LED Conversion to NAICS-based QWI Production

Why the conversion?

Local Employment Dynamics (LED) presently produces two sets of Quarterly Workforce Indicators (QWI) – one based on the Standard Industrial Classification (SIC) codes and the other based on North American Industry Classification System (NAICS). NAICS replaced SIC as the official standard in 2001. A key consideration of the continuing parallel production was the back-coding of NAICS to ensure a smooth, complete transition to NAICS.

LED has completed the research work to create a full historical time series for NAICS industries by back-coding as far back as 1990. The work has been tested and discussed in recent workshops with state partners. LED plans to begin implementing NAICS back-coding in the 2006Q4 production quarter on October 1, 2006.

What will happen to SIC-based QWI production?

The SIC time series will be produced in parallel for two more production cycles (through the 2007Q2 production cycle ending June 30, 2007), and will then cease to be updated.

How will the conversion be made?

LED state partners will select one of four options in making the conversion:

1. State forwards to LED the Longitudinal Data Base (LDB) files, as received by the state from BLS, in the format specified in the attachments and LED Standard Operating Procedure (SOP) 3120[1];
2. State forwards to LED the LDB files as updated and improved by the state partner, in the format specified in the attachments and SOP 3120;
3. State does not send files; NAICS back-coding is implemented using the LED imputation algorithm (default); or
4. State decides not to publish pre-2001 data – neither LDB data files nor LED imputation algorithm will be used.

What are LDB files?

The LDB files were created by BLS as a crosswalk to link SIC and NAICS codes for establishments. The original files contain one administrative data file (file layout in Attachment A) and up to 48 quarterly data files (file layout in Attachment B) that cover 1990Q1 to 2001Q4.

A state partner may make modifications to the original LDB files according to its knowledge of the local establishments. The modified files will have the same file layout as given in the Attachments A and B, but different field entries and file naming conventions.

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[1] Available at http://lehd.dsd.census.gov/led/partnersonly/sop.html.

So which option is "better?"

The creation of NAICS back-codes allows for a historical "what-if" time series prior to the formal establishment of NAICS in 2001. There are limitations in the NAICS back-codes. For example, some NAICS industries today may not have even existed in the past.

BLS established a baseline approach to create NAICS back-codes with the LDB files – their use will ensure consistency. Some states enhanced their original LDB files – their use will maximize use of local knowledge. LED currently uses an algorithm to impute NAICS codes when they are missing – their extended use will ensure completeness of the time series based on probability distributions with longitudinal knowledge. The fourth option allows the state partner not to back-code at all. There are pros and cons with each of these four available options.

The default implementation is to use the LED imputation algorithm where it is applicable.

What are the "drop-dead" dates for the state partners?

The LED imputation algorithm will be applied automatically to a state partner beginning with the 2006Q4 production cycle if LED has not received the required LDB files and written notification by September 1, 2006. Thereafter, the state partner will have two additional chances to switch to the LDB-based algorithm according to the following timelines:

To be implemented in	LDB files and written notification must be received by
2007Q1, ending March 31, 2007	December 1, 2006
2007Q2, ending June 30, 2007	March 1, 2007

Changes may be made after March 1, 2007, but they will depend heavily on very limited time and resources. A lag time of at least 6 months must be anticipated.

Which states have sent in their LDB files?

LED has received LDB files from the following seven states: Idaho, Illinois, Missouri, Oklahoma, Pennsylvania, Wisconsin, and West Virginia.

To where do states send in their written notification and files?

Send a brief email to dsd.lehd.production.list@census.gov to indicate which option you prefer to take and the delivery date for LDF files, if applicable.

Encrypted LDB files should be sent by secured FTP or registered express mail according to Standard Operating Procedures 3120 at http://lehd.dsd.census.gov/led/partnersonly/sop.html Files not consistent with the specified layouts may cause delays in implementation.

Where can I learn more about this issue?

