

**MODULE 5—WAGE ITEM VALIDATION****A. PURPOSE**

Each quarter, employers report to the state agency employee wages on a wage report (WR) and summary wage and contributions data on a contribution report (CR) on various media, including paper, magnetic tapes, diskettes, CD-ROMs, or files transmitted over the Internet. A WR includes a *wage record* for each employee: the individual's employee's name, social security number (SSN) and earnings in covered employment during the quarter. The agency creates a record in its files--called a *wage item*--that identifies the individual, his employer, and the individual's earnings for the quarter. The agency reports the number of wage items on the ETA 581 report; this count is one of the workload items used to allocate UI administrative funds. Wage item validation assesses the accuracy of the count of wage items reported on the 581, and alerts the state to correct any inaccuracies. This helps ensure equitable funding for this state workload activity.

It would be ideal to validate the count of wage items by building a reconstruction file as is done for the five Tax Populations. This is impractical for two reasons: (1) size of the extract file--California's file would contain over 18 million records--and (2) inability to conduct Data Element Validation (employers, not the agency, have the original wage information.) Instead, validators recount small samples of wage records already processed by the state and make an inference about the accuracy of the 581 count from those sample recounts. In this recount, validators make sure that (a) every valid wage record was counted on the ETA 581 as a wage item, and (b) that the ETA 581 report did not include any:

- *Corrections* (the system must be able to process corrections without double counting the item); or
- *Incomplete wage records* (for example, if the identifier or wage amount is missing or 0 for the employee); or
- *Duplicate records*.

This approach allows states to validate wage items at any time after they have been processed.

**B. METHODOLOGY**

**Task 1: Determine the modes the state uses to receive wage records, how each mode is processed, and how the 581 count is obtained.**

- *Modes.* Identify the specific modes your state uses to receive or “capture” wage records.
- *Processing.* It is essential to understand the process your state uses to enter the records of each mode into your system as wage items and corrections. It may be helpful to build a simple flowchart of the process of receipt of wage records to taking the count of wage items for the 581.
  - If wage records are received on paper, how are they data-entered?
  - For records that are batch-processed, are the totals for wage items indicated for each batch, so that a recount of the batch can be compared with the original count of wage items?
  - Are items received subjected to front-end edits to look for probable SSN errors (less than 9 digits, impossible sequences), missing wages, missing names, etc.?
  - How are corrections handled and recorded so that you as a validator can note corrections?
- *Counting.* How is the 581 count taken?
  - Built up as a sum of counts of items from each batch?
  - As a snapshot of the wage file at the end of the report quarter?
  - Other?

**Task 2. Set up the Worksheet**

Establish a row on the Wage Item Validation Worksheet in the UI Tax Data Validation software for each mode in which your state receives wage items.

**Task 3: Select Samples**

States typically group or “batch” wage and contribution reports, by mode received, to process them and organize their accounting records. The definition of a “batch” may vary depending on the size of reports and how they are received. For example, you may batch paper wage reports in groups of 50 or 100 documents with a batch number identifier and summary transaction totals. Or, you may process a large wage file from a tape or an FTP transmission, each of which could be a single batch of thousands of records.

It has been determined that a sample of 150 records from each mode, investigated in two stages. Stage 1 is 50 records, and if necessary, Stage 2 is an additional 100 records. This will allow a sufficiently precise inference to be made about the accuracy of processing wage records into wage items. On the basis of

your study and flowcharting of wage record processing, select a point at which you can identify at least 150 wage records obtained by each mode of receipt.

- *For Each Mode:*
  - Pick a Batch or Set of Wage Reports containing at least 150 wage records.
  - Randomly select 150 records of these records
  - Divide the 150 records into a Stage 1 set of 50 records and Stage 2 set of the remaining 100 records.
  - Set up a worksheet, preferably in a spreadsheet program such as Excel, to track results of investigations of the records.

## **Task 4: Review Sampled Records for Each Mode and Compare Count with Wage Items**

### **Task 4a: Review and Compare Count for First 50 Records in each Mode**

The validator must count only wage items that are complete. This means each countable entry must include each of the following elements:

- Employee Identifier (Name or SSN)
- Employer Identifier (Name or EAN)
- Wage dollar amount

Ensure that only complete records are counted, including corrected records. Enter the recount for each mode on your tracking worksheet.

### **Task 4b: Obtain the System Wage Item Count**

How this is done will depend on how your state counts wage items.

