LEHD Public Use Data Schema V4.2a-draft
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(Printable version)



Important

This document is not an official Census Bureau publication. It is compiled from publicly accessible information by Lars Vilhuber (Labor Dynamics Institute, Cornell University). Feedback is welcome. Please write us at lars.vilhuber@cornell.edu.

1 Purpose

The public-use data from the Longitudinal Employer-Household Dynamics Program, including the Quarterly Workforce Indicators (QWI) and Job-to-Job Flows (J2J), are available for download with the following data schema. These data are available as Comma-Separated Value (CSV) files through the LEHD website's Data page at http://lehd.ces.census.gov/data/ and through LED Extraction Tool at http://ledextract.ces.census.gov/.

This document describes the data schema for LEHD files. LEHD-provided SHP files are separately described in lehd_shapefiles.pdf. For each variable, a set of allowable values is defined. Definitions are provided as CSV files, with header variable definitions. Changes relative to the original v4.0 version are listed at the end.

2 File naming

The naming conventions of the data files is documented in lehd_csv_naming.pdf.

3 Extends

This version reimplements some features from V4.0. Many files compliant with LEHD or QWI Schema v4.0 will also be compliant with this schema, but compatibility is not guaranteed.

4 Supersedes

This version supersedes V4.1.0, for files released as of R2017Q1.

5 Basic Schema

Each data file is structured as a CSV file. The first columns contain [identifiers], subsequent columns contain [indicators], followed by status flags.

5.1 Generic structure

Column name
[Identifier1]
[Identifier2]
[Identifier3]
[]
[Indicator 1]
[Indicator 2]
[Indicator 3]

Column name
[]
[Status Flag 1]
[Status Flag 2]
[Status Flag 3]
[]

Note: A full list of indicators for each type of file are shown below in the Indicators section. While all indicators are included in the CSV files, only the requested indicators will be included in data outputs from the LED Extraction Tool.

5.2 Identifiers

Records, unless otherwise noted, are parts of time-series data. Unique record identifiers are noted below, by file type. Identifiers without the year and quarter component can be considered a series identifier.

5.2.1 Mapping for Identifiers

(lehd_mapping_identifiers.csv)

Each of the released files has a set of variables uniquely identifying records (*Identifiers*). The table below relates the set of identifier specifications to the released files. The actual CSV files containing the identifiers for each set are listed after this table. Each identifier can take on a specified list of values, documented in the section on Categorical Variables.

identifiers	QWI	NQWI	J2J	J2JR	J2JOD	LODES
lehd_identifiers_qwi	1	1				
lehd_identifiers_j2j			1	1		
lehd_identifiers_j2jod					1	

5.2.2 Identifiers for j2j

(lehd_identifiers_j2j.csv)

Variable	Type	label
periodicity	Char(1)	Periodicity of report
seasonadj	Char(1)	Seasonal Adjustment Indicator
geo_level	Char(1)	Group: Geographic level of aggregation
geography	Char(8)	Group: Geography code
ind_level	Char(1)	Group: Industry level of aggregation
industry	Char(5)	Group: Industry code
ownercode	Char(3)	Group: Ownership group code
sex	Char(1)	Group: Gender code
agegrp	agegrp Char(3) Group: Age group code (WIA)	
race	Char(2)	Group: race
ethnicity	Char(2)	Group: ethnicity
education	Char(2)	Group: education
firmage	Char(1)	Group: Firm Age group
firmsize	Char(1)	Group: Firm Size group
year Num		Time: Year
quarter	Num	Time: Quarter
agg_level	Num	Aggregation Level Indicator

5.2.3 Identifiers for j2jod

(lehd_identifiers_j2jod.csv)

Variable	Type	label	
periodicity	Char(1)	Periodicity of report	
seasonadj	Char(1)	Seasonal Adjustment Indicator	
geo_level	Char(1)	Group: Geographic level of aggregation of destination job	
geography	Char(8)	Group: Geography code of destination job	
ind_level	Char(1)	Group: Industry level of aggregation of destination job	
industry	Char(5)	Group: Industry code of destination job	
ownercode	Char(3)	Group: Ownership group code of destination job	
sex	Char(1)	Group: Gender code	
agegrp	Char(3)	Group: Age group code (WIA)	
race	Char(2)	Group: race	
ethnicity	Char(2)	Group: ethnicity	
education	ducation Char(2) Group: education		
firmage	Char(1)	Group: Firm Age group	
firmsize	Char(1)	Group: Firm Size group	
year	Num	Time: Year	
quarter	Num	Time: Quarter	
agg_level	Num	Aggregation Level Indicator	
geo_level_orig	Char(1)	Group: Geographic level of aggregation of origin job	
geography_orig	Char(8)	Group: Geography code of origin job	
ind_level_orig	Char(1)	Group: Industry level of aggregation of origin job	
industry_orig	Char(5)	Group: Industry code of origin job	
ownercode_orig	Char(3)	Group: Ownership group code of origin job	
firmage_orig	Char(1)	Group: Firm Age group of origin job	
firmsize_orig	Char(1)	Group: Firm Size group of origin job	

