Visualizing Texas: `beamer_presentation`

2019-03-15

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.

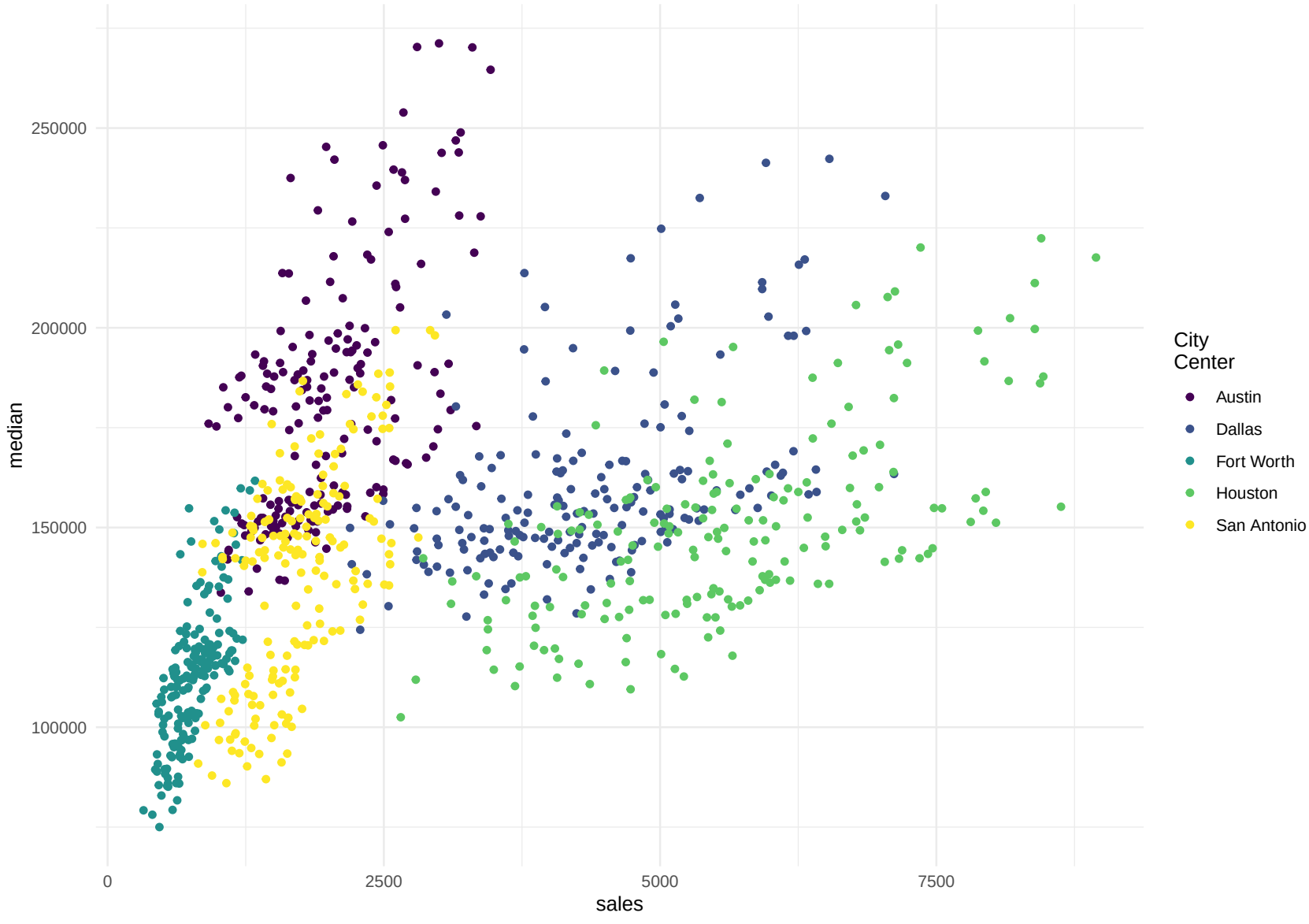
```
## Observations: 935
## Variables: 9
## $ city       <chr> "Austin", "Austin", "Austin", "Austin"
## $ year       <int> 2000, 2000, 2000, 2000, 2000, 2000, 20
## $ month      <int> 1, 2, 3, 4, 5, 6, 7, 8, 9, 10, 11, 12,
## $ sales      <dbl> 1025, 1277, 1603, 1556, 1980, 1885, 18
## $ volume     <dbl> 173053635, 226038438, 298557656, 28919
## $ median     <dbl> 133700, 134000, 136700, 136900, 144700
## $ listings   <dbl> 3084, 2989, 3042, 3192, 3617, 3799, 39
## $ inventory <dbl> 2.0, 2.0, 2.0, 2.1, 2.3, 2.4, 2.6, 2.6
## $ date       <dbl> 2000.000, 2000.083, 2000.167, 2000.250
```

