



Climate Works Pre-apprenticeship Program

2024-25 Program Manual

Chapter 10: Data Management

Chapter Overview

By the end of this chapter, you will be able to:

- Apply each step in the data management process.
- Utilize the Climate Works Continuous Program Improvement Model to improve program outcomes.
- Leverage program data to enhance program delivery.
- Identify different approaches for pre-apprenticeship program evaluation.

This chapter will highlight the data management process, the types of data grantees must collect and report, the role of the CEJA Reporting System, and the importance of accurate data management.

Data Management Process

Data is a group of information, facts or statistics which, when analyzed, can be used to understand program outcomes, uncover key insights and patterns, and contribute to informed decision-making and program improvements.

Data management is the administrative process of acquiring, validating, and processing data. Data management for Climate Works is done through the CEJA Reporting System for grantee and participant data.

Climate Works uses a four-step **data management process** that includes data collection, data entry, quality control, and accurate reporting. This section will highlight data collection, data entry, and quality control.



Data Collection and Entry

Collecting data is a key step in the data management process. Data may come from the grantee's outreach efforts, discussions with participants, required forms (Program Application, Pre-screen Assessment, Services Needs Assessment, Career Assessment, Exit Interview, and Follow-up Questionnaire, among others), or grantee accounting systems.

Grantee & Program Data

Grantees must collect grantee and program data, which includes information about grantees, their partners, and the services provided. Grantee data includes, but may not be limited to, the:

- Curriculum utilized
- Instructor information
- Worksite locations
- Communities served
- Number of cohorts
- Start and stop dates
- Services offered
- Outreach events held

Participant Data

Grantees are expected to collect participant data, including:

- Contact information
- Demographic information
- Barrier reduction services
- Progress measures
- Outcomes

Participant data is collected and analyzed at the individual, grantee, and program levels.

- On the **individual level**, participant data allows grantees to monitor each participant's participation, progress, completion, services received, and transition outcomes to help them succeed in the program.
- On the **grantee level**, participant data can help grantees identify strengths and gaps in participation, retention, completion, and transition rates—especially for target populations. Participant data can be used to uncover barriers that may be limiting the progress or success of specific participant sub-groups. Participant data will include the number of enrollees, the number of participants who complete the program, the number of participants who transition to apprenticeship programs or jobs, and more. This data will be used to determine if grantees are meeting their performance targets and will be used for performance-based repayment.
- On the **program level**, Climate Works administrators will gather and aggregate participant data across the different grantees to evaluate whether the Climate Works program is meeting its intended goals and to recommend changes for future program years.

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The table below outlines key participant data that will be collected through the CEJA Reporting System at each stage of the life cycle.

Table 10.1: Participant Data Collection through the Climate Works Life Cycle Stages

Life Cycle Phase	Data Collected
Outreach and Recruitment	Numbers and demographics of contacts, number of events held.
Application and Intake	Demographic data of enrollees (age, level of education, race/ethnicity, gender, and veteran status, geography), employment data, career interest data, needs assessment data.
Barrier Reduction Services	Services provided, status of service provision, referrals, dates of delivery.
Training	Progress in training modules, attendance, and test scores (if relevant)
Program Completion, Transition & Follow-up	Training program completion & certifications gained, jobs acquired, jobs retained, apprenticeship acceptance, progress towards journey person status, wage data, additional support service data, and retention rates.

In general, data that the grantees collect will be entered into the CEJA Reporting System, which provides real-time tracking of grantees' progress. This allows grantees and grant managers to identify early performance gaps and adjust. Data entry is also essential to the program's performance-based payment system. If you do not enter your outcome data into the system, you may not be reimbursed for the outcomes you achieve.

"If it is not documented in the reporting system, it did not happen."

