

Numident Supplementary Geography File Codebook*

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Summary and Methodology

The Numident Supplementary Geography File (N = 6,971,468) provides a set of supplementary geography variables reporting place of birth and death for individuals in the Numident. This file can be linked onto the Numident at the individual-level using HISTID. Individuals records may contain only place of birth variables, only place of death variables, or both place of birth and place of death variables.

Place of death variables: To construct the place of death variables, we use the ZIP code of last residence available in Social Security Numident records. It is likely that this reflects the ZIP code where an individual last lived. We map these ZIP codes onto city, county, state, census region, country, and rural-urban continuum codes using a database from the United States Postal Service (USPS) ([link](#)). For ZIP codes that have been decommissioned, we use a secondary database from UnitedStatesZipCodes.org. Approximately 6.3 million records have a ZIP code mapped to state, county, and city information, though some fields may be missing for certain records. Place of death variables are primarily available for individuals who died in the 50 U.S. states and the District of Columbia, but some are also present for deaths in Puerto Rico and a small number of ZIP codes indicating military bases abroad.

Place of birth variables: To construct the place of birth variables, we use 12-character city/county of birth string from the Social Security Numident records. These strings are uncleaned and contain misspellings and other inconsistencies. We mapped these uncleaned strings onto Geographic Names Information System (GNIS) codes using the crosswalk developed for the paper:

Black, Dan A., Seth G. Sanders, Evan J. Taylor, and Lowell J. Taylor. 2015. "The Impact of the Great Migration on Mortality of African Americans: Evidence from the Deep South." *American Economic Review*. 105(2):477–503. doi: 10.1257/aer.20120642.

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To construct other place of birth variable, we mapped the GNIS codes onto city, county, state, and census regions using a database from the U.S. Board on Geographic Names ([link](#)). Please cite Black et al. (2015) if you are using any of the birthplace geography variables in the file. Birthplace variables are available for nearly 6.5 million records in this dataset. Place of birth variables are only available for locations within the 50 United States and the District of Columbia. Note that state/country of birth is already included in the CenSoc-Numident (see the variables **bpl** and **bpl_string**) and thus not present in this dataset.

HISTID

Label: Historical Unique Identifier

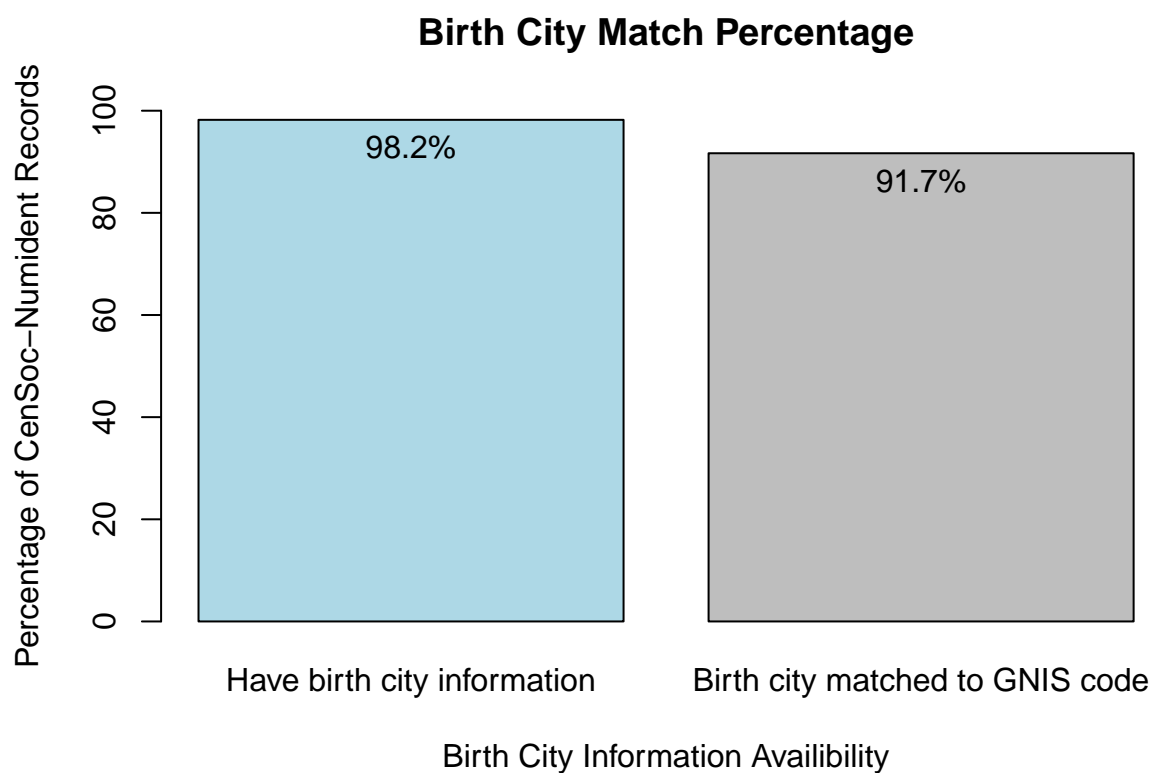
Description: HISTID is a unique individual-level identifier from IPUMS-USA 1940 Census data. This variable uniquely identifies all records in the dataset and can be used to merge onto the CenSoc-Numident mortality dataset.