5.2.4 Identifiers for qwi

(lehd_identifiers_qwi.csv)

Variable	Type	label
periodicity	Char(1)	Periodicity of report
seasonadj	Char(1)	Seasonal Adjustment Indicator
geo_level	Char(1)	Group: Geographic level of aggregation
geography	Char(8)	Group: Geography code
ind_level	Char(1)	Group: Industry level of aggregation
industry	Char(5)	Group: Industry code
ownercode	Char(3)	Group: Ownership group code
sex	Char(1)	Group: Gender code
agegrp	Char(3)	Group: Age group code (WIA)
race	Char(2)	Group: race
ethnicity	Char(2)	Group: ethnicity
education	Char(2)	Group: education
firmage	Char(1)	Group: Firm Age group
firmsize	Char(1)	Group: Firm Size group
year Num Time: Year		Time: Year
quarter	Num	Time: Quarter

5.3 Indicators

The following tables and associated mapping files list the indicators available on each file. The 'Indicator Variable' is the short name of the variable on the CSV files, suitable for machine processing in a wide variety of statistical applications. When given, the 'Alternate name' may appear in related documentation and articles. The 'Status Flag' is used to indicate publication or data quality status (see Status Flags). The 'Indicator Name' is a more verbose description of the indicator. The 'Base' indicates the denominator used to compute the statistic, and may be 1. 'Units' identify the type of variable: counts, rates, monetary amounts.

5.3.1 National QWI and state-level QWI (QWIPU)

(variables_qwi.csv)

Indicator Variable	Alternate name	Status Flag	Indicator Name	Units
		sEmp	Beginning-of-Quarter Employment	Count
EmpEnd E		sEmpEnd	End-of-Quarter Employment	Count
EmpS F		sEmpS	Full-Quarter Employment (Stable)	Count
EmpSpv	Fpv	sEmpSpv	Full-Quarter Employment in the	Count
			Previous Quarter	
EmpTotal	M	sEmpTotal	Employment - Reference Quarter	Count
HirA	A	sHirA	Hires (All Accessions)	Count
HirN	Н	sHirN	New Hires	Count
HirR	R	sHirR	Recall Hires	Count
Sep	S	sSep	Separations (All)	Count
HirAEnd	CA	sHirAEnd	End-of-Quarter Hires	Count
HirAEndR	CAR	sHirAEndR	End-of-Quarter Hiring Rate	Rate
SepBeg	CS	sSepBeg	Beginning-of-Quarter Separations	Count
SepBegR	CSR	sSepBegR	Beginning-of-Quarter Separation Rate	Rate
HirAS	FA	sHirAS	Hires (All Hires into Full-Quarter	Count
			Employment)	
HirNS	FH	sHirNS	New Hires (New Hires into	Count
			Full-Quarter Employment)	
SepS	FS	sSepS	Separations (Flows out of Full-Quarter	Count
			Employment)	
SepSnx	FSnx	sSepSnx	Separations in the Next Quarter (Flows	Count
			out of Full-Quarter Employment)	
TurnOvrS	FT	sTurnOvrS	Turnover (Stable)	Rate
FrmJbGn	JC	sFrmJbGn	Firm Job Gains (Job Creation)	Count
FrmJbLs	JD	sFrmJbLs	Firm Job Loss (Job Destruction)	Count
FrmJbC	JF	sFrmJbC	Firm Job Change (Net Change)	Count
HirAEndRepl	EI	sHirAEndRepl	Replacement Hires	Count
HirAEndReplr	EIR	sHirAEndReplr	Replacement Hiring Rate	Rate
FrmJbGnS	FJC	sFrmJbGnS	Firm Job Gains (Stable)	Count
FrmJbLsS	FJD	sFrmJbLsS	Firm Job Loss (Stable)	Count
FrmJbCS	FJF	sFrmJbCS	Firm Job Change (Stable; Net Change)	Count
EarnS	ZW3	sEarnS	Average Monthly Earnings	Dollars
			(Full-Quarter Employment)	
EarnBeg	ZW1	sEarnBeg	Average Monthly Earnings	Dollars
			(Beginning-of-Quarter Employment)	
EarnHirAS	ZWFA	sEarnHirAS	Average Monthly Earnings (All Hires	Dollars
			into Full-Quarter Employment)	
EarnHirNS	ZWFH	sEarnHirNS	Average Monthly Earnings (New Hires	Dollars
			into Full-Quarter Employment)	
EarnSepS	ZWFS	sEarnSepS	Average Monthly Earnings (Flows out	Dollars
			of Full-Quarter Employment)	
Payroll	W1	sPayroll	Total Quarterly Payroll	Dollars

