

Workforce Data Expansion Task Force Report Out

Overview

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 is preparing for this expansion by:

- Working with the Labor and Workforce Development Agency (LWDA) to identify priority research topics and the data points necessary to answer those questions
- Convening a task force of community members who are workforce data experts to identify additional priority questions and information required to answer those queries
- Facilitating discussions with state agencies to support the expansion of the P20W analytical data set

The task force includes researchers who have deep experience with labor market information, practitioners that would benefit from access to more comprehensive information on workforce topics, data experts who understand the complexities of the types of information that fall under the heading of “workforce,” and representatives from agencies that compile and use workforce information. It also includes representatives from C2C’s three boards, including the Governing Board, the Data & Tools Advisory Board, and the Community Engagement Advisory Board.

January 14, 2024 Meeting

The session began with C2C Executive Director, Mary Ann Bates, providing an overview of workforce data as it relates to C2C. In the initial planning process for the data system, the legislative report called for the inclusion of workforce data by the fifth year of development. She provided an update on that goal, including workforce information that is already included in the data set. She also clarified the scope of workforce data under discussion, including classes that teach job-specific skills, non-academic training that prepares people for work, job outcomes of people who participate in education

and training or receive public services, and the economic factors shaping which jobs are in the highest demand and how much they pay.

Next, Mary Ann Bates described the process used to identify data points in the original planning process, which began by identifying high priority research questions, determining which data points would be necessary to answer those questions, working with data experts at state agencies to evaluate the quality of related data that they collect, and developing detailed file specifications for the specific data that will be shared. For the expansion of workforce data in the P20W data set, a similar process will be used, but this time it began with LWDA reviewing the existing P20W data set and identifying priority questions it could answer by contributing additional data. In addition, LWDA identified data points not currently included in the P20W data set that would help to answer additional priority questions.

The task force will help to identify additional research questions that could be answered with the data that LWDA intends to provide, provide input on the data points that LWDA intends to contribute, and identify additional information that could be provided by other sources to answer priority workforce-related questions.

Abby Snay, the LWDA deputy secretary for workforce strategy, described the process that her agency used to identify priority questions and related data points, including extensive consultation with leaders and data experts that maintain the agency's four different data sets. In addition, LWDA worked with representatives from multiple state agencies to identify ways to improve labor market information. This resulted in Labor Secretary Stewart Knox sending a memo to C2C regarding LWDA's priorities for data system expansion, including the data points it intends to provide. That memo is posted on the C2C website.

Abby Snay walked through the priority research questions, intended data disaggregation, data points LWDA will provide, data points LWDA requests from other agencies, and additional functionality that is needed regarding labor market information.

Task force members asked clarifying questions and then used a Google document to identify additional priority workforce research questions that should be included, other data points that might help to answer high-priority questions related to workforce topics, and which entities have those additional data points. Recommendations from task force members are below.

Additional Research Questions that Build Off LWDA Priorities and Available Data

- 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?
- Which workforce development supports and basic needs services result in better outcomes for rural versus urban populations?
- How do barriers to employment vary for rural versus urban populations?
- How do outcomes vary for rural and urban workforce programs related to long-term career growth and economic mobility?
- 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)?
- 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.)?
- What does participation look like for English language learners, and how do their employment outcomes differ from English speakers with the same race/ethnicity?

- How does co-enrollment in workforce programs affect community college student outcomes? Does receiving wrap-around services impact those outcomes?
- What are the employment outcomes of people who participate in workforce training programs offered by community colleges?
- What types of employment outcomes do justice-involved people have when they participate in workforce programs?
- What is the relationship of distance between training location and place of employment to wage gain and employment persistence (i.e. geographic mobility)?
- 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?

Additional Types of Labor Market Information that Should Be Included

- Demand
 - What credentials and certifications are required or desired for what job roles in each industry sector?
 - What skills do employers need their employees to have to address evolving workforce needs?
 - What skills are associated with specific jobs?
 - What industries and occupations have the most urgent demand for talent (unfilled job openings)?
 - What employers are most at risk for layoffs or hours reductions, and how can employer services and layoff aversion activities be targeted to those employers?
- Skills and Curriculum
 - How are credentials aligned to in-demand skills and competencies?
 - How is demand for skills changing by region due to adoption of artificial intelligence or other technologies?
 - How do unfilled job openings align with training provided by programs on the Eligible Training Provider List (ETPL)?
 - How well do education and workforce programs align with the skills

needed by employers, particularly for students entering high-demand or emerging industries?