birth_gnis_code

Label: Place of birth, GNIS code

Description: birth_gnis_code is a numeric variable that reports a person's Geographic Names Information System (GNIS) code for their place of birth. Each GNIS code maps onto physical locations located in the U.S., including longitude and latitude coordinates, physical feature names, counties, and states. For more information on GNIS codes, please see <https://www.usgs.gov/faqs/what-geographic-names-information-system-gnis>.

Missing values occur if birth city is absent from Numident records, or if the original birth city string was not matched to a GNIS code.



birth_city

Label: Place of birth, city

Description: birth_city reports the 12-character city/county of birth string from the Numident Application records. This variable is generally uncleaned and unprocessed, and contains spelling errors and naming inconsistencies.

Missing values occur when birth city is not available in Numident records.

birth__county

Label: Place of birth, county

Description: birth__county is a character variable reporting a person's county of birth, as determined by GNIS place of birth.

Missing values occur if birth city is absent from Numident records, or if the original birth city string was not matched to a GNIS code.

Note: In 2022, the state of Connecticut began replacing its eight counties with nine county-equivalent planning regions. This dataset contains the eight “legacy” county regions of Connecticut.

birth__fips

Label: Place of birth, county FIPS code

Description: birth__fips is a character variable reporting a person's county FIPS code of birth. FIPS codes are 5 digits, of which the first two are the FIPS code of the state to which the county belongs. For a list of modern FIPS codes, see: https://en.wikipedia.org/wiki/List_of_United_States_FIPS_codes_by_county.

Missing values occur if birth city is absent from Numident records, or if the original birth city string was not matched to a GNIS code or FIPS code.

Notes: FIPS codes appear numeric but can contain leading zeros. County-level FIPS codes are always 5 digits. In 2022, the state of Connecticut began replacing its eight counties with nine county-equivalent planning regions. This dataset contain FIPS codes for the the eight “legacy” county regions of Connecticut. FIPS codes occasionally change due to county boundary changes, name changes, etc., and thus codes contained in this dataset may not be completely consistent with external county-level data.

birth__region

Label: Place of birth, census region

Description: birth__region is a character variable reporting a person's census region of birth. For more information on census regions, please see <https://www.census.gov/programs-surveys/economic-census/guidance-geographies/levels.html>.

NA values are due to an inability to match uncleaned birth city values with the GNIS crosswalk, birth city being outside of a census region (in a different country for example), or a birth city not being entered in social security records.

birth__region	label	n	freq %
	NA	142323	2.0
midwest	Midwest	2388590	34.3
northeast	Northeast	1763495	25.3
south	South	2083543	29.9
west	West	593517	8.5