Our data is monthly

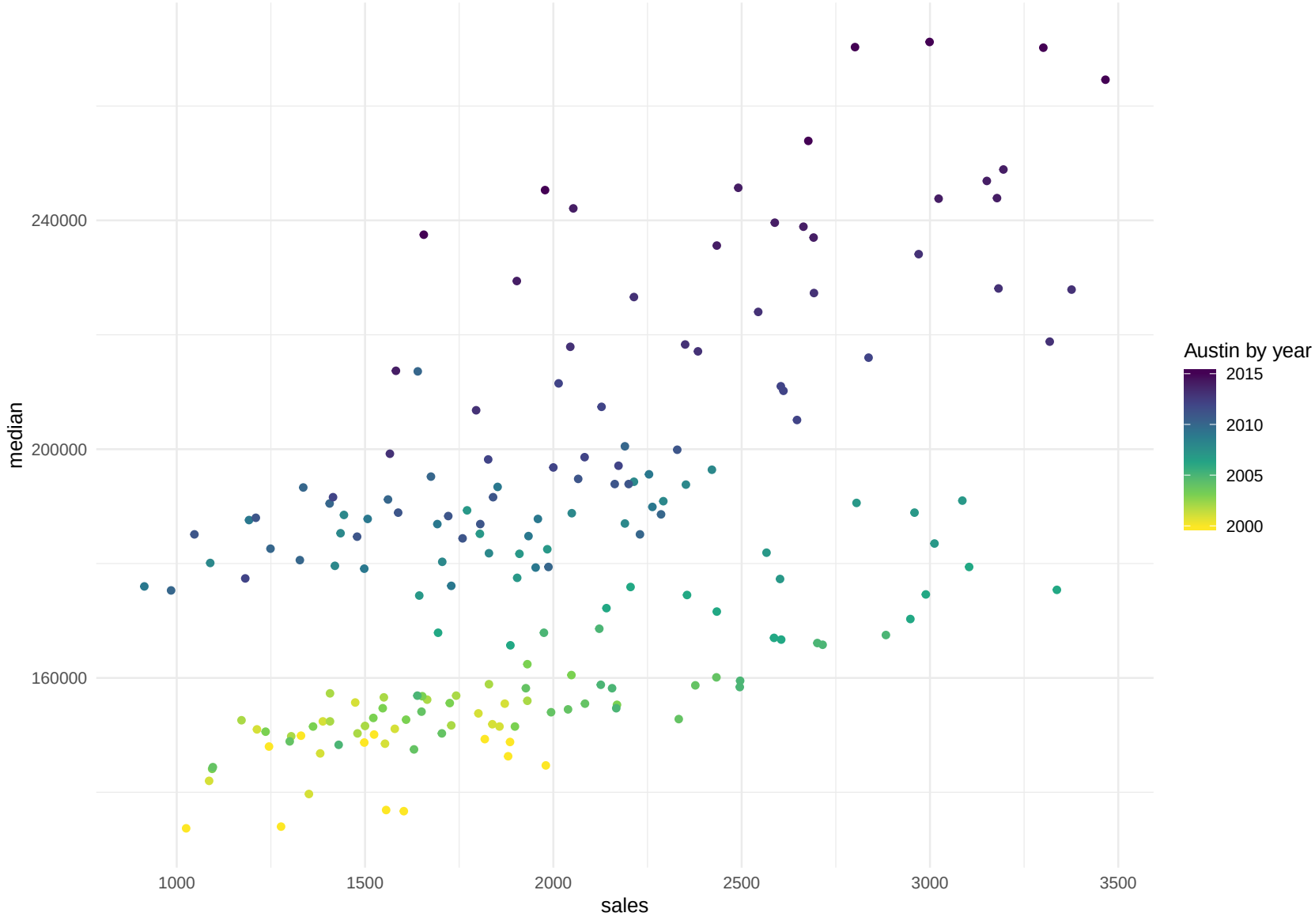
Here is just a sample of rows from one city to show that we have data for each of the 12 months for each year, except for 2015.

```
## # 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
```

