

# Texas Counties - Population Composition

Explore the population composition of Texas Counties.

Data Source: Census - 2019 American Community Survey (ACS)

**Josh Williams**

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## Guiding Questions

1. In what ways and how do county population compositions create issues, and or opportunities, for a region?
2. How can varying professions address population composition issues/opportunities?
3. Feel free to use this copy this [Student Guide](#) to document the exploration.

## Terms

- **Total Population** - The number of people living in a unit of land.
- **Growth Rate** - Increase, or decrease, of population in a given time period.
- **Doubling Time** - The amount of time a population will double if the growth rate remains consistent.
- **Median Age** - The age that divides a population into two numerically equal groups; that is, half the people are younger than this age and half are older.
- **Population Pyramid** - Graphs that illustrates the age and sex structure of a population. These visualizations may provide

insights about political and social stability, as well as economic development of a region.

- **Age Dependency Ratio** - The age dependency ratio is derived by dividing the combined under-18 and 65-and-over populations by the 18-to-64 population and multiplying by 100.
  - **Old-Age Dependency Ratio** - The old-age dependency ratio is derived by dividing the population 65 and over by the 18-to-64 population and multiplying by 100.
  - **Child Dependency Ratio** - The child dependency ratio is derived by dividing the population under 18 by the 18-to-64 population and multiplying by 100.
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## Approaching Exploration

### Identifying interest

Every profession explores the population from their unique perspective. Before exploring Texas counties, spend some time identifying your perspective. Use [this link \(Student Resources - Powerful Geography\)](#) and find a profession that you find most interesting. Please note and describe the profession of interest on the "Student Guide" document. **Remember**...this chosen profession is the perspective you will use throughout this exploration.

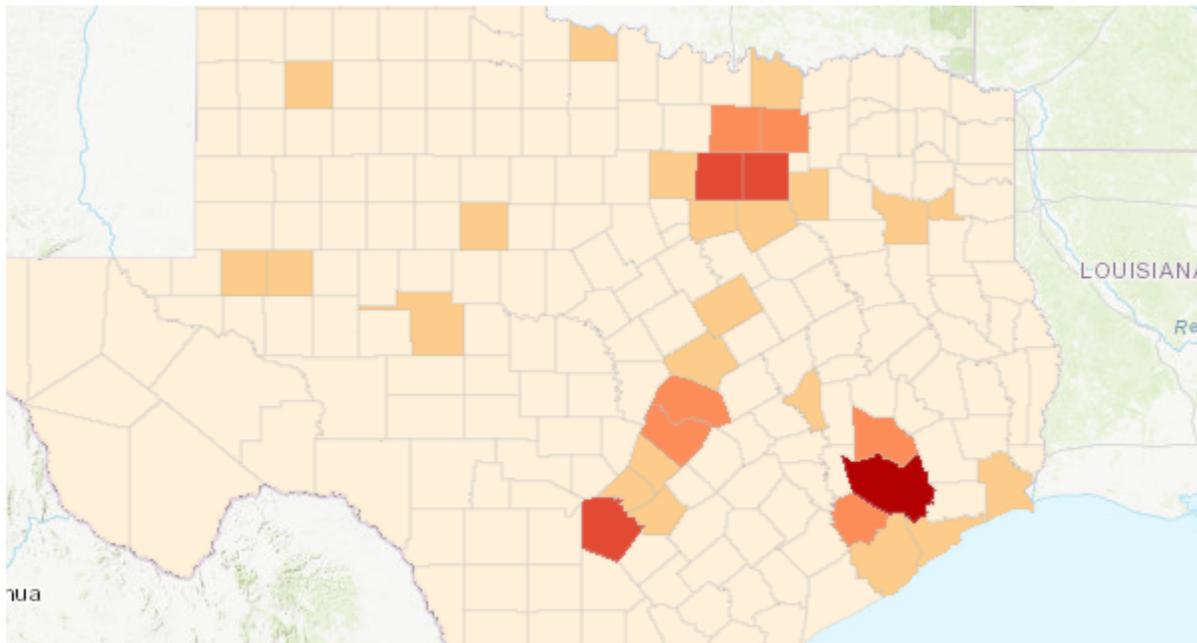
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## Exploration

Analyze each map visualization. Use the "Student Guide" to document your exploration.

