

2020 State & Local Government Employment & Payroll

Technical Documentation

Section 1: File Layouts

1.1 Individual Unit Data File (Public Use Format)

This is an ASCII fixed length text file containing a standard 94-character Public Use Format layout. It contains values for all variables by Item Code (Functional Category) for each Individual Unit ID (see [Section 1.2](#)). All payroll in the data file are 31-day monthly equivalent values for the month of March. There may be multiple Item Codes (Functional Category) for the same Individual Unit ID (see [Section 1.2](#)). The first 14 characters comprise the Individual Unit ID, which is a concatenation of State Code, Unit Type Code, County Code, Unit Identification Number, Supplement Code, and Sub Code. Beginning with the release of the 2019 Annual Survey of Public & Payroll, Part-time hours are no longer included in the content that is collected and published. The resulting change to the calculation of full-time equivalent (FTE) no longer allows provision of this data point at the individual unit level. For more information on changes to the FTE calculation, please see our [Methodology](#).

For 2020, the file name is:

20empst.txt

Below is a detailed record layout for the file:

Characteristic	Value
File Type	ASCII
Record Length	94 Characters
Record Type	Fixed Length, No Delimiter

Description	Length	Position	Reference
State Code (States & DC in alpha)	2	1-2	Section 2.1
Unit Type Code	1	3-3	Section 2.2
County Code	3	4-6	*
Unit Identification Number	3	7-9	
Supplement Code	3	10-12	
Sub Code	2	13-14	
Item Code (Functional Category)	3	18-20	Section 2.3
Full-Time Employees	10	21-30	†
Full-Time Employees Data Flag	1	32-32	Section 2.4
Full-Time Payroll	12	33-44	†
Full-Time Payroll Data Flag	1	46-46	Section 2.4
Part-Time Employees	10	47-56	†
Part-Time Employees Data Flag	1	58-58	Section 2.4
Part-Time Payroll	12	59-70	†
Part-Time Payroll Data Flag	1	72-72	Section 2.4

* For more information, please see the [Government Finance and Employment Classification Manual](#), and visit [Government Organization & Structure](#).

† For more information, please reference Chapter 11 of the [Government Finance and Employment Classification Manual](#).

1.2 Individual Unit ID File (Public Use Format)

This is an ASCII fixed length text file containing a standard 206-character Public Use Format layout. It contains information about individual units (by Individual Unit ID) collected for the survey. Each row in the file represents a unique Individual Unit ID and relates to the Individual Unit ID in the data file (see [Section 1.1](#)). The first 14 characters comprise the Individual Unit ID, which is a concatenation of State Code, Unit Type Code, County Code, Unit Identification Number, Supplement Code, and Sub Code.

For 2020, the file name is:

20empid.txt

Below is a detailed record layout for the file:

Characteristic	Value
File Type	ASCII
Record Length	206 Characters
Record Type	Fixed Length, No Delimiter

Description	Length	Position	Reference
State Code (States & DC in alpha)	2	1-2	Section 2.1
Unit Type Code	1	3-3	Section 2.2
County Code	3	4-6	‡
Unit Identification Number	3	7-9	
Supplement Code	3	10-12	
Sub Code	2	13-14	
Name of Government	64	15-78	
Census Region Code	1	79-79	Section 2.5
County Name	30	80-109	§
FIPS State	2	110-111	**
FIPS County	3	112-114	
Population/Enrollment/Function Code	9	126-134	††
Year of Population/Enrollment	2	135-136	‡‡
School Level Code	2	137-138	Section 2.6
Probability of Selection	6	146-151	§§
Worksheet Code	2	205-206	Section 2.7

‡ For more information, please see the [Government Finance and Employment Classification Manual](#), and visit [Government Organization & Structure](#).

§ Name of the county in which the government unit is geographically located or assigned. For more information, please visit [Government Organization & Structure](#).

