

poa_access_gov

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7.1) People who had difficulty accessing social services or benefits [21]

1. Run distribution over population
2. Run distribution by sub-demographics (a-k)
 - a. Compare and find gaps (test unequal proportions)

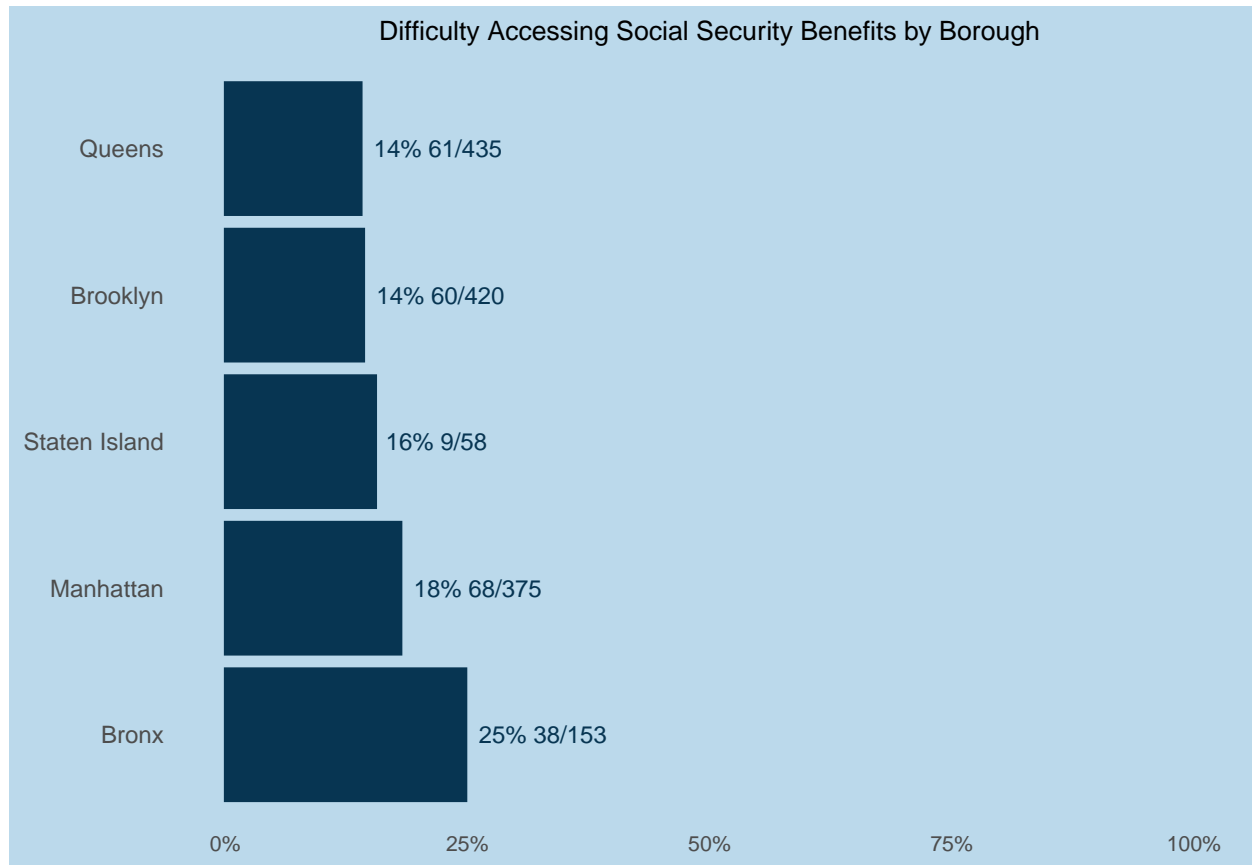
```
mean(wrangled$diff_ss, na.rm = TRUE)
```

```
## [1] 0.1637752
```

```
make_plots(wrangled, demographics, "diff_ss", title = "Difficulty accessing Social security benefits")
```

```
## $borough
```

```
## $borough$plot
```



```
##
```

```
## $borough$p.values
```

```
## $borough$p.values$diff_ss
```

```
##      queens brooklyn staten island manhattan  bronx
## queens      NA      NA      NA      NA      NA 0.0032
## brooklyn    NA      NA      NA      NA      NA 0.0045
## staten island NA      NA      NA      NA      NA NA
## manhattan    NA      NA      NA      NA      NA NA
## bronx        0.0032 0.0045      NA      NA      NA NA
```

```
##
```

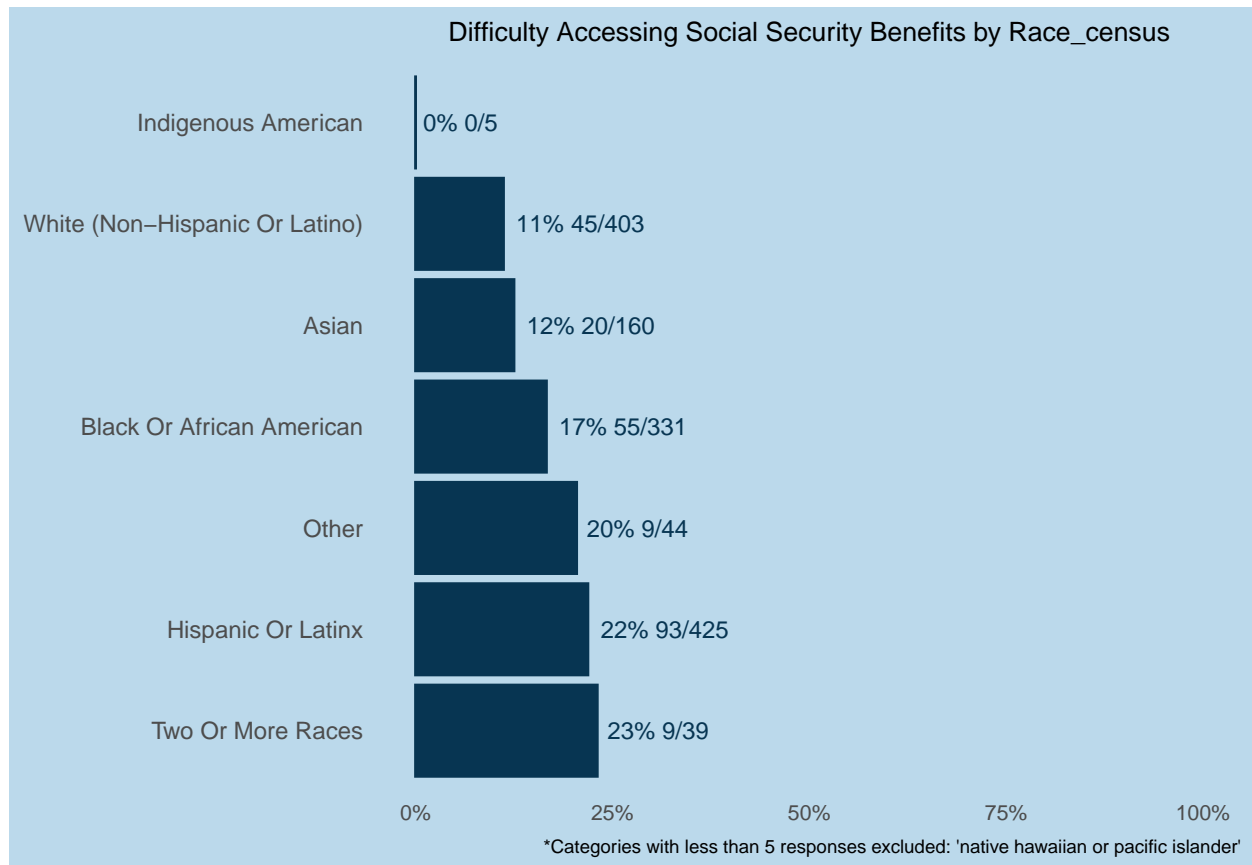
```
##
```

```
##
```

```
## $gen
```

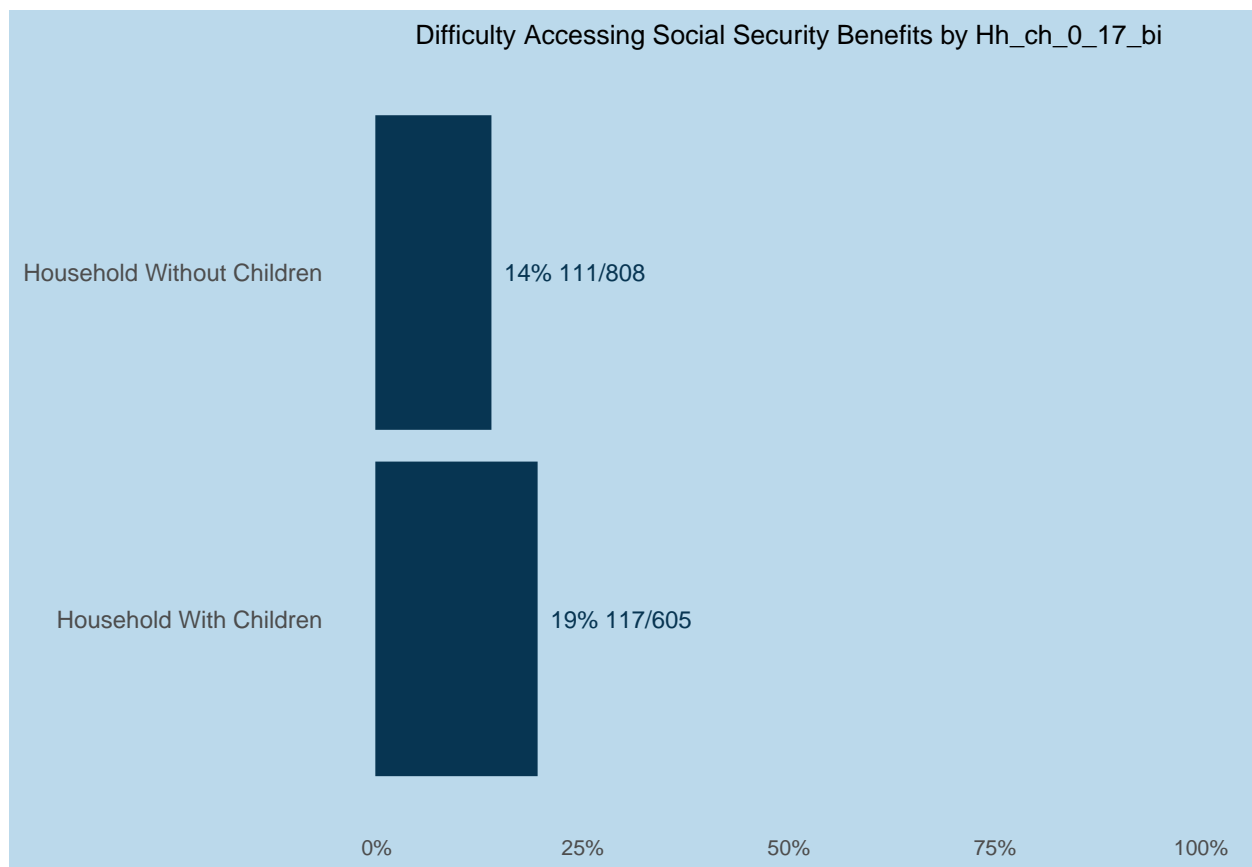
```
## NULL
```

```
##
## $race_census
## $race_census$plot
```



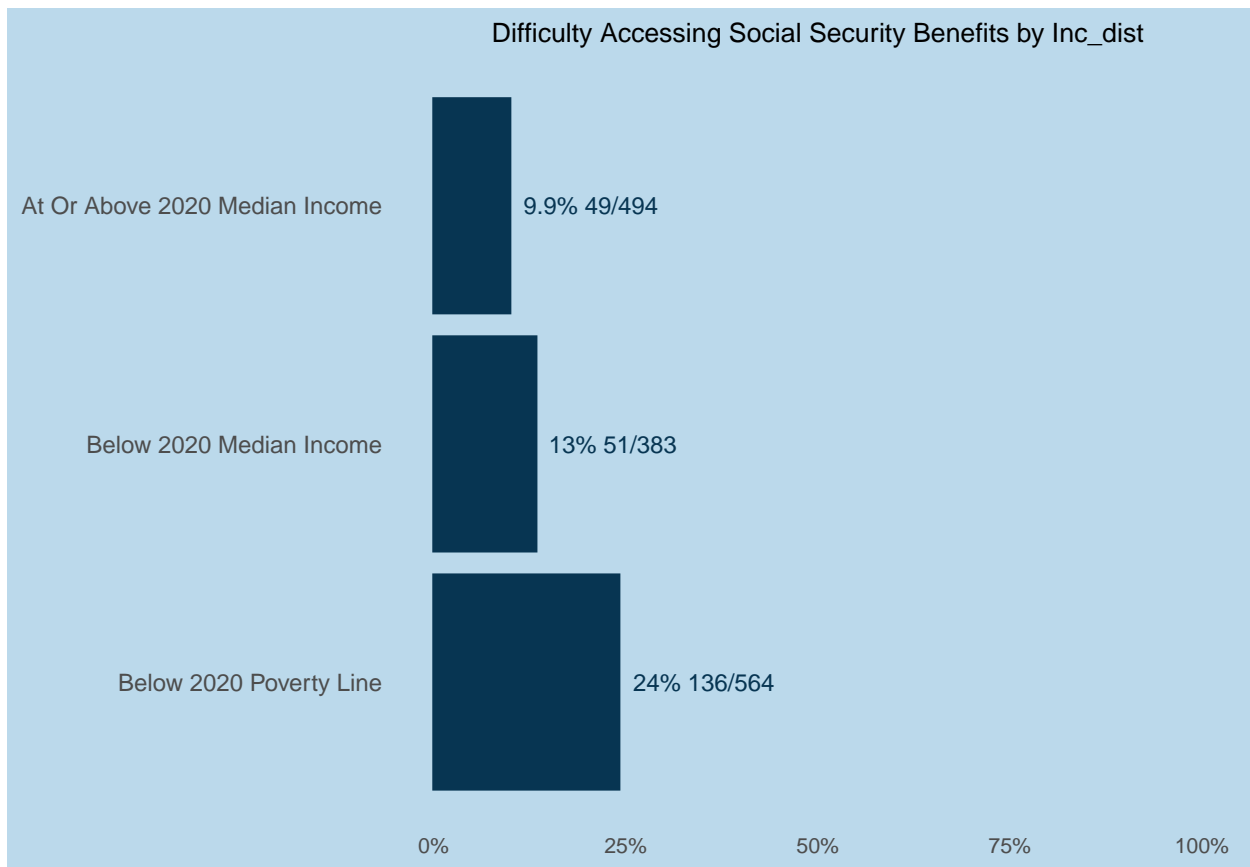
```
##
## $race_census$p.values
## $race_census$p.values$diff_ss
##
## Indigenous American
## Indigenous American NA
## white (non-hispanic or latino) NA
## asian NA
## black or african american NA
## other NA
## hispanic or latinx NA
## two or more races NA
##
## white (non-hispanic or latino) asian
## Indigenous American NA NA
## white (non-hispanic or latino) NA NA
## asian NA NA
## black or african american NA NA
## other NA NA
## hispanic or latinx 5.3e-05 NA
## two or more races NA NA
##
## black or african american other
## Indigenous American NA NA
```

```
## white (non-hispanic or latino)      NA      NA
## asian                               NA      NA
## black or african american           NA      NA
## other                               NA      NA
## hispanic or latinx                  NA      NA
## two or more races                   NA      NA
##                                     hispanic or latinx two or more races
## Indigenous American                 NA      NA
## white (non-hispanic or latino)      5.3e-05      NA
## asian                               NA      NA
## black or african american           NA      NA
## other                               NA      NA
## hispanic or latinx                  NA      NA
## two or more races                   NA      NA
##
##
##
## $hh_ch_0_17_bi
## $hh_ch_0_17_bi$plot
```



```
##
## $hh_ch_0_17_bi$p.values
## $hh_ch_0_17_bi$p.values$diff_ss
##                                     household without children household with children
## household without children                 NA                        0.0058
```

```
## household with children          0.0058          NA
##
##
##
## $hh_sn_65_bi
## NULL
##
## $inc_dist
## $inc_dist$plot
```



```
##
## $inc_dist$p.values
## $inc_dist$p.values$diff_ss
##          at or above 2020 median income
## at or above 2020 median income          NA
## below 2020 median income              NA
## below 2020 poverty line              2.2e-09
##          below 2020 median income below 2020 poverty line
## at or above 2020 median income          NA          2.2e-09
## below 2020 median income              NA          6.0e-05
## below 2020 poverty line              6e-05          NA
```

7.2) Households with children in public schools are more likely to give higher ratings to neighborhood public schools [32, 26]

1. Run binary distribution for overall rating of neighborhood schools Not Poor=Excellent, Good Poor=Fair, Poor
2. Find subset of population which are hhs with children in each binary category
 - a. Compare the strength of the subset with non-hhs with children in each subset

```
mean(wrangled$rate_neigh_pub, na.rm = TRUE)
```

```
## [1] 3.081301
```

```
mean(wrangled$rate_neigh_pub_good, na.rm = TRUE)
```

```
## [1] 0.3797226
```

