

Visualizing Texas: pdf_document

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Packages

We'll use `ggplot2` for visualization, and some light `dplyr` for data wrangling.

Texas housing data

This data is loaded for you when you install and load the `ggplot2` package.

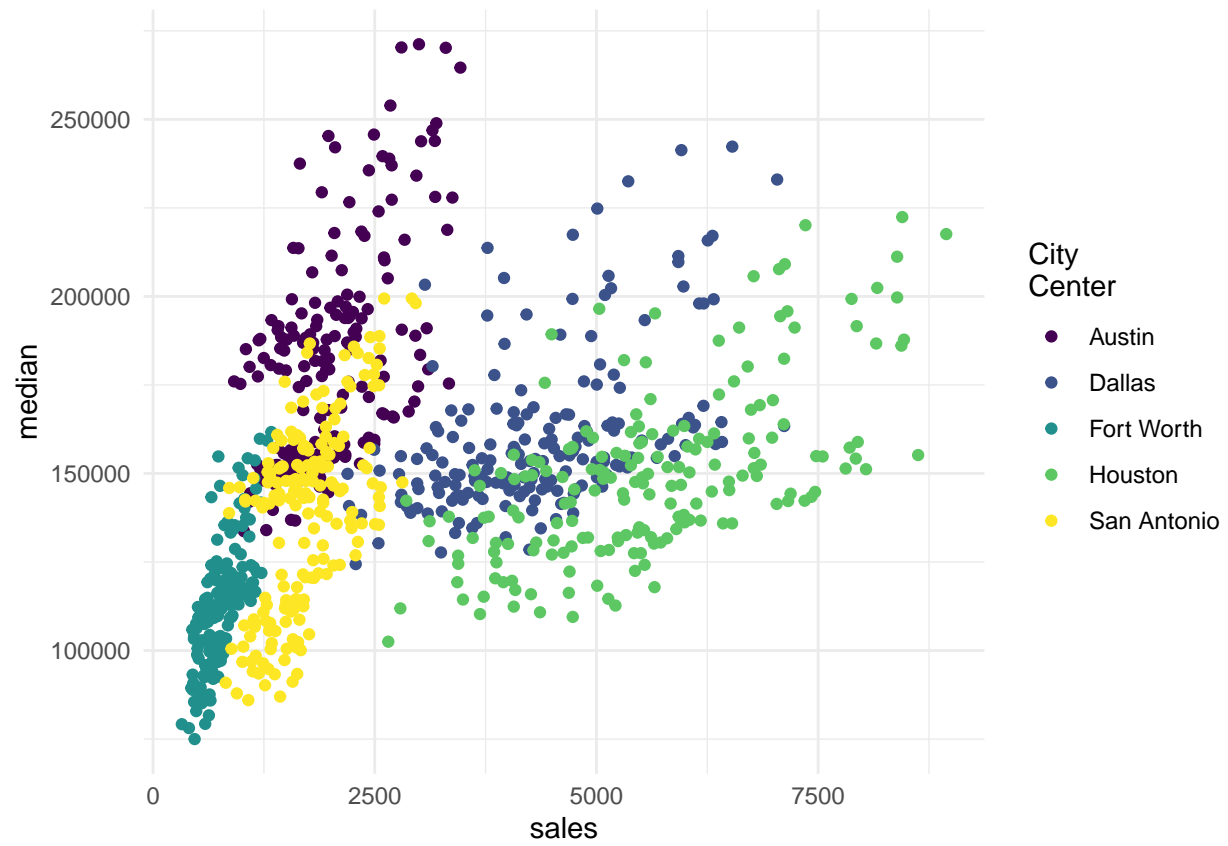
```
## Observations: 935
## Variables: 9
## $ city      <chr> "Austin", "Austin", "Austin", "Austin", "Austin", "A...
## $ year      <int> 2000, 2000, 2000, 2000, 2000, 2000, 2000, 2000, 2000...
## $ month     <int> 1, 2, 3, 4, 5, 6, 7, 8, 9, 10, 11, 12, 1, 2, 3, 4, 5...
## $ sales     <dbl> 1025, 1277, 1603, 1556, 1980, 1885, 1818, 1880, 1498...
## $ volume    <dbl> 173053635, 226038438, 298557656, 289197960, 39307377...
## $ median    <dbl> 133700, 134000, 136700, 136900, 144700, 148800, 1493...
## $ listings  <dbl> 3084, 2989, 3042, 3192, 3617, 3799, 3944, 3948, 4058...
## $ inventory <dbl> 2.0, 2.0, 2.0, 2.1, 2.3, 2.4, 2.6, 2.6, 2.6, 2.6, 2...
## $ date      <dbl> 2000.000, 2000.083, 2000.167, 2000.250, 2000.333, 20...
```

