

RESIDENTIAL BUILDING PERMITS SURVEY DOCUMENTATION

Master Compiled Data Set

Be advised: This file is extremely large and when extracted totals over 9 million rows and nearly 3GB in size. Please be aware of the abilities and limitations of any software you plan to use to work with this data source.

Much of the data contained in this file is represented in our [BPS Time Series and Table Tool](#) which may be a better option depending on your data needs.

Introduction

This file is compiled from all published Building Permits Survey data hosted on [our FTP site](#). This file contains monthly, annual, and year-to-date data for places, counties, states, metro areas, divisions, regions, and the United States.

File Format

Two sets of data are shown for each type of construction:

1. Estimates with Imputation - Includes reported data for respondents and imputed data for nonrespondents.
2. Reported Only - includes only reported data for respondents.

Sample Design

Slightly less than half of the permit-issuing places in the United States are surveyed monthly. The remainder of places are surveyed annually. The design of the monthly sample that has been used since January 2022 is as follows:

The places surveyed monthly include those places in the current (2014) universe that were identified as issuing an average of 6 or more permits in the most recent 3 years (initially 2018-2020). The remaining places in the universe represent about 1% of total permit activity and will only be surveyed annually.

The monthly estimates shown for the United States, Census Regions, Census Divisions, States, Counties, and each jurisdiction are based on received reports for places in the monthly survey and imputed activity for non-reporters and those not surveyed monthly.

For information on the monthly sample design that was used prior to January 2022, see the [Historical Methodology](#) section at the bottom of our website.

Monthly and Annual Building Permits Statistics

Monthly statistics are obtained by directly cumulating the data for all places that are requested to report monthly. Annual statistics are obtained by cumulating data for all places, both monthly and annual reporters.

Reliability of the Data

The portion of residential construction measurable from building permits records can be limited because such records do not reflect construction activity outside of areas subject to local permits requirements. For the nation as a whole, less than 1 percent of all privately owned housing units are constructed in areas not requiring building permits. However, this proportion varies greatly from state to state and among metropolitan areas.

The reported statistics on building permits are influenced by the following factors:

1. Some new residential construction work in building permit jurisdictions escapes recording. However, the number of such unrecorded units is likely very small.
2. Detailed evidence is lacking as to how closely the valuation recorded for building permit purposes approximates the dollar amount of construction work involved.
3. Changes in boundaries of localities resulting from annexations, new incorporations, etc., result in some problems of comparability over time, even for statistics for the same places.
4. Some building permit jurisdictions close their books a few days before the end of the month, so that the time reference for permits is not in all cases strictly the calendar month.

To the extent that most of these limiting factors apply rather consistently over an extended period, they may not seriously impair the usefulness of building permit statistics as prompt indicators of trends in residential construction activity. However, the geographic limitations of the data need to be kept in mind. In addition, the dollar volume of residential construction should be used with caution. Because of the nature of the building permit application process, valuations may frequently differ from the true cost of construction. Any attempt to use these figures for inter-area comparisons of construction volume must, at best, be made cautiously and with broad reservations.

Prior to January 2022, the monthly estimates shown for the United States, Census Regions, Census Divisions, and states (with the exception of a few states that have complete coverage in the monthly sample) were based on representative samples and may differ from statistics that would have been obtained from a complete census using the same schedules and procedures. For a particular estimate, statisticians define this difference as the total error of the estimate. When describing the reliability of survey results, total error is defined as the sum of sampling error and non-sampling error. Sampling error is the error arising from the use of a sample, rather than a census, to estimate population values. Nonsampling error encompasses all other factors that contribute to the total error of a survey estimate. The sampling error of an estimate can usually be estimated from the sample, whereas the nonsampling error of an estimate is difficult to measure and can rarely be estimated. Consequently, the actual error in an estimate exceeds the error that can be estimated. Data users should take into account the estimates of sampling error for estimates prior to January 2022 and the potential effects of nonsampling error when using all published estimates.

Sampling Error

Beginning with January 2022, the monthly estimates of building permits are not based on a probability sample and will be tabulated from the entire universe of building permit offices, similar to annual data. Although not subject to sampling error, these estimates are subject to various nonsampling errors. For

information on sampling error for estimates prior to January 2022, see the [Historical Methodology section](#) on our website.