Data Entry Staff

Data entry staff must enter data into the CEJA reporting system and run reports regularly to ensure data completion and accuracy. The responsibilities of the data entry staff include, but may not be limited to:

- Creating new records and entering information.
- Updating records.
- Running reports to check data accuracy and quality.
- Communicating data and reporting problems to Grant Managers and SIU's CEJA Reporting System technical support staff.

Data entry staff should have:

- Basic computer skills (typing, navigating the file system, opening program files, and proficiency with basic office software).
- CEJA Reporting System training.
- Access to technical assistance.

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All staff responsible for data entry must have easy access to the data collected by program staff and dedicated time built into their schedules for data entry.

Quality Control

Quality control is the process of periodically reviewing data for accuracy. Accurate data are essential to maintaining the integrity of the Climate Works Pre-apprenticeship Program.

Incorrect Data = Incorrect Reports = Inaccurate Outcomes and Impact

Staff who collect and enter data must check regularly (the frequency will depend on the data) for errors. Grant managers will verify data that grantees entered into the CEJA Reporting System and notify program administrators when data issues are identified.

See the table below for quality control recommendations.

Table 10.2: Data Quality Assurance Characteristics

Quality Assurance Characteristic	How It is Defined	Data Quality Example
Accuracy	Is the data correct in every detail?	<ul style="list-style-type: none">• Is the participant's name spelled correctly?• Was the participant's date of birth entered correctly?
Completeness	How comprehensive is the data?	<ul style="list-style-type: none">• Is the participant's first and last name recorded?• Is the month, day, and year recorded for the participant's birthdate?
Reliability	Does the data contradict other trusted resources?	<ul style="list-style-type: none">• If the participant has received other state or federal workforce development services, does demographic information (name, age, etc.) match information previously recorded in the CEJA Reporting System?
Relevance	Is the data needed?	<ul style="list-style-type: none">• Did the participant complete the Career Assessment, Pre-transition Career Assessment, and Service Needs Assessments?• Has all demographic information (age, gender, and Illinois residency, among others) been collected?
Timeliness	Is the data up-to-date?	<ul style="list-style-type: none">• Was an individual's application entered in the CEJA Reporting System before they began receiving services?• Was class attendance collected and reported as training progressed?

Accurate Reporting



Accurate reporting is the culmination of data collection, entry, and quality control efforts undertaken by staff. Accurate and timely data entry is critical for accurate reporting and effective continuous program improvement.

The CEJA Reporting System is a custom database developed by Climate Works in partnership with the Center for Workforce Development at Southern Illinois University (SIU). The **CEJA Reporting System** is located on the Illinois workNet platform and functions as the information hub for all **programmatic tracking** and most **program reporting**. The CEJA Reporting System data collect will include, but may not be limited to:

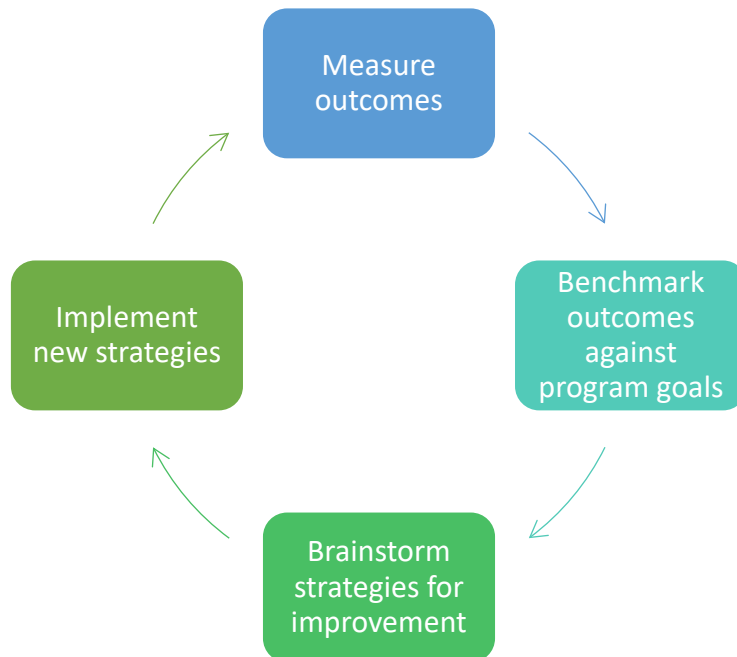
- Recruitment and outreach activities
- Barrier reduction services
- Career assessments – Orientation and pre-transition instruction
- Completion
- Follow-up activities