** For more information on FIPS, visit the [Census Geography Program](#), their [reference files](#) (Population Estimates FIPS Codes are available for certain years), and [FIPS](#).

†† Population for State, County, Municipality, or Township types of government. Enrollment for Independent School District or Education Service Agency type of government. Function or Activity Code for Special District type of government. For more information on Function or Activity Code, please see Chapters 1.9 and 12 of the [Government Finance and Employment Classification Manual](#). For more information on types of government, please see [Section 2.2](#).

‡‡ Specifies the last two digits of the year of Population or Enrollment data, when applicable.

§§ For more information on Probability of Selection and Weighting, please see the survey [Methodology](#).

1.3 Individual Unit Excel File

This is a Microsoft Excel Worksheet containing values for all variables by Government Function for each Individual Unit ID. Most variables with codes and from the two text files (see [Section 1.1](#) and [Section 1.2](#)) have already been cross-walked to their description and migrated into Excel. All payroll in the data file are 31-day monthly equivalent values for the month of March.

For 2020, the file name is:

20emp.xlsx

Description	Reference
State	Section 2.1
Type of Government	Section 2.2
Name of Government	
Government Function	Section 2.3
Full-time Employees	***
Full-time Employees Data Flag	Section 2.4
Full-time Payroll	†
Full-time Payroll Data Flag	Section 2.4
Part-time Employees	†
Part-time Employees Data Flag	Section 2.4
Part-time Payroll	†
Part-time Payroll Data Flag	Section 2.4
Individual Unit ID	†††
Census Region	Section 2.5
County Name	†††
FIPS State	§§§
FIPS County	
Population/Enrollment/Function Code	****
Year of Population/Enrollment	††††
School Level	Section 2.6
Probability of Selection	††††
Worksheet Code	Section 2.7

*** For more information, please reference Chapter 11 of the [Government Finance and Employment Classification Manual](#).

††† This 14 character ID is a concatenation of State Code, Unit Type Code, County Code, Unit Identification Number, Supplement Code, and Sub Code as found in [Section 1.1](#) and [Section 1.2](#).

††† Name of the county in which the government unit is geographically located or assigned. For more information, please visit [Government Organization & Structure](#).

§§§ For more information on FIPS, visit the [Census Geography Program](#), their [reference files](#) (Population Estimates FIPS Codes are available for certain years), and [FIPS](#).

**** Population for State, County, Municipality, or Township types of government. Enrollment for Independent School District or Education Service Agency type of government. Function or Activity Code for Special District type of government. For more information on Function or Activity Code, please see Chapters 1.9 and 12 of the [Government Finance and Employment Classification Manual](#). For more information on types of government, please see [Section 2.2](#).

†††† Specifies the last two digits of the year of Population or Enrollment data, when applicable.

†††† For more information on Probability of Selection and Weighting, please see the survey [Methodology](#).

Section 2: Code Definitions

2.1 State Code

This table below is a detailed reference for State Code as found in both the Individual Unit Data File (see [Section 1.1](#)) and the Individual Unit ID File (see [Section 1.2](#)). The table details each State's code, name, and abbreviation.

State Code	State Name	Abbreviation
00	United States	US
01	Alabama	AL
02	Alaska	AK
03	Arizona	AZ
04	Arkansas	AR
05	California	CA
06	Colorado	CO
07	Connecticut	CT
08	Delaware	DE
09	District of Columbia	DC
10	Florida	FL
11	Georgia	GA
12	Hawaii	HI
13	Idaho	ID
14	Illinois	IL
15	Indiana	IN
16	Iowa	IA
17	Kansas	KS
18	Kentucky	KY
19	Louisiana	LA
20	Maine	ME
21	Maryland	MD
22	Massachusetts	MA
23	Michigan	MI
24	Minnesota	MN
25	Mississippi	MS

