An introduction to ggmap

Camila Casquilho-Resende

Department of Statistics
University of British Columbia

February 4, 2015

How to use ggmap?

1 Download the map raster
  - **1** Define location
  - **2** Define map source, type, and colour
  - **3** Fine tune the scale of the map using zoom

2 Plotting the maps and data
  - **1** Plot the raster
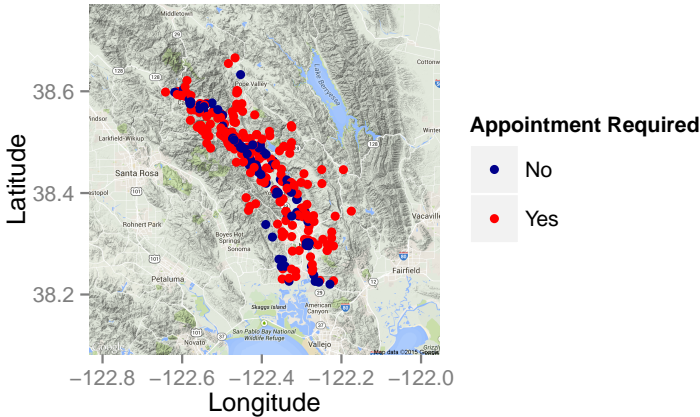 - **2** Add points with latitude and longitude coordinates

Define location

- Location or address
- Latitude and Longitude
- Bounding box (lower left lon, lower left lat, upper right lon, upper right lat)
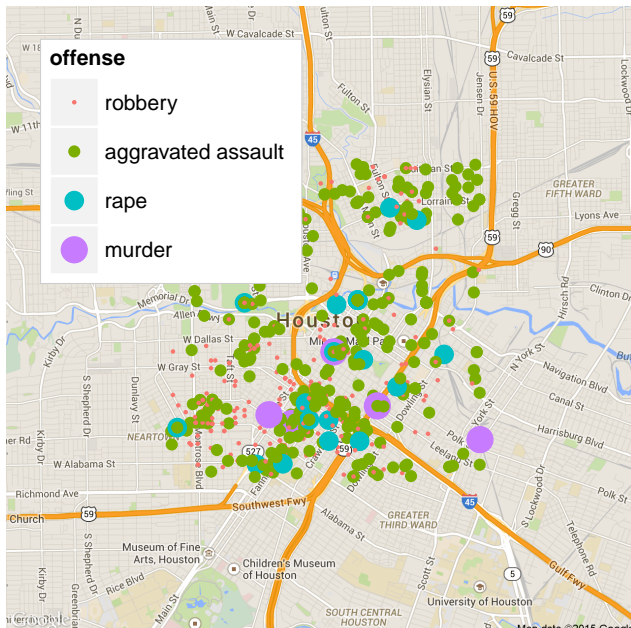
Define map source, type, and colour

- stamen: `maptype = c(''terrain'', ''toner'', ''watercolor'')`
- google: `maptype = c(''roadmap'', ''terrain'', ''satellite'', ''hybrid'')`
- osm: open street map
- cloudmade: 1000s of maps, but an api key must be obtained from `http://cloudmade.com`

Exercise: Napa Valley Wine Tasting

Houston Crime Data

Houston Crime Data