The staff at the Center for Workforce Development offer resources and ongoing technical assistance to all Climate Works grantees. Grantees are required to have an Illinois workNet profile to utilize the CEJA Reporting System for programmatic tracking. There is no limit on the number of grantee staff that can maintain a profile. However, it is important to remember that with more individuals entering data, there is a greater need for quality control. Grantees are encouraged to have one dedicated person to verify the accuracy of data entry each week. This must occur prior to monthly compliance reviews and be an individual who is different from the person who entered the data. This ensures that the data being entered adheres to quality standards, is entered in real-time, and more importantly, that data problems are addressed.

In addition to robust tracking capabilities, the CEJA Reporting System allows grantees to **run reports** that are required by the program. The dashboard available on the CEJA Reporting System allows grantees to have a snapshot of their performance, according to the data entered.

Continuous Program Improvement

Continuous program improvement is the ongoing assessment of performance to identify ways to improve the program. Climate Works requires grantees to develop and implement a continuous improvement plan. Continuous improvement plans are designed to bring improvements to service delivery processes through program performance, measuring outcomes, benchmarking against program goals, brainstorming opportunities for improvement, and implementing new strategies.



Measure Outcomes

Program performance is the degree to which grantees meet their objectives and achieve their goals, which are determined by the outcome measures. This approach is a systematic way of assessing if programs have achieved their goals.

Climate Works expects that program and participant data will be entered into the CEJA Reporting System regularly. This allows for live tracking of participant progress and program outcomes, as well as desk reviews from grant managers.

Note: Failure to keep accurate data may result in poor performance indicators that could ultimately result in Climate Works denying the renewal for funding.

Consistent and accurate data collection and data entry allow grantees to access accurate and up-to-date program reports. Reports can be utilized by grantees to monitor their program and determine if goals are being met or if there are performance gaps. Performance gaps are the difference between the program goal and the actual program performance.

Benchmark Performance Outcomes Against Program Goals

Do not wait until the end of the year to determine if your program is meeting its program goals! Continuous program improvement requires that grantees measure outcomes and track performance at regular intervals to see if performance goals are being met. This is called **benchmarking**. The reports and dashboards in the CEJA Reporting System can help grantees benchmark their performance. The CEJA dashboards and reports provide a quick snapshot of actual performance, compared with program goals, exposing any performance gaps.

The **CEJA Dashboard** is focused on the progress that participants are making in getting enrolled, receiving services, and completing the training program. It allows grantees to quickly identify red flags, participant progress, completion rates, and other key participant information. It also tracks participants

who have completed the program. It is focused on active tracking: long-term tracking, and follow-up participant tracking. The dashboard is fueled by the data entered in the CEJA Reporting System by grantees.

Workplan reports will allow grantees to see their progress toward metric goals. Grantees will be able to see and click on the number of individuals who have met each metric and the percentage of total participants. By clicking on the number of individuals for each metric, grantees will be able to drill down to participant lists and individual participant profiles.

Using the CEJA Dashboard

Each metric on the dashboard has an associated color that indicates if actions are needed for participants and the urgency with which action must be taken.

Table 10.3: CEJA Dashboard Color Code

Color code	Action needed
White	Information, no action needed.
Yellow	Action needed.
Red	Red flag. Immediate action needed.
Green	Complete or meets a program requirement.
Gray	Participant not enrolled or no in program, no action needed.