State Code	State Name	Abbreviation
26	Missouri	MO
27	Montana	MT
28	Nebraska	NE
29	Nevada	NV
30	New Hampshire	NH
31	New Jersey	NJ
32	New Mexico	NM
33	New York	NY
34	North Carolina	NC
35	North Dakota	ND
36	Ohio	OH
37	Oklahoma	OK
38	Oregon	OR
39	Pennsylvania	PA
40	Rhode Island	RI
41	South Carolina	SC
42	South Dakota	SD
43	Tennessee	TN
44	Texas	TX
45	Utah	UT
46	Vermont	VT
47	Virginia	VA
48	Washington	WA
49	West Virginia	WV
50	Wisconsin	WI
51	Wyoming	WY

2.2 Unit Type Code

The table below is a detailed reference and description for Unit Type Code as found in both the Individual Unit Data File (see [Section 1.1](#)) and the Individual Unit ID File (see [Section 1.2](#)). For more information on types of government units, please reference Chapter 1 of the [Government Finance and Employment Classification Manual](#).

Unit Type Code	Description
0	State
1	County
2	Municipality
3	Township
4	Special District
5	Independent School District or Education Service Agency

2.3 Item Code (Functional Category)

The table below is a detailed reference and description for Item Code (Functional Category) as found in the Individual Unit Data File (see [Section 1.1](#)). For more information on functional categories, please reference Chapter 12 of the [Government Finance and Employment Classification Manual](#).

Item Code (Functional Category)	Description
000	Total - All Government Employment Functions
023	Financial Administration
029	Other Government Administration
025	Judicial and Legal
062	Police Protection - Persons with Power of Arrest
162	Police Protection - Other
024	Fire Protection - Firefighters
124	Fire Protection - Other
005	Corrections
044	Highways
001	Air Transportation
087	Sea and Inland Port Facilities
079	Public Welfare
032	Health
040	Hospitals
022	Social Insurance Administration
081	Solid Waste Management
080	Sewerage
061	Parks and Recreation
050	Housing and Community Development
059	Natural Resources
091	Water Supply
092	Electric Power
093	Gas Supply

Item Code (Functional Category)	Description
094	Transit
012	Education - Elementary and Secondary Instructional
112	Education - Elementary and Secondary Other
018	Education - Higher Education Instructional
016	Education - Higher Education Other
021	Education - Other
052	Libraries
090	State liquor stores
089	All other and unallocable

Also available at <https://www.census.gov/programs-surveys/apes/technical-documentation/code-lists/data-function.html>.

2.4 Data Flag

The table below is a detailed reference for Data Flag as found in the Individual Unit Data File (see [Section 1.1](#)). The table provides descriptions for flags relevant to the employees and payroll data, including specifying the type of data, whether ultimately considered reported or imputed via a reported table and an imputed table below.

2.4.1 Reported

Data Flag	Description
C	Without contacting the respondent, the analyst corrects data provided in an inappropriate item code (functional category) or individual unit, corrects data so detail adds to total, corrects other reported minor reporting errors that prevents the use of the original data provided by the respondent.
K	Analyst corrects improperly keyed data and replaces with the reported values from the questionnaire.
R	1)Data item is reported directly by the respondent. 2)Respondent does not complete the survey form, but provided additional information which is compiled and used to complete the form, i.e., annual report, Website, etc.
T	Respondent reports totals and these data are pro-rated based on the prior year distribution.
U	Analyst obtains correct data from the respondent via telephone, e-mail, or fax.
V	Analyst verified the data with the respondent via telephone, e-mail, or fax.
Z	Data are the summation of multiple individual state agencies (i.e., state level data) or the summation of multiple data function codes (i.e., total data function code of "000").