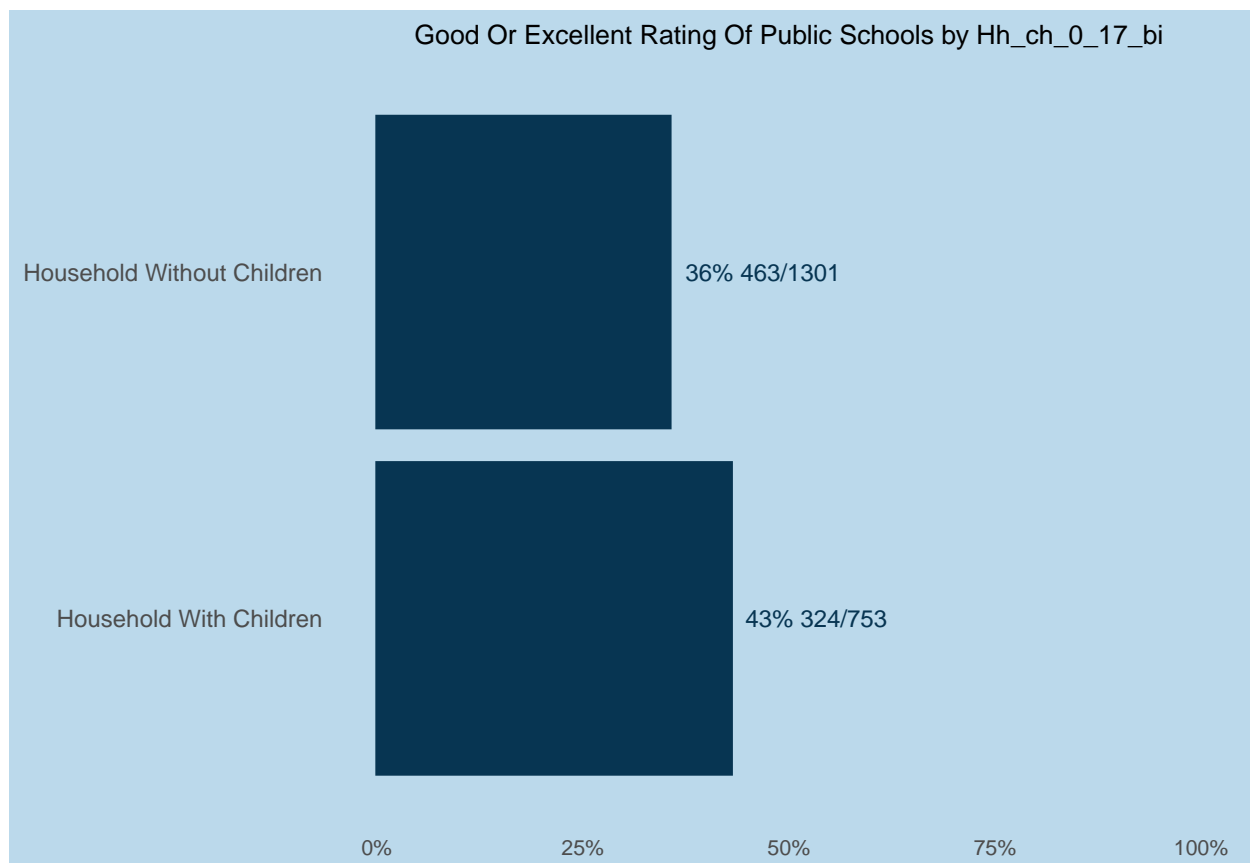
```
mean(wrangled$rate_neigh_pub_bad, na.rm = TRUE)
```

```
## [1] 0.3438546
```

```
make_plots(wrangled, "hh_ch_0_17_bi", "rate_neigh_pub_good", title = "Good or Excellent Rating of Public Schools by Hh_ch_0_17_bi")
```

```
## $hh_ch_0_17_bi
```

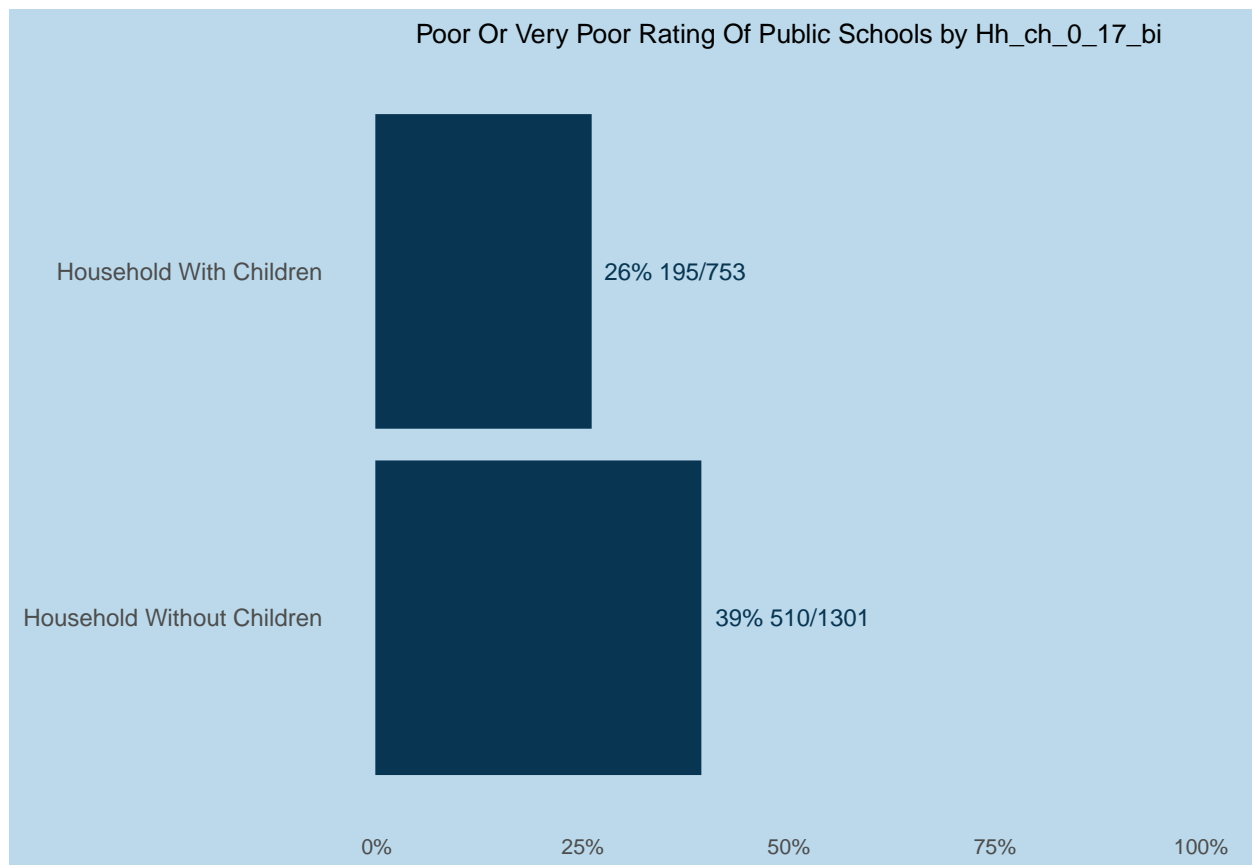
```
## $hh_ch_0_17_bi$plot
```



```
##
## $hh_ch_0_17_bi$p.values
## $hh_ch_0_17_bi$p.values$rate_neigh_pub_good
##                household without children household with children
## household without children                NA                0.00098
## household with children                0.00098                NA
```

```
make_plots(wrangled, "hh_ch_0_17_bi", "rate_neigh_pub_bad", title = "Poor or Very Poor Rating of Public
```

```
## $hh_ch_0_17_bi
## $hh_ch_0_17_bi$plot
```



```
##
## $hh_ch_0_17_bi$p.values
## $hh_ch_0_17_bi$p.values$rate_neigh_pub_bad
##                household with children household without children
## household with children                NA                1.3e-09
## household without children                1.3e-09                NA
```

7.3) Attitude towards Police Responsiveness

1. Run binary distribution over the overall rating of Police responsiveness (as described in 7.3)
2. Run distribution by sub-demographics

```
mean(wrangled$rate_neigh_pol, na.rm = TRUE)
```

```
## [1] 3.155906
```

```
mean(wrangled$rate_neigh_pol_good, na.rm = TRUE)
```

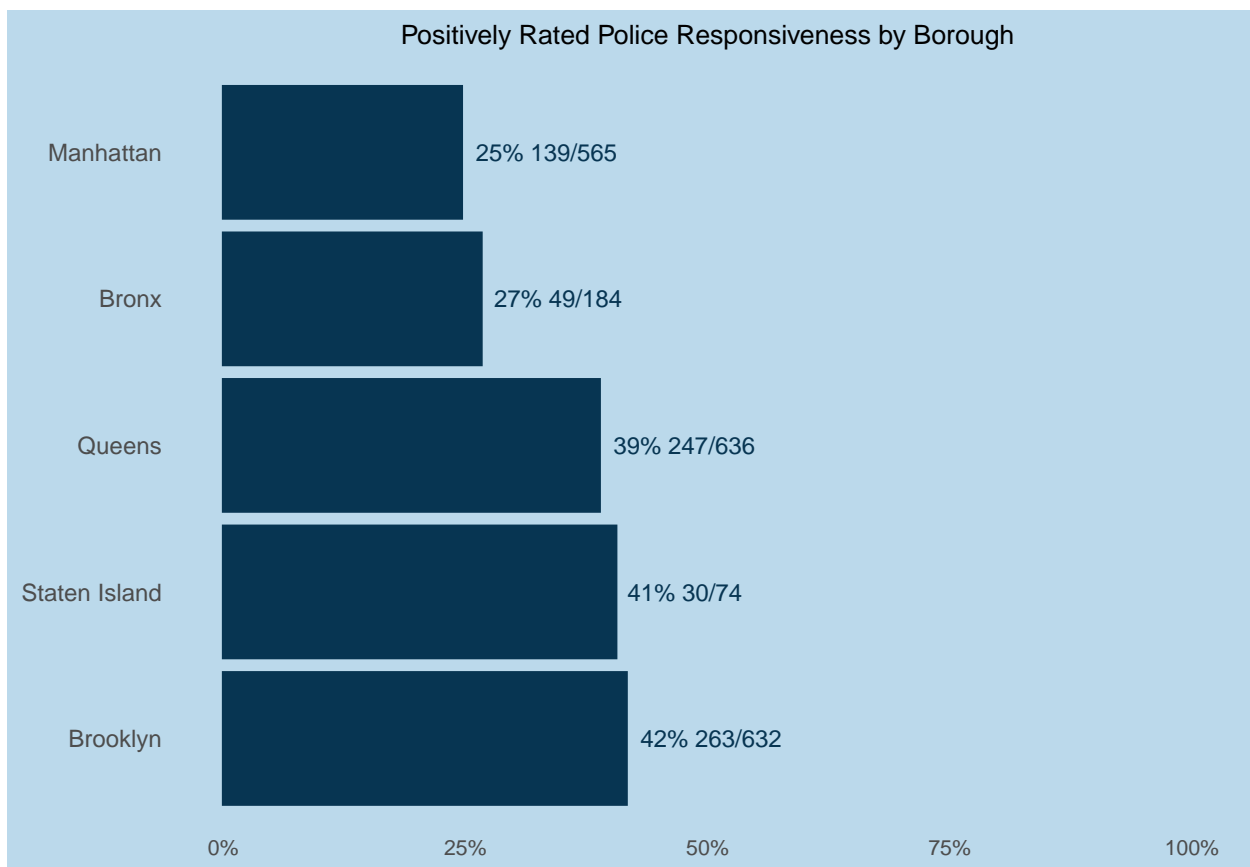
```
## [1] 0.3481588
```

```
mean(wrangled$rate_neigh_pol_bad, na.rm = TRUE)
```

```
## [1] 0.3988522
```

```
make_plots(wrangled, demographics, "rate_neigh_pol_good", title = "Positively Rated Police Responsiveness
```

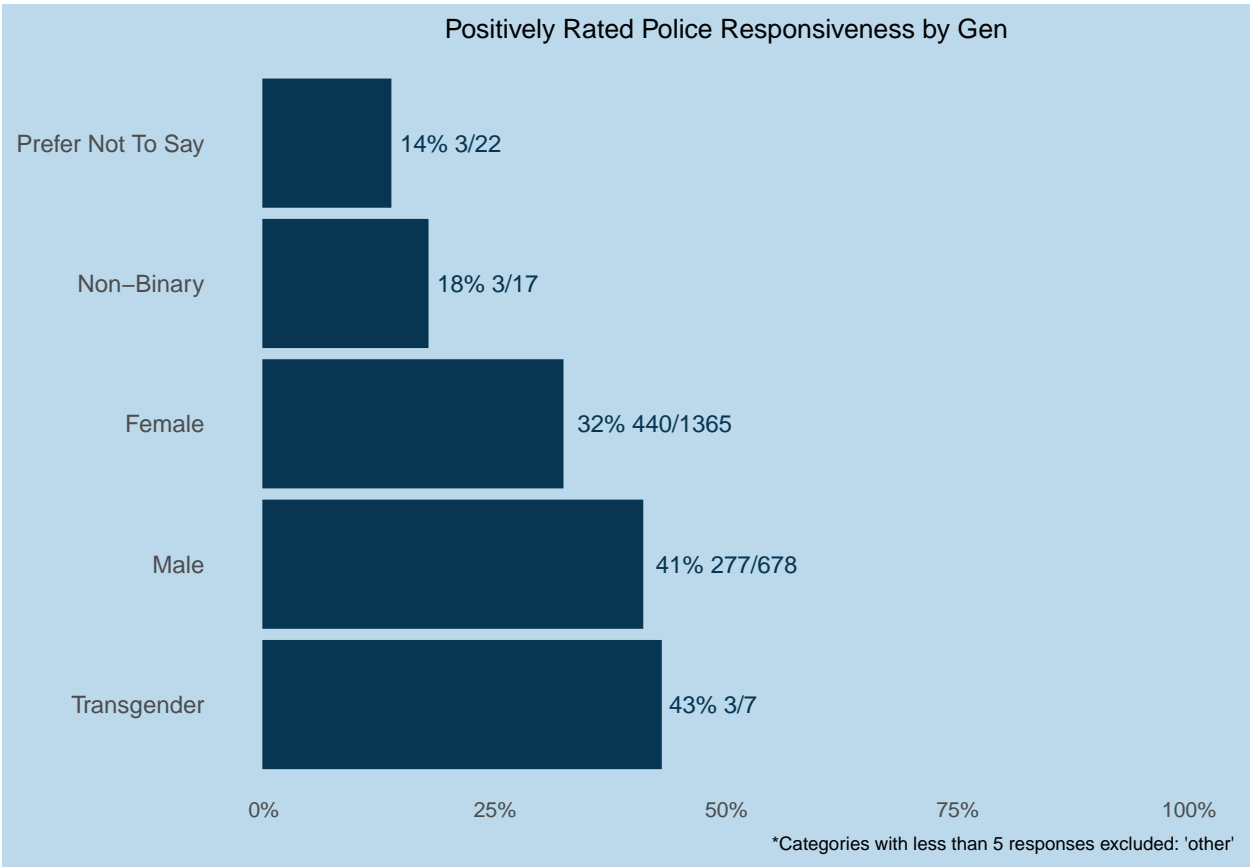
```
## $borough
## $borough$plot
```



```
##
## $borough$p.values
## $borough$p.values$rate_neigh_pol_good
##           manhattan  bronx  queens  staten  island  brooklyn
## manhattan           NA      NA 1.9e-07    0.0054  7.3e-10
```



```
## bronx          NA      NA 3.2e-03          NA 3.2e-04
## queens        1.9e-07 0.00320      NA          NA      NA
## staten island  5.4e-03      NA      NA          NA      NA
## brooklyn       7.3e-10 0.00032      NA          NA      NA
##
##
##
## $gen
## $gen$plot
```