Our data is monthly

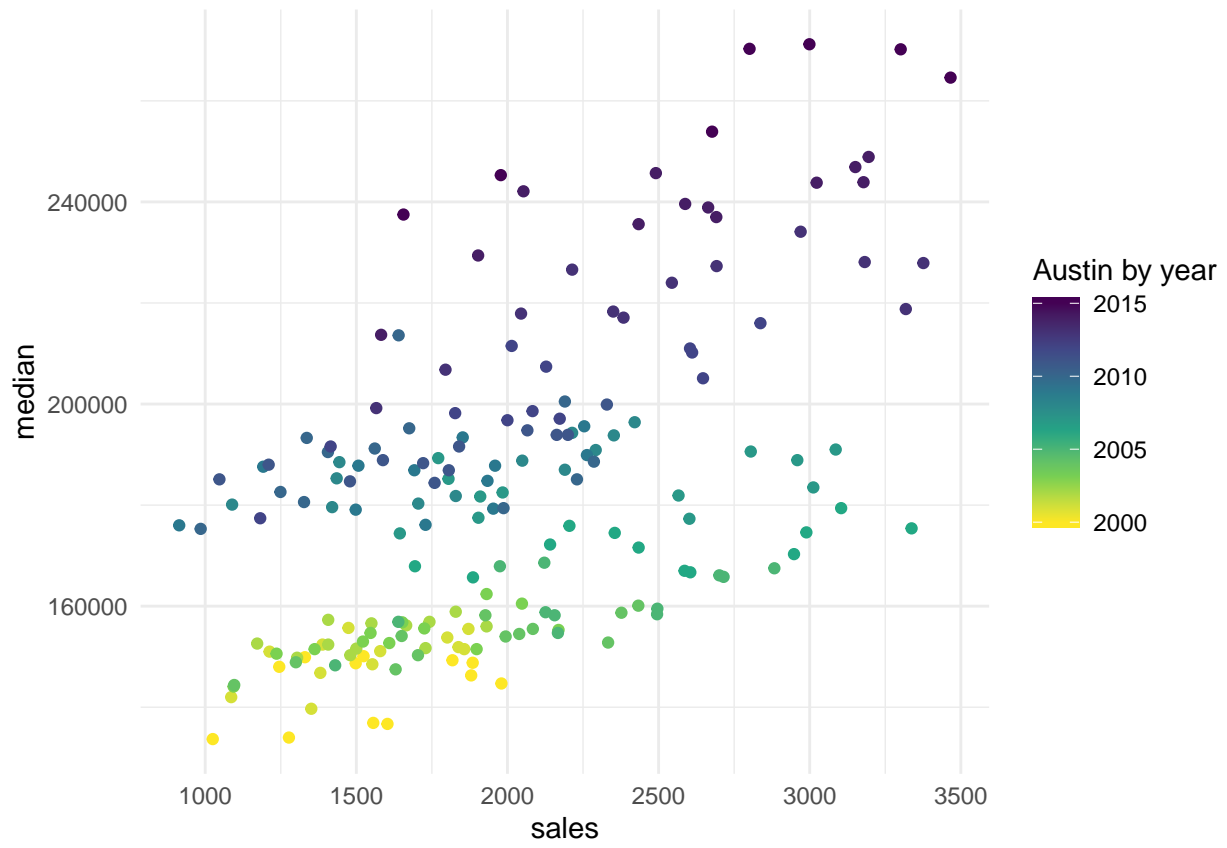
Here is just a sample of rows from one city to show that we have data for each of the 12 months for each year, except for 2015.

```
## # A tibble: 16 x 2
##   year      n
##   <int> <int>
## 1  2000    12
## 2  2001    12
## 3  2002    12
## 4  2003    12
## 5  2004    12
## 6  2005    12
## 7  2006    12
## 8  2007    12
## 9  2008    12
## 10 2009    12
## 11 2010    12
## 12 2011    12
## 13 2012    12
## 14 2013    12
## 15 2014    12
## 16 2015     7
```

