### Impact of Austin Growth

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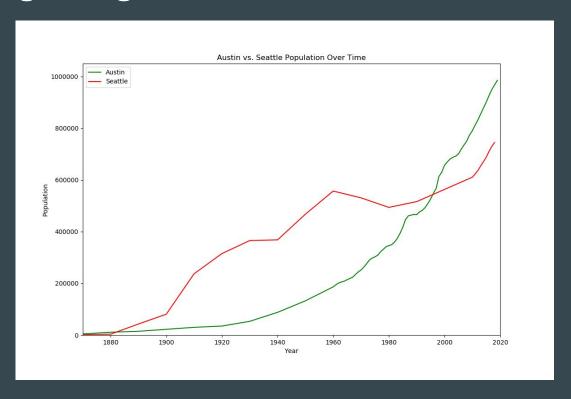
Rolando Navarro, Robert Ottogalli, Travis Tyler

#### Proposal

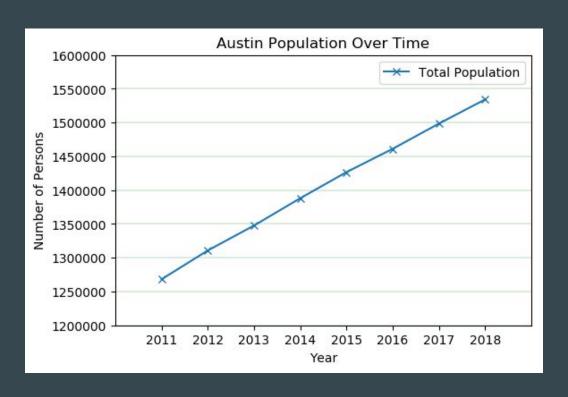
Analyze the population and economic growth of the city of Austin, TX over the last decade and how the trends fit in the broader context of the U.S.

- 1. What demographic and geographic changes have taken place?
- 2. How has the population grown?
- 3. How has growth impacted wealth and income equity?
- 4. What industries have grown the most over time?

#### Austin is growing fast!



#### Austin Metro Population Growth (2011-2018)



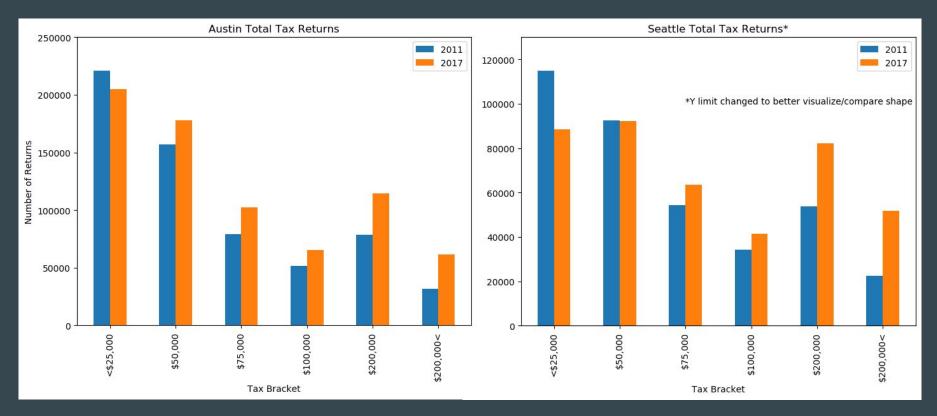
## Income Equity

#### Income analysis

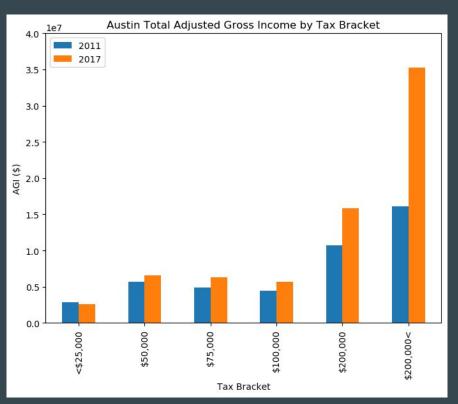
How has Austin's growth affected wealth and income equity?

