West Virginia
WorkForce

Best Practices in Data Validation

WEST VIRGINIA

Overview

Data Element Validation (DEV) assesses the accuracy of participant data records by reviewing samples of participant records against allowable source documentation to ensure compliance with federal definitions.

Current DEV instructions and allowable source documents are outlined in Training and Employment Guidance Letter (TEGL) 27-10, Change 1, issued July 25th, 2011, in Attachment A.

The Data Reporting and Validation Software (DRVS) supplied by ETA (Employment and Training Administration) draws the sample of participant records that state reviewers are required to validate.

Data element validation, using the file of exiters and participants reported on the ETA 9091, must be submitted by February 1st, 2012.

A. Validation Rules

Two types of validation rules exist:

1. Match: The data on the worksheet must be the same as the data in the source documentation. For example, if the worksheet says a participant's date of birth is July 1, 1975, then the source documentation must also have July 1, 1975, as the birth date.

2. Support: To support the data on the worksheet, the source documentation must provide evidence that the data on the worksheet is correct. Information must be interpreted or processed before it can be used to assess the accuracy of the data on the participant's records. For example, source documentation is used to support youth who needs additional assistance because validators must interpret policy and determine if the documentation supports that policy.

B. Types of Source Documentation

For most data elements, the validation instructions provide multiple forms of acceptable source documentation. Ideally, all source documentation should tell the same story regarding the participant, services rendered, and outcomes. For the most part, the definition of a particular source is clear. States have, however, had questions about four sources—Cross-Match, State Management Information System (MIS), Self-Attestation, and Case Notes. Definitions for these four types of source documentation are:

1. Cross-Match: A cross-match requires validators to find detailed supporting evidence for the data element. An indicator or presence of an SSN in a non-WIA database is not sufficient evidence. For example, Temporary Assistance to Needy Families (TANF) participation can be determined by a cross-match with the state's public assistance database. It is not sufficient to find that the sampled SSN is present in the public assistance database; validators must also find supporting information such as dates of participation and services rendered.

Source Documentation-continued
At-A-Glance

2. State MIS: Unless otherwise noted, state MIS refers to specific, detailed information that is stored in the state's information system that supports an element. (in West Virginia, our MIS system is the MACC)

3. Self-Attestation: Self-attestation occurs when a participant states his or her status for a particular data element, such as pregnant or parenting youth, and then signs and dates a form acknowledging this status. The key elements for self-attestation are: (a) the participant identifying his or her status for permitted elements and (b) signing and dating a form attesting to this self-identification. The form and signature can be on paper or in the state management information system, with an online signature.

4. Case Notes: Case notes refer to either paper or electronic statements by the case manager that identifies, at a minimum, the following: a participant's status for a specific data element, the date on which the information was obtained, and the case manager who obtained the information.

Sample DEV Worksheet

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Adult DEV Work Sheet

Element #	Data Element	Value	DEV Indicator

OBS Number: 177 **Individual Identifier** 000167944 **WIB Name:** WIB Region 1

Office Name: Beckley - WORKFORCE West Virginia Car **Case Manager** CM: Not Set

User Field 1: Customer name **User Field 2:** UMWA

Wrong SSN: **Unable To Locate:** **Invalid Record:** **Missing Record:**

Comments:

3	DateOfBirth	9/14/2011	
20	LowIncomeStatus	1	
34	ProgramParticipationDate	07/09/2007	
35	ProgramExitDate	06/30/2008	
66	FirstCoreServiceDate	09/13/2007	
68	FirstIntensiveService	07/09/2007	
84	ExitEmployed1	1	
85	ExitEmployedMatch1	1	
89	ExitEmployed2	1	
90	ExitEmployedMatch2	1	

Sample DEV Report

WIA Summary/Analytical Report

State: WEST VIRGINIA

Report Validated: PY 2009

Funding Stream: Adult

Number of Records Sampled:	256	Wrong SSNs:	0
Number of Records Validated:	256	Invalid Records:	0
		Missing Records:	4
		Unable to Locate Records:	4

Data Element	Element #	# Records with Element Present	No. of Errors	Overall Errors Rate	Reported Errors Rate
DateOfBirth	3	256	39	15.41%	15.41 %
VeteranStatus	12	14	8	3.16%	57.66 %
EmploymentStatus	16	88	5	1.92%	6.00 %
LowIncomeStatus	20	242	25	9.86%	10.43 %
NeedyFamilyStatus	21	0	0	0.00%	0.00 %
OtherPublicAssistanceS	22	0	0	0.00%	0.00 %
ProgramParticipationD:	34	256	28	11.20%	11.20 %
ProgramExitDate	35	256	31	12.95%	12.95 %
OtherExitReasons	61	13	3	1.30%	22.56 %

