

HousingWorks District Analyses Sources and Methodology

Sources

The district analyses are based on a variety of sources and these are mentioned on each district analysis sheet. The numbers below correspond with the numbers marked on the sheet for reference.

- Source 1: Combination of sources below with the exception of the following:
 - Austin Housing Repair Coalition, 2010-2014. Data available at City Council District Level.
 - United Way for Greater Austin, 2014. Data available at City Council District Level.
 - Capital Metropolitan Transportation Authority, 2015. District Analysis based on methodology 3.¹
- Sources 2-3: Neighborhood Housing and Community Development City of Austin (NHCD), 2015. District Analysis based on methodology 3.
- Sources 4-5: Ending Community Homelessness Coalition (ECHO), 2015. Data available at City Council District Level.
- Source 6: Ryan Robinson City of Austin, 2013 5-Year ACS. Data available at City Council District Level.
- Source 7: Austin Board of Realtors (ABOR), Q1 & Q2 2015. District Analysis based on methodology 2.
- Source 8: Austin Investor Interests, Q2 2015. District Analysis based on methodology 2. Data available at City Council District Level.
- Sources 9-10: Ryan Robinson City of Austin, 2013 1-Year ACS. Data available at City Council District Level.
- Source 11-12: Ryan Robinson City of Austin, 2013 5-Year ACS. Data available at City Council District Level.
- Source 13-16: Housing and Urban Development Comprehensive Housing Affordability Strategy (CHAS) Dataset, 2008-2012 & 2013 5-Year ACS. District Analysis based on methodology 1.
- Sources 17-20: Housing and Urban Development Location Affordability Index, 2008-2012. District Analysis based on methodology 1.

Methodology

The district analyses use a number of resources and different geographical scales. Furthermore, this data is analyzed in the context of the boundaries of the City of Austin Council Districts. This has led to three separate approaches based on geographic scale of source data:

1. Census tract data: Data available at the census tract level is analyzed based on a methodology developed after conversation with the City of Austin demographic staff. Census tracts are divided according to their overlap with the Austin City Council District boundaries. Tracts that overlap between two council districts are attributed to one council district based on the overlap area and the existing land use type. Once all the tracts have been linked to a council district, the corresponding data is calculated for that district. For average values such as median rent and home price, the data is weighed for each census tract based on its total population using Microsoft Excel.
2. Zip code data: Data available at the zip code level is analyzed using the Zonal Statistics as Table tool in the Spatial Analyst toolbox of the ArcGIS software. This requires converting vector source

data into the raster format and then using the tool to summarize the values of the raster based on the zones of another dataset (Austin City Council District boundaries in this case). The results from the generated table then provide a value at the district level.

3. Point Data: data associated with distinct addresses, such as the data provided by NHCD, is simply linked to Austin City Council District boundaries by its overlap.

Notes

- Families that spend more than 30% of their income on housing related costs are considered cost burdened.
- Families that spend more than 50% of their income on housing related costs are considered extremely cost burdened.
- The Location Affordability Index dataset from Housing and Urban Development has been modeled for eight different household types. The data used in the district analyses is for a median-income family household. The dataset assumes such a household type to earn the median income for the region or county, have a household size of four, and two commuters. This household type is chosen to best reflect the life of a family in each district.

Limitations

- American Community Survey (ACS) is based on sampling and thus the data from ACS involves a margin of error. This margin of error varies for 1-year, 3-year, and 5-year data, with decreasing levels of margin of error.
- Considering the varied sources, different geographical scales, and multiple methodologies it is important to understand that the data for each district is best evaluated comparatively and not referenced as absolute numbers.
- The Comprehensive Housing Affordability Strategy (CHAS) Dataset from Housing and Urban Development is based on a rotation of 3-year and 5-year ACS data. This limits the availability of the data in certain years.
- The Location Affordability Index dataset from Housing and Urban Development will be updated with every 5-year ACS release. This limits the availability of the data in certain years.

ⁱ See methodology section for reference