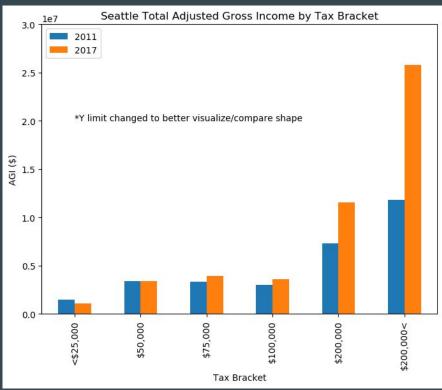
- The rich are getting richer.
- Income trends seem to be in line with U.S. cities with similar populations and industries, such as Seattle.
- Wealth is concentrated in the area of Austin west of I-35.

#### Tax bracket breakdown (2011 vs. 2018)



#### Adjusted gross income by tax bracket (2011 vs. 2018)

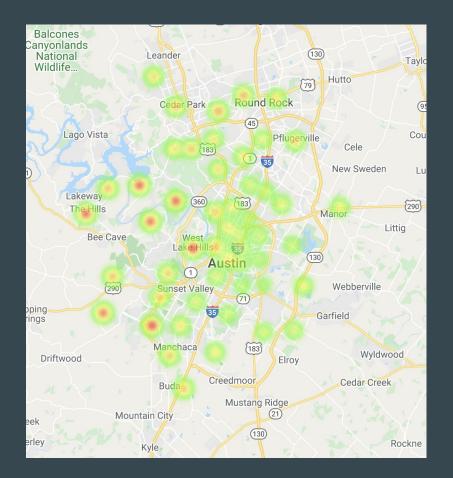




#### The geography of income

Household income by zip code

(Hot spots are zip codes with higher household income)

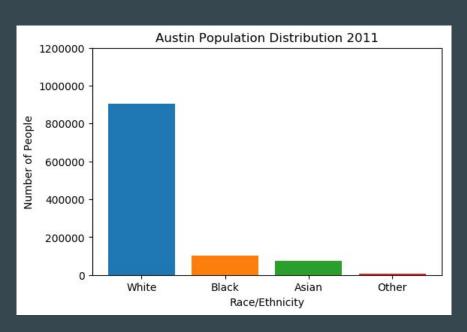


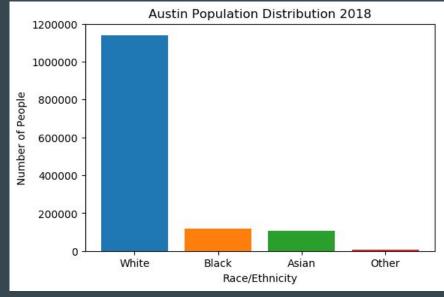
## Demographics Trends

#### Demographic analysis

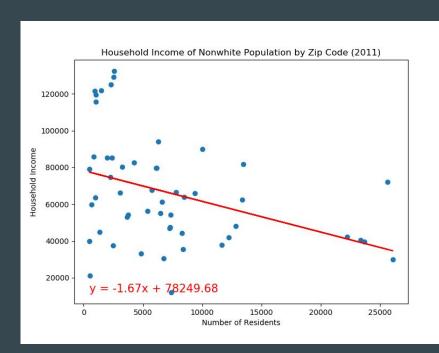
- The poverty rate is not distributed evenly across ethnic groups in Austin, with the black population experiencing a higher rate of poverty than white and Asian populations.
- The population growth and economic growth have generally reduced poverty rates across all ethnic groups in Austin.
- Gentrification has taken place between 2011 and 2018 and is especially visible in the east region of Austin.

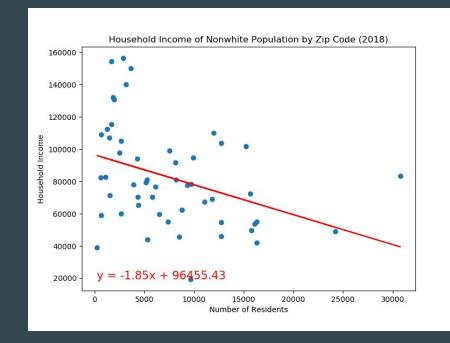
#### Population Distribution of Ethnicity (2011 vs. 2018)