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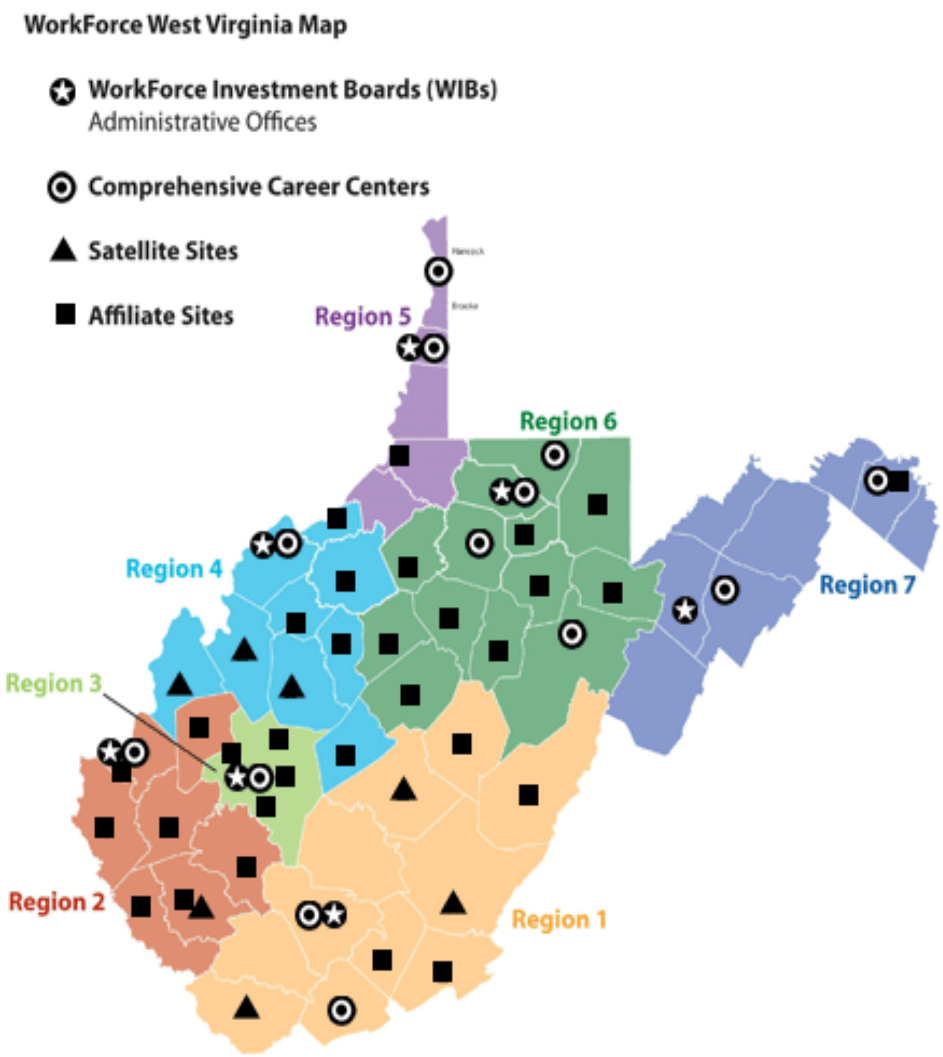
1. Collect data
2. Report data
3. Validate data
4. Analyze data
5. Identify issues

Coordination and Communication

Collect Data

West Virginia (WV) is comprised of seven local Workforce Investment Boards (WIBs). Each WIB contracts with and/or employs staff to maintain participant files.

Training was conducted in the Spring of 2010 to train field staff on various issues that were identified in the previous year's data validation review.



Report Data

West Virginia's Program Year (PY) 2009 Annual Report (ETA Form 9091) was submitted on September 13th, 2010.

1,700 total exiters were reported.

The DRVS extracted 864 participants into the sample of files to be validated.

Program	Total
Adult	199
Dislocated Worker	234
NEG	39
Older Youth	95
Younger Youth	208
State Set-Aside*	89

*separated manually by user field 2 flag

Validate Data

West Virginia WorkForce

- The DRVS separates the sample into program:
  - Adult
  - Dislocated Worker
  - NEG
  - Older Youth
  - Younger Youth

- WV breaks the sample down even further:
  - Region (WIB)
  - State Set-Aside

- WV provided each WIB and State Set-Aside grantee their sample on October 7th, 2010.

- Each WIB was sent a letter confirming their validation schedule.

- Validators were assigned regions/programs to review, and were trained on October 12th, 2010.

- Validation was completed by December 3rd, 2010.

- Data validation results were submitted on January 28th, 2011.

