

About the HARP 2020 Census Database

The HARP Air Dispersion Modeling and Risk Tool (ADMRT) contains a census database which is used for the population exposure analysis as part of a health risk assessment. In October 2024, CARB staff updated the census database with 2020 census data. This document provides information on how to manually update the census database in HARP, the process used to update the database, and table column descriptions in the database. For questions about the census database, please send an email to harp@arb.ca.gov.

How to Replace the Census Database in HARP

1. Close HARP ADMRT if it is open.
2. Download Census2020.zip from the HARP website.
3. Open and extract the files.
4. Copy and replace the census database with the one located in the HARP program directory (typically c:\HARP\tables\).

Note: The HARP ADMRT will show “HARP 2010 Census Database” on user screens related to the census data. This label will be fixed in a future HARP update.

Process Used to Update the HARP Census Database

To update the HARP Census Database, staff obtained the 2020 census data from the U.S. Census Bureau website. Staff used ArcGIS Pro to review the data and to convert coordinates into other systems. Staff also associated the centroid coordinates to corresponding postal zip code. The data produced from this process were imported into a Microsoft Access Database.

During the update process, staff identified some issues with the 2020 census data and made some revisions. These issues and revisions are listed below.

- In some cases, the census data contained centroid locations that landed outside of their census block areas. Staff observed this issue for centroids with irregularly shaped census block areas. For these records, staff recalculated the centroid location of a census block using ArcGIS Pro.
- In some cases, the census data contained census block centroids that landed on water with zero population. For these records, staff assigned “99999” to the zip code and zip code city name since the locations were outside of the postal code area.

Table Column Descriptions

Note: Not every column in the database is used by HARP. These columns are used by other programs at CARB.

Column	Used by HARP	Description
cnty	No	Census state and county codes. Format is usually XXXXX. First two digits are FIPS state code. 06 is California 0 is omitted. Last 3 refer to county
co	No	ARB 2-digit county ID.
tractbna	Yes	Census tract formatted to 6 digits. There is an implied decimal between the fourth and fifth digits. Statistical subdivisions of a county or equivalent. Up to four digits with optional two-digit suffix. Suffix is for comparison purposes (tract changes).
blkgrp	No	Block groups are statistical divisions of census tracts. One digit from 0 to 9. Zero is for water area.
blk	Yes	Four digits. First digit is block group. Summary level 150
cntname	No	County name
zip	No	Postal zip code servicing area
zipname	No	Name of postal office/city servicing area
longitude	No	Centroid longitude coordinate, NAD83, decimal degrees
latitude	No	Centroid latitude coordinate, NAD83, decimal degrees
x_ta83	No	Centroid x coordinate, Teale Albers NAD83, meters
Y_ta83	No	Centroid y coordinate, Teale Albers NAD83, meters
uz	Yes	UTM Zone for centroid
x_utm83	Yes	Centroid x coordinate, UTM NAD83, kilometers
y_utm83	Yes	Centroid y coordinate, UTM NAD83, kilometers
pop	Yes	Census 2020 population at block level
sumlevel	No	Summary level code