Read "The LEHD Infrastructure Files and the Creation of Quarterly Workforce Indicators" report located at http://lehd.dsd.census.gov/led/library/techpapers/tp-2006-01.pdf . Past workshop presentations may be found at http://lehd.dsd.census.gov/led/library/workshops.html.

Attachment A - LDB Administrative Data File Specifications

Original file name convention: SSLDBadmin_data.txt where SS is 2-character state postal code
(example: ILLDBadmin_data.txt)

Modified file name convention: SSLDBadmin_data_edit.txt (example: ILLDBadmin_data_edit.txt)

Field	Data Type	Start	Width
LDB Number	Text	1	9
State Code	Text	10	2
Legal Name	Text	12	35
Trade Name	Text	47	35
Reporting Unit Description	Text	82	35
Telephone Number	Text	117	10
Setup Date (YYYYMMDD)	Text	127	8
Initial Date of Liability (YYYYMMDD)	Text	135	8
End of Liability Date (YYYYMMDD)	Text	143	8
Reactivation Date (YYYYMMDD)	Text	151	8
Date First Positive Emp (YYYYMM)	Text	159	6
Date Last Positive Emp (YYYYMM)	Text	165	6
Predecessor UI Num	Text	171	10
Predecessor Rpt Unit Num	Text	181	5
Successor UI Num	Text	186	10
Successor Rpt Unit Num	Text	196	5
ARS Response Code	Text	201	2
ARS Refiling Year	Text	203	4
CES Indicator	Text	207	1
Physical Address Line 1	Text	208	35
Physical Address Line 2	Text	243	35
Physical Address City	Text	278	30
Physical Address State	Text	308	2
Physical Address Zip Code	Text	310	5
Physical Zip Code Exp	Text	315	4
UI Street Address Line 1	Text	319	35
UI Street Address Line 2	Text	354	35
UI Address City	Text	389	30
UI Address State Abbrev	Text	419	2
UI Address Zip	Text	421	5
UI Address Zip Expansion	Text	426	4
Mailing/Other Line 1	Text	430	35
Mailing/Other Line 2	Text	465	35
Mailing/Other City	Text	500	30
Mailing/Other State Abbr	Text	530	2
Mailing/Other Zip Code	Text	532	5
Mailing/Other Zip Exp	Text	537	4
Mailing/Other Address Type	Text	541	1

Attachment B – LDB Quarterly Data File Specifications

Original file name convention: SLDBSYYYYQ.txt where SS is 2-character state postal code, YYYY is 4-digit calendar year code, and Q is 1-digit quarter code (example: ILLDB19974.txt)
Modified file name convention: SSLDBYYYYQ_edit.txt (example: ILLDB19974.txt)

Field	Data Type	Start	Width
LDB Number	Text	1	9
State Code	Text	10	2
UI Account Number	Text	12	10
Reporting Unit Number	Text	22	5
Employer ID Number	Text	27	9
Special Indicator	Text	36	1
Reporting Year/Quarter (YYYYQ)	Text	37	5
Predecessor Break Flag	Text	42	2
Successor Break Flag	Text	44	2
Organization Type	Text	46	1
County Code	Text	47	3
Township Code	Text	50	3
MSA Code	Text	53	4
Ownership Code	Text	57	1
SIC Code	Text	58	4
Auxiliary Code	Text	62	1
NAICS	Text	63	6
NSTA Code	Text	69	6
MEEI Code	Text	75	1
Employment Month 1	Text	76	6
Employment Flag Month 1	Text	82	1
Employment Month 2	Text	83	6
Employment Flag Month 2	Text	89	1
Employment Month 3	Text	90	6
Employment Flag Month 3	Text	96	1
Total Quarterly Wages	Text	97	11
Total Quarterly Wages Flag	Text	108	1
Comment Code 1	Text	109	2
Comment Code 2	Text	111	2
Comment Code 3	Text	113	2