Additional Information That Should Be Requested From Other Providers

- Department of Consumer Affairs
 - Licensure data
- Department of Motor Vehicles
 - Car ownership
 - Driver's license status
 - Disabled placard status
- Health and Human Services Agency
 - Housing subsidy amount
 - Behavioral health status
 - In home supportive services program participation
 - Family status
 - Childcare program participation
 - Measures of health
- Unions:
 - Union membership
 - Success stories
 - Business community priorities
- Internal Revenue Service
 - Fringe benefit amounts
- Social Security Administration
 - Supplemental security income amounts
 - Social security disability insurance amounts
- US Census
 - Immigrant status
 - Date of arrival in the US
 - Country of origin

In addition, this exercise surfaced a number of questions about both C2C and LWDA data that will inform the topics that will be addressed at the second task force meeting.

February 6, 2025 Meeting

The session began with a recap of the first task force meeting. Then Judy Chan, C2C Deputy Director of Digital Services, answered questions that had been posed by the task force in the first meeting. Answers are summarized below.

Does California use integrated case management systems across programs to be able to link data more easily?

No. Local and legal variance in service provision determine the use of case management systems based on differences in program requirements and funding streams. C2C leverages data that is already collected at the state level and does not collect data. The P20W data set is centralized in C2C's data warehouse. Linked data is used for data insights about aggregated data, not direct service delivery for individuals. C2C has privacy protections that adheres to state and national standards.

What is the state doing to set up data governance structures so that the data are interoperable and that there are privacy protections?

Interoperability within the state has largely been done within sectors. C2C's extensive suppression policies ensure that information in its public-facing tools is de-identified and aggregated. For more on C2C's data system privacy and security:
<https://c2c.ca.gov/data-system-privacy/>

Is California building digital wallets so people have control over their own education and training data and have the ability to share it?

The California Career Passport is a customizable electronic record that people can use to share validated academic and nonacademic skills when they apply for a job. It will build upon existing tools, eTranscript California and Mapping Articulated Pathways (MAP). It is being created through a collaborative effort with partners including LWDA, the community college system, CalHR, and GovOps. Users will have the ability to choose validated skills to share with potential employers.

Next, Abby Snay, Deputy Secretary from LWDA, spoke to a number of questions posed at the first meeting. She began by clarifying there are four departments within LWDA that oversee workforce education, training or employment support:

- California Workforce Development Board (CWDB) - Administers state-funded special projects that often focus on particular sectors or populations (e.g., High Road Construction Careers).
- Employment Development Department (EDD) - Administers federally funded Workforce Innovation Opportunity Act (WIOA) programs, including adult, dislocated worker and youth.
- Employment Training Panel (ETP) - Provides payroll tax-based funding to employers to upgrade the skills of their current workforce.
- Division of Apprenticeship Standards (DAS) - Administers registered apprenticeship and pre-apprenticeship programs for both adults and youth.

Then she addressed each of the questions.

What is workforce training?

Workforce training may include a variety of modalities such as on-the-job training, cohort training, basic skills and English language learning, pre-apprenticeships and apprenticeships, which build skills and/or provide credentials for better jobs.

The Labor & Workforce Development Agency can provide information on the training programs overseen by its four departments. This includes training for incumbent workers, apprenticeship and pre-apprenticeship training, specialized grant programs such as High Road Training Program and WIOA funded training, including training provided via local workforce development boards for adults, dislocated workers and youth.

What information will be available about training programs?

The following information would be provided to C2C about training programs: training type, training provider, training location, service type, related occupation, related industry, completion, credential attainment, as relevant to each of the training programs. For training associated with academic institutions, the program of study can also be provided.

How is access to training defined?

Whether someone is recorded as having participated in one of the training programs listed above. Eligibility requirements for training vary by program and funding source.

Is information on the intensity of training programs available?

Information will be available on the duration of training programs, based on start and end dates. However, information on the number of hours in the training and on the how many hours the participant has participated in is not consistent across data sources so it will not be included.

What determines barriers to success?

LWDA would provide information using categories associated with federal funding such as household/family size, foster youth, homeless youth, justice involved, and low income. However information on each of these data points is not available for every type of LWDA program as the requirements differ based on the program design.

What determines program success?

LWDA tracks training completion, measurable skills gains, credential attainment, employment, and earnings, as relevant to each program. Earnings data is available on a lagged basis. Once data are linked to C2C, other factors could be examined like earning postsecondary awards or reduced use of public benefits.

What information will be provided on services?

Information will be provided on whether people received services and the type of services they received. Examples include basic career services like job search assistance, individualized career services like career planning or supportive services, follow up services, and vocational rehabilitation. Services differ based on program requirements and design.

Is information available on whether people with young children are accessing childcare?

LWDA does not have information on whether people with young children are accessing childcare. This information is only available for a subset of program participants where supportive services were provided and is not available in an easily usable format.

Is information available on the skills that employers prioritize?

Because of the way information is collected, it is not possible to identify the skills that employers are requesting training to address through LWDA services.

Will it be possible to disaggregate outcomes?

It will be possible to identify how outcomes differ based on the characteristics of participants, including age, race/ethnicity, gender/sex, disability, veteran status, education level, and zip code, based on the information provided by participants and the number of individuals with each characteristic.