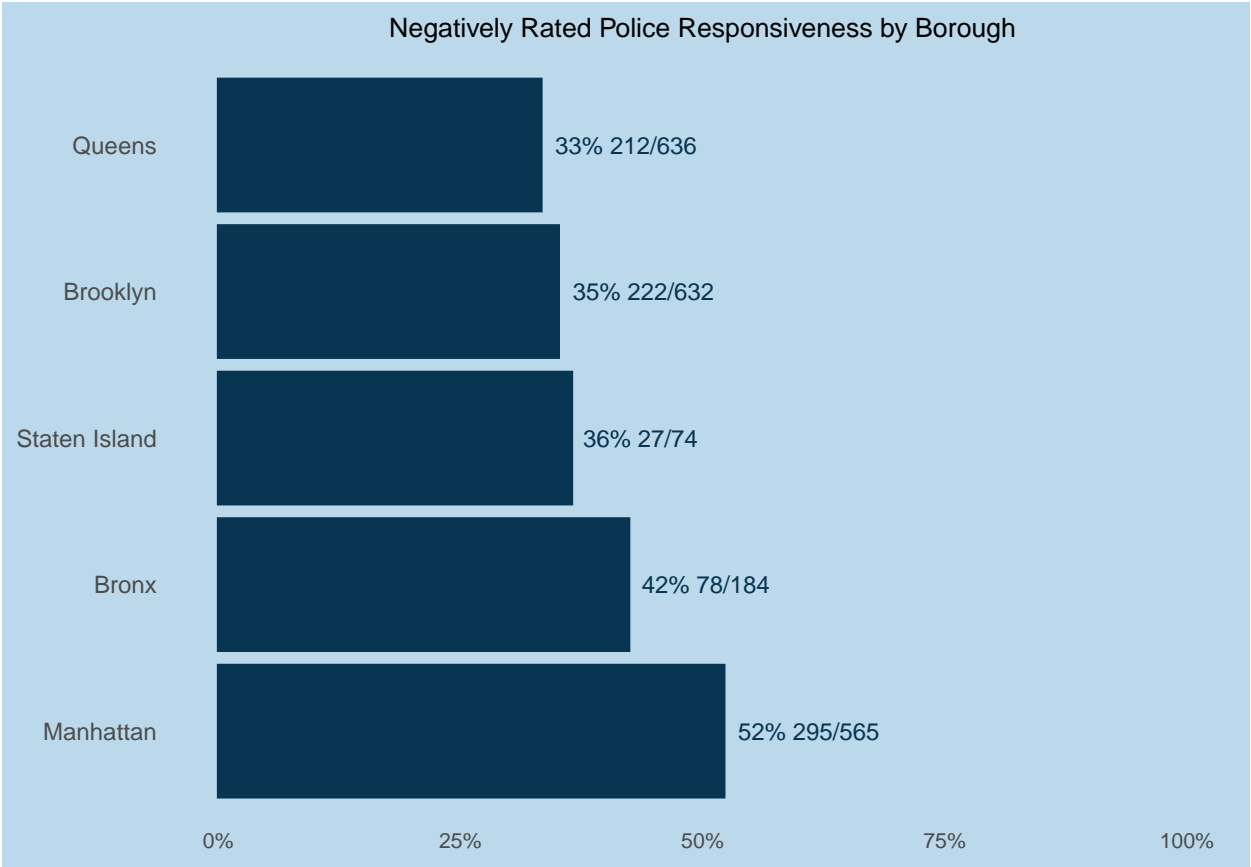


```
##
## $gen$p.values
## $gen$p.values$rate_neigh_pol_good
##           prefer not to say non-binary  female    male transgender
## prefer not to say          NA         NA      NA      NA         NA
## non-binary                 NA         NA      NA      NA         NA
## female                     NA         NA      NA 0.00015         NA
## male                       NA         NA 0.00015      NA         NA
## transgender                 NA         NA      NA      NA         NA
##
##
##
## $race_census
## NULL
##
```

```
## $hh_ch_0_17_bi
## NULL
##
## $hh_sn_65_bi
## NULL
##
## $inc_dist
## NULL
```

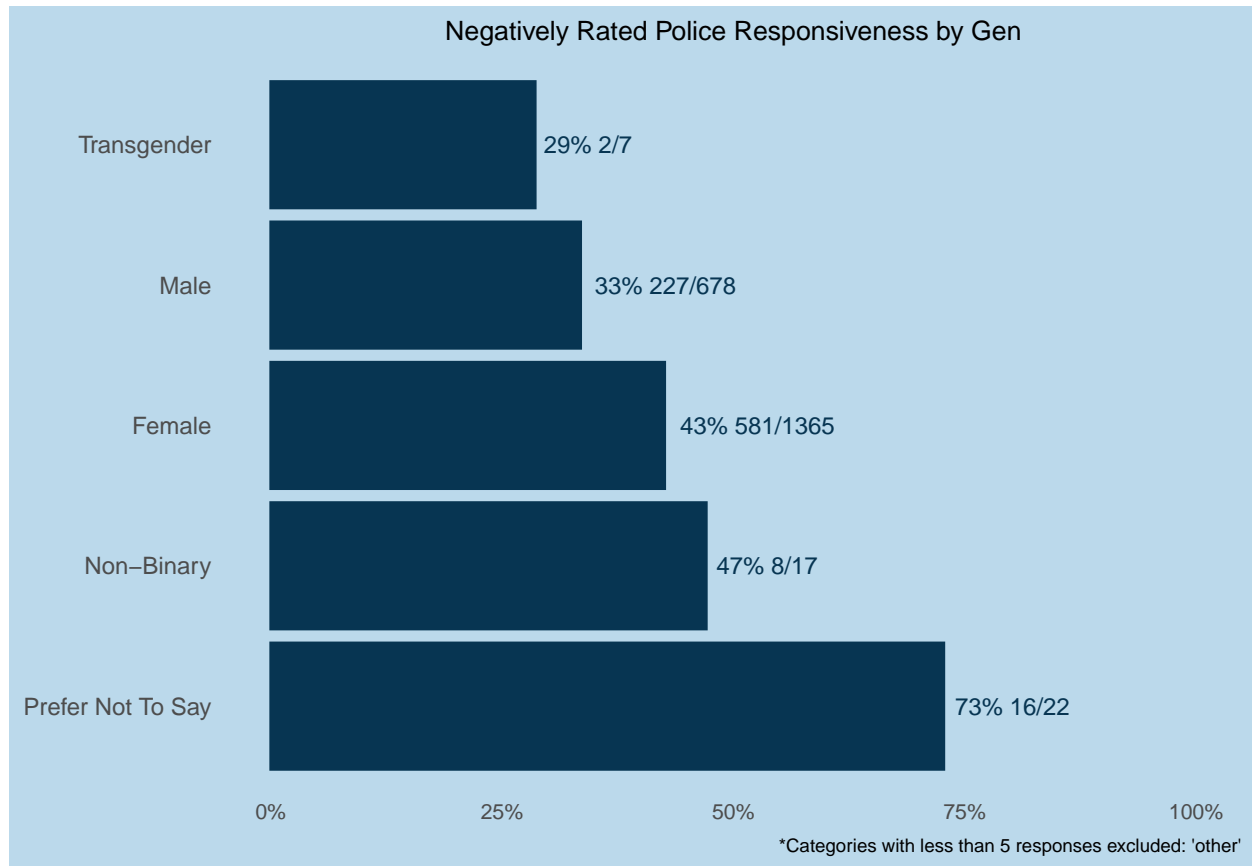
```
make_plots(wrangled, demographics, "rate_neigh_pol_bad", title = "Negatively Rated Police Responsiveness
```

```
## $borough
## $borough$plot
```

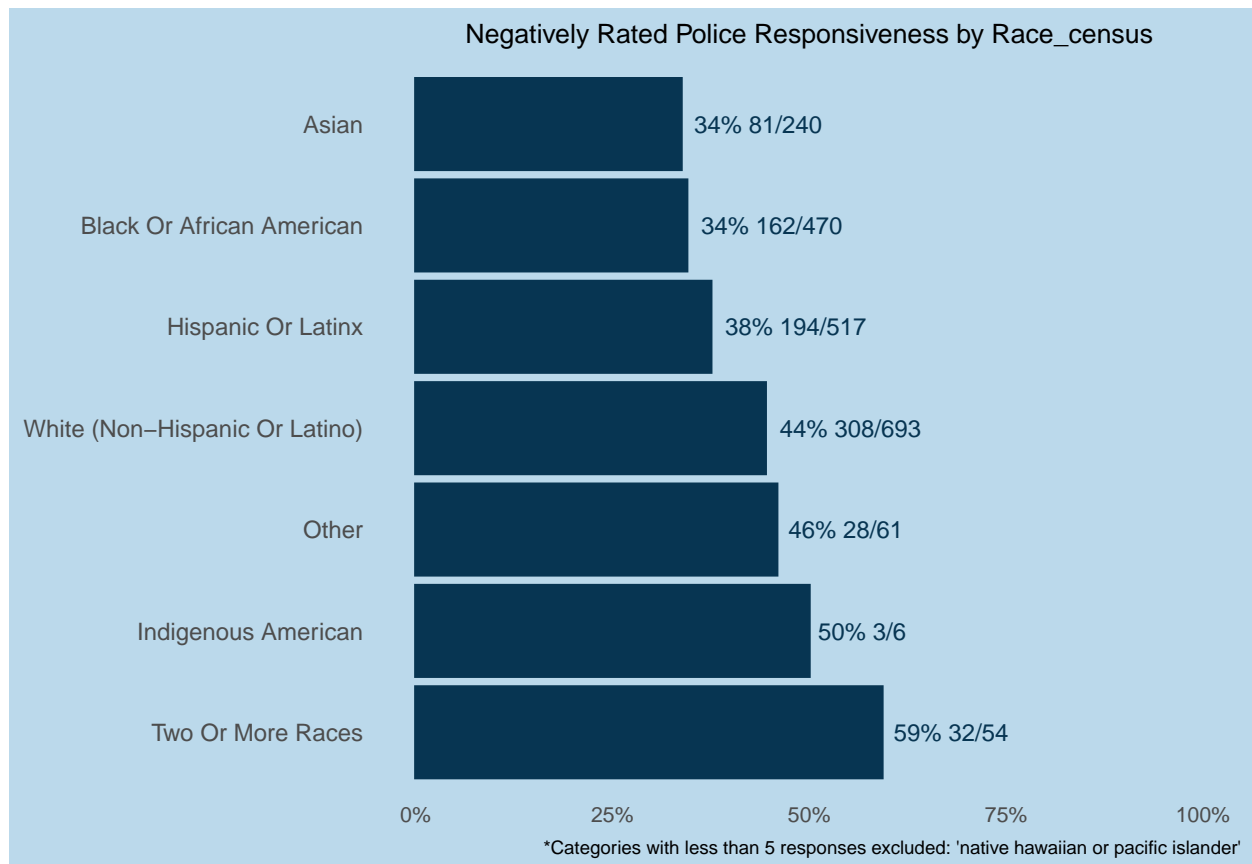


```
##
## $borough$p.values
## $borough$p.values$rate_neigh_pol_bad
##           queens brooklyn staten island bronx manhattan
## queens           NA      NA           NA  NA  5.6e-11
## brooklyn          NA      NA           NA  NA  3.7e-09
## staten island     NA      NA           NA  NA      NA
## bronx             NA      NA           NA  NA      NA
## manhattan    5.6e-11 3.7e-09           NA  NA      NA
##
```

```
##
##
## $gen
## $gen$plot
```

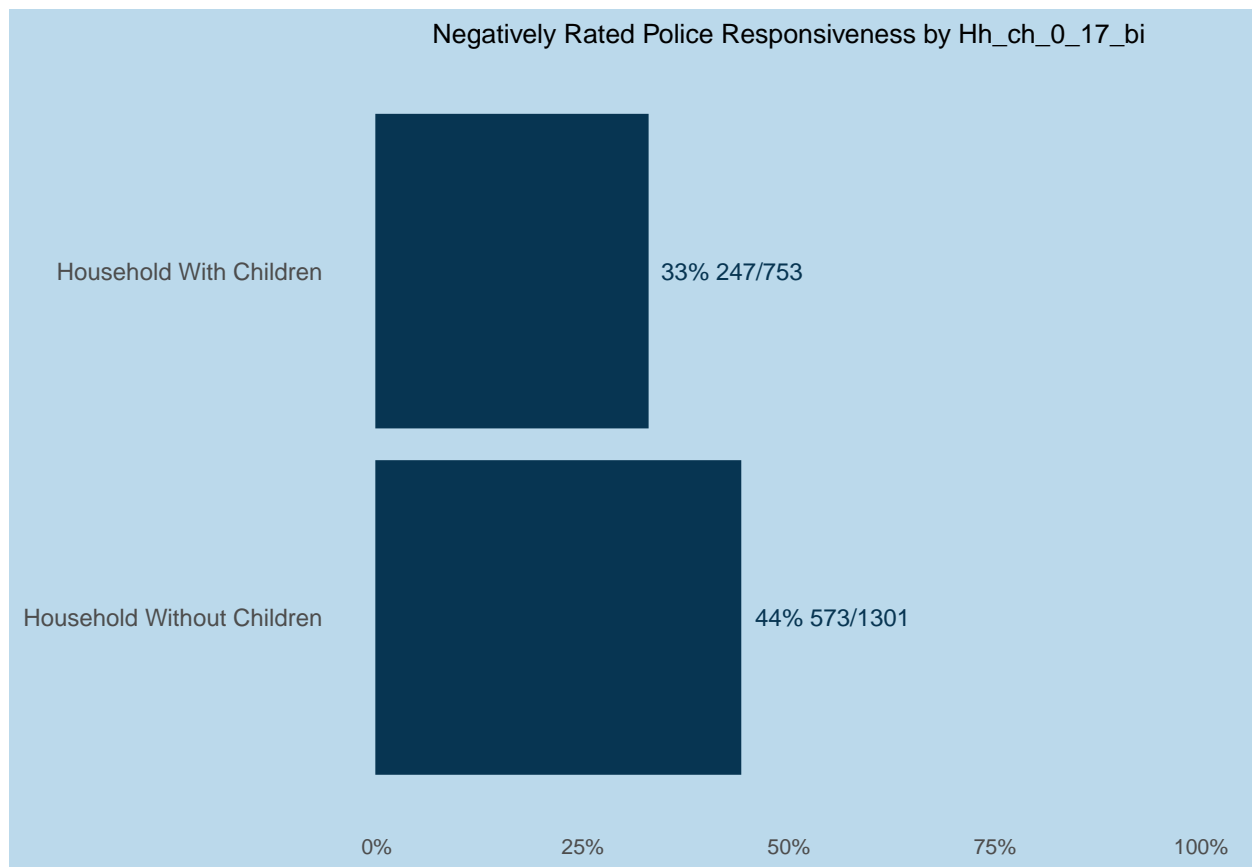


```
##
## $gen$p.values
## $gen$p.values$rate_neigh_pol_bad
##      transgender      male    female non-binary prefer not to say
## transgender          NA      NA      NA          NA          NA
## male                 NA      NA 9.4e-05          NA      0.00035
## female              NA 9.4e-05      NA          NA      0.00890
## non-binary          NA      NA      NA          NA          NA
## prefer not to say    NA 3.5e-04 8.9e-03          NA          NA
##
##
##
## $race_census
## $race_census$plot
```



```
##
## $race_census$p.values
## $race_census$p.values$rate_neigh_pol_bad
##               asian black or african american
## asian                NA                      NA
## black or african american    NA                      NA
## hispanic or latinx           NA                      NA
## white (non-hispanic or latino) 0.00480          0.00083
## other                    NA                      NA
## Indigenous American          NA                      NA
## two or more races           0.00088          0.00062
##               hispanic or latinx
## asian                NA
## black or african american    NA
## hispanic or latinx           NA
## white (non-hispanic or latino)  NA
## other                    NA
## Indigenous American          NA
## two or more races           0.0031
##               white (non-hispanic or latino) other
## asian                0.00480    NA
## black or african american    0.00083    NA
## hispanic or latinx           NA    NA
## white (non-hispanic or latino)  NA    NA
## other                    NA    NA
## Indigenous American          NA    NA
```

```
## two or more races
##
## asian
## black or african american
## hispanic or latinx
## white (non-hispanic or latino)
## other
## Indigenous American
## two or more races
##
##
## $hh_ch_0_17_bi
## $hh_ch_0_17_bi$plot
```



```
##
## $hh_ch_0_17_bi$p.values
## $hh_ch_0_17_bi$p.values$rate_neigh_pol_bad
##
## household with children household without children
## household with children NA 6.8e-07
## household without children 6.8e-07 NA
##
##
## $hh_sn_65_bi
```

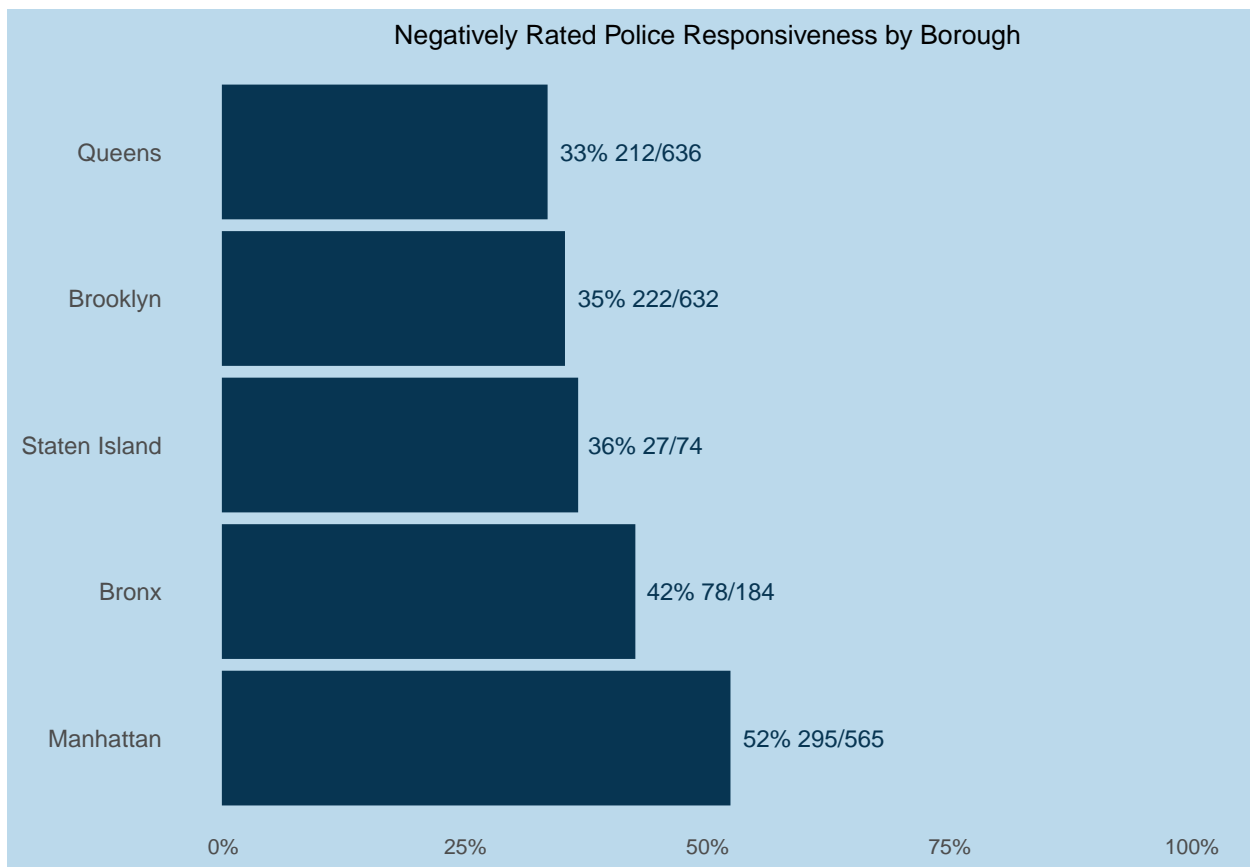
```
## NULL
##
## $inc_dist
## NULL
```

7.4) Respondents from the Bronx (high crime rate as compared to other boroughs) are more likely to rate Police Responsiveness as poor [32, 2]