Nonsampling Error

Nonsampling error encompasses all factors, other than sampling error, that contribute to the total error of a sample survey estimate and may also occur in censuses. It is often helpful to think of nonsampling error as arising from deficiencies or mistakes in the survey process. Nonsampling errors are usually attributed to many possible sources: (1) coverage error - failure to accurately represent all population units in the sample, (2) inability to obtain information about all sample cases (nonresponse), (3) response errors, possibly caused by definitional difficulties or misreporting, (4) mistakes in recording or coding the data obtained, and (5) other errors of coverage, collection, processing, or imputation for missing items or inconsistent data. Although nonsampling error is not measured directly, the Census Bureau employs quality control procedures throughout the process to minimize this type of error.

Geographic Coverage of Building Permit Jurisdictions

Building permits data are collected from individual permit offices, most of which are municipalities; the remainder are counties, townships, or New England and Middle Atlantic-type towns. Because building permits are public records, local area data can be published without any confidentiality concerns. From local area data, estimates are tabulated for counties, states, metropolitan areas, Census Divisions, Census Regions, and the United States. Data are also collected for Puerto Rico and U.S. territories, although these areas are excluded from the national estimates.

The Building Permits Survey covers all "permit-issuing places," which are jurisdictions that issue building or zoning permits. Zoning permits are used only for areas that do not require building permits but require zoning permits. Areas for which no authorization is required to construct a new privately-owned housing unit are not included in the survey.

Periodically, we use Form C-411 "Survey of Residential Building or Zoning Permit Systems" to canvass active governments in the United States. The Building Permits sampling frame or "universe" is updated by adding all places that reported the establishment of a new permit system since the last canvass. More can be read about the C-411 process on our website under [Geographic Coverage](#).

Contact Us

Questions should be directed to Residential Construction Branch, U.S. Census Bureau, Washington, D.C. Phone: (301) 763-5160.

Additional information can also be found at our [FAQs](#), [Definitions](#), [Documentation](#), and [How the Data are Collected](#) pages.

Much of the data contained in this file are represented in our [BPS Time Series and Table Tool](#)

Description of Data Items Found in the File

101 Single Family Houses - Includes all detached one-family houses. Also includes all attached one-family houses separated by a wall that extends from ground to roof with no common heating system or interstructural public utilities. Includes prefabricated, sectionalized, panelized, and modular homes which are manufactured partially off-site, but which are transported and assembled at the construction site. Excludes mobile homes.

103 Two-Family Buildings - Includes all buildings containing two housing units which may be one above the other or side-by-side. If built side-by-side, they (1) do not have a wall that extends from ground to roof or (2) share a heating system, or (3) have interstructural public utilities such as water supply/sewage disposal.

104 Three- and Four-Family Buildings - Includes all buildings containing three or four housing units. If built side-by-side, they (1) do not have a wall that extends from ground to roof, or (2) share a heating system, or (3) have interstructural public utilities such as water supply/sewage disposal.

105 Five-or-More Family Buildings - Includes all buildings containing five or more housing units. If built side-by-side, they (1) do not have a wall that extends from ground to roof, or (2) share a heating system, or (3) have interstructural public utilities such as water supply/sewage disposal.

109 Total - A summarization of items 101 through 105.

Record Layout of Compiled Building Permits Customer Data File

Field	Description	Section
BLDGS_1_UNIT	101-Buildings	Estimates With Imputation
BLDGS_1_UNIT_REP	101-Buildings Reported	Reported Only Data
BLDGS_2_UNITS	103-Buildings	Estimates With Imputation
BLDGS_2_UNITS_REP	103-Buildings Reported	Reported Only Data
BLDGS_3_4_UNITS	104-Buildings	Estimates With Imputation
BLDGS_3_4_UNITS_REP	104-Buildings Reported	Reported Only Data
BLDGS_5_UNITS	105-Buildings	Estimates With Imputation
BLDGS_5_UNITS_REP	105-Buildings Reported	Reported Only Data
CBSA_CODE	Five-digit CBSA code or " 99999" if not in a CBSA	Identification
CBSA_NAME	Alpha Geographic (CBSA) Name	Identification
CENSUS_PLACE_CODE	Four-digit Census Place code	Identification
CENTRAL_CITY	Central City code: Blank: Place is not a central city of a metropolitan area. 1: Place is a central city of a metropolitan area	Identification
COUNTY_CODE	Three-digit FIPS county code	Identification
COUNTY_NAME	Alpha Geographic (County) Name	Identification
CSA_CODE	Three-digit CSA code or "999" if not in a CSA	Identification
DIVISION_CODE	One-digit Census division code: <ul style="list-style-type: none"> • 1 New England • 2 Middle Atlantic • 3 East North Central • 4 West North Central • 5 South Atlantic • 6 East South Central • 7 West South Central • 8 Mountain • 9 Pacific 	Identification
DIVISION_NAME	Alpha. Division name	Identification
FILE_NAME	Name of ASCII file data are contained in	Identification
FIPS_COUNTY_5_DIGITS	Five-digit FIPS County code. Two-digit FIPS state code plus three-digit FIPS county code	Identification
FIPS_MCD_CODE	Five-digit FIPS MCD code	Identification
FIPS_PLACE_CODE	Five-digit FIPS place code	Identification
FOOTNOTE_CODE	Footnote code: Blank: Place has no explanatory footnote 2: Place has an explanatory footnote	Identification