It will be possible to disaggregate outcomes based on whether the person was flagged as low-income for programs where such information is collected, such as WIOA. Once data are linked in C2C, other economic data may be available such as prior earnings or if they accessed financial aid.

It will be possible to identify how outcomes differ based on training characteristics such as duration, type of training, occupation, and industry.

Is information available on assets that participants accrue?

It is not possible to know what additional assets individuals accrue after participating in workforce programs. Economic data points are limited to earnings and credential attainment up to one year post program.

What information will be available on employment conditions?

Information on the characteristics of employers that hire workforce training participants is limited to their industry. Information is not available on employer size and public/private sector. Because information on location of employment is inconsistent across programs, it will not be included.

It is not possible to examine how labor market demand impacts employment based on what is currently available in C2C, but information from the P20W data set could be compared to supply and demand information provided from other sources.

Is information available on cost-per-participant?

LWDA is interested in cost-per-participant and capturing information from multiple sources in C2C, which could enable evaluation of this more effectively while recognizing that outcomes for individuals with barriers require greater investment.

Is LWDA aligning definitions across programs so that users and frontline staff do not have to enter information every time they access services from different programs?

Each department oversees workforce development programs in accordance with state or federal mandates, including gathering required information on participants, services, and outcomes as defined by their respective funding sources and policies.

LWDA is utilizing the opportunity to contribute data to C2C to align definitions among all of these departments and the programs that they oversee, where relevant.

Given that programs have different levels of intensity or may be short-lived, can the data be provided to C2C in a way that makes the information more consistent?

LWDA will continue to deliver programs of different levels of intensity and duration, and track post program completion based on program design, participant needs, and federal/state requirements. This variation cannot be addressed through data definitions. If programs change over time or begin/end during data collection, our best avenue is having a strong data dictionary that clarifies what the data meant in each year. C2C will work with LWDA on clear file upload specifications for each of the four departments and ensure that they are consistently implemented. As program changes occur, C2C will work with LWDA to update the data dictionary.

Are there ways this information is being shared across service providers to determine eligibility for other programs?

LWDA shares the vision of aligning eligibility information, reducing duplicate data entry and collection, and sharing information across service providers. However, each of the programs has different funding streams with different eligibility requirements, so there are some limits on alignment. Aligning outcomes and data definitions are strategies that we can use to better understand the impact of these programs and the impact of being served by multiple programs.

Task force members asked clarifying questions regarding the consistency of information and ways to clarify which data sources could be prioritized for data points that are collected by multiple agencies. Task force members also reflected on the value of tracking outcomes from multiple starting points, such as understanding which education and training pathways led to specific occupations, as well as the occupational outcomes of individuals in specific programs of study.

In the next portion of the meeting, task force members were asked to identify potential visualizations that could be created using the data that LWDA will provide for the C2C data set, including identifying the intended audience and how those individuals would use the information. Mary Ann Bates, C2C executive director, set the stage for the task force members by reminding them that workforce-related dashboards would not be available until after data specifications are developed, information is provided by LWDA, those data are integrated into the P20W data set, and visualization content is finalized through a user centered design process.

Task force member ideas are grouped thematically below and edited to ensure they only include information that will be available in the P20W data set once LWDA contributes data.

Cross-Agency Outcomes

- Student education attainment starting at high school, into postsecondary, and ending with employment and earnings, disaggregated by demographics and location [note: this visual is already planned for release by C2C]
- Proportion of students who took career technical education in high school who subsequently participated in LWDA workforce training, and their employment outcomes, disaggregated by demographics, industry, and location
- Dashboard for major initiatives like K-16 Regional Collaboratives to show rates of college going, transfer, graduation, employment, and wage gain

Program Comparisons

- Allow users to select different programs to compare, with different length bar graphs that represent 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 location

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 location

When identifying potential use cases for these visualizations, task force members consistently identified similar themes, 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 identify industries that need to improve worker outcomes and provide information to support program design
- Education and training providers could use this information to understand workforce trends, identify loss points, design targeted training and upskilling programs, build stronger pathways, support recruitment, advise individuals, strengthen outcomes, 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

Task force members also described visuals that would require information that is not yet planned for the P20W data set. Bolded items indicate the information that is not available.

Employment Outcomes

- Equity gaps in employment and wages by **occupation**, disaggregated by demographics, industry, and location
- Compare career progression and wage growth over time for **self employment, public employment, private sector employment**, disaggregated by demographics
- Differences in **job quality, job satisfaction**, and retention rates between graduates of traditional education programs and those who complete apprenticeship programs

Labor Market Information

- Career pipelines that show **occupations, salaries, job openings, common employers, training required to enter the occupation, providers of those credentials, time needed to complete each step in the pathway, and services available to apply for those programs**, disaggregated by location
- Thermometer infographic showing the “temperature” of education and job training completion, disaggregated by demographics, industry, location, and education attainment level, relative to **demand**