### Map Group Analysis 1 (Total Population)



Esri, HERE, Garmin, FAO, NOAA, USGS, EPA, NPS

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***Total Population (Est. 2019)***

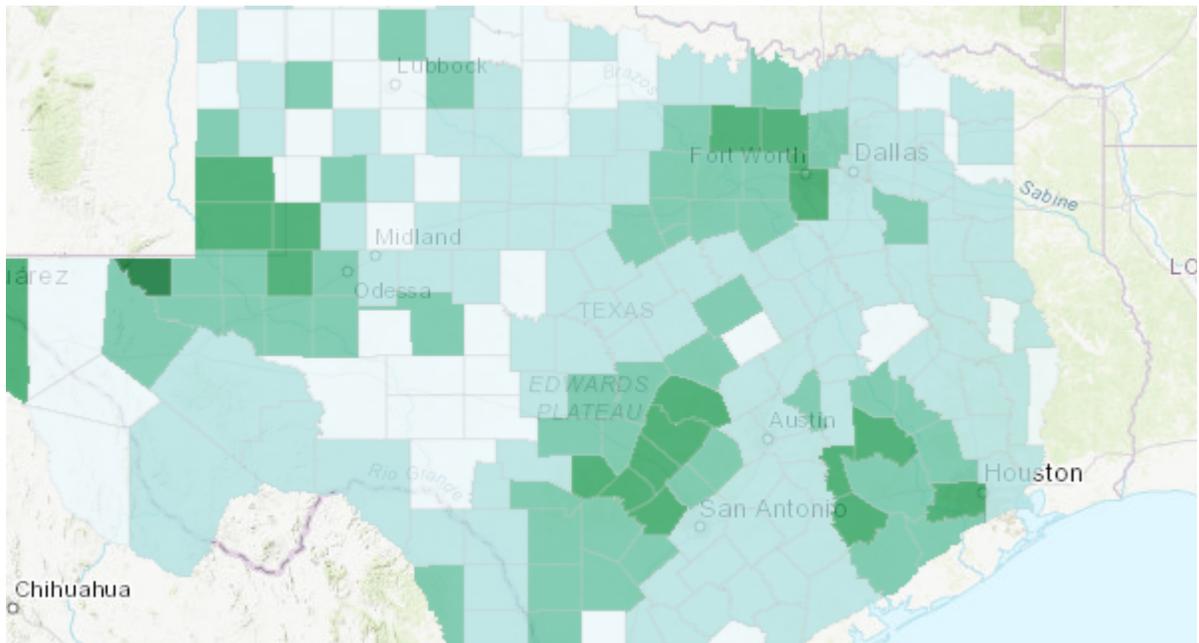
- Identify one county with a population above 1,226,805 million people. Click on the county to document both the name of the county and the total population.
- Identify one county with a population between 421,666 and 1,226,808 people. Click on the county to document both the name of the county and the total population.
- Identify one county with a population less than 421,666 people. Click on the county to document both the name of the county and the total population.
- Find the county that you live in. Click on the county to document both the name of the county and the total population.
- Using this data set, describe how this population indicator might create an issue or opportunity for your chosen profession within your county.

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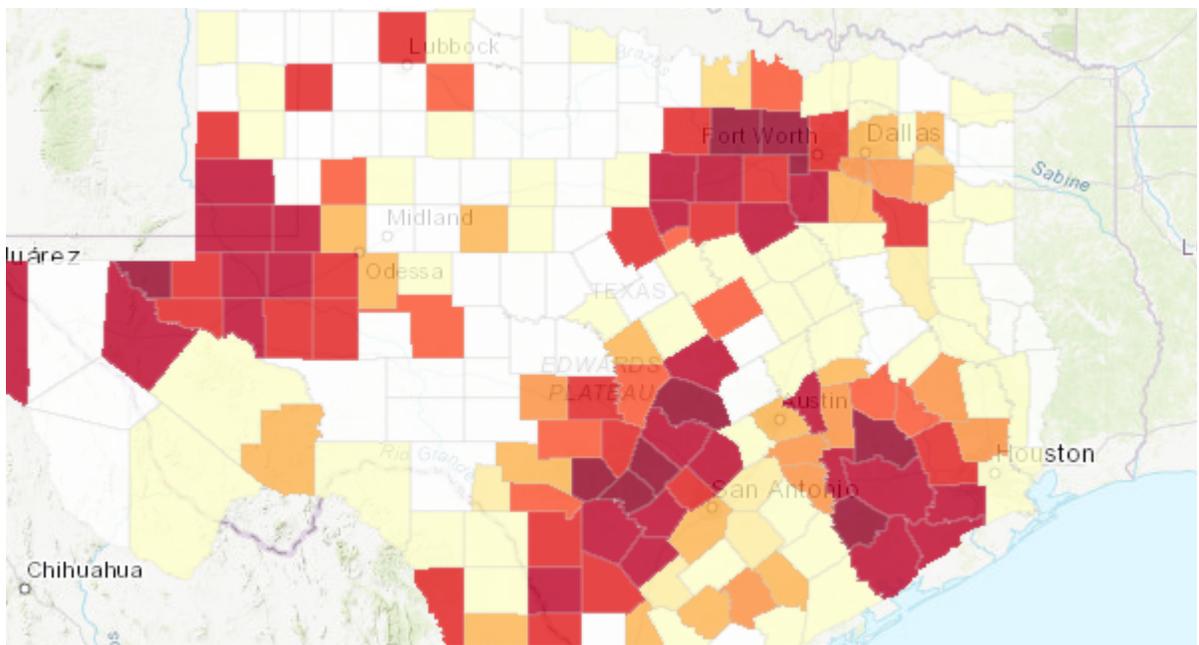
## Map Group Analysis 2 (Growth)



