies Goger, Brookings Institution
- Ana Luz Gonzalez-Vasquez, Labor Center, University of California Los Angeles
- Cesar Lara, California Federation of Labor Unions, AFL-CIO
- Jill Leufgen, Foundation for California Community Colleges
- Alex Nottbohm-Popelka, Office of Data & Innovation
- Javier Romero, Employment Development Department
- Renay Sehgal, Chino Valley Chamber of Commerce
- Alexis Takagi, Santa Clara University
- Till Von Wachter, California Policy Lab, University of California Los Angeles
- John Watson, San Diego County Office of Education
- Terrence Willett, California Community Colleges Chancellor's Office
- Jay Wright, CASAS

Recommendations

Proposed Data Points from the Labor and Workforce Development Agency

The task force reviewed a memo [1] from the Labor and Workforce Development Agency (LWDA) that outlines data that it proposes to provide for the P20W data set. The task force agreed that the proposed data points would be useful to answer a broad range of questions.[2]

In addition to the research questions that LWDA identified that could be answered with the expanded data set, the task force identified a number of other analyses that may be possible, including:

Participant Characteristics and Experiences

- How do barriers to employment vary for rural versus urban populations?
- How do workforce program outcomes vary based on students' academic level at the time of participation (e.g., high school diploma, some college, or degree holder)?
- What does participation look like for English language learners, and how do their employment outcomes differ from English speakers with the same race/ethnicity?

Program Characteristics and Experiences

- How does access to individualized services shape outcomes compared to receiving both individualized services and training?
- Are there specific types of workforce programs (e.g., apprenticeships, etc.) that have a greater impact on public benefit uptake, either increasing or decreasing it?
- How do barriers to participation and positive economic returns for apprenticeship vary based on the industry?
- What are the top 10 most common occupations and industries of training for workforce programs, and what are the outcomes for each (earnings, job placement, etc.)?
- How does co-enrollment in workforce programs affect community college student outcomes? Does receiving wrap-around services impact those

[1]Note: The LWDA memo may be found at https://c2c.ca.gov/wp-content/uploads/2025/01/Memo_-Labor-Workforce-Development-Agency-Priorities-for-Expanding-the-Cradle-to-Career-Data-System.pdf

[2] See the Appendix for a list of proposed data points

outcomes?

- What is the relationship of distance between training location and place of employment to wage gain and employment persistence (i.e. geographic mobility)?
- Which workforce development supports and basic needs services result in better outcomes for rural versus urban populations?

Outcomes

- What is the impact of workforce program participation on reducing income inequality in local communities?
- Which workforce programs support sustained employment among older workers?
- Are there regions or local areas that have particularly high outcomes or high levels of co-enrollment across programs?
- How do outcomes vary for rural and urban workforce programs related to long-term career growth and economic mobility?
- What are the employment outcomes of people who participate in workforce training programs offered by community colleges?
- Are there equity gaps in wages for specific populations, including gender and race/ethnicity?
- What types of employment outcomes do justice-involved people have when they participate in workforce programs?
- How long do individuals work in a specific industry and occupation?
- How does the state benefit when people participate in workforce programs?
- How do employers benefit when people participate in workforce programs?

Visualizing Data from LWDA

Once additional data from LWDA is integrated into the data set, C2C should use user centered design to inform how this information will be visualized. The Office should consider likely ways that the public would use this information, including:

- Policy makers and state agencies could use this information for funding and policy decisions to support stronger pathways, better wages, and reduce equity gaps

- Researchers could use this information to address research questions relevant for topics such as understanding the effectiveness of programs, program design, identifying equity gaps, showing strong outcomes to make a case for funding, exploring dual training opportunities such as apprenticeship and postsecondary participation, identifying employment patterns within specific industries, and clarifying patterns in individuals' participation in education, workforce training, employment, and earnings as a way to understand the economy
- Education and training providers could use this information to understand workforce trends, identify loss points, design targeted training and upskilling programs, updating programs to meet emerging needs, build stronger pathways, support recruitment, advise individuals, strengthen outcomes, enhance resource development, support partnerships with employers and community organizations, and fulfill accountability reporting
- Employers could use this information to better understand the available talent pool, workforce trends, and quality training opportunities for employees
- Union members, advocates, and the community could use this information to push for fair pay structures and better education and training options
- Individuals could use this information to inform their education and career choices

To assist in the user centered design process, task force members identified possible ways that this information could be visualized.

Cross-Agency Outcomes

- Proportion of students who took career technical education in high school who subsequently participated in LWDA workforce training, whether they went to postsecondary, and their employment outcomes, disaggregated by demographics, industry, and region
- Proportion of participants in short-term workforce training programs who enter postsecondary education and apprenticeships, disaggregated by program type, demographics, industry, and region
- Dashboard for major initiatives like K-16 Regional Collaboratives to show rates of college going, transfer, graduation, employment, and wage gain

Program Comparisons

- Comparisons between programs that enable users to understand their duration, the number of participants that earn certifications, and the number of participants who become employed
- Long term earnings and return on investment for individuals completing specific types of education and training programs compared to other types of education and training or different education and training providers
- Differences in employment outcomes when learners also receive public benefits, disaggregated by traditional education and workforce training programs
- Number of people participating in training and education and their earnings, with comparisons to the broader population that did not participate in training and education, disaggregated by demographics, industry, and region

Employment Outcomes

- Long term earnings for students who participated in career technical education while in high school and by their college/career preparation level
- Long term outcomes for completers of specific education and training programs, including employment, job retention, earnings gains, and receipt of public benefits, and how those changed when completing subsequent education and training, disaggregated by demographics, industry, and region

Data Points from Other Agencies

The task force agreed with LWDA that data points from other sources could help to address additional workforce questions. Given limited resources, the task force identified specific types of employment information that could be included, which would augment the state wage file that is already part of the P20W data set, as most important for C2C to include in the future.