1. Run binary distribution for overall rating of Police responsiveness (as described in 7.2)
2. Find subset of population who are from Bronx in both the category responses
 - a. Compare and contrast the responses between the Bronx and on-Bronx population

```
make_plots(wrangled, "borough",
           "rate_neigh_pol_bad", title = "Negatively Rated Police Responsiveness")
```

```
## $borough
## $borough$plot
```



```
##
## $borough$p.values
```

```
## $borough$p.values$rate_neigh_pol_bad
##               queens brooklyn staten island bronx manhattan
## queens              NA        NA              NA    NA    5.6e-11
## brooklyn             NA        NA              NA    NA    3.7e-09
## staten island        NA        NA              NA    NA         NA
## bronx                NA        NA              NA    NA         NA
## manhattan           5.6e-11  3.7e-09              NA    NA         NA
```

7.5) Respondents from low income brackets (at or below median income) are more likely to rate neighbourhood safety poorly

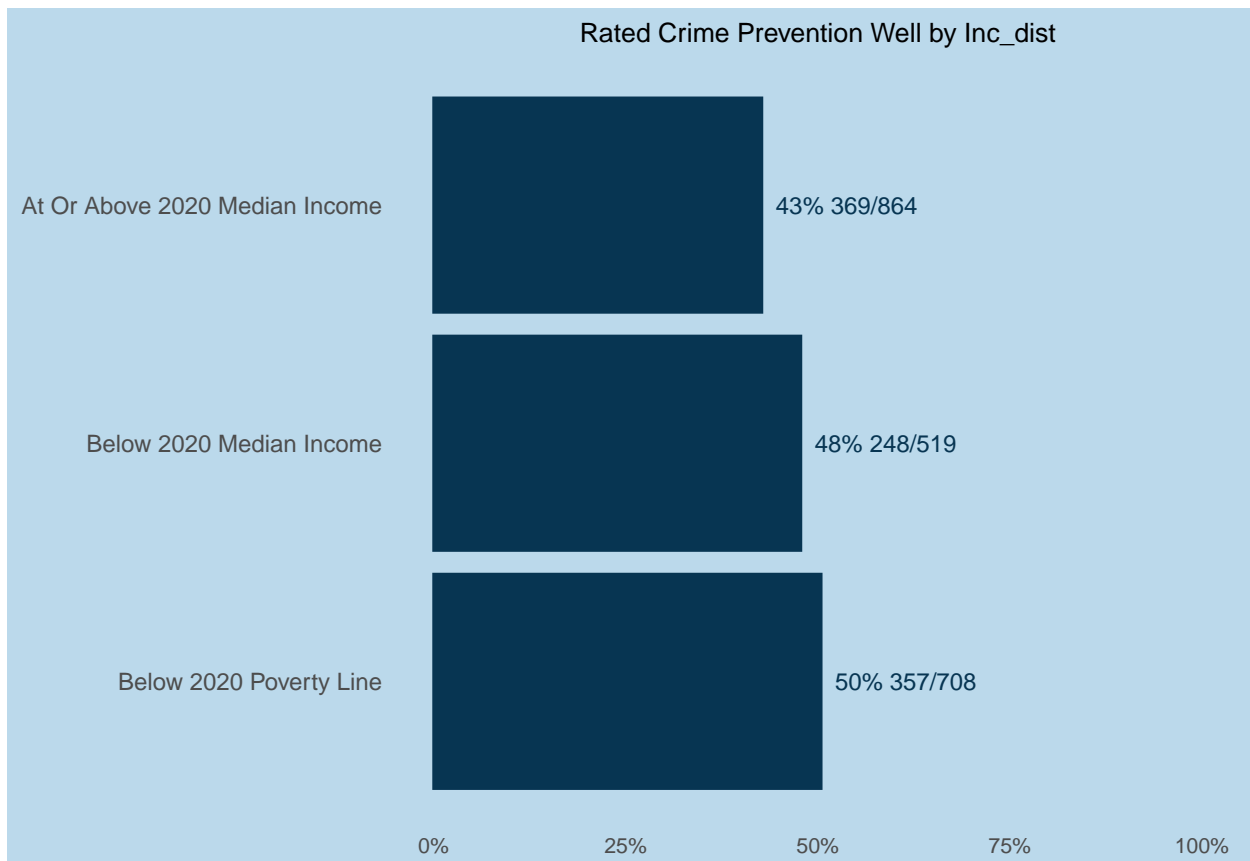
3. Run binary distribution for overall rating of Police responsiveness (as described in 7.3)
4. Find subset of population who are from above median income in both the category responsenses
 - b. Compare and contrast the responses between high and low income population

```
mean(wrangled$rate_neigh_pre, na.rm = TRUE)
```

```
## [1] 3.27164
```

```
make_plots(wrangled, "inc_dist", "rate_neigh_pre_bad", title = "Rated Crime Prevention Well")
```

```
## $inc_dist
## $inc_dist$plot
```



```
##
## $inc_dist$p.values
## $inc_dist$p.values$rate_neigh_pre_bad
## at or above 2020 median income
## at or above 2020 median income NA
## below 2020 median income NA
## below 2020 poverty line 0.0027
## below 2020 median income below 2020 poverty line
## at or above 2020 median income NA 0.0027
## below 2020 median income NA NA
## below 2020 poverty line NA NA

make_plots(wrangled, "inc_dist", "rate_neigh_pre_good", title = "Rated Crime Prevention Poorly")

## $inc_dist
## NULL
```

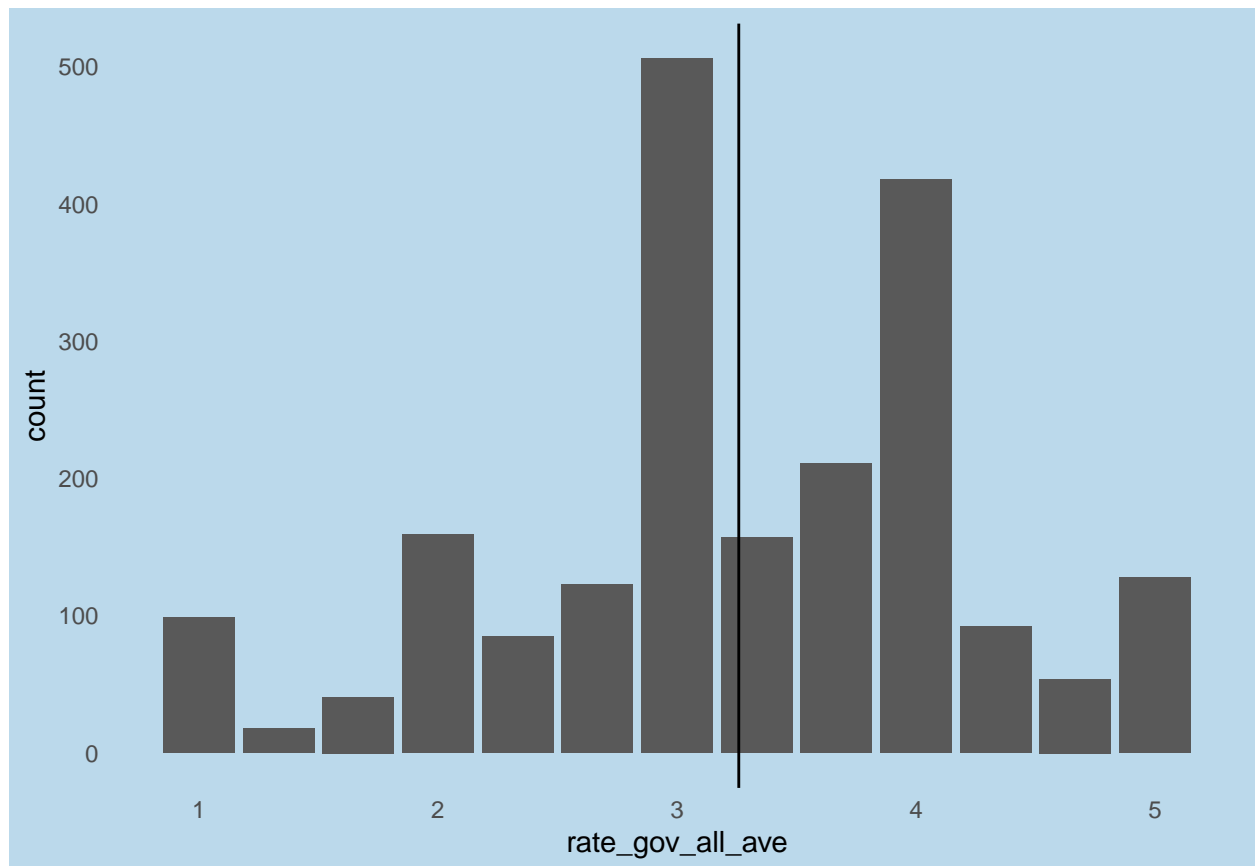
7.6) People who rated city/state/federal government response to the pandemic well were more likely to indicate they would turn to the government if they needed help

1. Find respondents who rated city/state/federal government response as good or excellent [31]
 - a. Find proportion of subset who indicated they would use the government for at least one need [33]
 - b. Find proportion not in subset who indicated they would use the government for at least one need and compare (test unequal proportions)

```
prop_rate_above_ave <- mean(wrangled$rate_gov_all_ave, na.rm = TRUE)

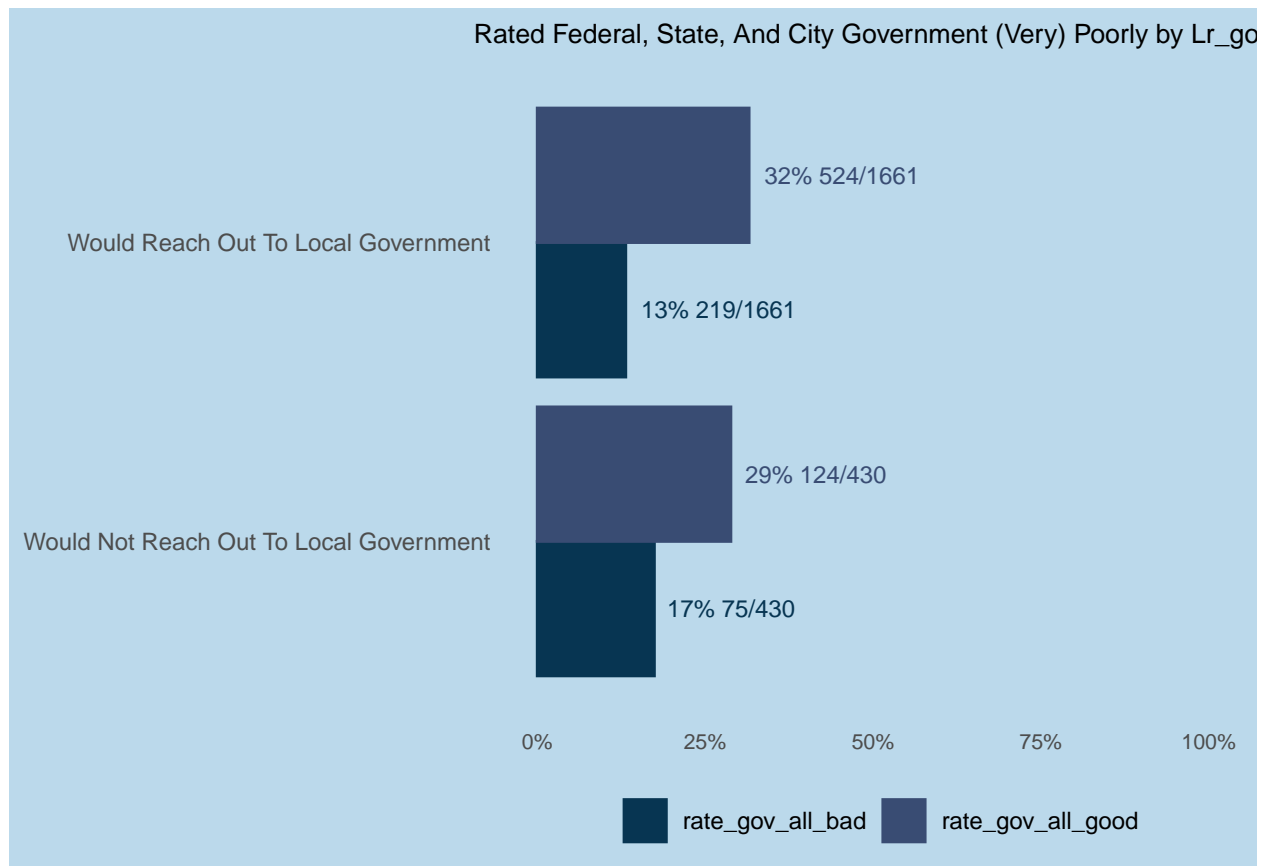
mean_val <- mean(6 - wrangled %>% select(rate_gov_fed, rate_gov_sta, rate_gov_cit) %>% unlist, na.rm = TRUE)

wrangled %>% ggplot(aes(x = rate_gov_all_ave)) + geom_bar() + geom_vline(xintercept = mean_val)
```

```
make_plots(wrangled, "lr_gov", c("rate_gov_all_bad", "rate_gov_all_good"),  
           title = "Rated Federal, State, and City Government (Very) poorly", show = "TRUE")
```

```
## $lr_gov  
## $lr_gov$plot
```



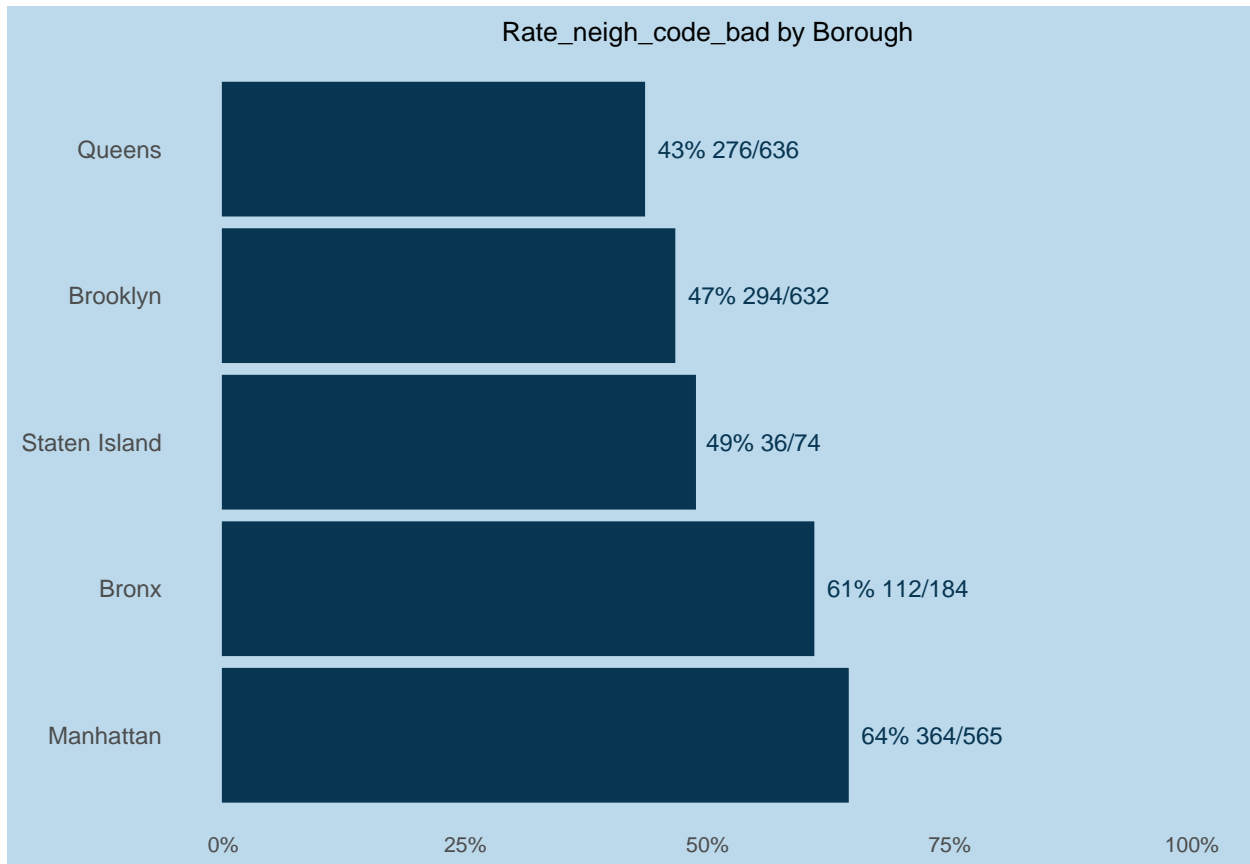
```
##
## $lr_gov$p.values
## $lr_gov$p.values$rate_gov_all_bad
## would reach out to local government
## would reach out to local government NA
## would not reach out to local government NA
## would not reach out to local government
## would reach out to local government NA
## would not reach out to local government NA
##
## $lr_gov$p.values$rate_gov_all_good
## would not reach out to local government
## would not reach out to local government NA
## would reach out to local government NA
## would reach out to local government
## would not reach out to local government NA
## would reach out to local government NA
```