ID_6_DIGIT	Six-digit Building Permits Survey ID code, specific to the Building Permits Survey	Identification
LOCATION_TYPE	Alpha. Denotes geographic type of data.	Identification
MONCOV	Alpha Code - Header Coverage Code – Blank, or “C” if CSA/CBSA is completely covered by monthly permit issuing places	Identification
MONTH	Numerical month 1-12, representing January-December. Annual records will have 99.	Identification
NUMBER_OF_MONTHS_REP	Number of months data have been received from respondent for annual or Year-to-date data. Shown for place-level geography only.	Identification
PERIOD	Alpha. Denotes whether data are Monthly, Year-to-date, or Annual	Identification
PLACE_NAME	Alpha place name	Identification
POP	Population based on preceding decennial count	Identification
REGION_CODE	One-digit Census region code: <ul style="list-style-type: none"> • 1 Northeast • 2 Midwest • 3 South • 4 West 	Identification
REGION_NAME	Alpha region name	Identification
SOURCE_CODE	Source code identifying source of data as shown for monthly place-level data: <ul style="list-style-type: none"> • 1 Building Permits C-404 survey form • 2 Received data in electronic format • 3 Received residential data via online reporting • 4 Received residential data from another source - equivalent to reported data • 5 No report received, imputed data • 9 No report received and no imputed data 	Identification
STATE_CODE	FIPS State code	Identification
STATE_NAME	Alpha Geographic (State) Name	Identification
SURVEY_DATE	Survey date, in the form "YYYYMM" (annual files show a date of "YYYY" or "YYYY99")	Identification
TOTAL_BLDGS	Total buildings	Estimates With Imputation
TOTAL_BLDGS_REP	Total buildings reported	Reported Only Data

TOTAL_UNITS	Total units	Estimates With Imputation
TOTAL_UNITS_REP	Total units reported	Reported Only Data
TOTAL_VALUE	Total value	Estimates With Imputation
TOTAL_VALUE_REP	Total value reported	Reported Only Data
UNITS_1_UNIT	101-units	Estimates With Imputation
UNITS_1_UNIT_REP	101-units reported	Reported Only Data
UNITS_2_UNITS	103-units	Estimates With Imputation
UNITS_2_UNITS_REP	103-units reported	Reported Only Data
UNITS_3_4_UNITS	104-units	Estimates With Imputation
UNITS_3_4_UNITS_REP	104-units reported	Reported Only Data
UNITS_5_UNITS	105-units	Estimates With Imputation
UNITS_5_UNITS_REP	105-units reported	Reported Only Data
VALUE_1_UNIT	101-valuation	Estimates With Imputation
VALUE_1_UNIT_REP	101-valuation reported	Reported Only Data
VALUE_2_UNITS	103-valuation	Estimates With Imputation
VALUE_2_UNITS_REP	103-valuation reported	Reported Only Data
VALUE_3_4_UNITS	104-valuation	Estimates With Imputation
VALUE_3_4_UNITS_REP	104-valuation reported	Reported Only Data
VALUE_5_UNITS	105-valuation	Estimates With Imputation
VALUE_5_UNITS_REP	105-valuation reported	Reported Only Data
YEAR	Year represented data occurs in	Identification
ZIP_CODE	Zip Code where permit office/official is located. Not necessarily the area covered by the data	Identification
LOCATION_NAME	Alpha location name	Identification
UNIQUE_PLACE_ID	FIPS state code plus six-digit BPS ID. This 8-digit code is unique per "Place" and allows identifying individual jurisdictions regardless of duplicate place names, county names, zip codes, etc.	Identification