Reliable, individual-level data on earnings will help to clarify the degree to which learners benefit from education and training and whether all learner types benefit in the same way. Not only would researchers benefit, education and training providers could use evidence of strong employment outcomes to secure funding for programs.

In addition to earnings, task force members prioritized data sources that could help

enable regional analyses. This type of information is valuable to determine whether investments in specific regions are contributing to improvements to the local economy, or if learners apply the skills they gained to jobs in other regions. Geographic information such as zip code would also allow for the contextualization of earnings, to account for different living costs in various parts of the state, or different salary profiles for similar jobs in different regions.

Task force members noted the employment information currently included in the P20W data system does not list occupation, which is important for understanding whether learners become employed in their field of study.

Data on employment could be strengthened by including information from three data sources.

1) An enhanced state wage file: Existing proposals document options for expanding information collected from employers regarding region of employment, hours worked, and occupation. By using strategies like automating the reporting of wage records and using the national Jobs and Employment Data Exchange (JEDx) standards, in partnership with payroll providers, California could reduce the reporting burden on employers and provide more frequent, higher quality, standardized data. In addition, LWDA could provide information on who employed each individual using existing data to facilitate analyses of retention and turnover rates, as a way to understand job quality.
2) The Franchise Tax Board: This additional data source would allow the de-identified analytical data set to include earnings for people who are missing from the state wage file, such as people who are self-employed, and provide valuable context such as zip code, occupation, family status, and household income.
3) The Department of Motor Vehicles. This data would help to improve matches between agency data sets, provide home zip code, and clarify which Californians have a driver's license, which is required for many jobs.

Task force members also prioritized the inclusion of data from the Department of Corrections and Rehabilitation (CDCR). Including information on incarceration will also help to better understand employment outcomes, both to account for years in which

individuals did not have wages and to identify how a criminal record impacts employment and earnings over time. Without this contextual information, the return on investment for some education and workforce programs may be hard to understand.

This information could also be used to address hiring challenges. For example, research could inform policy changes that address industries that employ large numbers of people with similar characteristics and educational attainment to ensure those jobs are available to formerly incarcerated people. In addition, given regional differences in probation and check-in policies, researchers could identify the impact of those policies.

Given that CDCR provides workforce training, information on the people who participate in those programs could help to conduct research about which types of training programs are most effective and inform labor market analyses.

Education and training providers could also use this information to understand the scale of formerly incarcerated people who could benefit from training and what their likely employment trajectories would be after they gain new skills. One task force member recommended developing data sharing agreements that would allow CDCR to share information on people with conviction records with Job Centers run by the Labor Agency, to support service delivery.

Labor Market Information

Task force members agreed with LWDA's recommendations that California enhance its capacity to provide labor market information that will help to illuminate workforce trends, including information on the skills and credentials that are required for specific jobs, which industries and occupations have unfilled job openings, and which employers are most at risk for layoffs or hours reductions. This information could be used to ensure that education and workforce training programs are aligned with employer needs and to support advising.

Task force members reviewed a policy proposal that C2C provide information to a new California Education Interagency Council that would evaluate "a variety of data sources to inform…the Legislature and the Governor of the supply of, and projected demand for, jobs in major occupational or career areas and in-demand skills and sectors at least every two years. Each evaluation shall include economic forecasting

and analysis to ensure educators can plan for emerging skills needs in areas critical to California's economy."

Task force members noted that C2C could support the council by:

- Providing data necessary to analyze the sequence of jobs that people held and analyze which education and training programs those individuals participated in to prepare for those jobs.
- Comparing data elements across different providers and clarify how the different entities may be recording and reporting this data differently from each other to inform the development of a system that shows more "apples to apples" data results and to align reporting requirements across agencies
- Providing information on learners' eligibility and participation in public benefit programs to inform outreach efforts and cross agency collaboration
- Sharing information gained through C2C's user centered design processes on ways to provide information in a way that is aligned with the needs of different types of data consumers
- Providing data for the analysis of credentials of value by measuring consistent outcomes of specific credentials, including earnings and job retention
- Hosting dashboards with key performance indicators such as high demand, high wage occupations, wage gaps, employment trends by geography, sector, educational attainment, and demographics

Appendix: Labor & Workforce Development Agency Data Points Proposed for Cradle-to-Career Data System Inclusion

Participant Demographics

- Age
- Race/ethnicity
- Gender/sex
- Disability
- Veteran status
- Sexual orientation
- Zip code
- Education level at point of enrollment
- Barriers to Participation
- Household/family size
- Single parent
- Foster youth
- Homeless youth
- Justice involved
- Low income

Services

- Training/skill type
- Training start date
- Training end date
- Training provider
- Service type
- Zip code for training provider
- Occupation for training
- Industry for training

Participant Outcomes

- Training completion
- Measurable skills gain

- Workforce credential attainment
- Employer
- Occupation of employment
- Industry of employment
- Quarterly earnings