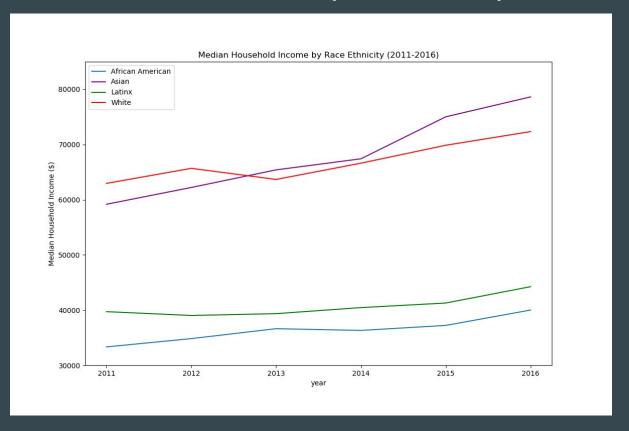


#### Household income by ethnicity (2011 vs. 2018)

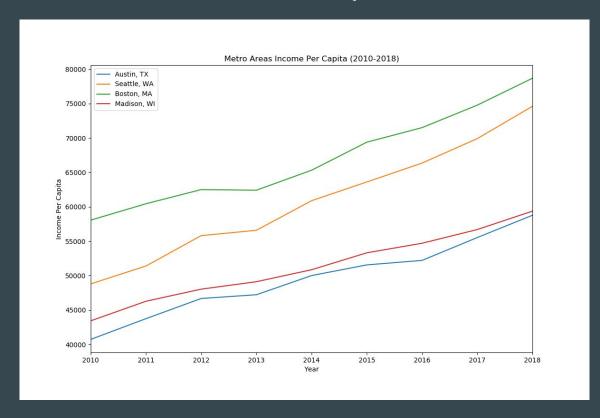




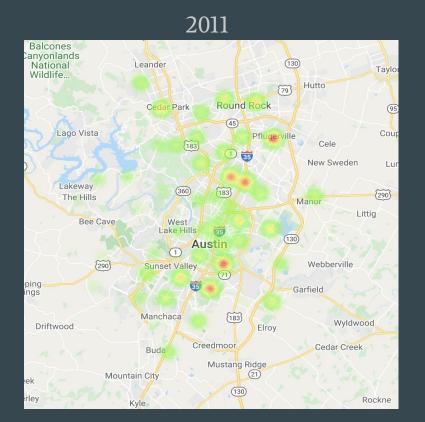
#### Household income by ethnicity (only Austin)



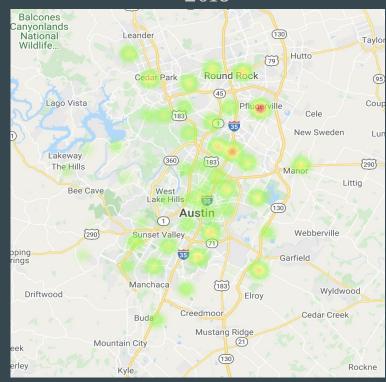
#### Per capita income by ethnicity (Austin metro area)



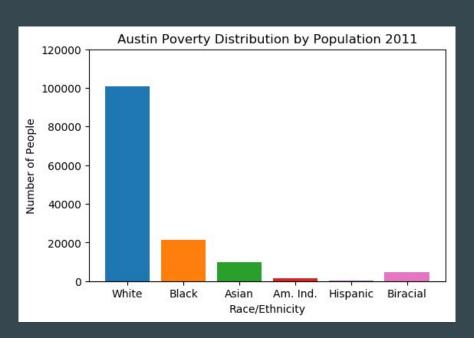
#### Concentration of nonwhite residents (2011 vs. 2018)