Esri, HERE, Garmin, FAO, NOAA, USGS, EPA, NPS

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***Growth Rate (Est. 2010 - 2019)***



Esri, HERE, Garmin, FAO, NOAA, USGS, EPA, NPS

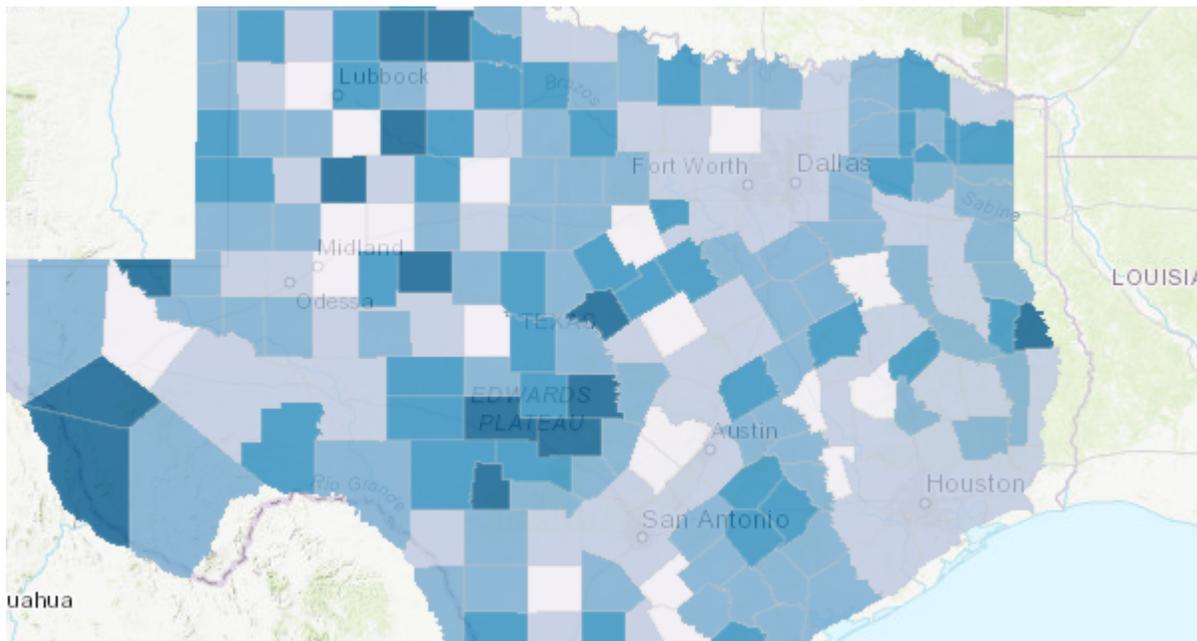
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***Doubling Time (Est. 2019)***

- Identify one county with a growth rate above 2.3. Click on the county to document the name of the county growth rate and doubling time.
- Identify one county with a growth rate between 0.83 and 2.3. Click on the county to document the name of the county growth rate and doubling time.