7.7)Run distribution over the rating of each neighborhood service

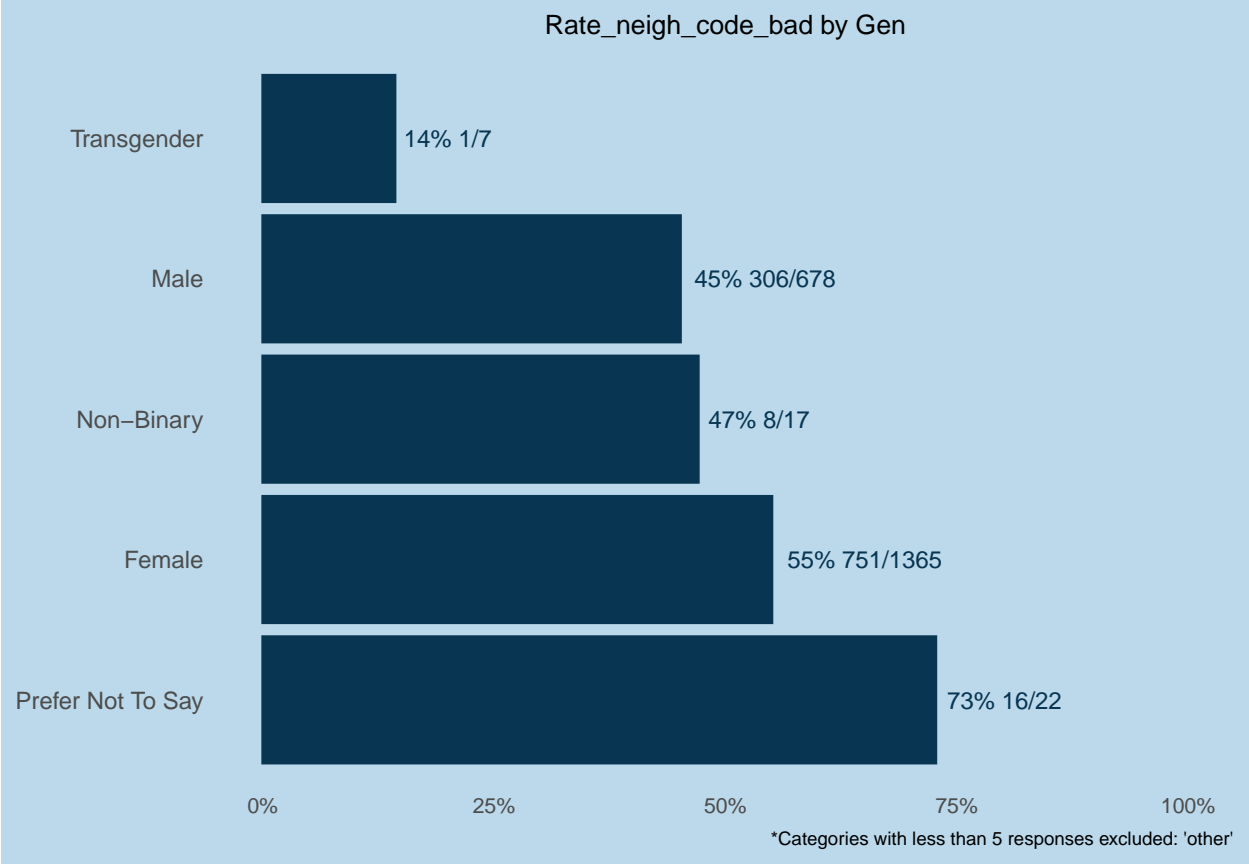
1. Run binary distribution for overall rating of all neighborhood services as done for police responsiveness in 7.2

```
rate_neigh <- select(wrangled, starts_with("rate_neigh") & (ends_with("good") | ends_with("bad"))) %>%
  lapply(rate_neigh, function(item) {
    make_plots(wrangled, demographics, item, title = item)
  })
```

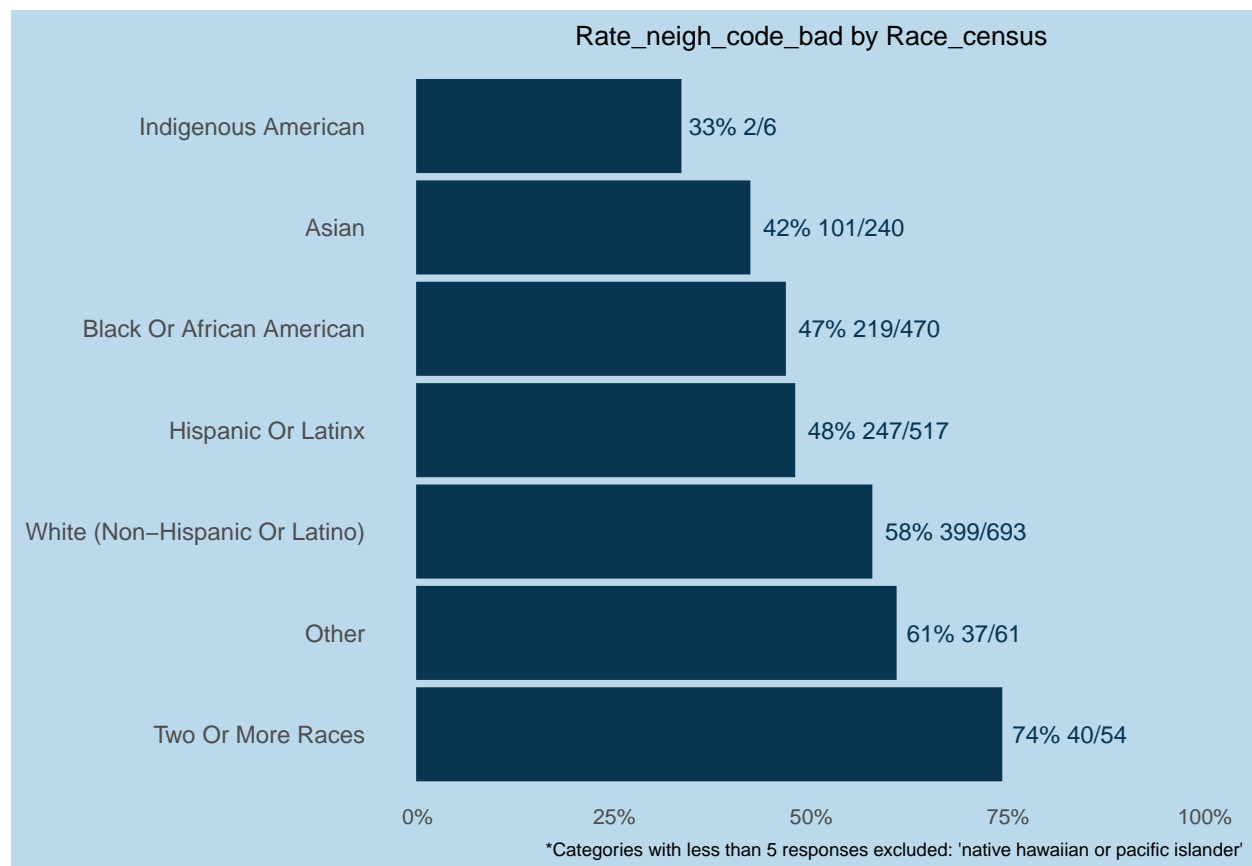
```
## [[1]]
## [[1]]$borough
## [[1]]$borough$plot
```



```
##
## [[1]]$borough$p.values
## [[1]]$borough$p.values$rate_neigh_code_bad
##
##      queens  brooklyn  staten island  bronx  manhattan
## queens      NA      NA      NA  4.2e-05  4.7e-13
## brooklyn      NA      NA      NA  8.3e-04  7.4e-10
## staten island  NA      NA      NA      NA      NA
## bronx      4.2e-05  8.3e-04      NA      NA      NA
## manhattan      4.7e-13  7.4e-10      NA      NA      NA
##
##
##
## [[1]]$gen
## [[1]]$gen$plot
```

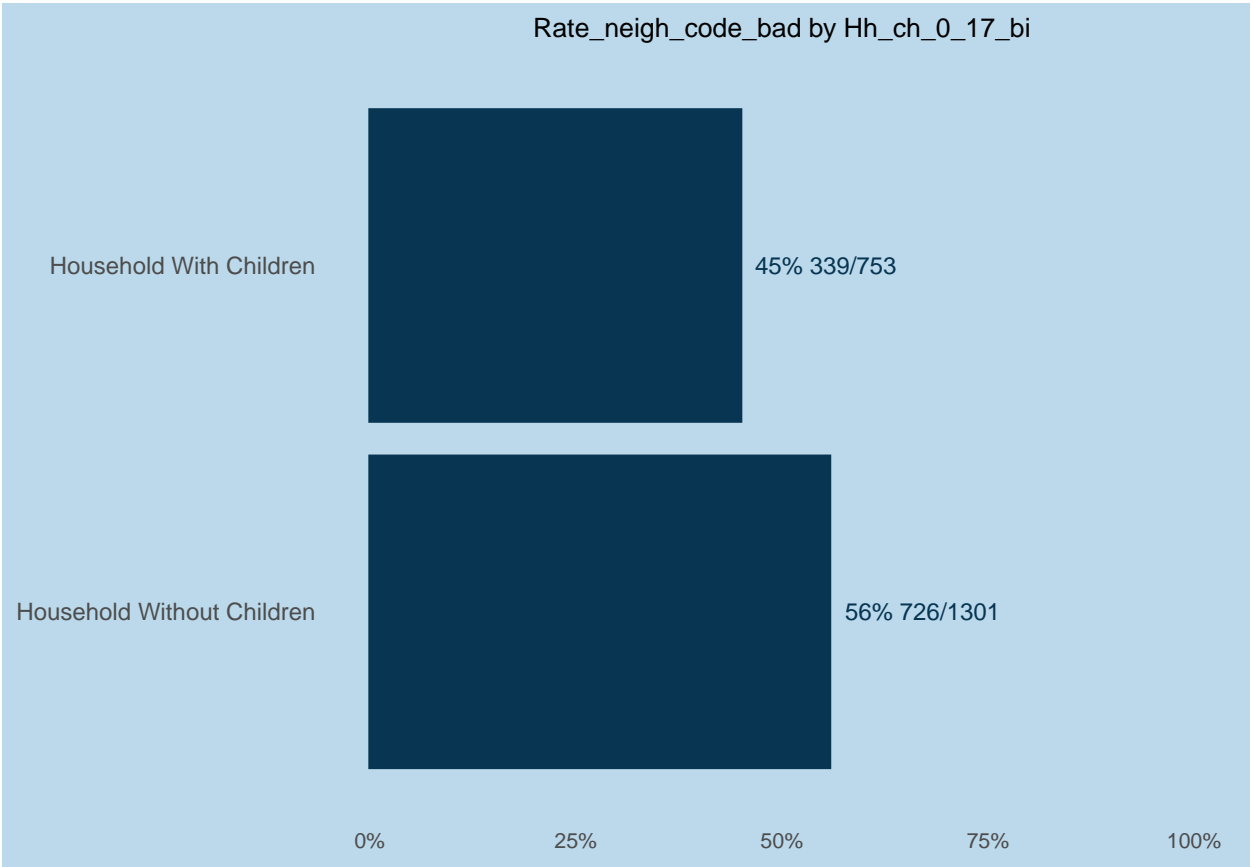


```
##  
## [[1]]$gen$p.values  
## [[1]]$gen$p.values$rate_neigh_code_bad  
##  
##      transgender      male non-binary  female prefer not to say  
## transgender          NA      NA          NA      NA          NA  
## male                 NA      NA          NA 3.1e-05          NA  
## non-binary           NA      NA          NA      NA          NA  
## female               NA 3.1e-05          NA      NA          NA  
## prefer not to say    NA      NA          NA      NA          NA  
##  
##  
##  
## [[1]]$race_census  
## [[1]]$race_census$plot
```

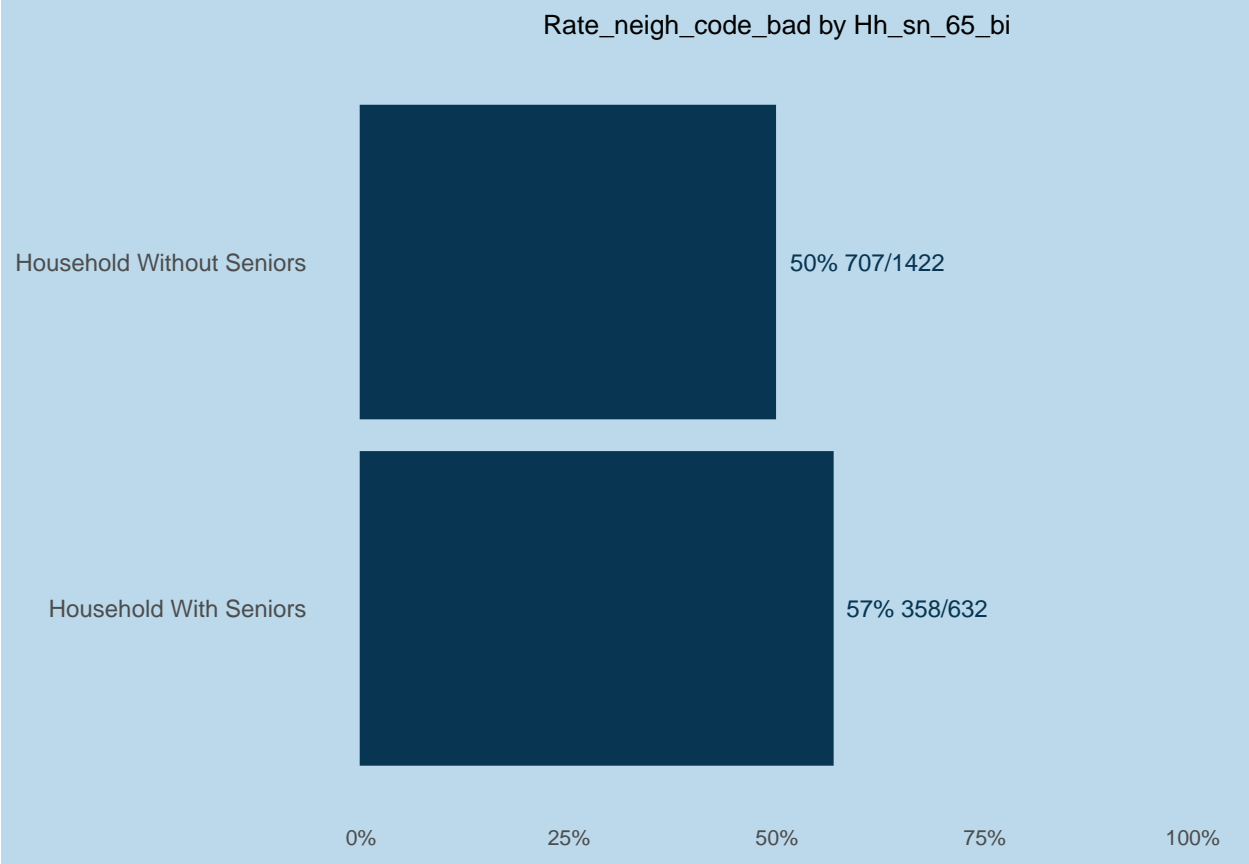


```
##
## [[1]]$race_census$p.values
## [[1]]$race_census$p.values$rate_neigh_code_bad
##
##      Indigenous American      asian
## Indigenous American      NA      NA
## asian                    NA      NA
## black or african american  NA      NA
## hispanic or latinx        NA      NA
## white (non-hispanic or latino) NA 4.6e-05
## other                    NA      NA
## two or more races        NA 4.1e-05
##
##      black or african american hispanic or latinx
## Indigenous American          NA          NA
## asian                        NA          NA
## black or african american    NA          NA
## hispanic or latinx          NA          NA
## white (non-hispanic or latino) 0.00029    0.00089
## other                        NA          NA
## two or more races            0.00023    0.00041
##
##      white (non-hispanic or latino) other
## Indigenous American                NA    NA
## asian                          4.6e-05    NA
## black or african american    2.9e-04    NA
## hispanic or latinx          8.9e-04    NA
## white (non-hispanic or latino)      NA    NA
## other                          NA    NA
```