- *Batch cumulating of Wage Items.* If your state obtains its 581 count by cumulating batch counts, and you have the original records with an indication of whether they were included as wage items or not, you can compare your results with those originals.
  - It may be easier to retrieve your wage history files to see which of the records in your set were counted.
- *Snapshot counting of Wage Items.* Obtain an extract of all wage items from your system for the validated quarter that have the combination of EAN and SSN included in your mode samples.

Enter this count as the “581 count for batch” on your worksheet.

### **Task 4c: Identify and Count Erroneous Records**

If there are any discrepancies between your sample recounts and the 581 counts from the system, search for duplicates—including corrections counted as records—and incomplete records among the extracted records.

### **Task 4d: Determine Whether Stage 2 Investigation is needed**

Proceed as follows at this point:

- If difference between recount and 581 count is
  - = 0, the mode passes at Stage 1. The mode is done.
  - = 1, 2, or 3, review remaining 100 cases for the mode.
  - $\geq$  4, the mode fails at stage 1
    - You may also want to review the remaining 100 cases if the difference is 4 or 5, or you want to assess the likely error rate in wage item processing for the mode.

**Task 4e: Repeat Steps 4a-4c for Remaining 100 Cases for each mode as determined at Step 4d.**

**Task 4f. Combine Results for Stages 1 and 2**

### **Task 5: Enter Combined Results in Wage Item Validation Worksheet**

From your tracking worksheet, enter the total number of valid wage items in the “Recount for Batch” column on the *Wage Item Validation Worksheet* on the DV software. If any duplicates or other errors have been identified, enter the count by type in the appropriate columns on the worksheet.

### **Task 6: UI Tax Validation Software**

The UI Tax Data Validation software calculates the difference between the recount and reported counts for the validated sample of wage items. Wage Item Validation passes if, based on the sample results, each mode is likely to contain no more than 2% errors. Pass and fail for a mode is determined as follows:

- **Pass:**
  - The Stage 1 sample of 50 wage records contains no errors.
  - The full sample of 150 wage records contains no more than 6 errors.
- **Fail:**
  - The Stage 1 sample of 50 wage records 4 or more errors.
  - The full sample of 150 wage records contains 7 or more errors.

To pass Wage Item Validation, every mode must pass. If it passes, WIV does not need to be repeated for three years; if at least one mode fails, WIV must be repeated the following year.

## **Task 7: Submitting and Saving Wage Item Validation Results**

Submit Wage Item Validation results by clicking the “Transmit” button at the bottom of the Worksheet (Figure 5.1). Results for a validation year must be submitted by June 10. Because the software only retains these results until the next validation or a reload of the software, it is recommended that the results be saved by taking a screen print or doing Save As.

## **Task 8: Following Up on Wage Item Validation Errors**

If the wage item validation identifies errors, the validator should discuss the errors with the programmer or individual responsible for wage item processing, and the state should determine whether the error affects other batches of wage items as well.

**Example of a Wage Item Validation Worksheet**

Figure 5.1 shows an example of a Wage Item Validation Worksheet. The first column lists the state’s modes for receiving wage records. The second column shows the dates of the batches from which samples of 150 wage records were drawn. The number of Cases Reviewed out of the 150 drawn depends on the results at Stage 1. The column labeled “581 Count” indicates how many of the reviewed wage records were counted as wage items and included in the ETA 581 count during the quarter. The validator’s recount of those same wage records is entered in the column labeled “Recount for Batch.” Pass and fail are based on the difference between the two counts and depend on the allowable errors explained in **4d** above. In this example, the Fax mode passes with one error after all 150 cases were reviewed because the discrepancy was discovered at Stage 1. Internet, Magnetic Tape, and Diskette all pass with 0 differences in the 50 cases reviewed at Stage 1, but Paper failed with 5 errors out of 50 cases reviewed at Stage 1, and Scans failed with 7 errors out of 150 cases reviewed. The analysis of errors provides guidance for the corrective action process.

**FIGURE 5.1**  
**WAGE ITEM VALIDATION WORKSHEET**

<b>WAGE ITEM VALIDATION</b>										
Validation Worksheet										
Mode	Date Received	Cases Reviewed	581 Count	Recount	Difference	Pass/Fail	Analysis of Errors			Delete Mode?
							ID missing	Amt Missing	Duplicate	
Fax	12/31/2008	150	148	147	1	Pass	1			
Internet	11/29/2008	50	50	50	0	Pass				Delete
Magnetic Tape	11/29/2008	50	49	49	0	Pass				Delete
Diskette	11/29/2008	50	48	48	0	Pass				Delete
paper	11/29/2008	50	49	44	5	Fail	2	3		Delete
Scans	12/8/2008	150	149	142	7	Fail	2	2	3	Delete
<b>Overall Validation Score: Fail</b>										