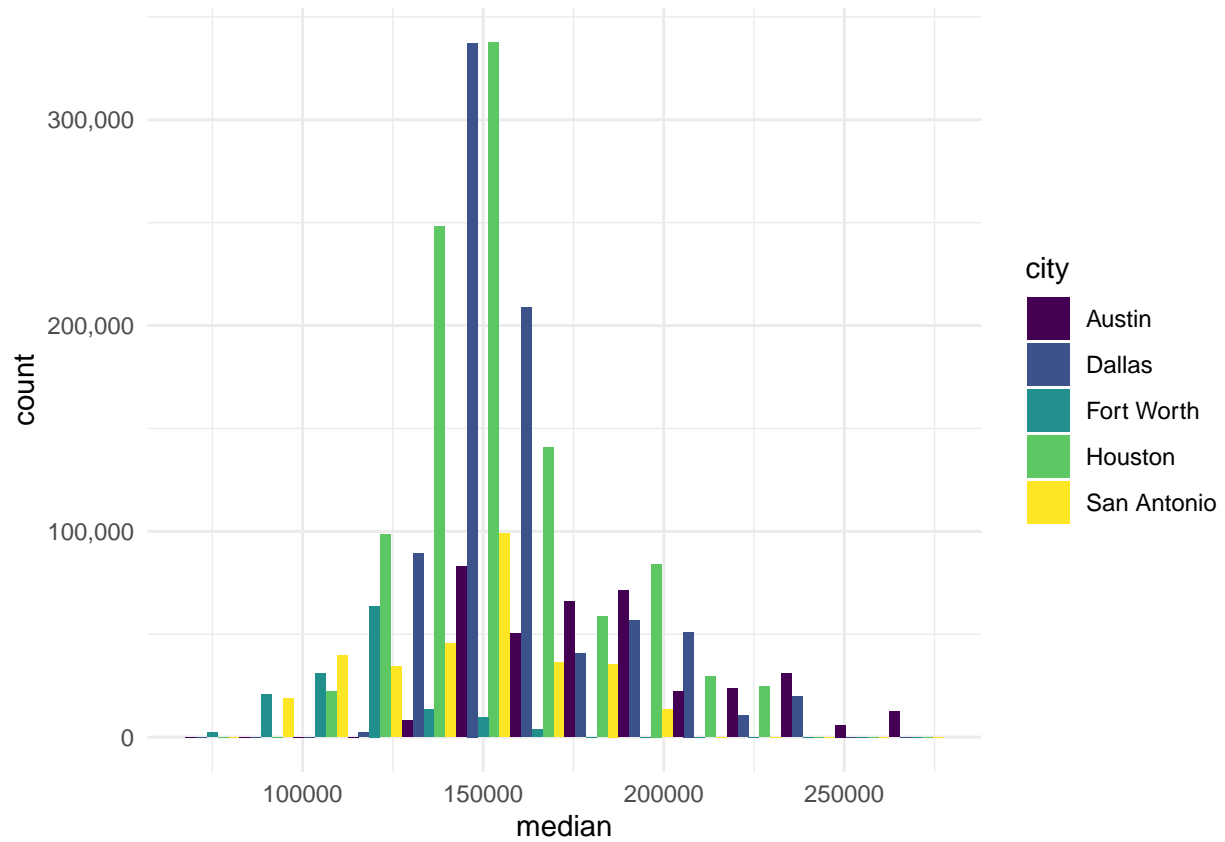
Austin is expensive



Austin prices on the rise

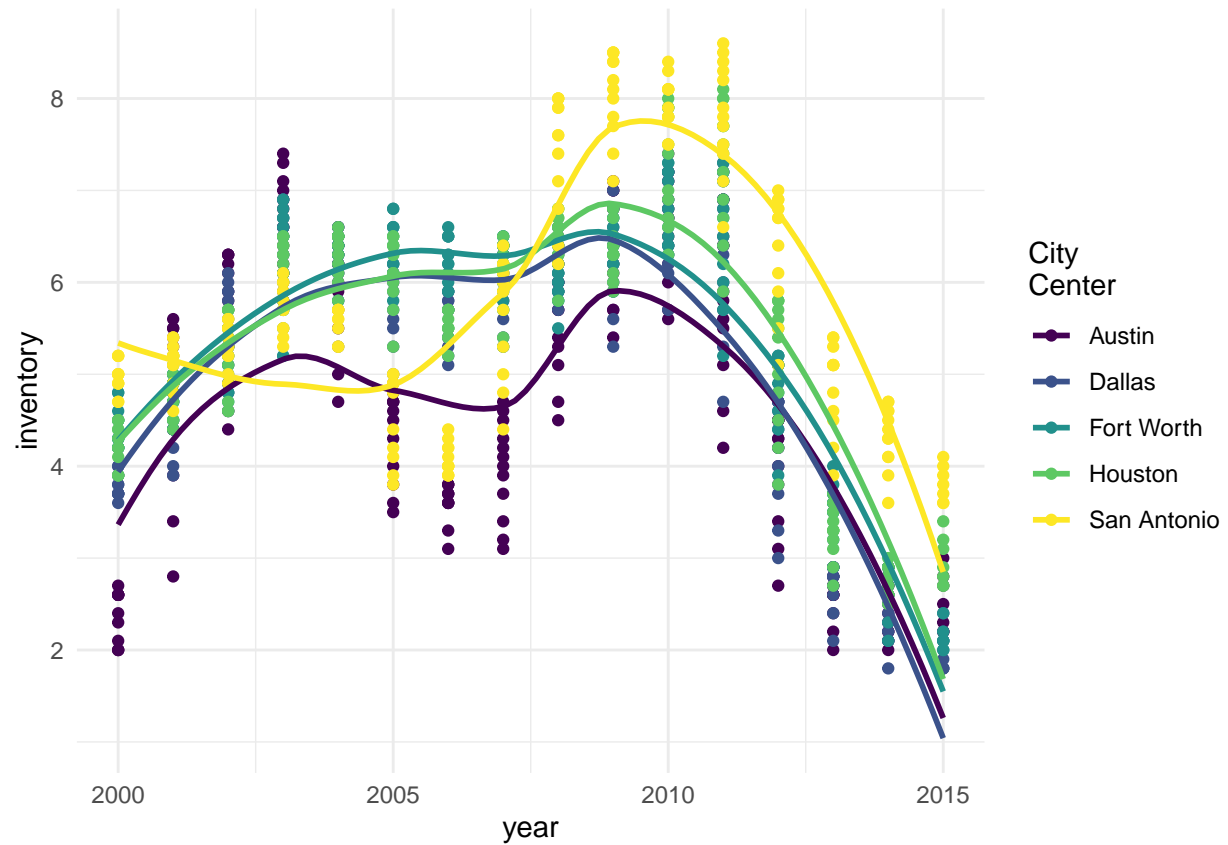


Fort Worth has more affordable housing



The current pace of sales is fast

“Months inventory”: amount of time it would take to sell all current listings at current pace of sales.



Thanks to...

- Jennifer Thompson: <https://github.com/jenniferthompson/ParamRmdExample>
- Garrett Golemund: <https://rmarkdown.rstudio.com/lesson-6.html>