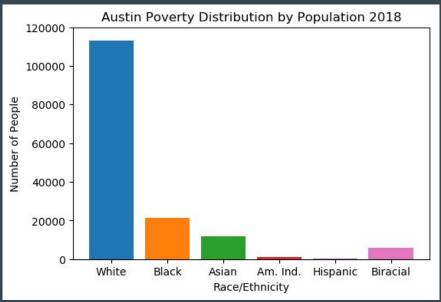


2018

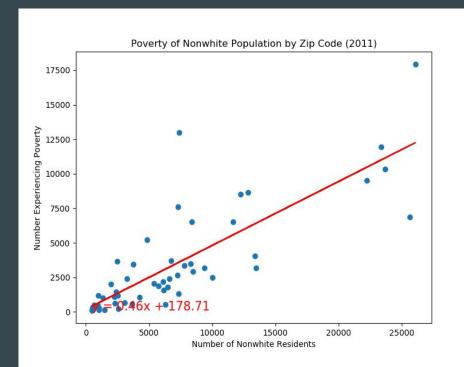


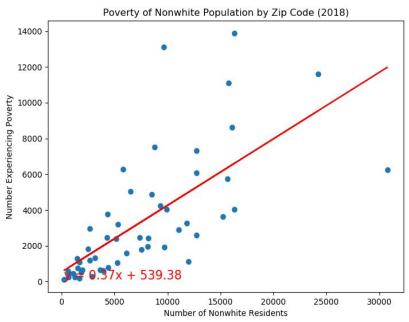
#### Poverty Distribution by Ethnicity (2011 vs. 2018)



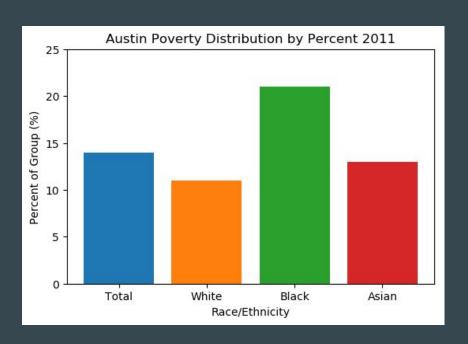


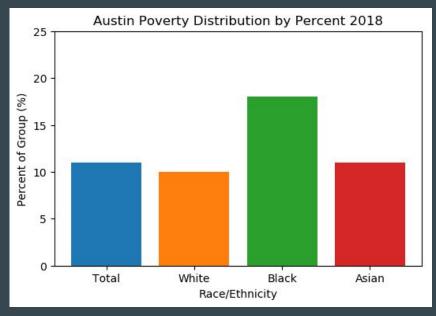
#### Ethnicity's relationship to poverty (2011 vs. 2018)



