

## Chapter 10: Data Management

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### Chapter Overview

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

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

This chapter will highlight the data management process, the types of data grantees must collect and report, the role of the 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 JTED is done through the Reporting System for grantee and customer data.

JTED 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 customers, required forms (Program Application, Services Needs Assessment, Career Planning, Placement Services, and Follow-up, among others), or grantee accounting systems.

### Program Data

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

- Training providers
- Training locations
- Training sectors
- Curriculum utilized
- Credentials Earned
- Instructor information

- Worksite locations
- Communities served
- Start and stop dates
- Services offered

## Customer Data

Grantees are expected to collect customer data, including:

- Contact information
- Demographic information
- Eligibility documentation
- Services Needs Assessment
- Services Provided
- Case Notes
- Progress measures
- Outcomes

Customer data is collected and analyzed at the individual, grantee, and program levels:

- On the **individual level**, customer data allows grantees to monitor each customer’s participation, progress, completion, services received, and outcomes to help them succeed in the program.
- On the **grantee level**, customer data can help grantees identify strengths and gaps in participation, retention, completion, and rates—especially for target populations. Customer data can be used to uncover barriers that may be limiting the progress or success of specific customer sub-groups. Customer data will include the number of enrollees, wage data, the number of customers who successfully completed programs or employment opportunities. This data will be used to determine if grantees are meeting their performance targets. Acceptable performance for a current grantee is set at 75% of the planned performance goals.
- On the **program level**, JTED administrators will gather and aggregate customer data across the different grantees to evaluate whether the JTED program is meeting its intended goals and to recommend changes for future program years.

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

Table 10.1: Dashboard Sections – Programmatic and Customer Data

| Dashboard Sections   | Data Tracked                                                                                                         |
|----------------------|----------------------------------------------------------------------------------------------------------------------|
| Participant Overview | Total customers current status of enrolled, completed, or exited; customers who have not had a case note in 30 days. |

|                                                     |                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    |
|-----------------------------------------------------|------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
| Enrollment Status                                   | Total customers who have started but not completed/signed the application; total customers who have a completed and signed application but not enrolled; total customers who do not have a training program assigned; total customers who have an enrollment; total customers who are not enrolled (broken out by declined to participate, not eligible, Application not completed); total customers (unduplicated count).                                                                                                                                                                                                                                                                                                                                                                                                                                                         |
| Service Needs Assessment                            | Total customers who did not completed the service needs assessment; total customers who have completed the service needs assessment.                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               |
| Career Plan: Current Training/Career Service Status | Total customers who have at least one service where start/completion status does not meet deadlines set with the start/end dates; total customers who have all service start/completion statuses that meet the deadlines set with the start/end dates; total customers who do not have training/work-based learning service; total customers who have an open training / work-based service, total customers who have one or more support/barrier reduction services identified in the service needs assessment that still need to be addressed; total customers who have an estimated cost that needs updated; total customers that have a service with a planned status; total customers that have a started/completed service (unduplicated – broken out by career service, training service, employment and work-based learning services, support/barrier reduction services). |
| Earned Credential                                   | Total customers who are in a training service and do not have a credential entered in the system; total customers who earned an industry-linked credential, certification, or license; total customers who withdrew or completed program without earning an industry-linked credential, certification, or license.                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 |
| Completion Information                              | Total customers who have not completed program; total customers who were employed during enrollment and/or completion; total customers employed 2 <sup>nd</sup> quarter after exit; total customers employed 4 <sup>th</sup> quarter after exit; total customers employed in training related job at exit; total customers employed in training related job 2 <sup>nd</sup> quarter after exit; total customers employed in training related job 4 <sup>th</sup> quarter after exit; total customers who received a wage increase; total customers who have been placed in secondary education; total customers who have been placed in post-secondary education; total customers placed in a registered apprenticeship program.                                                                                                                                                   |

|                              |                                                                                                                                                                                                                                                                                                                                                              |
|------------------------------|--------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
| Measurable Skills Gain (MSG) | Total customers with Educational Functional Level (EFL); total customers with secondary transcript/report card; total customers with postsecondary transcript/report card; total customers with training milestone; total customers with skills progression/diploma/certificate/degree; total customers with an MSG (unduplicated count); total MSGs earned. |
|------------------------------|--------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|

In general, data that the grantees collect will be entered into the Reporting System, which provides real-time tracking of grantees' progress. This allows grantees and Grant Managers to identify early performance gaps and adjust. If you do not enter your outcome data into the system, your outcomes and achievement may not be measurable.

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

## Data Entry Staff

It is highly recommended that grantees hire or identify a data entry staff person. This person must enter data into the 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 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).
- Reporting System training.
- Access to technical assistance.

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 JTED Programs.

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

## 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 data the Reporting System collects, includes, but may not be limited to:

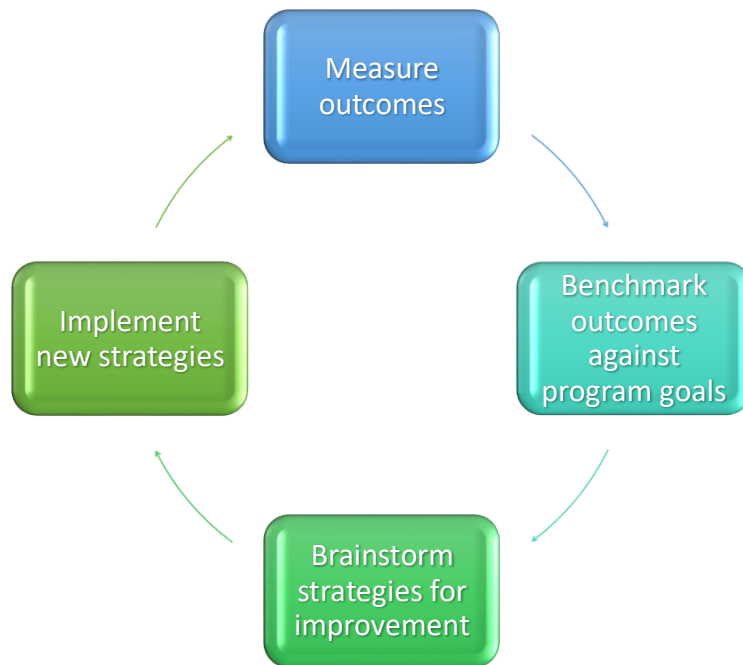
- Eligibility
- Assessment
- Career Plan/IEP
- Training Program Enrollment
  - Attendance Sheets
  - Grades
  - Any necessary documents to support that the participant is attending the training program.
- Supportive Services
- Credentials Earned
- Follow Up Services

Grantees are required to have an Illinois workNet profile to utilize the 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 Reporting System allows grantees to **run reports** that are required by the program. The dashboard available on the 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. JTED 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.

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

**Note:** *Failure to keep accurate data may result in poor performance indicators.*

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 Reporting System can help grantees benchmark their performance. The dashboards and reports provide a quick snapshot of actual performance, compared with program goals, exposing any performance gaps.

The **Dashboard** is focused on the progress that customers are making in getting enrolled, receiving services, and completing the training program. It allows grantees to quickly identify red **flags**, customer progress, completion rates, and other key customer information. It also tracks customers who have completed the program. It is focused on active tracking: long-term tracking, and follow-up customer tracking. The dashboard is fueled by the data entered in the 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 customers. By clicking on the number of individuals for each metric, grantees will be able to drill down to customer lists and individual customer profiles.

## Using the Dashboard

Each metric on the dashboard has a section title and description that indicates relevant information.

## Dashboard Sections

The Dashboard is separated into the following sections:

- Participant Overview
- Enrollment Status
- Service Needs Assessment Career Plan: Current Training/Career Service Status)
- Earned Credential
- Completion Information
- Measurable Skills Gain (MSG) Participant Overview
- Enrollment Status
- Service Needs Assessment
- Career Plan (Current Training/Career Service Status)
- Referrals

See the table below for programmatic, data, customer data, and red flags.

Table 10.3: Dashboard Sections – Programmatic and Customer Data

| Dashboard Sections                                 | Data Tracked                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         |
|----------------------------------------------------|----------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
| Intake                                             | Total individuals with inquiry status (closed, cold, warm, hot); per cohort customers enrolled; total customers not enrolled (decline, not selected); total customers.                                                                                                                                                                                                                                                                                                                                               |
| Customer Engagement                                | Total number of active customers; total customers with a training service; customers with an open training service that is past due for attendance entry; total customers with barrier reduction services; total customers with transition services; customers with transition services for more than six months.                                                                                                                                                                                                    |
| Earned Credentials                                 | Total customers who have not earned JTED approved credential e.g. First Aid, and CPR certificate/certification); total customers/ per cohort who have earned a full program certificate.                                                                                                                                                                                                                                                                                                                             |
| Completion Information                             | Total customers/per cohort with incomplete status; total customers/per cohort who has successfully completed; total customers/per cohort who have unsuccessfully completed.                                                                                                                                                                                                                                                                                                                                          |
| Completed Program and Receives Transition Services | Total successfully completed customers with an open transition service; total/per cohort customers who successfully completed and received a transition service (e.g. hired by an employer or enrolled in a registered apprenticeship program); total/per cohort customers,; total/per cohort customers, 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: Dashboard Sections – Red flags

Table 10.4: Dashboard Color Code

| Dashboard Sections                                  | Red Flags                                                                                                                   |
|-----------------------------------------------------|-----------------------------------------------------------------------------------------------------------------------------|
| Enrollment Status                                   | Customers who have a completed and signed application, but who are not enrolled.                                            |
| Enrollment Status                                   | Customers who do not have a training program assigned.                                                                      |
| Career Plan: Current Training/Career Service Status | Customers who have at least one service where start/completion status does not meet deadlines set with the start/end dates. |

## 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 **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 Regional Administrators may be included to offer guidance during this process. Other JTED grantees 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 customers 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

If grantees are underperforming, they may be required to submit a **Program Improvement Plan**. This tool communicates how service delivery practices will be improved for optimal program performance.

**Note:** See the 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 customer referrals and/or leveraged resources.
- **Customer Lifecycle** - Goals/objectives communicate how the grantee can improve on recruiting, enrolling, retaining, training, and transitioning customers. The grantee may also communicate plans to increase the number of customers 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.

Approaches to programs evaluation may include, but not be limited to:

- **Customer Satisfaction Survey** - All customers will be asked to provide feedback on their program experience through a Customer 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** - 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:

- Additionally, the JTED program will keep track of grant activities and outcomes utilizing the Illinois workNet system. These metrics will inform the Department of the efficiency and effectiveness of employment and training services provided under this NOFO. The activity and outcome metrics include (but are not limited to the following):
  - Number of individuals placed and number acquiring an Industry-Linked Credential, Certification, or License
  - Number of individuals placed and number completing a Pre-Apprenticeship, United States Department of Labor (USDOL) Registered Apprenticeship, or other Apprenticeship Programs (see <https://www.illinoisworknet.com/ApprenticeshipIL/Pages/default.aspx>)
  - Number of individuals placed and number completing OJT
  - Number of individuals placed and number completing a paid work experience or internship
- **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 customer outcomes after they complete or leave their JTED 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 JTED 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 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 [JTED Partner Guide](#) for the *Program Improvement Plan*.