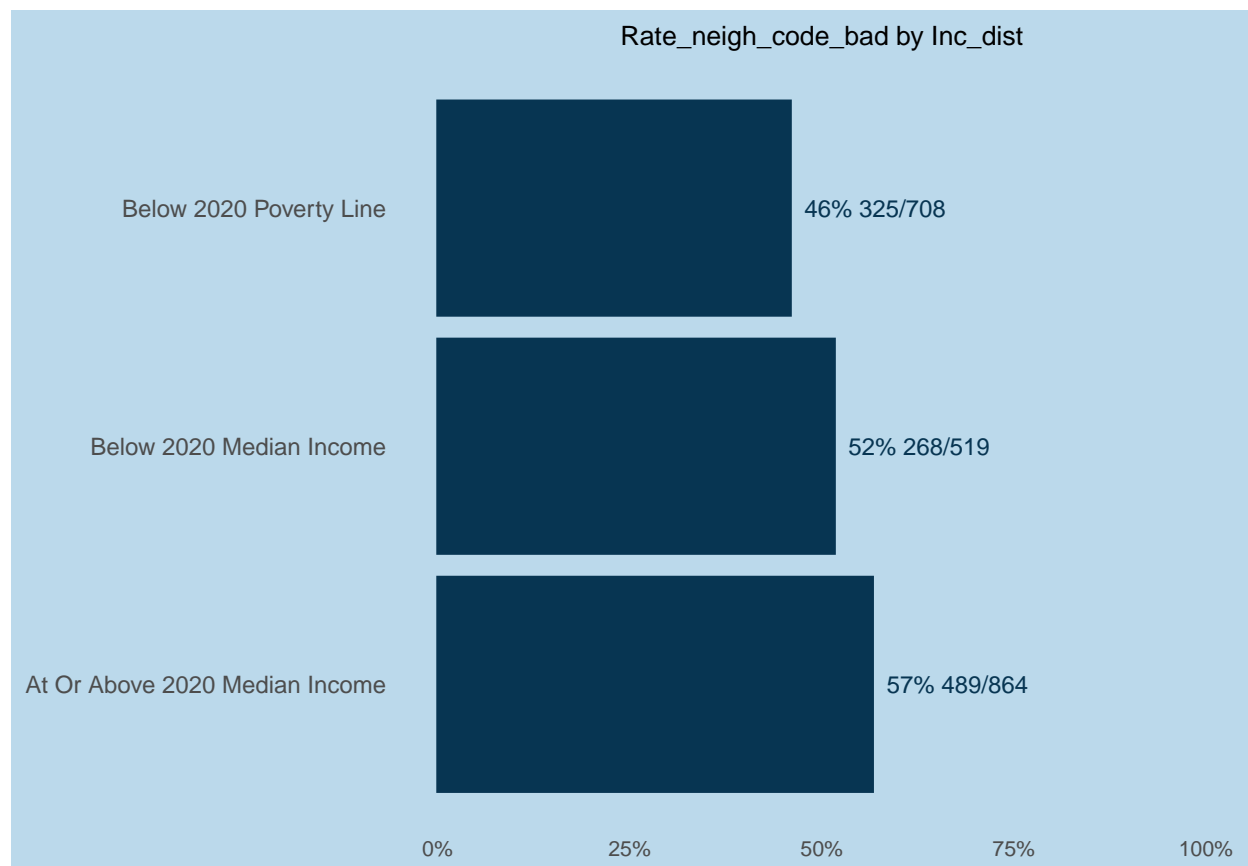
```
## two or more races
##
## Indigenous American
## asian
## black or african american
## hispanic or latinx
## white (non-hispanic or latino)
## other
## two or more races
##
##
## [[1]]$hh_ch_0_17_bi
## [[1]]$hh_ch_0_17_bi$plot
```



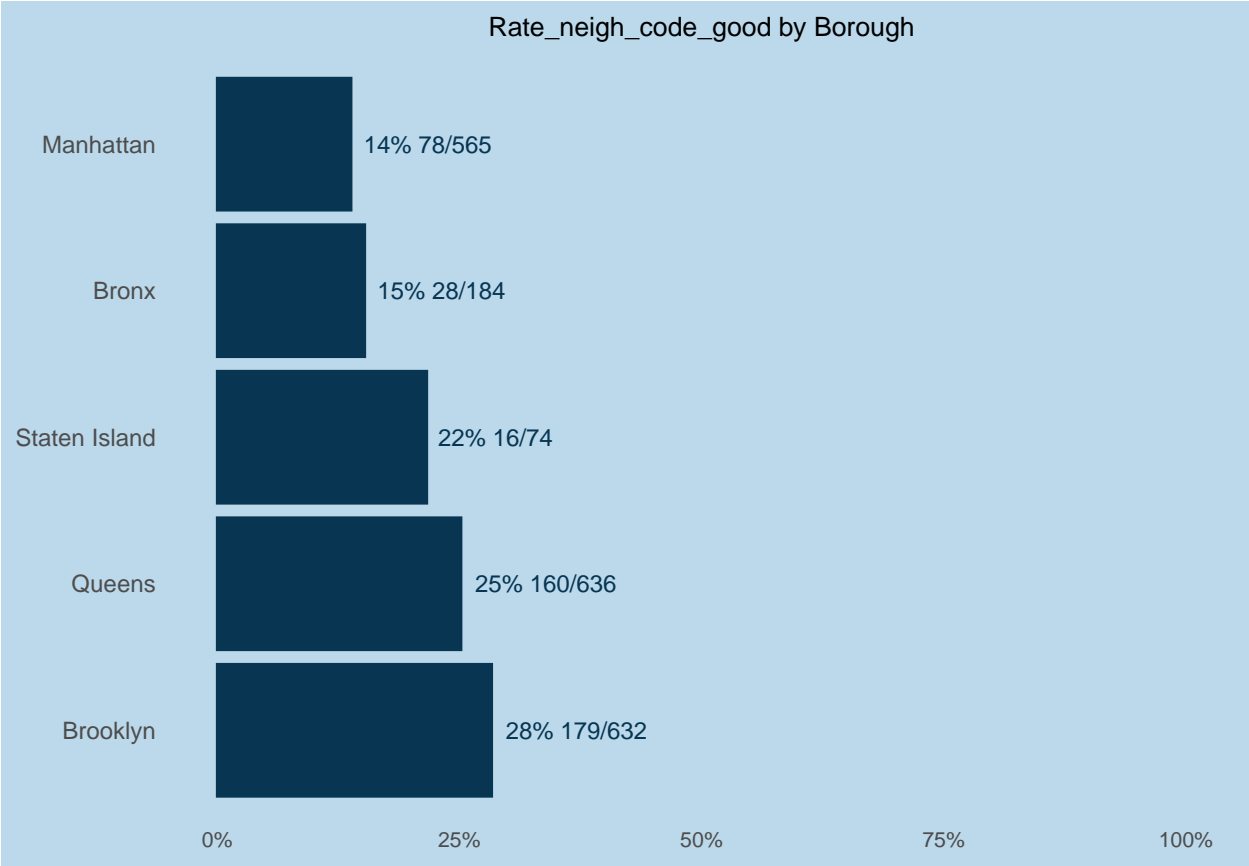
```
##
## [[1]]$hh_ch_0_17_bi$p.values
## [[1]]$hh_ch_0_17_bi$p.values$rate_neigh_code_bad
## household with children household without children
## household with children
## household without children
##
##
## [[1]]$hh_sn_65_bi
## [[1]]$hh_sn_65_bi$plot
```



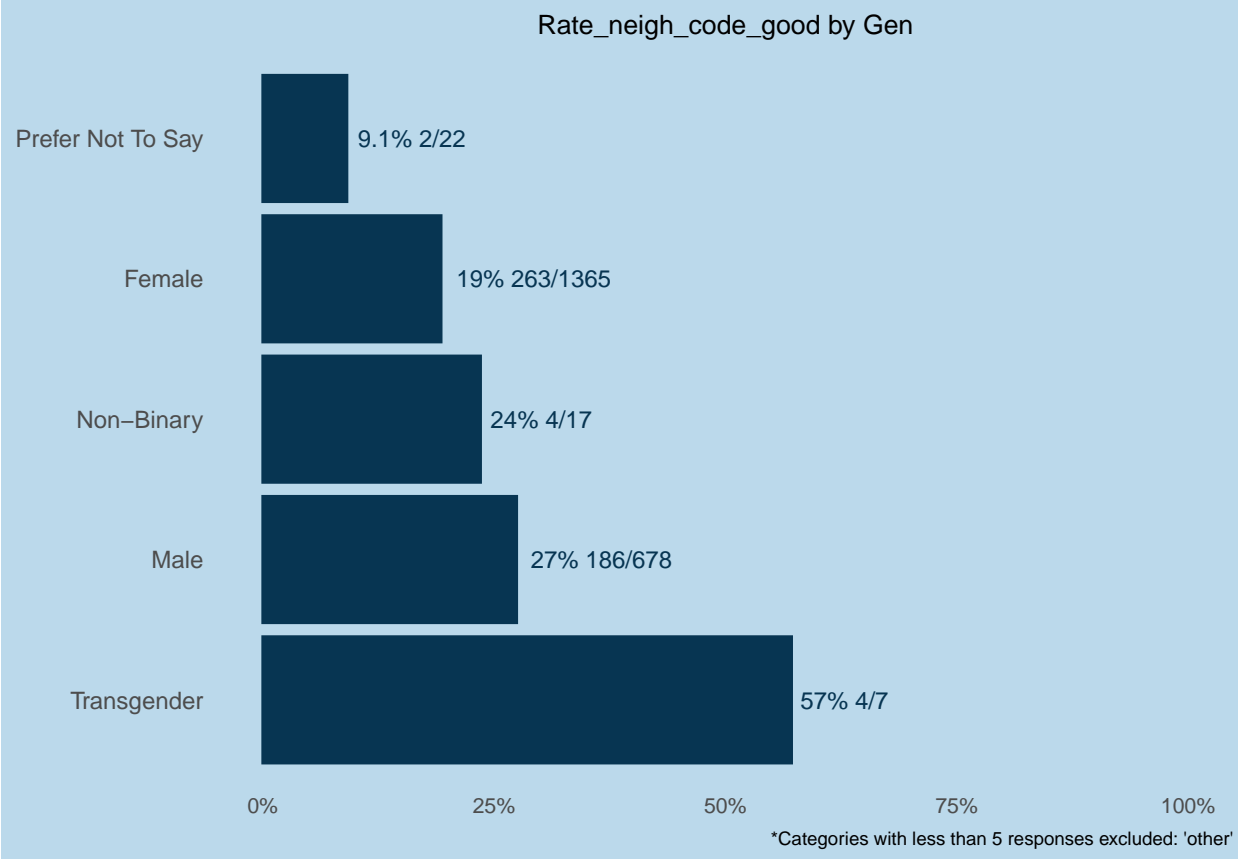
```
##
## [[1]]$hh_sn_65_bi$p.values
## [[1]]$hh_sn_65_bi$p.values$rate_neigh_code_bad
##           household without seniors household with seniors
## household without seniors           NA           0.0043
## household with seniors           0.0043           NA
##
##
##
## [[1]]$inc_dist
## [[1]]$inc_dist$plot
```



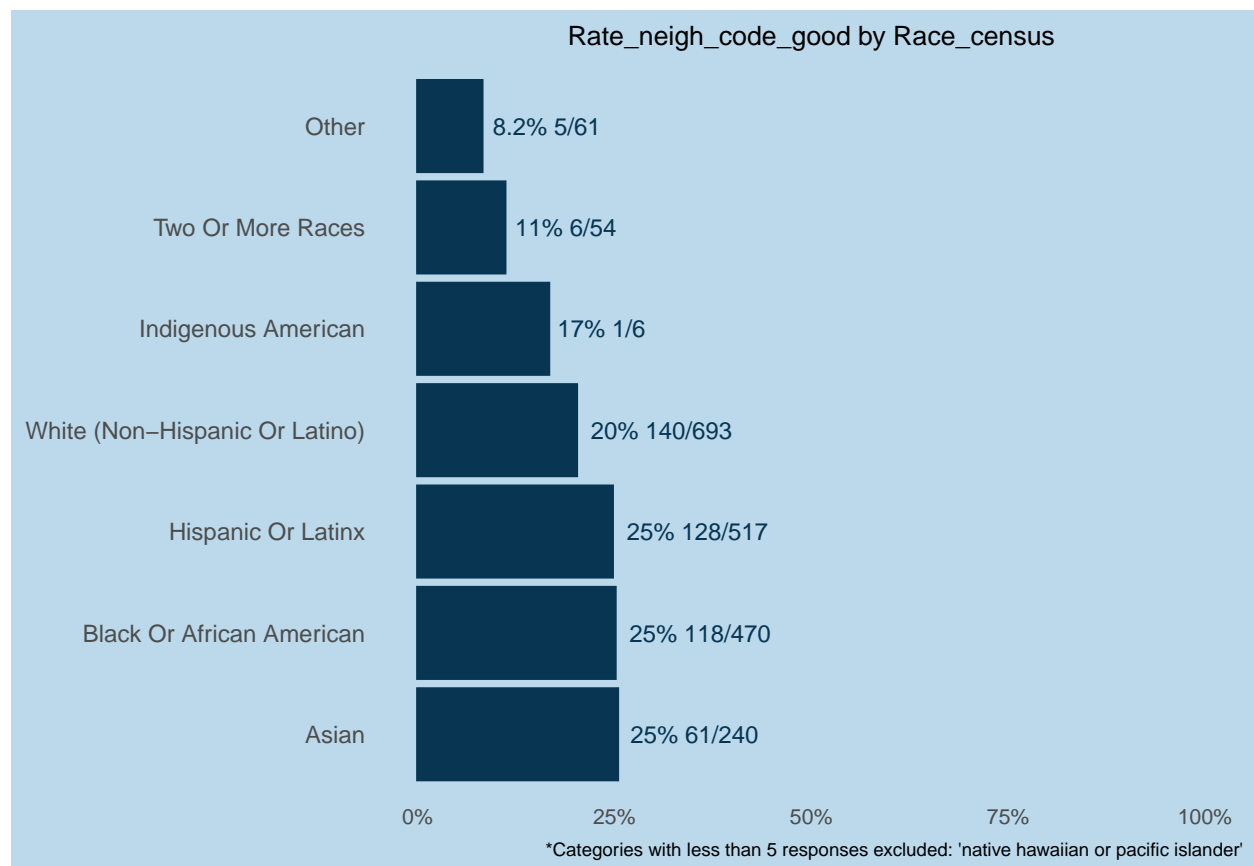
```
##
## [[1]]$inc_dist$p.values
## [[1]]$inc_dist$p.values$rate_neigh_code_bad
##               below 2020 poverty line below 2020 median income
## below 2020 poverty line                NA                NA
## below 2020 median income                NA                NA
## at or above 2020 median income          3e-05                NA
##               at or above 2020 median income
## below 2020 poverty line                3e-05
## below 2020 median income                NA
## at or above 2020 median income          NA
##
##
##
## [[2]]
## [[2]]$borough
## [[2]]$borough$plot
```

```
##
## [[2]]$borough$p.values
## [[2]]$borough$p.values$rate_neigh_code_good
##      manhattan  bronx staten island  queens brooklyn
## manhattan      NA     NA              NA  1.2e-06  1.6e-09
## bronx           NA     NA              NA  6.4e-03  4.7e-04
## staten island    NA     NA              NA     NA     NA
## queens          1.2e-06 0.00640          NA     NA     NA
## brooklyn         1.6e-09 0.00047          NA     NA     NA
##
##
##
## [[2]]$gen
## [[2]]$gen$plot
```