CEJA Dashboard Sections

The CEJA Dashboard is separated into the following sections:

- Outreach
- Intake
- Referrals
- Service Status
- Earned Credentials
- Completion Information
- Transition Outcomes
- Program Follow-up

See the table below for programmatic, data, participant data, and red flags

Table 10.4: CEJA Dashboard Sections – Programmatic and Participant Data

CEJA Dashboard Sections	Data Tracked
Intake	Total individuals with inquiry status (closed, cold, warm, hot); per cohort participants enrolled; total participants not enrolled (decline, not selected); total participants.
Participant Engagement	Total number of active participants; total participants with a training service; participants with an open training service that is past due for attendance entry; total participants with barrier reduction services; total participants with transition services; participants with transition services for more than six months.
Earned Credentials	Total participants who have not earned a credential of any type; total/per cohort that have earned an NCCER, TradesFutures MC3, other construction curriculum approved by climate works, OSHA 10, First Aid, and CPR certificate/certification; total participants/per cohort who have earned a full program certificate.
Completion Information	Total participants/per cohort with incomplete status; total participants/per cohort who has successfully completed; total participants/per cohort who have unsuccessfully completed.
Completed Pre-apprenticeship Program and Receives Transition Services	Total successfully completed participants with an open transition service; total/per cohort participants who successfully completed and received a transition service; total/per cohort participants, who are hired by an employer and enrolled in a registered apprenticeship program; total/per cohort participants, who achieved a secondary transition (open a small business, employed in construction, but not in a RAP; complete alternate training/ education program enroll in an advanced construction training program).
Provider and Employer/ Sponsor Relationships	Total number of union apprenticeship relationships; total number of contractor and subcontractor relationships; total number of non-union apprenticeship relationships.

Table 5: CEJA Dashboard Sections – Red flags

CEJA Dashboard Sections	Red Flags
Prescreening	If customer has had inquiry status of prescreen status for more than 30 days.
Intake	If one of the three items is not complete within 10 days of being added into the system, i.e. career assessment, service needs assessment, enrollment.
Post-Assessment	If a customer has at least one training service that does not meet the post-assessment criteria, i.e. score of at least 70%
Referral	If a referral is sent and 10 days have passed with no response; or the response is pending/no contact from customer; or referral for customer is required but has not been sent.
Career Plan/Services	Service does not meet deadlines set with start/end dates OR service has not been added.
Program Follow-up is Past Due	i.e. 1-month, 2-month, 3-month, etc. follow-up post completion

Brainstorming Strategies for Improvement

Through the grant application process, grantees provided outcome metric goals including the number of individuals; recruited, enrolled, completed, and transitioned to apprenticeships or jobs. These metrics were initially communicated in the Notice of Funding Opportunity (NOFO), agreed upon during the grant negotiations, and solidified in the Work Plan and grant agreement.

Grantees should refer to their Grantee Work Plan which outlines their outcome metric goals and timelines.

The **CEJA Dashboard** will reveal grantees' current performance in achieving their outcome metrics. Utilizing the dashboards and program reports, grantees can self-identify their current standing in specific areas.

- **Not Meeting Expectations** - Performance outcomes are below expectations. The current trajectory predicts program goals will not be met.
- **Meeting Expectations** - Performance outcomes are within the margins of expectations. The current trajectory predicts program goals will be met.
- **Exceeding Expectations** - Performance outcomes are beyond expectations. The current trajectory predicts the program will exceed goals.

If current strategies are not producing the desired results, new strategies may need to be considered to close performance gaps. Grantees should facilitate brainstorming sessions among their team to discuss ways to improve performance. Grant managers, program managers, and the CEJA Regional Administrators may be included to offer guidance during this process. Other Climate Works grantees

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may have ideas for strategies that can be implemented. Grantees will have opportunities to learn from each other during webinars and training sessions.