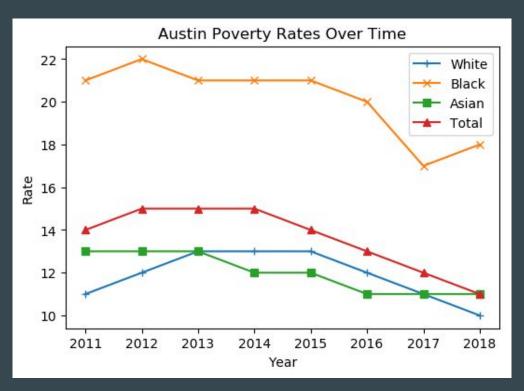


#### Poverty Rate by Ethnicity (2011 vs. 2018)

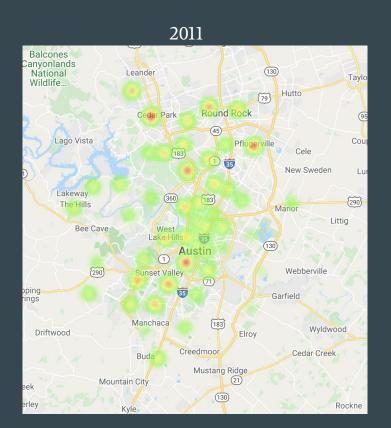


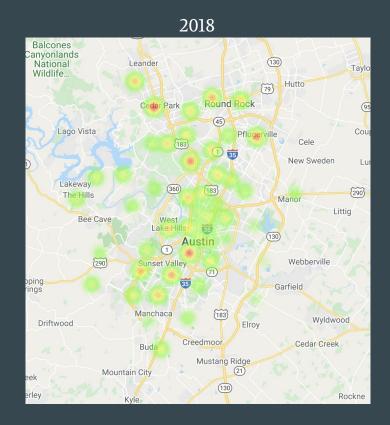


#### Poverty Rate over Time (2011 vs. 2018)



#### What areas of Austin are most impoverished?



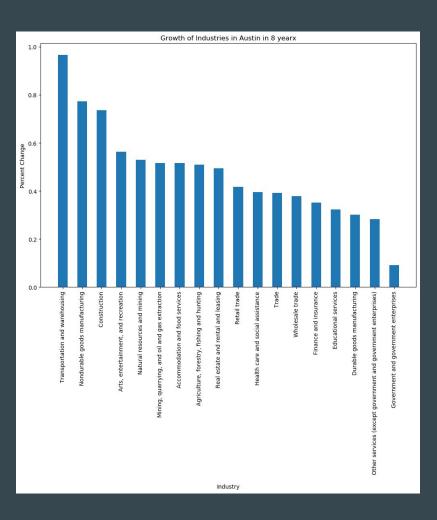


## Industry Trends ...

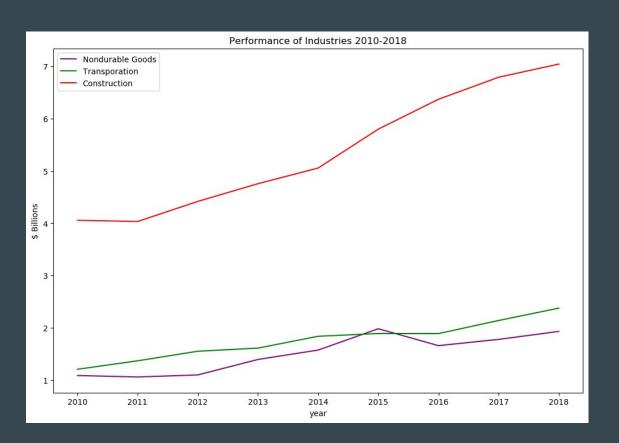
#### **Industry analysis**

- Transportation/warehousing is the fastest growing industry in Austin.
- Most construction is happening downtown and in the region between I-35 and MOPAC, with zip code 78704 experiencing by far the most.
- Income across most occupations has increased between 2011-2018, with tech jobs increasing the most.
- Legal occupations remain the highest paid
- Income and workforce of farming, fishing and forestry jobs have decreased by far the most.

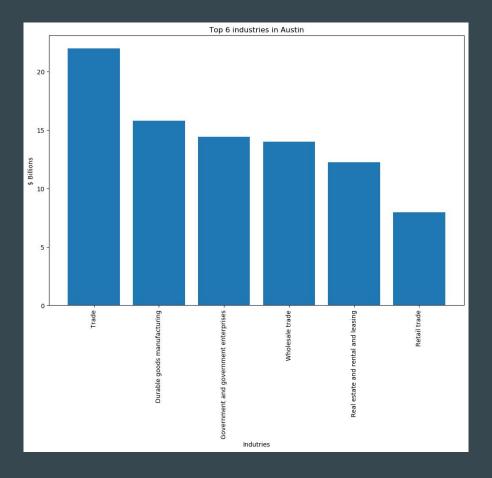
# Industries that experienced the most growth (2010-2018)