- Identify one county with a growth rate less than 0.83 people. Click on the county to document the name of the county growth rate and doubling time.
  - Find the county that you live in. Click on the county to document the name of the county growth rate and doubling time.
  - Using these data sets, describe how these population indicators might create an issue or opportunity for your chosen profession within your county.
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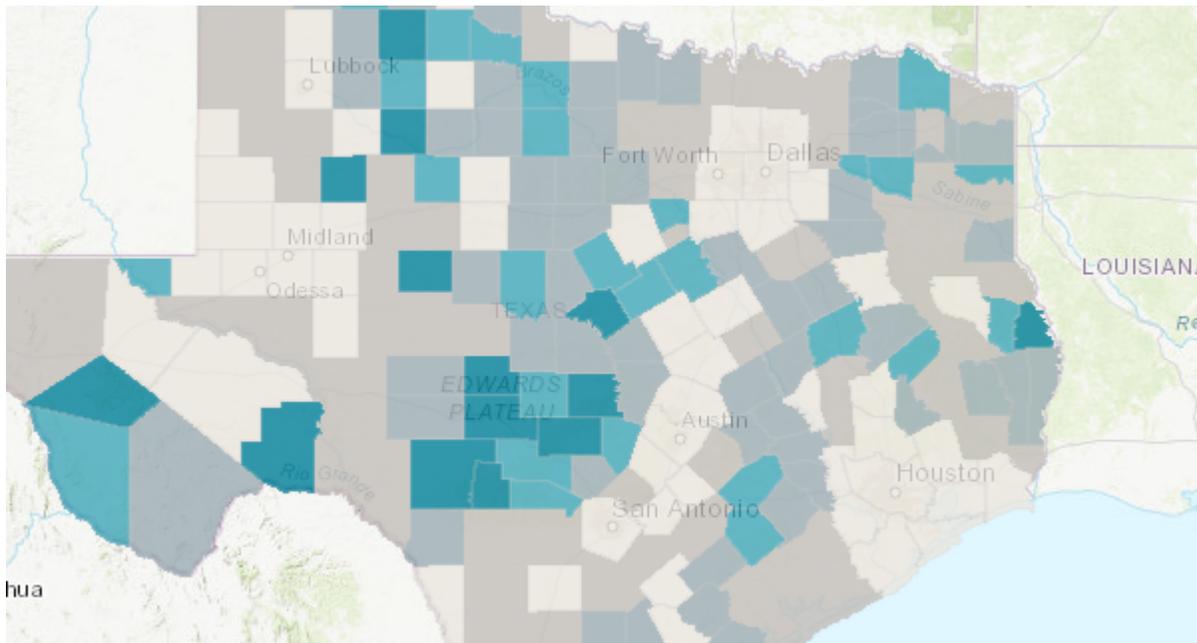
### Map Group Analysis 3 (Balance)



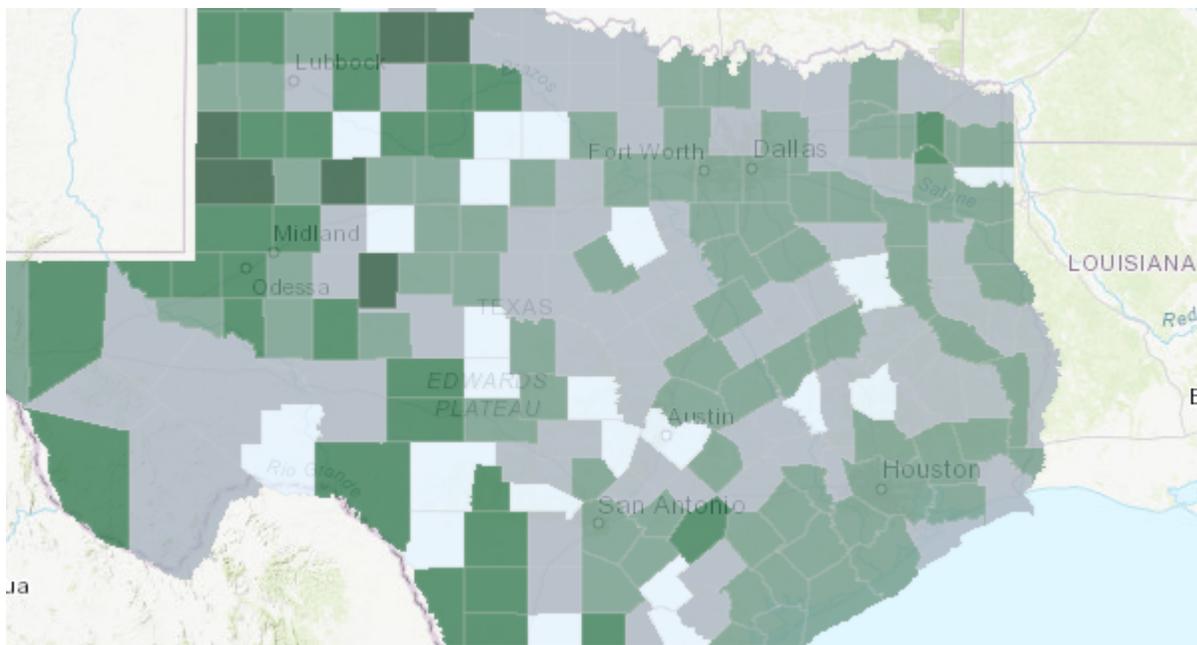
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***Age Dependency Ratio (Est. 2019)***