5.3.2 National QWI and state-level QWI rates (QWIPUR)

Rates are computed from published data, and are provided as a convenience.

(variables_qwir.csv)

Indicator	Alternate	Status Flag	Indicator Name	Units	Base
Variable	name				
HirAR	AR	sHirAR	Hiring Rate (All Accessions)	Rate	(Emp+
					EmpEnd)/2
HirNR	HR	sHirNR	New Hiring Rate	Rate	(Emp +
					EmpEnd)/2
HirRR	RR	sHirRR	Recall Rate	Rate	(Emp +
					EmpEnd)/2
SepR	SR	sSepR	Separation Rate (All Separations)	Rate	(Emp +
					EmpEnd)/2
HirAEndR	CAR	sHirAEndR	End-of-Quarter Hiring Rate	Rate	(Emp+
					EmpEnd)/2
SepBegR	CSR	sSepBegR	Beginning-of-Quarter Separation	Rate	(Emp+
			Rate		EmpEnd)/2
HirAsR	FAR	sHirAsR	Hiring Rate (Flows into	Rate	(EmpSpv +
			Full-Quarter Employment)		EmpS)/2
HirNsR	FHR	sHirNsR	New Hiring Rate (New Hires to	Rate	(EmpSpv +
			Full-Quarter Status)		EmpS)/2
SepSR	FSR	sSepSR	Separation Rate (Flows out of	Rate	(EmpSpv +
			Full-Quarter Employment)		EmpS)/2
SepSnxR	FSnxR	sSepSnxR	Separation Rate in the Next	Rate	(EmpSpv +
			Quarter (Flow out of		EmpS)/2
			Full-Quarter Employment)		
TurnOvrSR	FTR	sTurnOvrSR	Turnover Rate (Stable)	Rate	2*EmpS
FrmJbGnR	JCR	sFrmJbGnR	Firm Job Gain Rate (Job	Rate	(Emp +
			Creation Rate)		EmpEnd)/2
FrmJbLsR	JDR	sFrmJbLsR	Firm Job Loss Rate (Job	Rate	(Emp+
			Destruction Rate)		EmpEnd)/2
FrmJbCR	JFR	sFrmJbCR	Firm Job Change Rate (Net	Rate	(Emp +
			Change Rate)		EmpEnd)/2
HirAEndReplR	EIR	sHirAEndRepl	RReplacement Hiring Rate	Rate	(Emp +
					EmpEnd)/2
FrmJbGnSR	FJCR	sFrmJbGnSR	Firm Job Gain Rate (Stable)	Rate	(EmpSpv +
					EmpS)/2
FrmJbLsSR	FJDR	sFrmJbLsSR	Firm Job Loss Rate (Stable)	Rate	(EmpSpv +
					EmpS)/2
FrmJbCSR	FJFR	sFrmJbCSR	Firm Job Change Rate (Stable;	Rate	(EmpSpv +
			Net Change Rate)		EmpS)/2

5.3.3 Job-to-job flow counts (J2J)

(variables_j2j.csv)

Indicator	Alternate	Status Flag	Indicator Name	Units	Base
Variable	Name				
MHire	all_doma2	sMHire	Hires	Count	1
MSep	all_doms2	sMSep	Separations	Count	1
MJobStart	first_dome	sMJobStart	Main Job Starts	Count	1
MJobEnd	last_domb	sMJobEnd	Main Job Ends	Count	1
EEHire	ee_doma2	sEEHire	Job-to-Job Hires (Continuous	Count	1
			Employment)		
EESep	ee_doms2	sEESep	Job-to-Job Separations	Count	1
			(Continuous Employment)		
AQHire	aq_doma2	sAQHire	Job-to-Job Hires (Brief	Count	1
			Nonemployment)		
AQSep	aq_doms2	sAQSep	Job-to-Job Separations (Brief	Count	1
			Nonemployment)		
J2JHire	j2j_doma2	sJ2JHire	Job-to-Job Hires	Count	1
J2JSep	j2j_doms2	sJ2JSep	Job-to-Job Separations	Count	1
NEHire	ne_doma2	sNEHire	Hires from Nonemployment	Count	1
ENSep	en_doms2	sENSep	Separations to Nonemployment	Count	1
NEPersist	ne2_doma2	sNEPersist	Hires from Persistent	Count	1
			Nonemployment		
ENPersist	en2_doms2	sENPersist	Separations to Persistent	Count	1
			Nonemployment		
NEFullQ	ne2p_doma2	sNEFullQ	Hires from Full-Quarter	Count	1
			Nonemployment		
ENFullQ	en2p_doms2	sENFullQ	Separations to Full-Quarter	Count	1
			Nonemployment		
MainB	domB	sMainB	Employment (Beginning of	Count	1
			Quarter)		
MainE	domE	sMainE	Employment (End of Quarter)	Count	1