Births by Census Region

death_zip

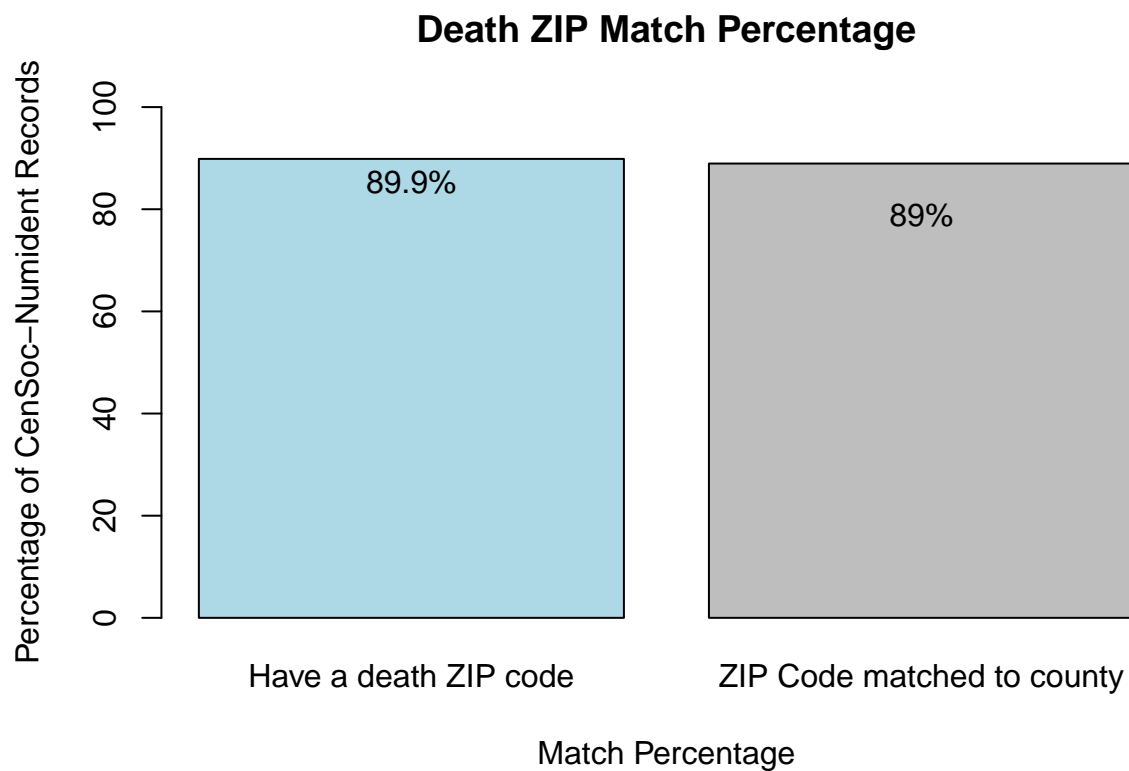
Label: Place of death, ZIP code

Description: death_zip is a character variable that represents the 5-digit ZIP code of the last residence, as obtained from Numident Death records

Missing values may occur if ZIP code was entered incorrectly in Numident records, if ZIP code is absent from Numident records, or if place of death occurred outside USPS identifiable ZIP codes (e.g., most locations abroad). However, Non-identifiable codes such as “XX768” and “00000” may remain in this field.

Notes: ZIP codes appear numeric, but can contain leading zeros. They should always be 5 digits.

We note that ZIP codes are primarily used for USPS mail delivery purposes, not as geographic units. For a more detailed description of ZIP codes, please see: <https://faq.usps.com/s/article/ZIP-Code-The-Basics>.



death_city

Label: Place of death, city

Description: death_city is a character variable reporting a person's city of death, as determined from the ZIP code of their residence at time of death. For ZIP codes that cross city lines, we report the city where the primary post office for that ZIP code is located.

Missing values may occur if ZIP code was entered incorrectly in Numident records, if ZIP code is absent from Numident records, or if place of death could not be matched to an USPS identifiable ZIP code.