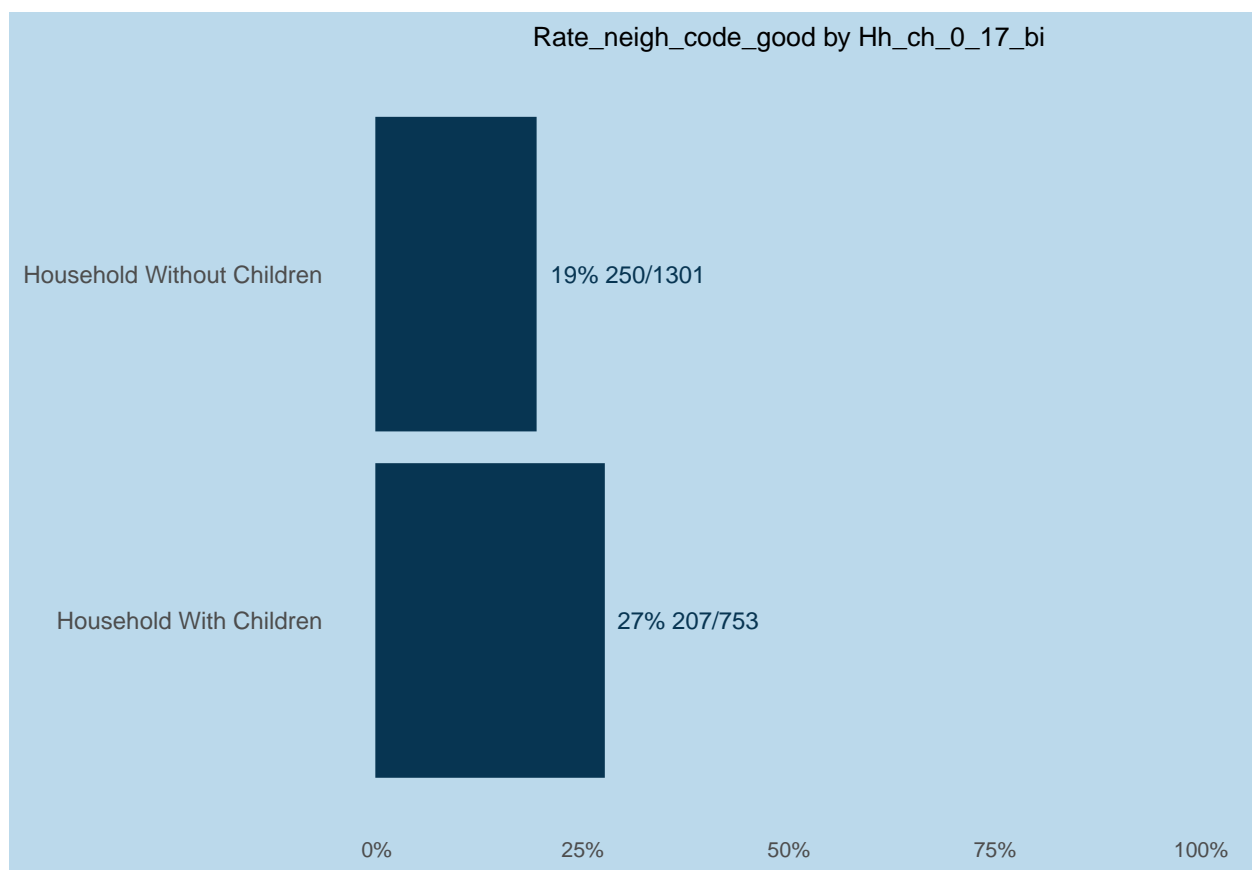


```
##
## [[2]]$gen$p.values
## [[2]]$gen$p.values$rate_neigh_code_good
##
##           prefer not to say  female non-binary    male transgender
## prefer not to say          NA      NA          NA      NA          NA
## female                   NA      NA          NA 3.5e-05      NA
## non-binary               NA      NA          NA      NA      NA
## male                     NA 3.5e-05          NA      NA      NA
## transgender              NA      NA          NA      NA      NA
##
##
##
## [[2]]$race_census
## [[2]]$race_census$plot
```



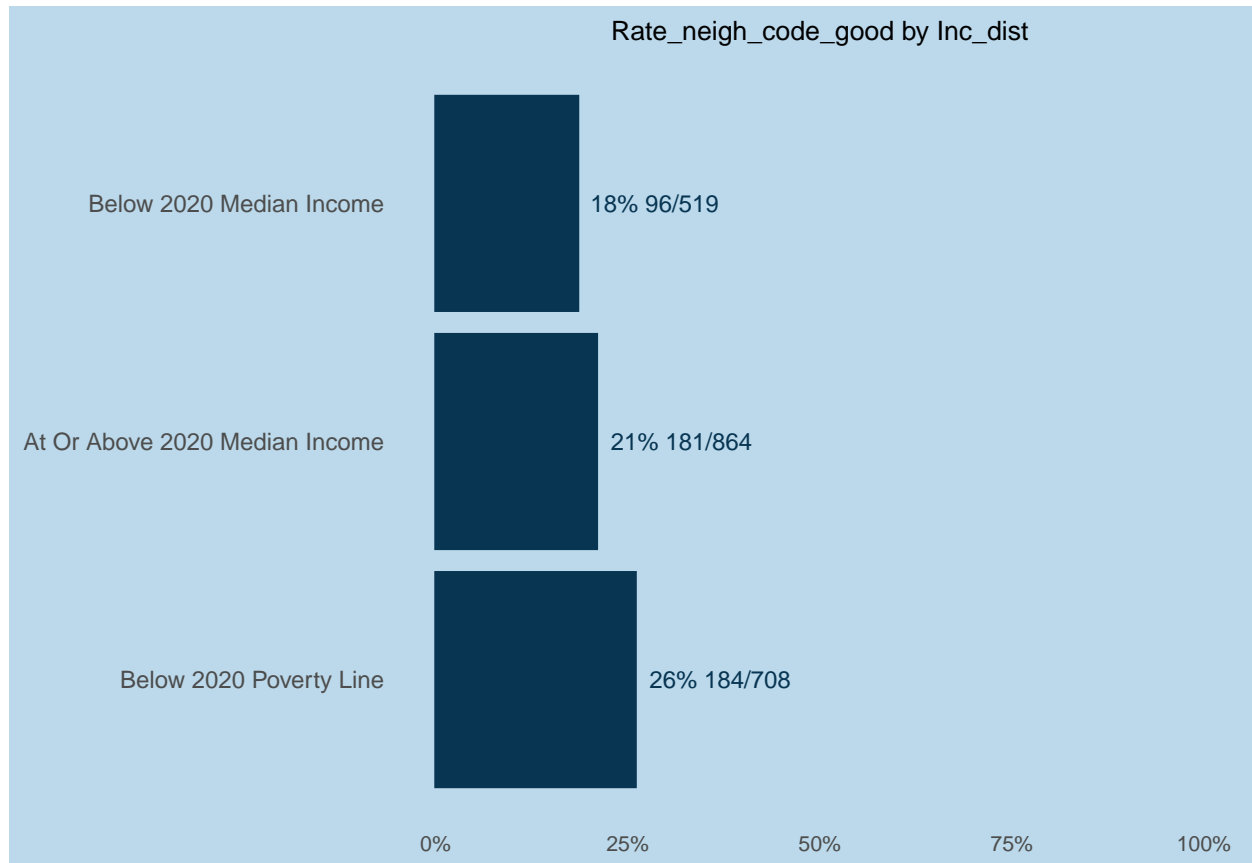
```
##
## [[2]]$race_census$p.values
## [[2]]$race_census$p.values$rate_neigh_code_good
##
##          other two or more races Indigenous American
## other          NA              NA                  NA
## two or more races          NA              NA                  NA
## Indigenous American          NA              NA                  NA
## white (non-hispanic or latino)          NA              NA                  NA
## hispanic or latinx          0.0060              NA                  NA
## black or african american          0.0054              NA                  NA
## asian          0.0063              NA                  NA
##
##          white (non-hispanic or latino)
## other          NA
## two or more races          NA
## Indigenous American          NA
## white (non-hispanic or latino)          NA
## hispanic or latinx          NA
## black or african american          NA
## asian          NA
##
##          hispanic or latinx black or african american
## other          0.006              0.0054
## two or more races          NA              NA
## Indigenous American          NA              NA
## white (non-hispanic or latino)          NA              NA
## hispanic or latinx          NA              NA
## black or african american          NA              NA
```

```
## asian
##
## other
## two or more races
## Indigenous American
## white (non-hispanic or latino)
## hispanic or latinx
## black or african american
## asian
##
##
##
## [[2]]$hh_ch_0_17_bi
## [[2]]$hh_ch_0_17_bi$plot
```



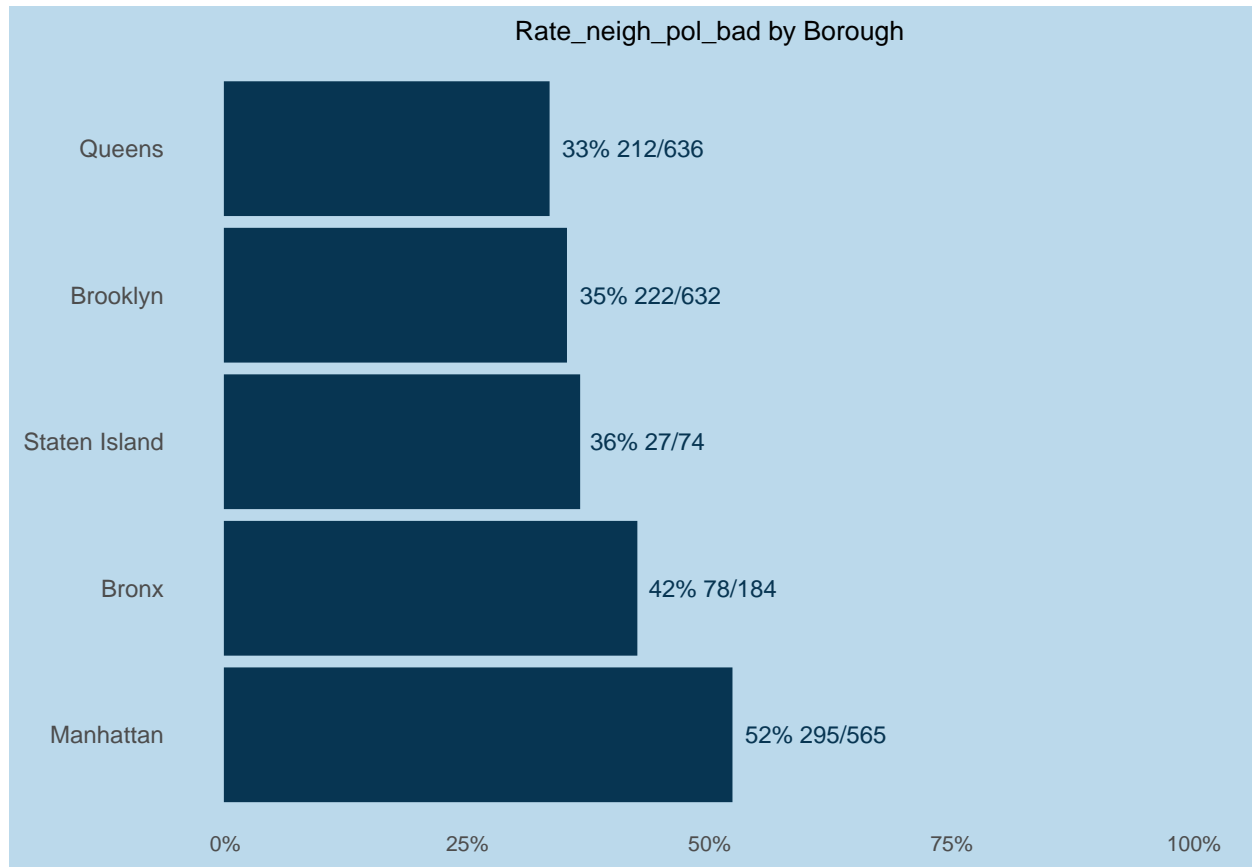
```
##
## [[2]]$hh_ch_0_17_bi$p.values
## [[2]]$hh_ch_0_17_bi$p.values$rate_neigh_code_good
##
## household without children household with children
## household without children
## household with children
##
##
##
## [[2]]$hh_sn_65_bi
```

```
## NULL
##
## [[2]]$inc_dist
## [[2]]$inc_dist$plot
```

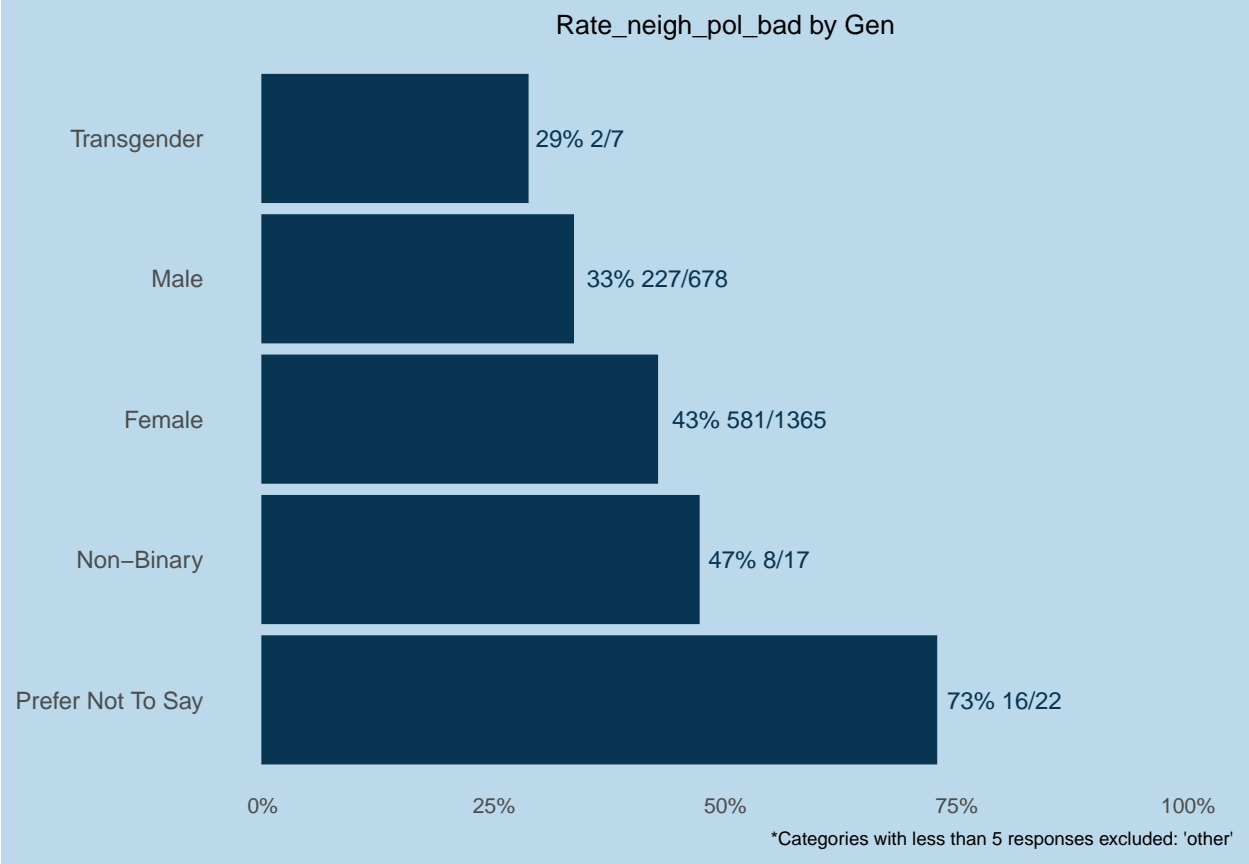


```
##
## [[2]]$inc_dist$p.values
## [[2]]$inc_dist$p.values$rate_neigh_code_good
##
## below 2020 median income
## below 2020 median income NA
## at or above 2020 median income NA
## below 2020 poverty line 0.0025
##
## at or above 2020 median income
## below 2020 median income NA
## at or above 2020 median income NA
## below 2020 poverty line NA
##
## below 2020 poverty line
## below 2020 median income 0.0025
## at or above 2020 median income NA
## below 2020 poverty line NA
##
##
##
##
## [[3]]
```

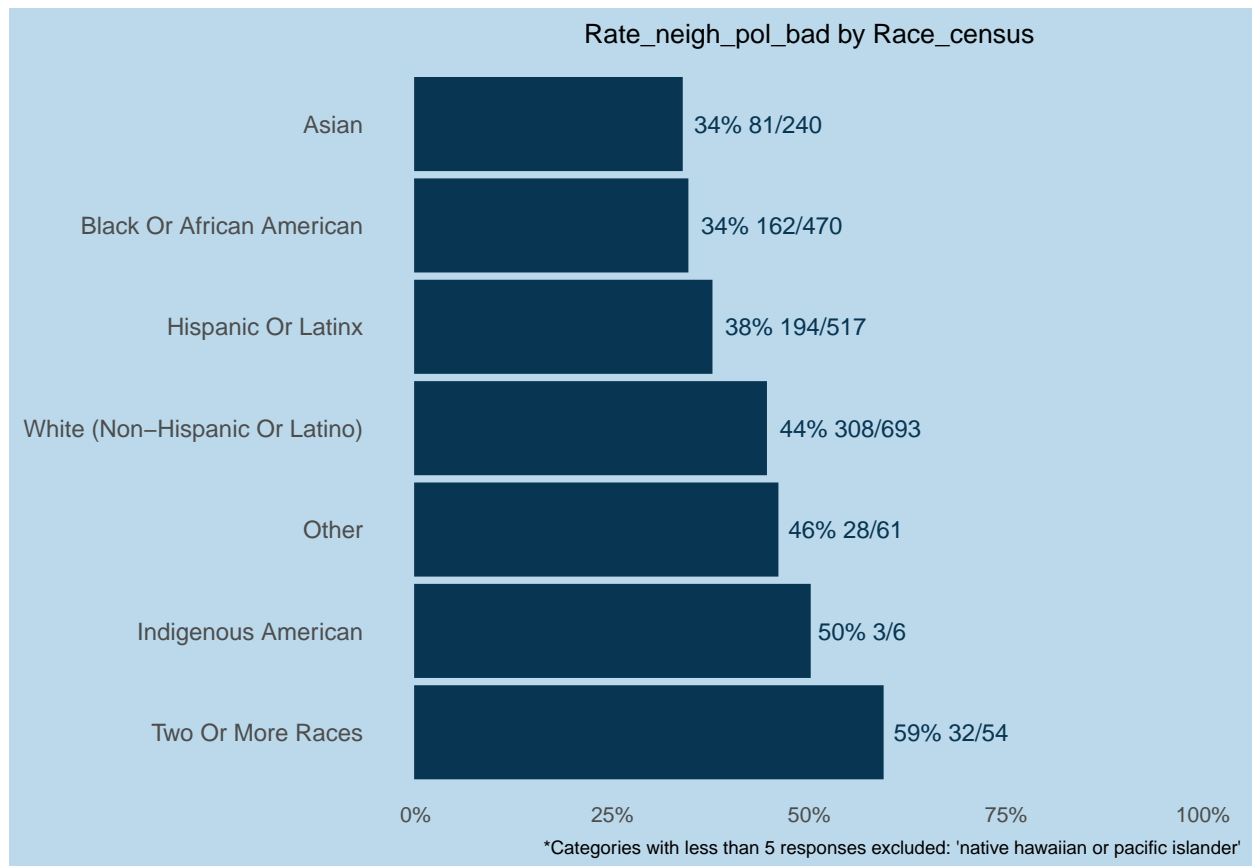
```
## [[3]]$borough
## [[3]]$borough$plot
```



```
##
## [[3]]$borough$p.values
## [[3]]$borough$p.values$rate_neigh_pol_bad
##               queens brooklyn staten island bronx manhattan
## queens              NA      NA              NA  NA  5.6e-11
## brooklyn             NA      NA              NA  NA  3.7e-09
## staten island        NA      NA              NA  NA      NA
## bronx                NA      NA              NA  NA      NA
## manhattan            5.6e-11 3.7e-09              NA  NA      NA
##
##
##
## [[3]]$gen
## [[3]]$gen$plot
```