***Old-Age Dependency Ratio (Est. 2019)***



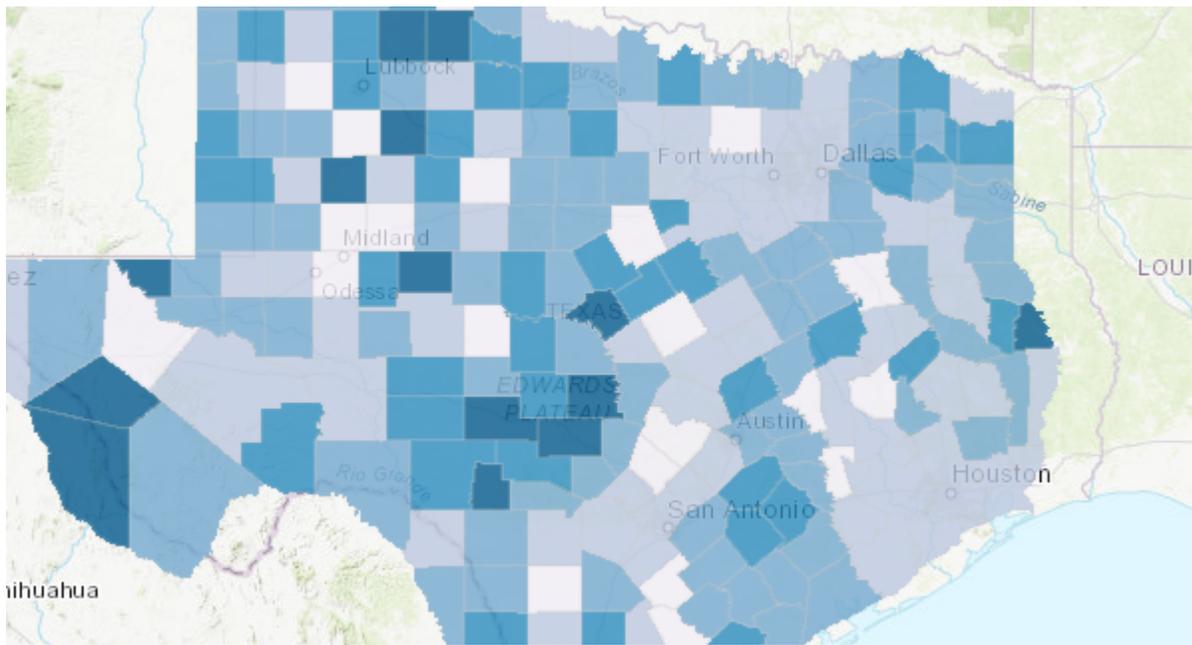
***Child Dependency Ratio (Est. 2019)***

- Identify one county with an age dependency ratio above 79. Click on the county to document the name of the county, age dependency ratio, old-age dependency ratio, child dependency ratio, and median age.
- Identify one county with an age dependency ratio between 69 and 79. Click on the county to document the name of the

county, age dependency ratio, old-age dependency ratio, child dependency ratio, and median age.

- Identify one county with an age dependency ratio less than 69 people. Click on the county to document the name of the county, age dependency ratio, old-age dependency ratio, child dependency ratio, and median age.
  - Find the county that you live in. Click on the county to document the name of the county, age dependency ratio, old-age dependency ratio, child dependency ratio, and median age.
  - Using these data sets, describe how these population indicators might create an issue or opportunity for your chosen profession within your county.
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## Population Pyramids



*Age Dependency Ratio (Est. 2019)*

1. Use the search box to find "Hidalgo County, TX, USA". Click County and describe the shape of the population pyramid. Identify if this country struggles from a poor old-age dependency ratio or a poor child dependency ratio. How does the population pyramid visualize this struggle?

2. Use the search box to find "Brazos County, TX, USA". Click County and describe the shape of the population pyramid. Explain the awkward shape of the pyramid between the ages of 20-24. (Hint...zoom in and explore)
  3. Use the search box to find "Jones County, TX, USA". Click County and describe the shape of the population pyramid. Explain the awkward shape of the pyramid. (Hint...look the gender composition)
  4. Use the search box to find "Llano County, TX, USA". Click County and describe the shape of the population pyramid. Identify if this country struggles from a poor old-age dependency ratio or a poor child dependency ratio. How does the population pyramid visualize this struggle?
  5. Click on your county and describe the shape of the population pyramid. Find one anomaly within the pyramid and document one question you have based on your observation.
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## Powerful Geography

Which map group analysis would have the greatest impact on your chosen profession? Please explain how and why this grouping would have this impact.