Validate Data-continued

Staff who conducted validation had a binder containing the worksheets, a copy of TEGL 31-09, Guidance Notice 1-08 (State policy), and were asked to complete the following forms:

- Fail log
  - MACC ID
  - Participant Name
  - Element Number
  - Reason element failed

- Tally sheet
  - Manual count; totals of present elements and failed elements

- Summary
  - Identifies best practices
  - Identifies areas of weakness
  - Identifies compliance with the State's file maintenance policy

Validate Data-continued
Fail Log

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Data Validation 2010 Log

Region 8 Funding Adult Date 10/25/10 Reviewer R. Shoffner

MACC ID	Last Name	Element Number	Reason Failed
123456	Presley	3	Date on birth certificate did not match date on worksheet
789101	Monroe	28	Self-attestation not signed

Validate Data-continued Tally

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Data Validation Tally

Region/Grantee 8 **Circle One:** Local NEG SSA **Circle One:** Draft or Final

Provide the total amount of files were present and how many were missing for appropriate funding stream. Then record how many files the element was present in. Indicate how many fails were found within the element.

	Adult		DW		NEG		OY		YY		SSA	
# Files/Missing>>	22	0										
Element	Present	Fail	Present	Fail	Present	Fail	Present	Fail	Present	Fail	Present	Fail
3	22	1										
12												
16												
20												
21												
22												
24												
25												
26												
27												
28												
29												
30												
31												
32												
34												
35												
38												

Validate Data-continued Summary

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Data Validation 2010 Summary

(NEG and SSA files are not to be reflected in WIB summaries. Separate summary sheet will need completed for each.)

Region 8 Date(s) of Review 10/25/10 Reviewer(s) R. Shoffner

- Data Validation
  - Provide three positives/areas of strength based on your review:
    1. Checklists provided in files
    2. Case notes were very thorough
    3. _____
  - Provide three negatives/areas that need improvement based on your review:
    1. Several files were missing. It is recommended that files be maintained for 5 ½ years from exit.
    2. _____
    3. _____
  - Summarize (in 3-5 sentences) your review of this region's files:
    Staff were very cooperative, knowledgeable, and very helpful. Files were very organized.

- Guidance Notice 1-08

• Were the files divided into appropriate sections?	Yes	No	Some
• Were the data elements labeled appropriately?	Yes	No	Some
○ Labeled according to guideline?	Yes	No	Some
○ Was there an attempt at labeling?	Yes	No	Some
○ Were elements mislabeled?	Yes	No	Some

Analyze and Identify Data

The fail log's purpose was to identify the participant(s) who failed an element, which element(s) failed, and why the element(s) failed.

The tally sheet identified how many files the region/grantee was responsible for, how many were missing, the number of elements present, and of those elements, how many failed.

The summary sheet identified each region's areas of strength, so that we could incorporate best practices statewide, as well as areas of weakness, so that we could develop a plan of action to improve that area. The summary also allowed us to verify whether regions were in compliance with our file maintenance policy.

Identify Issues
State Staff

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✓Confirm manual counts of present elements and failed elements.

✓Separate worksheets in each binder into two categories-

1. worksheets with all ‘pass’ elements
2. worksheets that have at least one ‘fail’

✓Once data entry is completed, run a preliminary report, to compare data entry with manual counts. Address discrepancies.

✓Calculate missing file rate.

✓Compare current results with previous year’s results.

Identify Issues
Field Staff

Each WIB received an 'exit letter' on December 16th, 2010, confirming that data validation had been completed, along with their summary sheet.

Each WIB was provided a packet of information on February 14th, 2011, containing:

- ✓statewide summary/analytical reports
- ✓side-by-side comparison of the PY2009's data validation results versus PY2008
- ✓their regional breakout
- ✓statewide missing file tally
- ✓list of missing files in their region (if applicable)
- ✓copy of each worksheet if an element failed

On February 22nd, 2011, regions that experienced missing/unable to locate files received a letter asking for justification as to why a file was missing during the review. Regions received a comparison of what results could have been if files had not been missing.

Regions were also asked to complete a survey on their experience with the data validation process.

