## Attachment I
## Data Element Validation Methodology and Tools

The data element validation process ensures the accuracy of data entered in the state management information systems (MIS), such as Workforce One (WF1) and MinnesotaWorks (MNW) and reported to the United States Department of Labor (DOL) in the Participant Individual Record Layout (PIRL) files. Workforce Innovation and Opportunity Act program staff collect documentation supporting data elements on an ongoing basis. The PIRL data elements requiring validation, and their acceptable forms of source documentation, are identified in Attachment II.

**Data Validation Staffing Structure**
Minnesota's data validation is led by the Department of Employment and Economic Development's (DEED) Employment and Training Program (ETP) Monitoring Supervisor who works collaboratively with a team of internal technical, monitoring, and program staff. DEED Performance and Technical Management (PTM) staff develop and maintain data sampling and data validation tools. DEED monitoring staff (hereafter referred to as data validators) are responsible for validating that the information reported in Minnesota's PIRL files is correct. The data validators will work with Local Workforce Development Areas (LWDAs) and WIOA program administrators to correct errors. DEED WIOA program administrators are responsible for communicating with, and providing training and technical assistance to, LWDAs.

**Data Validation Methodology and Tools**
Minnesota developed a **sampling tool** to guide the state in determining the number of records included in data validation. The tool includes WIOA participant counts from the PIRL file, by LWDA, and from each program included in WIOA quarterly and annual performance reports. The WIOA participant counts in the sampling tool includes each distinct cohort in the WIOA reports: served participants, exited participants, second quarter after exit employment metric and median earnings participants, fourth quarter after exit employment metric participants, credential attainment metric participants, and measurable skills gain participants. Using this tool, DEED PTM staff advise WIOA program administrators and the ETP Monitoring Supervisor in selecting sample sizes that enable Minnesota to speak with confidence about the validity of the data in the state's PIRL files,

Minnesota's **data validation tool** is auto populated with the PIRL data elements that are required to be validated for each WIOA program. The data validation tool enables the comparison of data reported in the PIRL data elements to the data in Minnesota's MIS, as well as comparing the data in Minnesota's MIS to the allowable source documentation. Each tool is specific to each LWDA, ensuring the data is viewed by those who have pre-established rights for access. The data validators verify each data element by determining whether the data in the PIRL matches the data in the MIS, and that the data entered in the MIS are accurate per the source documentation. Once data validation is complete, the tool generates a report of data elements with validity issues. This allows DEED and LWDA staff to identify any trends or

data integrity concerns. Finally, the tool is sent to each LWDA to facilitate communication and to address data validation issues.

DEED is starting with an 85% confidence interval and a 10% margin of error for Program Year (PY) 2023. The stratified random sample will consist of both core and non-core programs (Title I, Title III, TAA, and DWG Programs) from a subset of three Local Workforce Development Associations (LWDAs). Approximately 206 to 250 participant records will be reviewed.

During PY 2024, DEED will continue the stratified random sampling of both core and non-core programs, but will expand the subset of LWDAs from three to all LWDAs. The confidence interval will be increased to 90%, with a margin of error of 10%, resulting in a review of approximately 404 to 480 participant records.

In PY 2025, DEED will increase the confident interval and margin of error in our stratified random sampling to 95% and 10%, respectively, resulting in a review of approximately 562 to 680 participant records.

Minnesota will progressively continue to lower our margin of error, as we solidify our data validation procedures and tools, until DEED can achieve a stratified random sampling with a 95% confidence interval and a 5% margin of error.

**Additional Error Correction**
In addition to the data validation process, DEED PTM will also:
- Conduct a monthly review of PIRL data to identify errors, missing data, out-of-range values, and other anomalies, and
- Document missing and erroneous data identified that have been corrected.