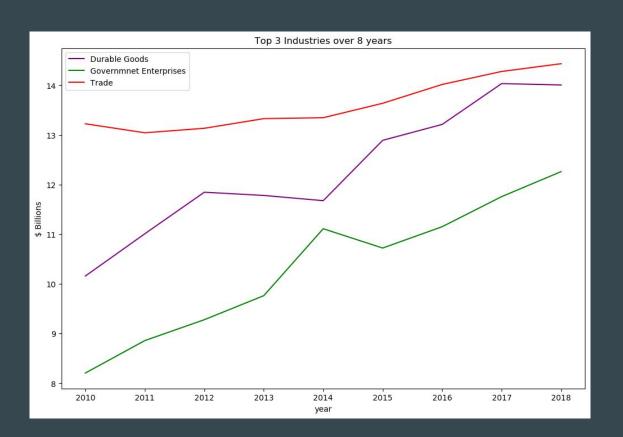
#### **Industry in Austin**



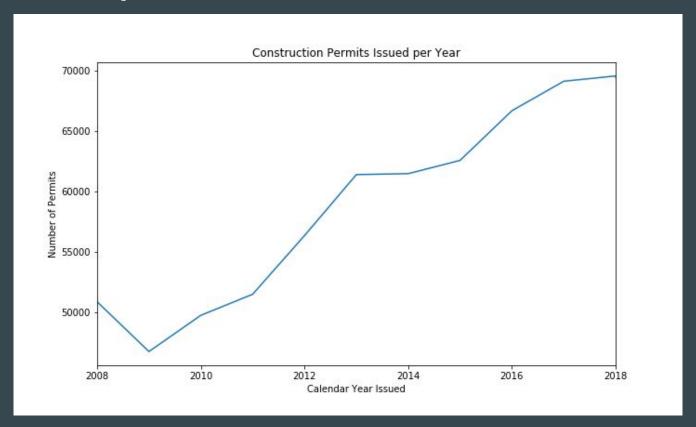
#### **Dominant Industries**



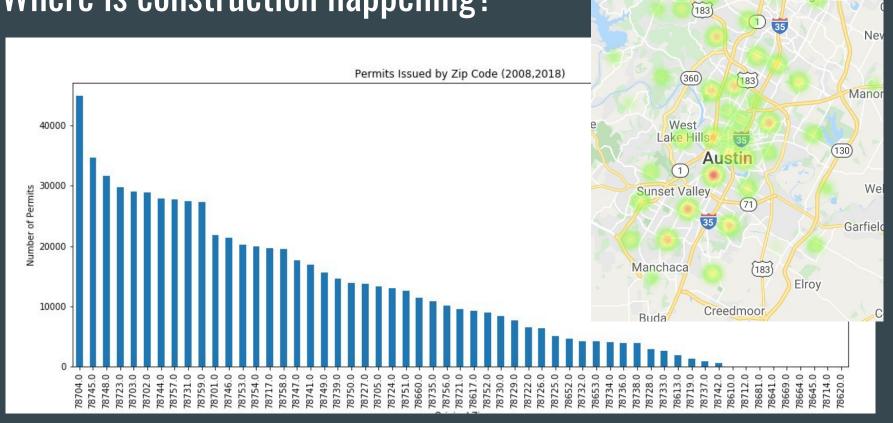
# Growth of top 3 industries (2010-2018)



#### Constructions permits issued by year



#### Where is construction happening?



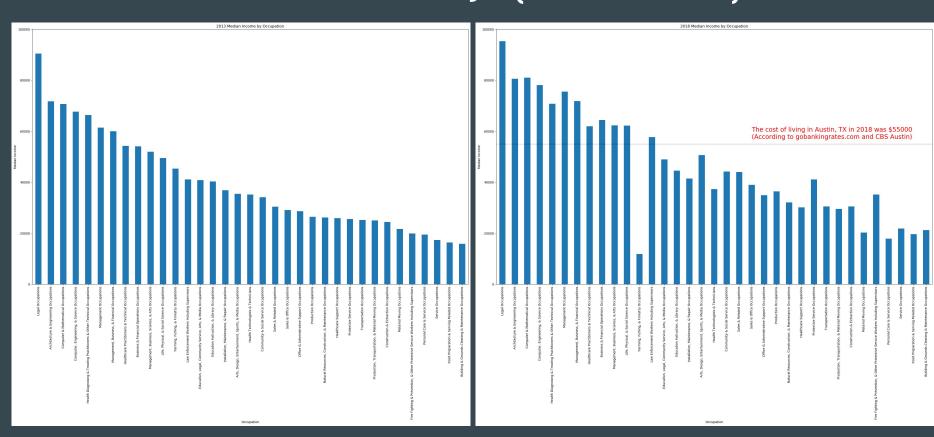
Round Rock

Pflugerville

(45)

Cedar Park

#### How do Austinites make money? (2013 vs. 2018)



#### Conclusion

- 1. Austin's changing technological and industrial landscape has contributed to increased income across all ethnic groups in Austin.
- 2. It has also led to greater inequity between the top income brackets and lower income brackets, and can be observed in the gentrification on Austin's East side.
- 3. There is a strong correlation between wealth/poverty and ethnicity.

#### Data sources

- U.S. Bureau of Labor Statistics
  (<a href="https://www.bls.gov/oes/2018/may/oes\_12420.htm">https://www.bls.gov/oes/2018/may/oes\_12420.htm</a>) (CSV)
- U.S. Bureau of Economic Analysis
  (<a href="https://www.bea.gov/data/by-place-county-metro-local">https://www.bea.gov/data/by-place-county-metro-local</a>) (CSV)
- U.S. Census Bureau (<a href="https://www.census.gov/">https://www.census.gov/</a>) (API call)
- U.S. Internal Revenue Service (<a href="https://irs.gov">https://irs.gov</a>) (CSV)
- City of Austin (<a href="https://data.austintexas.gov/">https://data.austintexas.gov/</a>) (CSV)