Side-by-side comparison
PY2008 vs. PY2009

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Data Validation Comparison PY2008/PY2009

	Adult								Dislocated Worker							
	Present Elements		Errors		Overall Error Rate %		Reported Error Rate %		Present Elements		Errors		Overall Error Rate %		Reported Error Rate %	
	2008	2009	2008	2009	2008	2009	2008	2009	2008	2009	2008	2009	2008	2009	2008	2009
3	289	256	37	39	13.11	15.41	13.11	15.41	279	249	20	28	7.33	11.74	7.33	11.74
12	30	14	15	8	5.15	3.16	51.24	57.66	26	32	11	7	3.76	2.46	42.68	20.48
16	93	88	16	5	5.43	1.92	18.45	6.00	15	19	4	4	1.30	1.36	27.00	20.66
20	245	242	34	25	12.41	9.86	14.59	10.43								
21	0	0	0	0	0.00	0.00	0.00	0.00	0	0	0	0	0.00	0.00	0.00	0.00
22	0	0	0	0	0.00	0.00	0.00	0.00	0	0	0	0	0.00	0.00	0.00	0.00
24									7	4	0	1	0.00	0.41	0.00	29.63
25									0	1	0	1	0.00	0.41	0.00	100.00
26	0	0	0	0	0.00	0.00	0.00	0.00								
27	0	0	0	0	0.00	0.00	0.00	0.00								
28																
29																
30																
31																
32																
34	289	256	40	28	14.09	11.20	14.09	11.20	279	249	11	19	4.09	8.34	4.09	8.34
35	289	256	45	31	15.85	12.95	15.85	12.95	279	249	16	16	5.88	6.25	5.88	6.25
38																
45																
61	14	13	0	3	0.00	1.30	0.00	22.56	4	5	1	0	0.34	0.00	21.14	0.00
66	244	224	46	33	16.29	13.41	19.44	15.32	252	229	29	31	10.37	13.35	11.49	14.55
68	248	228	36	19	13.15	7.54	15.51	8.53	242	238	11	26	3.87	10.91	4.47	11.45
69	185	186	22	21	7.36	8.12	12.53	12.01	145	178	12	12	3.98	4.38	8.31	6.67
70	185	186	25	20	8.35	8.05	14.21	11.92	145	178	12	12	3.96	4.42	8.27	6.73
74	185	186	30	15	9.98	5.83	16.98	8.62	145	178	11	9	3.66	3.29	7.65	5.01

Statewide Missing File Tally

	Adult-Total Files 256							Dislocated Worker-Total Files 249						
Element	Present Elements	Errors		Overall Error Rate %		Reported Error Rate %		Present Elements	Errors		Overall Error Rate %		Reported Error Rate %	
		With Missing	Without Missing	With Missing	Without Missing	With Missing	Without Missing		With Missing	Without Missing	With Missing	Without Missing	With Missing	Without Missing
3	256	39	31	15.41	12.11	15.41	12.11	249	28	21	11.74	8.43	11.74	8.43
12								32	7	6	2.46	2.41	20.48	18.75
16	88	5	3	1.92	1.17	6.00	3.41							
20	242	25	17	9.86	6.64	10.43	7.02							
34	256	28	20	11.20	7.81	11.20	7.81	249	19	12	8.34	4.82	8.34	4.82
35	256	31	23	12.95	8.98	12.95	8.98	249	16	9	6.25	3.61	6.25	3.61
61	13	3	2	1.30	0.78	22.56	15.38							
66	224	33	28	13.41	10.94	15.32	12.50	229	31	25	13.35	10.04	14.55	10.92
68	228	19	15	7.54	5.86	8.53	6.59	238	26	21	10.91	8.43	11.45	8.82
69	186	21	15	8.12	5.86	12.01	8.06	178	12	7	4.38	2.81	6.67	3.93
70	186	20	14	8.05	5.47	11.92	7.53	178	12	7	4.42	2.81	6.73	3.93
74	186	15	9	5.83	3.52	8.62	4.84	178	9	4	3.29	1.61	5.01	2.25
84	201	7	0	2.64	0.00	3.65	0.00	219	6	0	2.29	0.00	2.77	0.00
85	201	11	4	4.03	1.56	5.57	1.99	219	7	1	2.62	0.40	3.17	0.46
89	198	6	0	2.19	0.00	3.06	0.00	220	6	0	2.29	0.00	2.74	0.00
90	198	8	2	2.94	0.78	4.11	1.01	220	7	1	2.62	0.40	3.15	0.91
91	190	6	0	2.19	0.00	3.20	0.00	212	7	0	2.88	0.00	3.59	0.00
92	190	7	1	2.58	0.39	3.76	0.53	212	9	2	3.54	0.80	4.41	0.94
95-100	256	8	0	3.24	0.00	3.24	0.00	249	7	0	2.88	0.00	2.88	0.00
102	131	11	9	3.97	3.52	8.46	6.87	115	3	2	1.06	0.80	2.57	1.74

Results

DOL conducted a Reports and Data Element Validation Review in December, 2008. Of the records validated by the State and reviewed by the ETA review team, more than thirty percent contained mistakes or were unverifiable. We were also asked to submit a corrective action plan.

DOL conducted a Reports and Data Element Validation Review in July, 2011. Of the records validated by the State and reviewed by the ETA review team, only six percent contained mistakes. No corrective action plan was required.

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