5.3.4 Job-to-job flow rates (J2JR)

(variables_j2jr.csv)

Rates are computed from published data, and are provided as a convenience.

Indicator	Alternate	Status Flag	Indicator Name	Units	Base
Variable	Name				
MHireR	all_doma2_rate	sMHireR	Hires	Rate	(MainB+MainE)/2
MSepR	all_doms2_rate	sMSepR	Separations	Rate	(MainB+MainE)/2
MJobStartR	all_dest_rate	sMJobStartRat	e Main Job Starts	Rate	(MainB+MainE)/2
MJobEndR	all_orgin_rate	sMJobEndRate	Main Job Ends	Rate	(MainB+MainE)/2
EEHireR	eea_rate	sEEHireRate	Job-to-Job Hires (Continuous	Rate	(MainB+MainE)/2
			Employment)		
EESepR	ees_rate	sEESepR	Job-to-Job Separations	Rate	(MainB+MainE)/2
			(Continuous Employment)		
AQHireR	aq_doma2_rate	sAQHireR	Job-to-Job Hires (Brief	Rate	(MainB+MainE)/2
			Nonemployment)		
AQSepR	aq_doms2_rate	sAQSepR	Job-to-Job Separations (Brief	Rate	(MainB+MainE)/2
			Nonemployment)		
J2JHireR	eeall_doma2_r	ate sJ2JHireR	Job-to-Job Hires	Rate	(MainB+MainE)/2
J2JSepR	eeall_doms2_r	ate sJ2JSepR	Job-to-Job Separations	Rate	(MainB+MainE)/2
NEHireR	ne_doma2_rate	sNEHireR	Hires from Nonemployment	Rate	(MainB+MainE)/2
ENSepR	en_doms2_rate	sENSepR	Separations to Nonemployment	Rate	(MainB+MainE)/2
NEPersistR	ne2_doma2_ra	te sNEPersistR	Hires from Persistent	Rate	(MainB+MainE)/2
			Nonemployment		
ENPersistR	en2_doms2_rat	te sENPersistR	Separations to Persistent	Rate	(MainB+MainE)/2
			Nonemployment		
NEFullQR	ne2p_doma2_r	atesNEFullQR	Hires from Full-Quarter	Rate	(MainB+MainE)/2
			Nonemployment		
ENFullQR	en2p_doms2_r	atesENFullQR	Separations to Full-Quarter	Rate	(MainB+MainE)/2
			Nonemployment		

5.3.5 Job-to-job flow Origin-Destination (J2JOD)

(variables_j2jod.csv)

Indicator Variable	Alternate Name	Status Flag	Indicator Name	Units	Base
EE	ee_doma2	sEE	Job-to-Job Flows (Continuous	Count	1
			Employment)		
AQHire	aq_doma2	sAQHire	Job-to-Job Flows (Brief	Count	1
			Nonemployment)		
EES	fee_doma2	sEES	Stable Job-to-Job Flows	Count	1
			(Continuous Employment)		
AQHireS	faq_doma2	sAQHireS	Stable Job-to-Job Flows (Brief	Count	1
			Nonemployment)		

5.4 Variability measures

The following tables and associated mapping files list the variability measures available on each file. The 'Variability Measure' is the short name of the variable on the CSV files, suitable for machine processing in a wide variety of statistical applications. When given, the 'Alternate Name' may appear in related documentation and articles. The 'Variable Name' is a more verbose description of the variability measure.

Six variability measures are published:

- Total variability, prefixed by vt_
- Standard error, prefixed by st_, and computed as the square root of Total Variability
- Between-implicate variability, prefixed by vb_
- Average within-implicate variability, prefixed by vw_
- Degrees of freedom, prefixed by df_
- Missingness ratio, prefixed by mr_

A missing variability measure indicates a structural zero in the corresponding indicator. This is currently not associated with a flag.