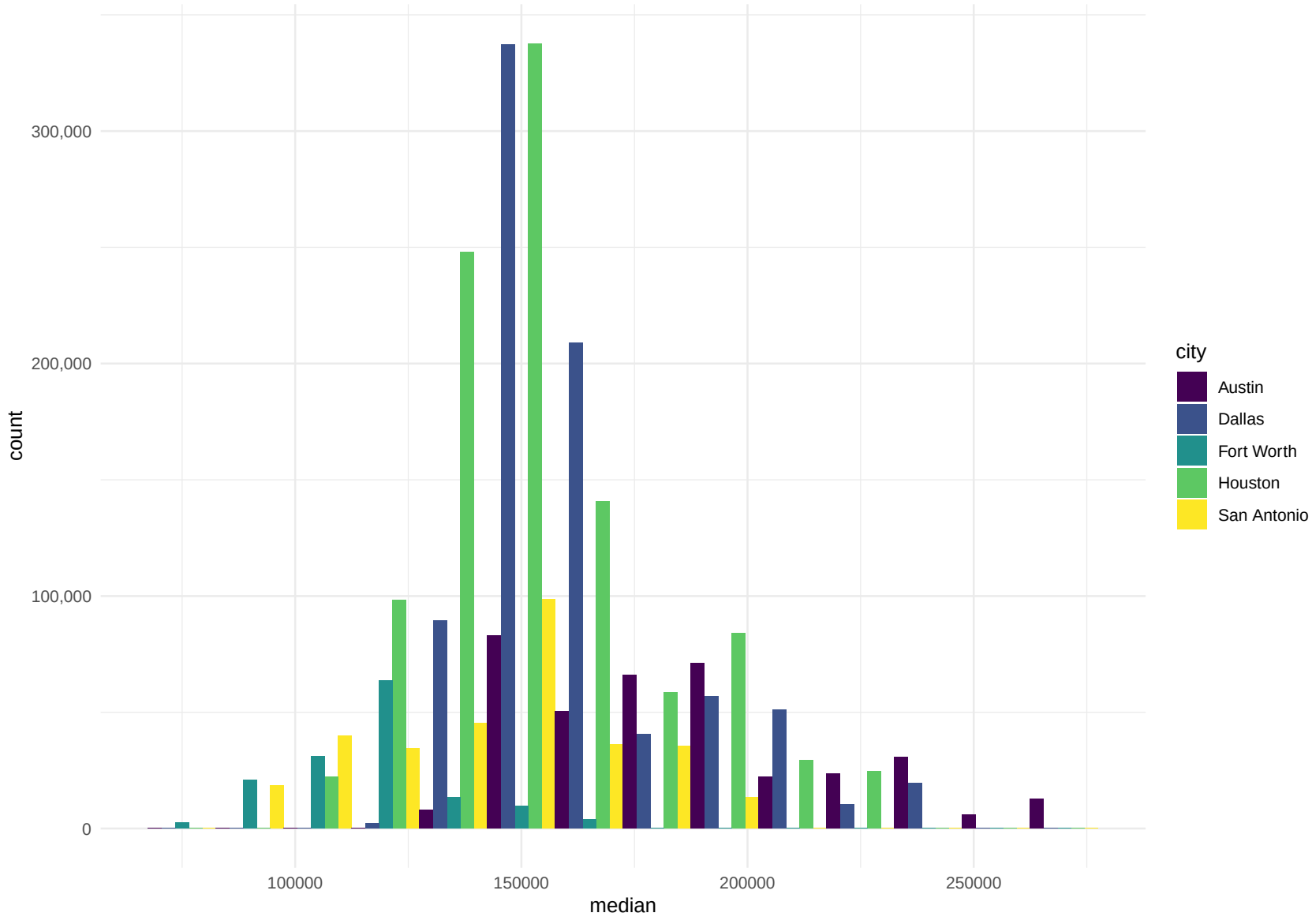
Austin is expensive



Austin prices on the rise

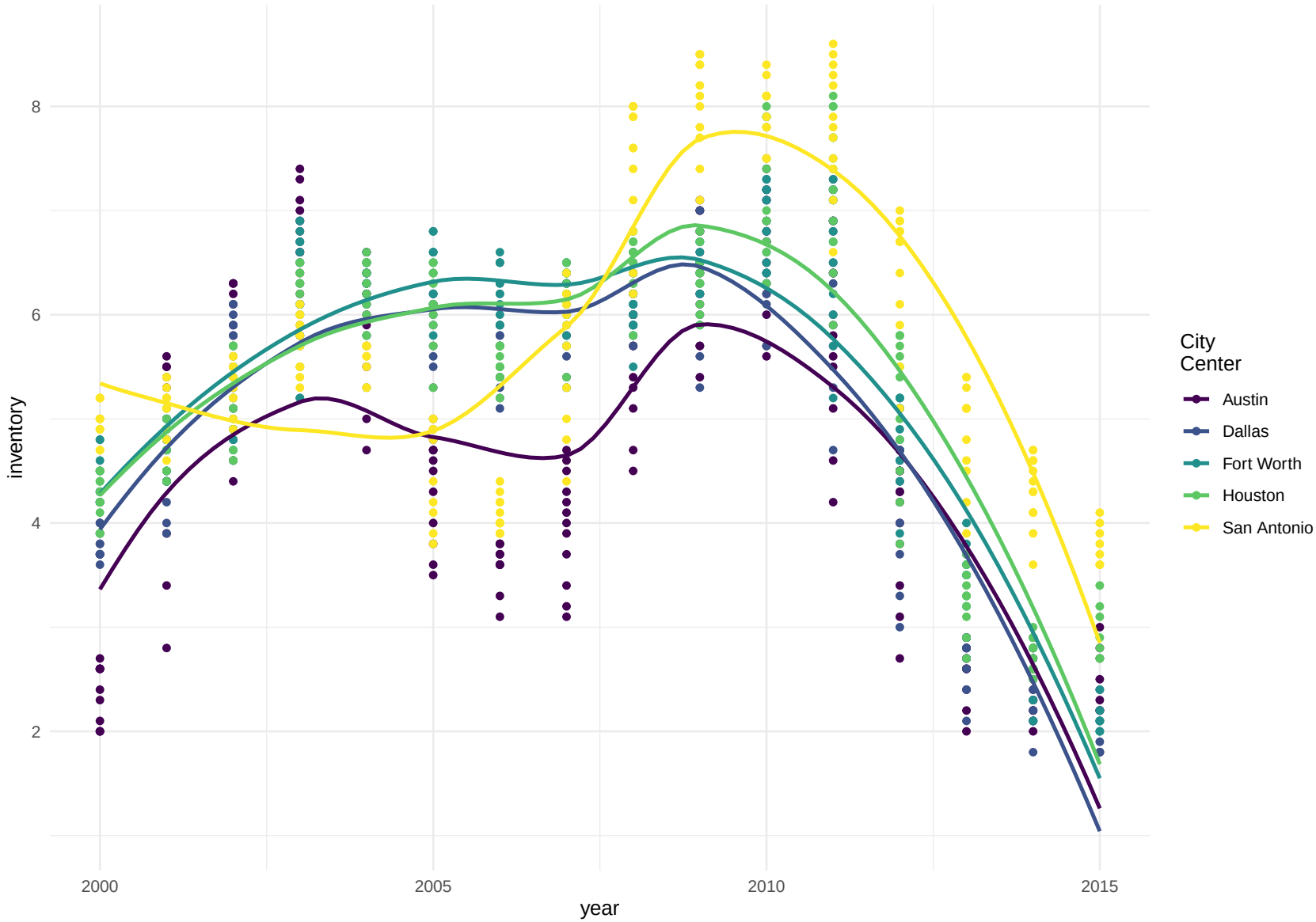


Fort Worth has more affordable housing



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 Grolemund:
  https://rmarkdown.rstudio.com/lesson-6.html