LEHD Public Use Shapefile Data

Contents

(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 Scope

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 according to structural and file naming schema. The data themselves are available as Comma-Separated Value (CSV) files through the LEHD website's Data page at http://lehd.ces.census.gov/data/ as well as through the LED Extraction Tool.

Shapefiles are used to provide mapping functionality in QWI Explorer and Job-to-Job Explorer. They are created by transforming input shapefiles sourced from TIGER/Line.

2 Sources

Files are derived from TIGER/Line 2015 shapefiles:

- tl_2015_us_state
- tl_2015_us_county
- tl_2015_us_cbsa
- tl_2015_(ST)_place (for creation of WIA/WIB shapefile)
- tl_2015_(ST)_cousub (for creation of WIA/WIB shapefile)

3 Transformations

The following major transformations are applied to the input files:

- All geographies are reprojected to WGS-1984 Geographic Coordinate System
- Shoreline water has been clipped out to provide a more recognizable depiction of the coastlines.
- Each layer is given internal point coordinates (stored as double) based on the WGS-1984 projection (decimal degrees).
- Each layer is run through a "simplify polygon" procedure to remove unnecessary complexity from the features.
- Features from Guam, American Samoa, and the Northern Mariana Islands have been removed because they are not used in current LEHD tabulations.
- Each shapefile's attribute table has been updated to conform to the standard LEHD output format, defined in Format section

4 Outputs

Output shapefiles – grouped by paired products – are listed below. Each shapefile includes specific notes on its preparation.

4.1 FORMAT

(variables_shp.csv)

column	label	description	type
STUSPS	State USPS code	FIPS State Postal Code as per https://www.census.gov/-geo/reference/codes/-cou.html	string
GEOGRAPHY	Nationally unique identi-fier	Derived from Nationally Unique Federal Information Processing Series (FIPS) Code as per https://www.census.gov/-geo/reference/-ansi.html (see notes)	string
NAME	Feature Name	Full Census Name of Geography Feature	string
LABEL	Feature Label	Shorter Census Name of Geography Feature for Thematic Mapping	string
INTPTLAT	Internal Point Latitude	Internal Point Latitude in WGS-1984 Decimal Degrees as per http://spatialreference.org/-ref/epsg/wgs-84/	double
INTPTLON	Internal Point Longi-tude	Internal Point Longitude in WGS-1984 Decimal Degrees as per http://spatialreference.org/-ref/epsg/wgs-84/	double

4.2 Values

4.2.1 STUSPS

(label_stusps.csv)

FIPS State Postal Code as per https://www.census.gov/geo/reference/codes/cou.html

4.2.2 GEOGRAPHY

(label_geography.csv) The valid codes correspond to those listed on label_geography.csv.

4.2.3 NAME

This is a string that corresponds in general to the *label* field on label_geography.csv. Minor deviations for ease of exposition are possible.

4.3 Common files

4.3.1 State

(lehd_state.shp)

No transformations occur to this layer other than those listed above.

4.4 QWI Geographies

4.4.1 County

(lehd_county.shp)

- STUSPS is appended to the NAME field so that county names are nationally unique. Example: "Cook, IL"

4.4.2 CBSA - within State

(lehd_stcbsa.shp)

- All features are split into state-specific CBSA features by intersecting each feature with the state shapefile features.
- The STUSPS field is added during the intersect with the state shapefile.
- STFIPS (i.e. FIPS State Code as per https://www.census.gov/geo/reference/ansi_statetables.html) is prepended to the CBSA code (https://www.census.gov/population/metro/data/def.html) to create the GEOGRAPHY field to distinguish state-parts of the same CBSA (i.e. make them nationally unique).
- The text "([STUSPS] part)" is appended to the NAME field only for those CBSA features that are split by state lines.

4.4.3 Workforce Investment Board Areas

(lehd_wib.shp)

The WIA/WIB shapefiles are built from the Place, County Subdivision, and County shapefiles from TIGER/Line based on definitions provided by the LED state partners.

4.5 Job-to-Job Flow Geographies

4.5.1 CBSA - National

(lehd_cbsa.shp)

- The state remainder areas are added to the shapefile as new features. They are assigned unique codes ([STUSPS]+999) and names (“Not in metro/micro area, [STUSPS]”).

5 Versioning

Versioning rules follow Semantic Versioning V2.0.0, which states that

> Given a version number MAJOR.MINOR.PATCH, increment the:
>
> - MAJOR version when you make incompatible API changes,
> - MINOR version when you add functionality in a backwards-compatible manner, and
> - PATCH version when you make backwards-compatible bug fixes.

6 Changes

This revision: Wed Apr 13 16:53:08 EDT 2016