5.4.1 Generic structure

Column name
[Identifier1]
[Identifier2]
[Identifier3]
[]
[Standard error for Indicator 1]
[Standard error for Indicator 2]
[Standard error for Indicator 3]
[]
[Total variation for Indicator 1]
[Total variation for Indicator 2]
[Total variation for Indicator 3]
[]
[Between-implicate variability
for Indicator 1]
[Between-implicate variability
for Indicator 2]
[Between-implicate variability
for Indicator 3]
[]
[Average within-implicate
variability for Indicator 1]
[Average within-implicate
variability for Indicator 2]
[Average within-implicate
variability for Indicator 3]
[]
[Degrees of freedom for
Indicator 1]
[Degrees of freedom for
Indicator 2]

Column name
[Degrees of freedom for
Indicator 3]
[]
[Missingness ratio for Indicator
1]
[Missingness ratio for Indicator
2]
[Missingness ratio for Indicator
3]
[]

Note: A full list of indicators for each type of file are shown in the Indicators section. In the tables below, only a sample of variability measures are printed, but the complete list is available in the linked CSV schema files.

5.4.2 National QWI and state-level QWI

(variables_qwiv.csv)

Variability	Alternate	Variable name	Units	Base
measure	name			
st_Emp	st_B	Standard error of	Count	1
_ 1	_	Beginning-of-Quarter		
		Employment		
st_EmpEnd	st_E	Standard error of	Count	1
_ 1		End-of-Quarter Employment		
st_EmpS	st_F	Standard error of Full-Quarter	Count	1
_		Employment (Stable)		
vt_Emp	vt_B	Total variation of	Count	1
		Beginning-of-Quarter		
		Employment		
vt_EmpEnd	vt_E	Total variation of	Count	1
		End-of-Quarter Employment		
vt_EmpS	vt_F	Total variation of Full-Quarter	Count	1
		Employment (Stable)		
vb_Emp	vb_B	Between-implicate variability	Count	1
		for Beginning-of-Quarter		
		Employment		
vb_EmpEnd	vb_E	Between-implicate variability	Count	1
		for End-of-Quarter Employment		
vb_EmpS	vb_F	Between-implicate variability	Count	1
		for Full-Quarter Employment		
		(Stable)		
• • •				
df_Emp	df_B	Degrees of freedom for VT of	Count	1
		Beginning-of-Quarter		
		Employment		
df_EmpEnd	df_E	Degrees of freedom for VT of	Count	1
		End-of-Quarter Employment		
df_EmpS	df_F	Degrees of freedom for VT of	Count	1
		Full-Quarter Employment		
		(Stable)		
		N: ·		1
mr_Emp	mr_B	Missingness ratio for	Count	1
		Beginning-of-Quarter		
Euro Euro	P	Employment	Count	1
mr_EmpEnd	mr_E	Missingness ratio for	Count	1
F C	F	End-of-Quarter Employment	G. vi	1
mr_EmpS	mr_F	Missingness ratio for	Count	1
		Full-Quarter Employment		
		(Stable)		

5.4.3 National QWI and state-level QWI rates

(variables_qwirv.csv)

Variability	Alternate	Variable name	Units	Base
measure	name			
st_HirAR	st_AR	Standard error of Hiring Rate	Rate	1
		(All Accessions)		
st_HirNR	st_HR	Standard error of New Hiring	Rate	1
		Rate		
st_HirRR	st_RR	Standard error of Recall Rate	Rate	1
vt_HirAR	vt_AR	Total variation of Hiring Rate	Rate	1
		(All Accessions)		
vt_HirNR	vt_HR	Total variation of New Hiring	Rate	1
		Rate		
vt_HirRR	vt_RR	Total variation of Recall Rate	Rate	1
vb_HirAR	vb_AR	Between-implicate variability	Rate	1
		for Hiring Rate (All Accessions)		
vb_HirNR	vb_HR	Between-implicate variability	Rate	1
		for New Hiring Rate		
vb_HirRR	vb_RR	Between-implicate variability	Rate	1
		for Recall Rate		
df_HirAR	df_AR	Degrees of freedom for VT of	Rate	1
		Hiring Rate (All Accessions)		
df_HirNR	df_HR	Degrees of freedom for VT of	Rate	1
		New Hiring Rate		
df_HirRR	df_RR	Degrees of freedom for VT of	Rate	1
		Recall Rate		
mr_HirAR	mr_AR	Missingness ratio for Hiring	Rate	1
		Rate (All Accessions)		
mr_HirNR	mr_HR	Missingness ratio for New	Rate	1
		Hiring Rate		
mr_HirRR	mr_RR	Missingness ratio for Recall	Rate	1
		Rate		

5.4.4	Job-to-job flow counts (J2J)
Soon.	
5.4.5	Job-to-job flow rates (J2JR)
Soon.	
5.4.6	Job-to-job flow Origin-Destination (J2JOD)
Soon.	