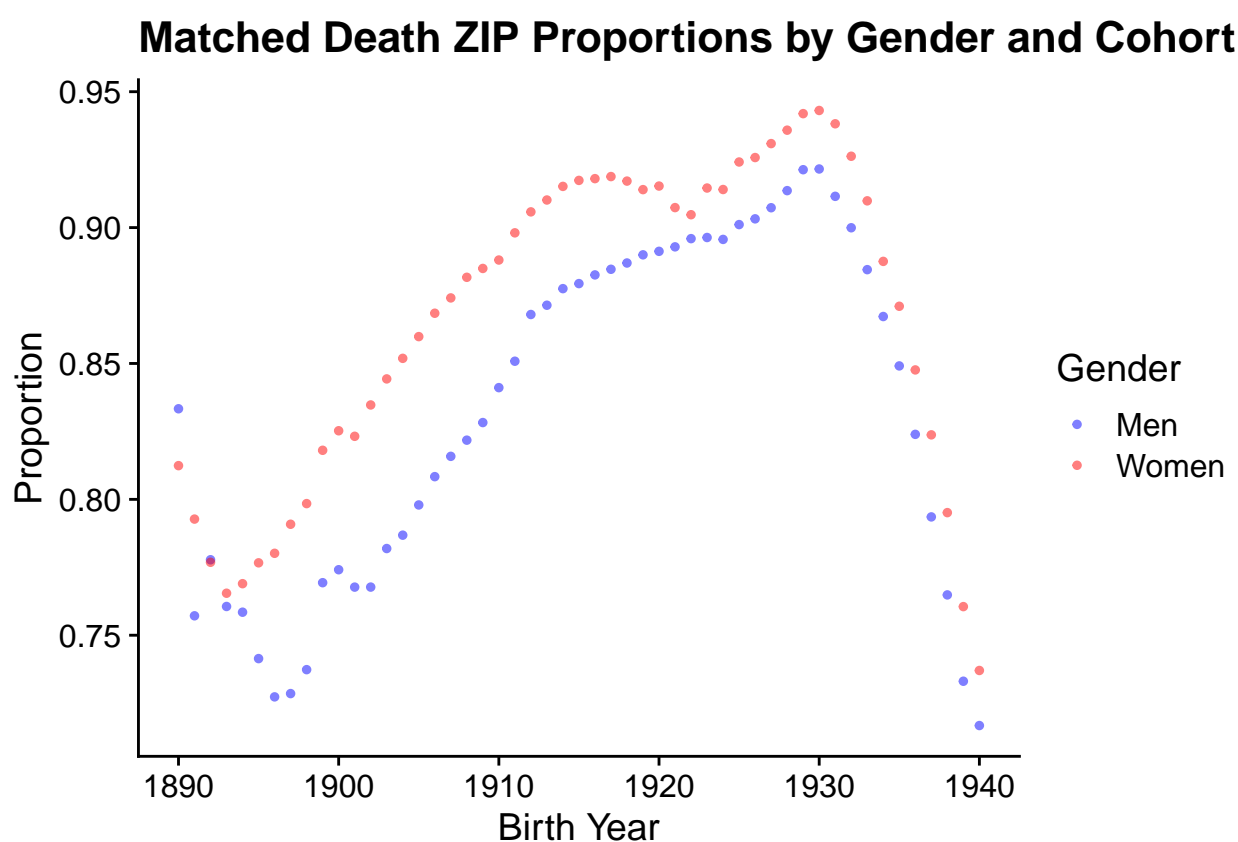
death__county

Label: Place of death, county

Description: death__county is a character variable reporting a person's county of death, as determined by the ZIP code of their residence at time of death.

NA values are due to ZIP code not being entered correctly in social security records or a ZIP code that could not be matched against USPS records.

Note: In 2022, the state of Connecticut began replacing its eight counties with nine county-equivalent planning regions. This dataset contains the eight "legacy" county regions for Connecticut.



death__county__fips

Label: Place of death, county FIPS code

Description: death_fips is a character variable reporting a person's county FIPS code of birth. FIPS codes are 5 digits, of which the first two are the FIPS code of the state to which the county belongs. For a list of modern FIPS codes, see: https://en.wikipedia.org/wiki/List_of_United_States_FIPS_codes_by_county.

Missing values may occur if ZIP code was entered incorrectly in Numident records, if ZIP code is absent from Numident records, if place of death could not be matched to an identifiable USPS identifiable ZIP code, or if county could not be matched to a FIPS code. County FIPS codes are not available for deaths occurring in Puerto Rico.

Notes: FIPS codes appear numeric but can contain leading zeros. County-level FIPS codes are always 5 digits. In 2022, the state of Connecticut began replacing its eight counties with nine county-equivalent planning regions. This dataset contain FIPS codes for the the eight “legacy” county regions of Connecticut. FIPS codes occasionally change due to county boundary changes, name changes, etc., and thus codes contained in this dataset may not be completely consistent with external county-level data.

death__state

Label: Place of death, state

Description: death__state is a character variable reporting a person's state of death, as determined by the ZIP code of their residence at time of death. Includes the 50 U.S states, the District of Columbia, and Puerto Rico.