Consider other groups to consult with to assist with brainstorming strategies to improve performance. Community stakeholders (including community-based organizations, educational institutions, and businesses) may have ideas for recruiting program participants or reducing barriers to program completion. They often have intimate knowledge of the community and its residents that may provide unique insights. Professional associations might provide industry-specific best practices, evidence-based practices, and/or evidence-informed practices that can be leveraged by the grantee.

Implement New Strategies

Once strategies have been identified to help close a performance gap, the next step is to put them into action:

- Communicate the strategies to all relevant stakeholders and impacted staff.
- Update relevant forms, documents, processes, and procedures.
- If a new skill is involved, train instructors and staff members.
- The new strategies must have a definitive start date and benchmark date (the date Performance Outcomes will be benchmarked against Program Goals to see if there is still a performance gap or if performance has been improved).

Program Improvement Plan

Grantees are required to submit a **Program Improvement Plan** if the grantee is invited to renew their grant into the second and third years of program implementation. This tool communicates how service delivery practices will be improved for optimal program performance.

Note: See the Climate Works Partner Guide for a sample Program Improvement Plan.

The Program Improvement Plan may include, but not be limited to the following program areas:

- **Partner Engagement** - Goals/objectives communicate how the grantee can improve on developing and maintaining partnerships with organizations for participant referrals and/or leveraged resources.
- **Participant Lifecycle** - Goals/objectives communicate how the grantee can improve on recruiting, enrolling, retaining, training, and transitioning participants to DOL Registered Apprenticeships. The grantee may also communicate plans to increase the number of participants from underrepresented groups.
- **Financial Management** - Goals/objectives communicate how the grantee can improve on managing Illinois Works grant funds.

Program Evaluation

Evaluation takes a deeper look at program data and impacts. It employs empirical analysis to describe the operation of a program, measure the program impacts on outcomes of policy and program interest, and determines the cost-effectiveness of the program with the goal of identifying improvements and best practices.

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Climate Works' approaches to programs evaluation may include, but not be limited to:

- **Participant Satisfaction Survey** - All pre-apprenticeship participants will be asked to provide feedback on their program experience through a Participant Satisfaction Survey. All responses to this survey are anonymous and individual data will not be made available to grantees. However, grantees will be provided with aggregate information for their cohorts as a tool to improve programming.
- **Longitudinal Study** - Climate Works will conduct a longitudinal study, a correlational study that documents variables over an extended period. Data for this longitudinal study will include variables such as employment and earning levels after completion. The longitudinal study will assess the effectiveness of:
 - Preparing pre-apprentices for entry into the construction and building trades.
 - Increasing the entry of women, people of color, formerly incarcerated people, and foster care alumni into construction and building trades apprenticeships.
 - Increasing the likelihood that women, people of color, formerly incarcerated people, and foster care alumni will complete apprenticeships in the construction and building trades.
- **Implementation Studies** - An implementation study documents program operation or compares it against goals, across locations, or over time. It describes and analyzes “what happened and why” in the design, implementation, administration, and operation of programs and is generally used to determine whether a program is being carried out in a manner consistent with its goals, design, or other planned aspects.
- **Outcome Studies** - An outcome study compares individual outcomes against goals, across programs or locations, or over time. Outcome studies track participant outcomes after they complete or leave their pre-apprenticeship program.
- **Impact Studies** - An impact study estimates the difference in individual outcomes attributable to a specific program or policy. Impact studies determine whether programs or policies measure the intended impacts—that is, the program causes the differences in the outcomes that it is designed to influence.

These evaluation activities will examine both the Climate Works program as a whole and individual grantees and their programs.

Role of Grantees

Grantees will contribute to evaluation studies through their accurate and timely collection and reporting of data in the CEJA Reporting System.

Grantees are expected to fully cooperate with program evaluation activities, which might occur at any point during the grant period. The results of these studies will help inform how the program will be administered in the future.

Additional Resources

See the Climate Works Partner Guide for a sample Program Improvement Plan.