6 Categorical Variables

Categorical variable descriptions are displayed above each table, with the variable name shown in parentheses. Unless otherwise stated, every possible value/label combination for each categorical variable is listed. Please note that not all values will be available in every table.

6.1 agegrp

(label_agegrp.csv)

agegrp	label
A00	All Ages (14-99)
A01	14-18
A02	19-21
A03	22-24
A04	25-34
A05	35-44
A06	45-54
A07	55-64
A08	65-99

6.2 education

(label_education.csv)

education	label
E0	All Education Categories
E1	Less than high school
E2	High school or equivalent, no college
E3	Some college or Associate degree
E4	Bachelor's degree or advanced degree
E5	Educational attainment not available (workers aged 24
	or younger)

6.3 ethnicity

(label_ethnicity.csv)

ethnicity	label
A0	All Ethnicities
A1	Not Hispanic or Latino
A2	Hispanic or Latino

6.4 firmage

(label_firmage.csv)

firmage	label
0	All Firm Ages
1	0-1 Years
2	2-3 Years
3	4-5 Years

firmage	label
4	6-10 Years
5	11+ Years
N	Firm Age Not Available For Public-Sector Firms

6.5 firmsize

(label_firmsize.csv)

firmsize	label
0	All Firm Sizes
1	0-19 Employees
2	20-49 Employees
3	50-249 Employees
4	250-499 Employees
5	500+ Employees
N	Firm Size Not Available For Public-Sector Firms

6.6 ownercode

(label_ownercode.csv)

ownercode	label
A00	All (1-5)
A01	Federal government
A05	All Private (5)

6.7 periodicity

(label_periodicity.csv)

periodicity	label
A	Annual data
Q	Quarterly data

6.8 quarter

(label_quarter.csv)

quarter	label
1	1st Quarter of the Year (January-March)
2	2nd Quarter of the Year (April-June)
3	3rd Quarter of the Year (July-September)
4	4th Quarter of the Year (October-December)

6.9 race

(label_race.csv)

race	label
A0	All Races

race	label
A1	White Alone
A2	Black or African American Alone
A3	American Indian or Alaska Native Alone
A4	Asian Alone
A5	Native Hawaiian or Other Pacific Islander Alone
A6	Some Other Race Alone (Not Used)
A7	Two or More Race Groups

6.10 seasonadj

(label_seasonadj.csv)

seasonadj	label
S	Seasonally adjusted
U	Not seasonally adjusted

6.11 sex

(label_sex.csv)

sex	label
0	All Sexes
1	Male
2	Female

6.12 stusps

(label_stusps.csv)

geography	stusps
01	AL
02	AK
04	AZ
05	AR
06	CA
08	CO
09	CT
10	DE
11	DC
12	FL
13	GA
15	HI
16	ID
17	IL
18	IN
19	IA
20	KS
21	KY
22	LA
23	ME
24	MD
25	MA
26	MI

geography	stusps
27	MN
28	MS
29	MO
30	MT
31	NE
32	NV
33	NH
34	NJ
35	NM
36	NY
37	NC
38	ND
39	OH
40	OK
41	OR
42	PA
44	RI
45	SC
46	SD
47	TN
48	TX
49	UT
50	VT
51	VA
53	WA
54	WV
55	WI
56	WY
72	PR
78	VI

6.13 Industry

6.13.1 Industry levels

(label_ind_level.csv)

ind_level	label
A	All Industries
S	NAICS Sectors
3	NAICS Subsectors
4	NAICS Industry Groups

6.13.2 Industry

(label_industry.csv)

Only a small subset of available values shown. The 2012 NAICS (North American Industry Classification System) is used for all years. QWI releases prior to R2015Q3 used the 2007 NAICS classification (see Schema v4.0.1). For a full listing of all valid 2012 NAICS codes, see http://www.census.gov/cgi-bin/sssd/naics/naicsrch?chart=2012.

