Texas Demographic Center

Interim 2010-2020 Intercensal Estimates of the Total Populations of Counties and Places in Texas for July 1, 2010-2019

Produced by:

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at
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About Intercensal Population Estimates

Intercensal population estimates are demographic data calculated for the years between two official decennial census counts. These estimates differ from postcensal estimates, which are produced annually following the most recent decennial census.

For example, the Census Bureau produced **Postcensal Estimates** following the 2000 Census every year from 2000 to 2010**.** These estimates began with the population count from the 2000 Census and estimate the population change using data on births, deaths, migration, housing units, and other factors. Each vintage year of the estimates included population estimates for the years following the 2000 Census up to the year of the estimates.

In contrast, the 2000-2010 Census Bureau **Intercensal Population Estimates** were produced after the 2010 Census counts became available. These estimates used the 2000 and 2010 Census counts to retrospectively adjust the existing postcensal estimates so they aligned with both censuses.

Intercensal estimates are produced only once each decade and are usually released approximately two years after the decennial census. Once available, they replace the existing postcensal estimates for 2010-2020 from the previous decade. This is particularly important for researchers conducting population studies across multiple decades to ensure a smooth transition of the estimates from the previous decade into the new one.

The Texas Demographic Center (TDC) typically does not produce independent intercensal estimates and instead directs users to those produced by the Census Bureau. However, due to the delay of the 2020 Census, the Census Bureau's Intercensal Estimates for 2010-2020 have yet to be released. TDC has received several inquiries requesting intercensal estimates. In response, TDC has produced the **2010-2020 Interim Intercensal Total Population Estimates** for the State of Texas, and the counties and cities in Texas.

Users should be aware that these interim intercensal estimates aim to replicate the methodology the Census Bureau has proposed to use. While the results should be close to the official Census Bureau intercensal population estimates scheduled for release in fall 2024, they are unlikely to be exactly the same. The TDC recommends using the official Census Bureau estimates and will provide a link on our Population Estimates website once they are available.

Visit the [Census Bureau website](#) for more information on the different types of population estimates.

Methodology for TDC Interim Intercensal Estimates 2010-2020

Data

We use the Census Bureau Vintage 2020 Postcensal Population Estimates, which start with the 2010 Census and include estimates for each year from 2010 to 2020. Using these postcensal estimates and the 2020 Census, we produce the TDC Interim Intercensal Estimates for 2010-2020. Note that we have to exclude a few cities/towns for which not all the data are available to calculate the intercensal estimates.

Calculating the Error of Closure (EOC)

The Error of Closure (EOC) is the difference between the Census counts and the postcensal estimates as of April 1, 2020. This error indicates the total discrepancy that needs to be distributed across the 120 months from April 2010 to April 2020. The formula used to adjust the estimates is:

$$Pt = Qt + (t * \frac{EOC}{120})$$

Where

     t = time in months elapsed since April 2010

     Pt = population estimate at time t

     Qt = postcensal estimate at time t

     EOC = the difference between the Census counts and the estimates values for April 1, 2020

Step-by-Step Methodology

1. **Error Distribution**: We calculate the EOC and linearly distribute it across the 120 months from April 2010 to April 2020 using the formula provided.

2. **Separate Analyses**: We conduct this analysis separately for the state, counties, and places (cities and towns).

3. **Handling Split Places**: For places that span multiple counties, we perform the analysis for each part of the place (part place).

4. **Control Totals**: We ensure that the sum of county estimates equals the state estimate and that the sum of part place estimates matches the corresponding county estimates.

This methodology ensures consistency and accuracy across different geographic levels, allowing for the population estimates to align with the 2010 and 2020 Census data.

File Layout

Column Name	Description
FIPS	Area FIPS code
Name	Area Name
Census201004	4/1/2010 Decennial Census Resident Population Count
Estimates201007	7/1/2010 Resident Population Estimate
Estimates201107	7/1/2011 Resident Population Estimate
Estimates201207	7/1/2012 Resident Population Estimate
Estimates201307	7/1/2013 Resident Population Estimate
Estimates201407	7/1/2014 Resident Population Estimate
Estimates201507	7/1/2015 Resident Population Estimate
Estimates201607	7/1/2016 Resident Population Estimate
Estimates201707	7/1/2017 Resident Population Estimate
Estimates201807	7/1/2018 Resident Population Estimate
Estimates201907	7/1/2019 Resident Population Estimate
Census202004	4/1/2020 Decennial Census Resident Population Count