Missing values may occur if ZIP code was entered incorrectly in Numident records, if ZIP code is absent from Numident records, or if place of death could not be matched to an identifiable USPS identifiable ZIP code in the United States.

death__state	label	n	freq %	death__state	label	n	freq %
	NA	705247	10.1	ms	Mississippi	59350	0.9
ak	Alaska	4833	0.1	mt	Montana	23905	0.3
al	Alabama	96717	1.4	nc	North Carolina	158663	2.3
ar	Arkansas	68530	1.0	nd	North Dakota	20996	0.3
az	Arizona	108487	1.6	ne	Nebraska	57204	0.8
ca	California	541103	7.8	nh	New Hampshire	31644	0.5
co	Colorado	81786	1.2	nj	New Jersey	197142	2.8
ct	Connecticut	93149	1.3	nm	New Mexico	30969	0.4
dc	Washington DC	10451	0.1	nv	Nevada	37500	0.5
de	Delaware	19606	0.3	ny	New York	377049	5.4
fl	Florida	377124	5.4	oh	Ohio	327561	4.7
ga	Georgia	118774	1.7	ok	Oklahoma	93291	1.3
hi	Hawaii	4667	0.1	or	Oregon	95311	1.4
ia	Iowa	96989	1.4	pa	Pennsylvania	343227	4.9
id	Idaho	29976	0.4	pr	Puerto Rico	1216	0.0
il	Illinois	291387	4.2	ri	Rhode Island	36341	0.5
in	Indiana	161364	2.3	sc	South Carolina	73069	1.0
ks	Kansas	79917	1.1	sd	South Dakota	26570	0.4
ky	Kentucky	100157	1.4	tn	Tennessee	126017	1.8
la	Louisiana	102850	1.5	tx	Texas	335119	4.8
ma	Massachusetts	158004	2.3	ut	Utah	35333	0.5
md	Maryland	114550	1.6	va	Virginia	141986	2.0
me	Maine	45951	0.7	vt	Vermont	18809	0.3
mi	Michigan	248418	3.6	wa	Washington	133667	1.9
mn	Minnesota	119164	1.7	wi	Wisconsin	165813	2.4
mo	Missouri	169809	2.4	wv	West Virginia	61322	0.9
				wy	Wyoming	13384	0.2

Deaths by State

death__region

Label: Place of death, census region

Description: death__region is a character variable reporting a person's census region of death, as sourced from the ZIP code of their residence at time of death. This variable is available for persons dying within the 50 United States and the District of Columbia.

Missing values may occur if ZIP code was entered incorrectly in Numident records, if ZIP code is absent from Numident records, if place of death could not be matched to an identifiable USPS identifiable ZIP code in the United States.

birth__region	label	n	freq %
	NA	706351	10.1
midwest	Midwest	1538179	22.1
northeast	Northeast	1301316	18.7
south	South	2057688	29.5
west	West	1367934	19.6

Deaths by Census Region

death__country

Label: Place of death, country

Description: death__country is a character variable reporting a person's country of death, as determined by the ZIP code of their residence at time of death. While the vast majority of ZIP codes are within the U.S., countries that host U.S. military bases on their territories may also have ZIP codes associated with them. Codes follow [ISO 3166-1 alpha-2 country codes](#).

Missing values may occur if ZIP code being entered incorrectly in Numident records, if ZIP code is absent from Numident records, if place of death could not be matched to an identifiable USPS identifiable ZIP code.

death_ruc1993

Label: County of death, rural-urban continuum code

Description: death_ruc1993 report the 1993 Rural-Urban continuum code for a person's county (or county equivalent) of death, as sourced from the United States Department of Agriculture (USDA). The Urban-Rural Continuum Codes are a classification system developed to categorize U.S. counties based on their degree of urbanization and adjacency to metropolitan areas. The system consists of ten codes, ranging from 0 to 9, where lower codes represent more urbanized counties and higher codes represent more rural areas.

Missing values may occur if ZIP code being entered incorrectly in Numident records, if ZIP code is absent from Numident records, or if ZIP code could not be matched to a county.

For more information, see: <https://www.ers.usda.gov/data-products/rural-urban-continuum-codes.aspx>

death_ruc1993		label	n	freq %
0	Central counties of metro areas of 1 million population or more		2448589	35.1
1	Fringe counties of metro areas of 1 million population or more		239080	3.4
2	Counties in metro areas of 250,000 to 1 million population		1410715	20.2
3	Counties in metro areas of fewer than 250,000 population		556801	8.0
4	Urban population of 20,000 or more, adjacent to a metro area		291959	4.2
5	Urban population of 20,000 or more, not adjacent to a metro area		172429	2.5
6	Urban population of 2,500 to 19,999, adjacent to a metro area		511661	7.3
7	Urban population of 2,500 to 19,999, not adjacent to a metro area		422880	6.1
8	Rural or fewer than 2,500 urban population, adjacent to a metro area		80740	1.2
9	Rural or fewer than 2,500 urban population, not adjacent to a metro area		128967	1.8
NA		NA	707647	10.2

Rural-Urban County of Death