industry	label
00	All NAICS Sectors
000	All NAICS Subsectors
0000	All NAICS Industry Groups
11	Agriculture, Forestry, Fishing and Hunting
111	Crop Production
1111	Oilseed and Grain Farming
1112	Vegetable and Melon Farming
2382	Building Equipment Contractors
2383	Building Finishing Contractors
2389	Other Specialty Trade Contractors
31-33	Manufacturing
311	Food Manufacturing
3111	Animal Food Manufacturing
3112	Grain and Oilseed Milling
3113	Sugar and Confectionery Product Manufacturing

6.14 Geography

6.14.1 Geographic levels

Geography labels for data files are provided in separate files, by scope. Each file *label_geograpy_SCOPE.csv* may contain one or more types of records as flagged by geo_level. For convenience, a composite file containing all geocodes is available as label_geography.csv. The 2015 vintage of Census TIGER/Line geography is used for all tabulations as of the R2015Q4 release.

Shapefiles are described in a separate document.

(label_geo_level.csv)

geo_l	ev løl bel	description	sourceurl		
В	Metropolitan	Identifies 5-digit CBSA code for	http://www.census.gov/-		
	(complete)	metropolitan areas provided by the	population/metro/		
		Census Bureau's Geography			
		Division			
С	Counties	Identifies 5-digit FIPS code	https://www.census.gov/geo/-		
			reference/codes/cou.html		
M	Metropolitan/N	Aikchenptofiietan7-digit code constructed	http://www.census.gov/-		
	(state part)	from the 2-digit state FIPS code	population/metro/		
		and the 5-digit CBSA code			
		provided by the Census Bureau's			
		Geography Division			
N	National (50	Custom code using 00 to denote			
	States + DC)	national scope			
S	States	Identifies 2-digit FIPS code (also	https://www.census.gov/geo/-		
		called "ANSI" codes)	reference/ansi_statetables.html		
W	Workforce	2-digit state FIPS code and the			
	Investment	6-digit WIA identifier provided by			
	Areas	LED State Partners			

6.14.2 National and state-level values

(label_fipsnum.csv)

The file label_fipsnum.csv contains values and labels for all entities of geo_level N or S, and is a summary of separately available files

geograpl	geo_level	
00	National (50 States +	N
	DC)	
01	Alabama	S
02	Alaska	S
04	Arizona	S
05	Arkansas	S
06	California	S
08	Colorado	S
45	South Carolina	S
46	South Dakota	S
47	Tennessee	S
48	Texas	S
49	Utah	S
50	Vermont	S
51	Virginia	S
53	Washington	S

6.14.3 Detailed state and substate level values

Note: cross-state CBSA, in records of type $geo_level = M$, are present on files of type $label_geography_XX.csv$. A particular cross-state CBSA will appear on multiple files.

Scope	Format file			
US	label_geography_us.csv			
METRO	label_geography_metro.csv			
States	-6***6***1			
AK	label_geography_ak.csv			
AL	label_geography_al.csv			
AR	label_geography_ar.csv			
AZ	label_geography_az.csv			
CA	label_geography_ca.csv			
CO	label_geography_co.csv			
CT	label_geography_ct.csv			
DC	label_geography_dc.csv			
DE	label_geography_de.csv			
FL	label_geography_fl.csv			
GA	label_geography_ga.csv			
HI	label_geography_hi.csv			
IA	label_geography_ia.csv			
ID	label_geography_id.csv			
IL	label_geography_il.csv			
IN	label_geography_in.csv			
KS	label_geography_ks.csv			
KY	label_geography_ky.csv			
LA	label_geography_la.csv			
MA	label_geography_ma.csv			
MD	label_geography_md.csv			
ME	label_geography_me.csv			
MI	label_geography_mi.csv			
MN	label_geography_mn.csv			
MO	label_geography_mo.csv			
MS	label_geography_ms.csv			
MT	label_geography_mt.csv			
NC	label_geography_nc.csv			
ND	label_geography_nd.csv			
NE	label_geography_ne.csv			
NH	label_geography_nh.csv			
NJ	label_geography_nj.csv			
NM	label_geography_nm.csv			
NV	label_geography_nv.csv			
NY	label_geography_ny.csv			
ОН	label_geography_oh.csv			
OK	label_geography_ok.csv			
OR	label_geography_or.csv			
PA	label_geography_pa.csv			
RI	label_geography_ri.csv			
SC	label_geography_sc.csv			
SD	label_geography_sd.csv			
TN	label_geography_tn.csv			
TX	label_geography_tx.csv			
UT	label_geography_ut.csv			
VA	label_geography_va.csv			
VT	label_geography_vt.csv			
WA	label_geography_wa.csv			