2.4.2 Imputed

Data Flag	Description
A	Missing or inappropriate data fixed by computer calculations are based on prior year factors or prior year state averages.
B	Analyst obtains information from a report or other administrative source without prior respondent contact and there exists documentation verifying that these data sources are comparable to reported data.
D	Analyst obtains information from a website without prior respondent contact and there exists documentation verifying that these data sources are comparable to reported data.
G	The prior year data were adjusted by a growth rate that was determined by the growth of responding units that were similar to the nonrespondent in size, geography and type of government.
J	The unit contained partially reported data sufficient to determine unit totals at the total employee/total pay level. Data were imputed using pro-rated values based on prior year or cell median ratios. Flag J differs from Flag T in that Flag T implies that the unit total for that variable was reported, e.g., if full-time pay is reported, then full-time pay for each item code (functional category) of that unit will receive a flag of T. While Flag J implies that the unit total for that variable was not reported, e.g., if total employees are reported, but neither full-time nor part-time employees are reported, then full-time employees will be pro-rated and full-time employees for each item code of that unit will receive a flag of J.
P	Data were from a donor that was randomly selected from units similar to the nonrespondent. A per capita adjustment based on population enrollment was made.
Q	A growth rate was applied to the prior year that carried a flag of P.
X	The analyst creates a value missing entry, an erroneous reported entry, or an imputed value without contacting the respondent.

Also available online at <https://www.census.gov/programs-surveys/apcs/technical-documentation/code-lists/data-flags.html>.

2.5 Census Region Code

The table below is a detailed reference and description for Census Region Code as found in the Individual Unit ID File (see [Section 1.2](#)). For more information on regions, please visit the [Census Geography Program](#) and their [reference files](#) (Population Estimates FIPS Codes are available for certain years and will also contain region codes).

Census Region Code	Description
1	Northeast
2	Midwest
3	South
4	West

2.6 School Level Code

The table below is a detailed reference and description for School Level Code as found in the Individual Unit ID File (see [Section 1.2](#)). For more information on school levels, please reference Section 1.8.4 of Chapter 1 of the [Government Finance and Employment Classification Manual](#).

School Level Code	Description
01	Elementary Only
02	Secondary Only
03	Elementary and Secondary
04	Post-Secondary
05	Special or Vocational Education
06	Non-Operating
07	Educational Service Agency (ESA)

2.7 Worksheet Code

The table below is a detailed reference for Worksheet Code as found in the Individual Unit ID File (see [Section 1.2](#)), and provides the code, worksheet name as available on the survey website, and a description. For more information about the survey worksheets and data collection, please visit our [Questionnaires](#) page.

Worksheet Code	Survey Worksheet	Description
00	§§§§	Central Collection
01	E-1	State Agencies
02	E-2	State Institutions of Higher Education
03	E-3	Special Districts and Local Agencies
04	E-4	Municipalities, Counties, Townships
05	E-5	Municipalities and Townships
06	E-6	School Systems
07	E-7	Major Special Districts and Agencies
08	E-8	Elementary & Secondary Education
09	E-9	Police Protection Agencies
10	E-10	College & Other Postsecondary Education

§§§§ Governments reporting by central collection receive a letter requesting submission of a data file rather than a worksheet. These governments provide a payroll record containing data for multiple governments and/or multiple agencies within a government.

Section 3: Supplemental Resources and Contact Information

3.1 Resources

- Public Sector website: <https://www.census.gov/govs/>
- Survey of Public Employment & Payroll website: <https://www.census.gov/programs-surveys/apes.html>
- Survey Technical Documentation: <https://www.census.gov/programs-surveys/apes/technical-documentation.html>
 - Includes Code Lists, File Layouts, Methodology, Questionnaires, and User Notes.
- Government Organization & Structure website: <https://www.census.gov/topics/public-sector/government-organization.html>
- Government Finance and Employment Classification Manual:
https://www2.census.gov/govs/pubs/classification/2006_classification_manual.pdf

3.2 Contact Information

For information about tables, datasets, or the Survey of Public Employment & Payroll, users can contact the Employment Statistics Branch. We would also appreciate learning how these data are used:

Email: EWD.Employment.Survey@census.gov

Telephone: (800) 642-4901

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Economy-Wide Statistics Division
U.S. Census Bureau
Washington, DC 20233-6800