Scope	Format file
WI	label_geography_wi.csv
WV	label_geography_wv.csv
WY	label_geography_wy.csv

6.15 Aggregation level

(label_agg_level.csv)

Measures within the J2J and QWI data products are tabulated on many different dimensions, including demographic characteristics, geography, industry, and other firm characteristics. For Origin-Destination (O-D) tables, characteristics of the origin and destination firm can be tabulated separately. Every tabulation level is assigned a unique aggregation index, represented by the agg_level variable. This index starts from 1, representing a national level grand total (all industries, workers, etc.), and progresses through different combinations of characteristics. There are gaps in the progression to leave space for aggregation levels that may be included in future data releases.

agg_level is currently reported only for J2J data products.

The following variables are included in the label_agg_level.csv file:

Variable	Description
agg_level	index representing level of aggregation reported
	on a given record
worker_char	demographic (worker) characteristics reported
	on record
firm_char	firm characteristics reported on record. These
	will be the characteristics of the destination firm
	in O-D tabulations
firm_orig_char	characteristics of origin firm reported on record
	(O-D tabulations only)
j2j	Flag: Aggregation level available on J2J counts
	tables
j2jr	Flag: Aggregation level available on J2J rates
	tables
j2jod	Flag: Aggregation level available on J2J O-D
	tables
qwi	Flag: Aggregation level available on QWI

The characteristics available on an aggregation level are repeated using a series of flags following the standard schema:

- geo_level geographic level of table
- ind_level industry level of table
- by_variables flags indicating other dimensions reported, including ownership, demographics, firm age and size.

A shortened representation of the file is provided below, the complete file is available in the link above.

agg_leve	l worker_char	firm_char	firm_orig_char	· j2j	j2jr	j2jod	qwi	geo_level
1				1	1	1	0	N
2	Sex			1	1	1	0	N
3	Age			1	1	1	0	N
4	Sex * Age			1	1	1	0	N
5	Race			1	1	1	0	N
9	Ethnicity			1	1	1	0	N
13	Race *			1	1	1	0	N
	Ethnicity							
129		Firm Size		1	1	1	0	N
257		NAICS		1	1	1	0	N
		Sector						
258	Sex	NAICS		0	0	0	0	N
		Sector						

agg_leve	l worker_char	firm_char	firm_orig_char	· j2j	j2jr	j2jod	qwi	geo_level
1029	Race	State		1	1	1	0	S
1033	Ethnicity	State		1	1	1	0	S
1037	Race *	State		1	1	1	0	S
	Ethnicity							

7 Status flags

(label_flags.csv)

Each status flag in the tables above contains one of the following valid values. The values and their interpretation are listed in the table below.



Important

Note: Currently, the J2J tables only contain status flags -1 and 1. Status flags with values 10 or above only appear in online applications, not in CSV files.

flag	label
-2	no data available in this category for this quarter
-1	data not available to compute this estimate
1	OK
5	Value suppressed because it does not meet US Census Bureau publication
	standards.
6	Value calculated from other released measures - no significant distortion
7	Value calculated from other released measures - some of which have
	significantly distorted data
9	Data significantly distorted - fuzzed value released
10	Aggregate of cells - no significant distortion
11	Aggregate of cells not released because component cells do not meet U.S.
	Census Bureau publication standards
12	Aggregate of cells - some of which have significantly distorted data

8 Changes

For a description of how schema files are versioned, see main directory.

8.1 This version (revisions)

• 2017-03-06: Initial release

8.2 Version 4.1.1 from 4.1.0

- 2017-03-06: Modifed naming_geo_cat.csv, gb value to read "Metropolitan (complete)", gm to "Metropolitan/Micropolitan (state parts)"
- 2017-03-06: Updated reference in shapefile description to Job-to-Job Explorer to point to the recently released Beta webap, updated title to refer to the same name as the naming_geo_cat.csv uses
- 2017-03-06: Updated TIGER references to 2016 in shapefile description
- 2017-03-06: Modifed label_geo_level.csv, B value to read "Metropolitan (complete)"
- 2017-03-06: Added referenced in the same file to where to find the CBSA code underlying the state-part definitions
- 2017-03-06: Added a new file label_geography_metro.csv
- 2017-03-06: Changed references where appropriate from label_geography_cbsa to label_geography_metro
- 2017-03-06: Added additional aggregation levels, changed some labels
- 2017-03-06: Removed two variables from variables_j2jod.csv that were not actually on the CSV file
- 2017-03-07: Updated 2016 geography in shapefiles
- 2017-03-07: Corrected naming of files inside shapefile ZIP files

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