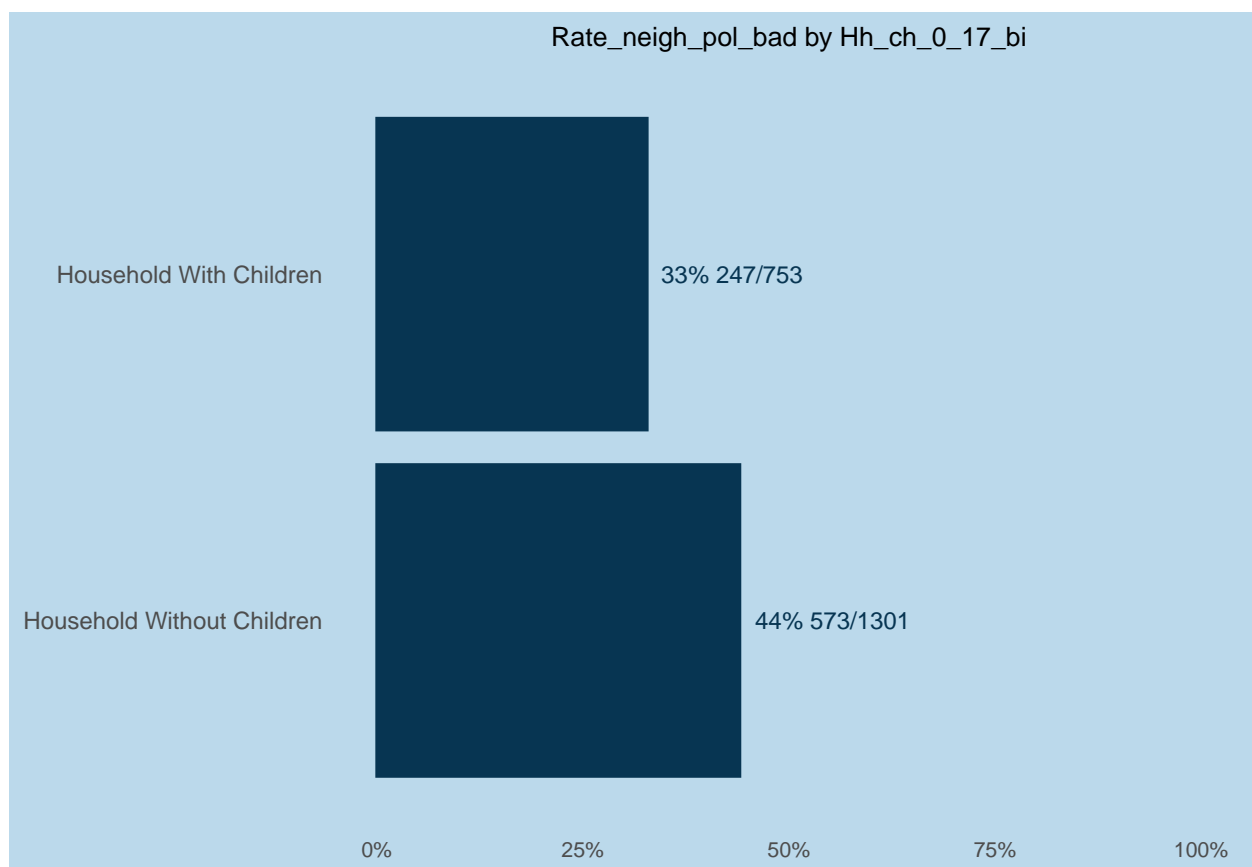
```
##
## [[3]]$gen$p.values
## [[3]]$gen$p.values$rate_neigh_pol_bad
##               transgender      male  female non-binary prefer not to say
## transgender              NA      NA      NA          NA              NA
## male                    NA      NA 9.4e-05          NA          0.00035
## female                  NA 9.4e-05      NA          NA          0.00890
## non-binary              NA      NA      NA          NA              NA
## prefer not to say       NA 3.5e-04 8.9e-03          NA              NA
##
##
##
## [[3]]$race_census
## [[3]]$race_census$plot
```



```
##
## [[3]]$race_census$p.values
## [[3]]$race_census$p.values$rate_neigh_pol_bad
##               asian black or african american
## asian                NA                      NA
## black or african american    NA                      NA
## hispanic or latinx          NA                      NA
## white (non-hispanic or latino) 0.00480          0.00083
## other                    NA                      NA
## Indigenous American          NA                      NA
## two or more races          0.00088          0.00062
##               hispanic or latinx
## asian                NA
## black or african american    NA
## hispanic or latinx          NA
## white (non-hispanic or latino)  NA
## other                    NA
## Indigenous American          NA
##               0.0031
##               white (non-hispanic or latino) other
## asian                0.00480    NA
## black or african american    0.00083    NA
## hispanic or latinx          NA    NA
## white (non-hispanic or latino)  NA    NA
## other                    NA    NA
## Indigenous American          NA    NA
```

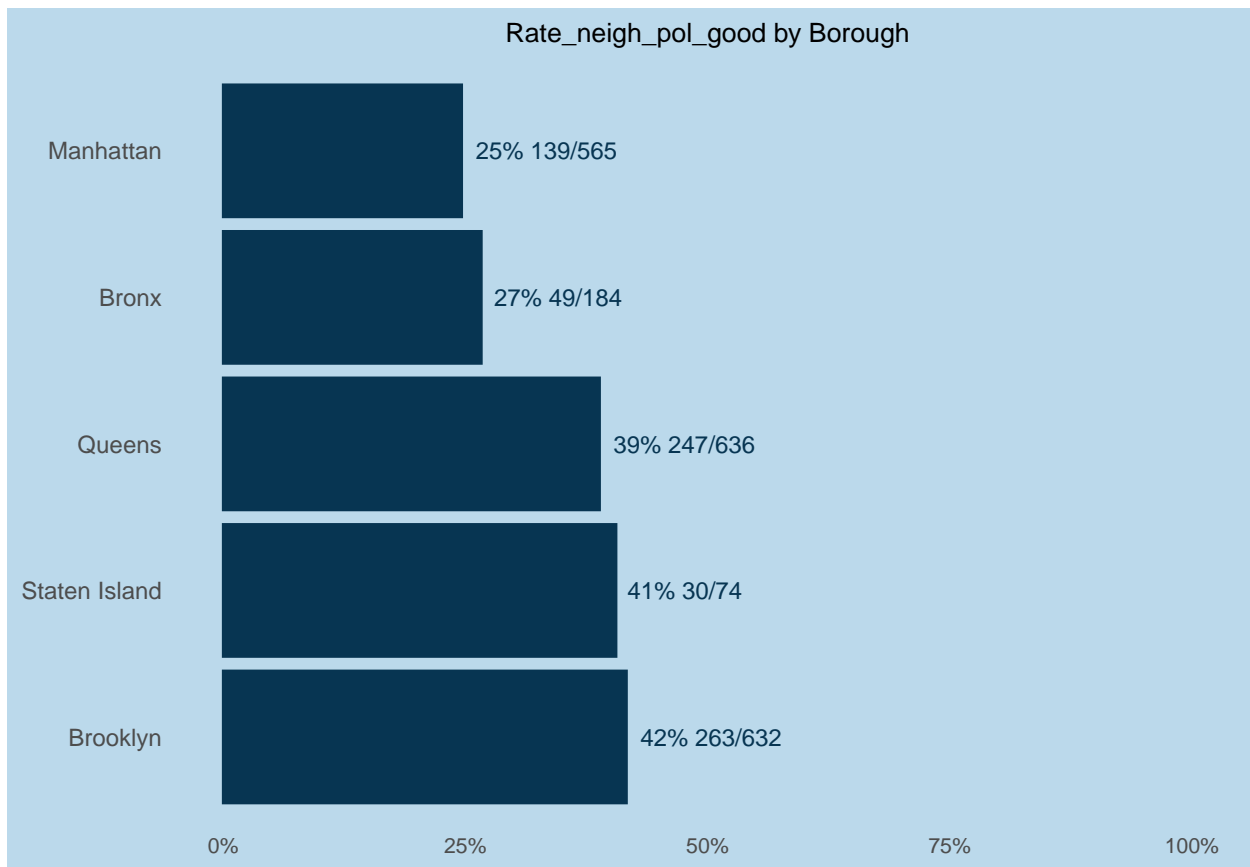


```
## two or more races
##
## asian
## black or african american
## hispanic or latinx
## white (non-hispanic or latino)
## other
## Indigenous American
## two or more races
##
##
## [[3]]$hh_ch_0_17_bi
## [[3]]$hh_ch_0_17_bi$plot
```

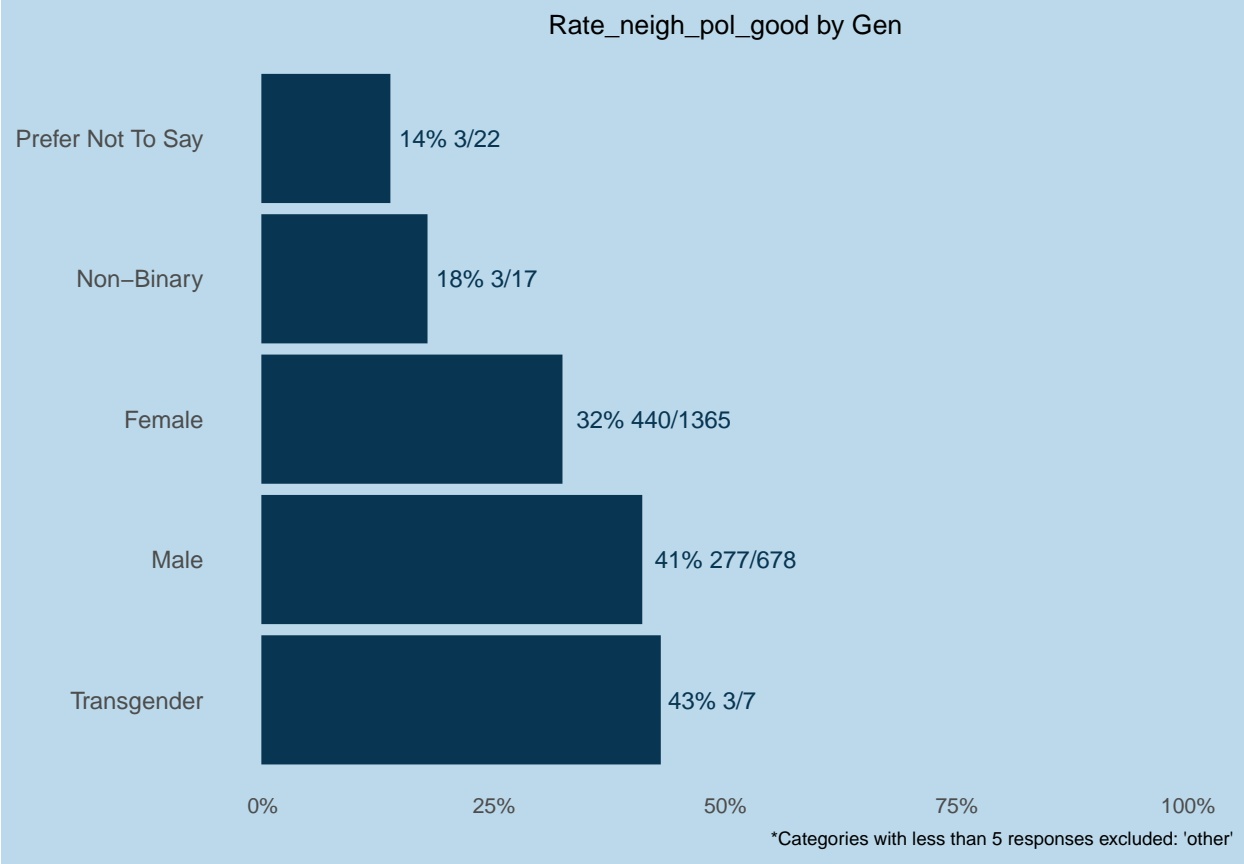


```
##
## [[3]]$hh_ch_0_17_bi$p.values
## [[3]]$hh_ch_0_17_bi$p.values$rate_neigh_pol_bad
##
## household with children household without children
## household with children NA 6.8e-07
## household without children 6.8e-07 NA
##
##
## [[3]]$hh_sn_65_bi
```

```
## NULL
##
## [[3]]$inc_dist
## NULL
##
##
## [[4]]
## [[4]]$borough
## [[4]]$borough$plot
```

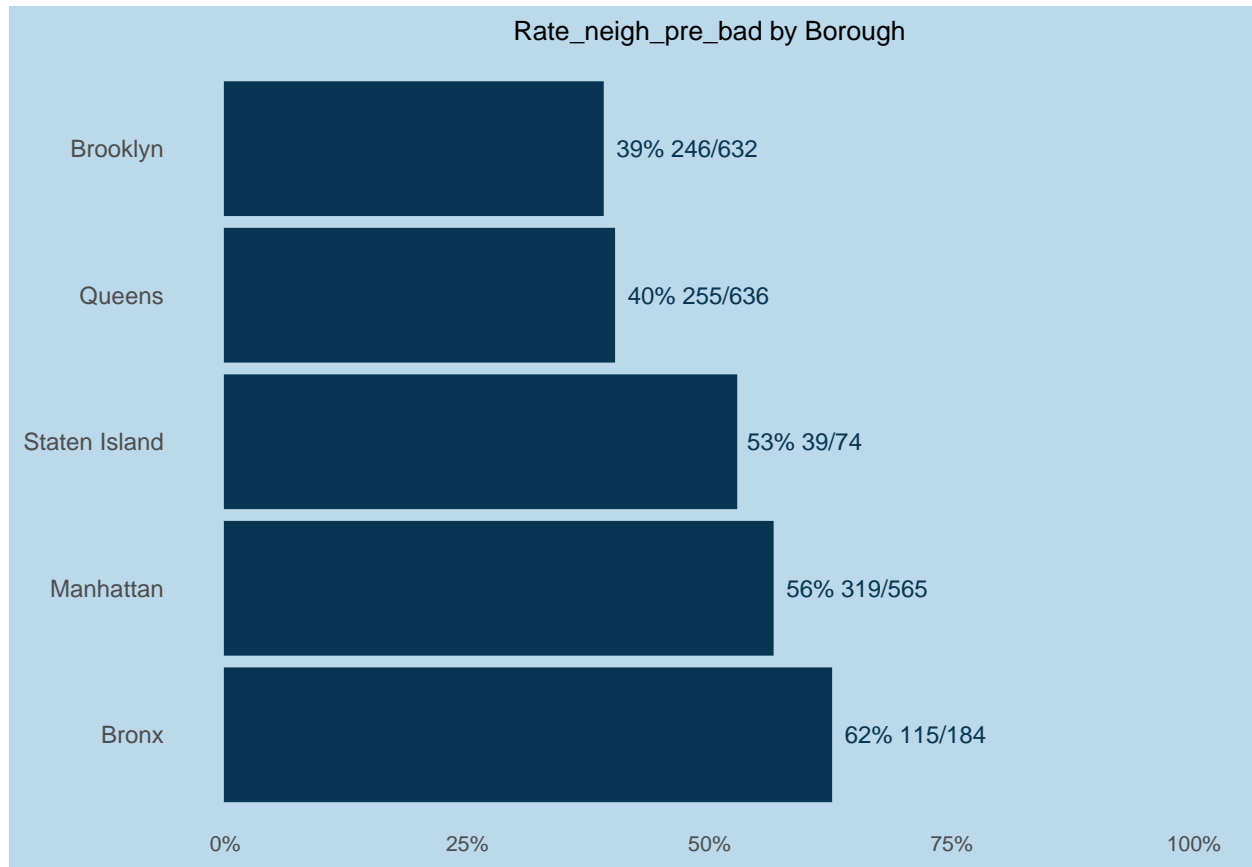


```
##
## [[4]]$borough$p.values
## [[4]]$borough$p.values$rate_neigh_pol_good
##
##      manhattan  bronx  queens  staten  island  brooklyn
## manhattan      NA      NA  1.9e-07      0.0054  7.3e-10
## bronx          NA      NA  3.2e-03      NA      3.2e-04
## queens      1.9e-07  0.00320      NA      NA      NA
## staten island  5.4e-03      NA      NA      NA      NA
## brooklyn      7.3e-10  0.00032      NA      NA      NA
##
##
##
## [[4]]$gen
## [[4]]$gen$plot
```

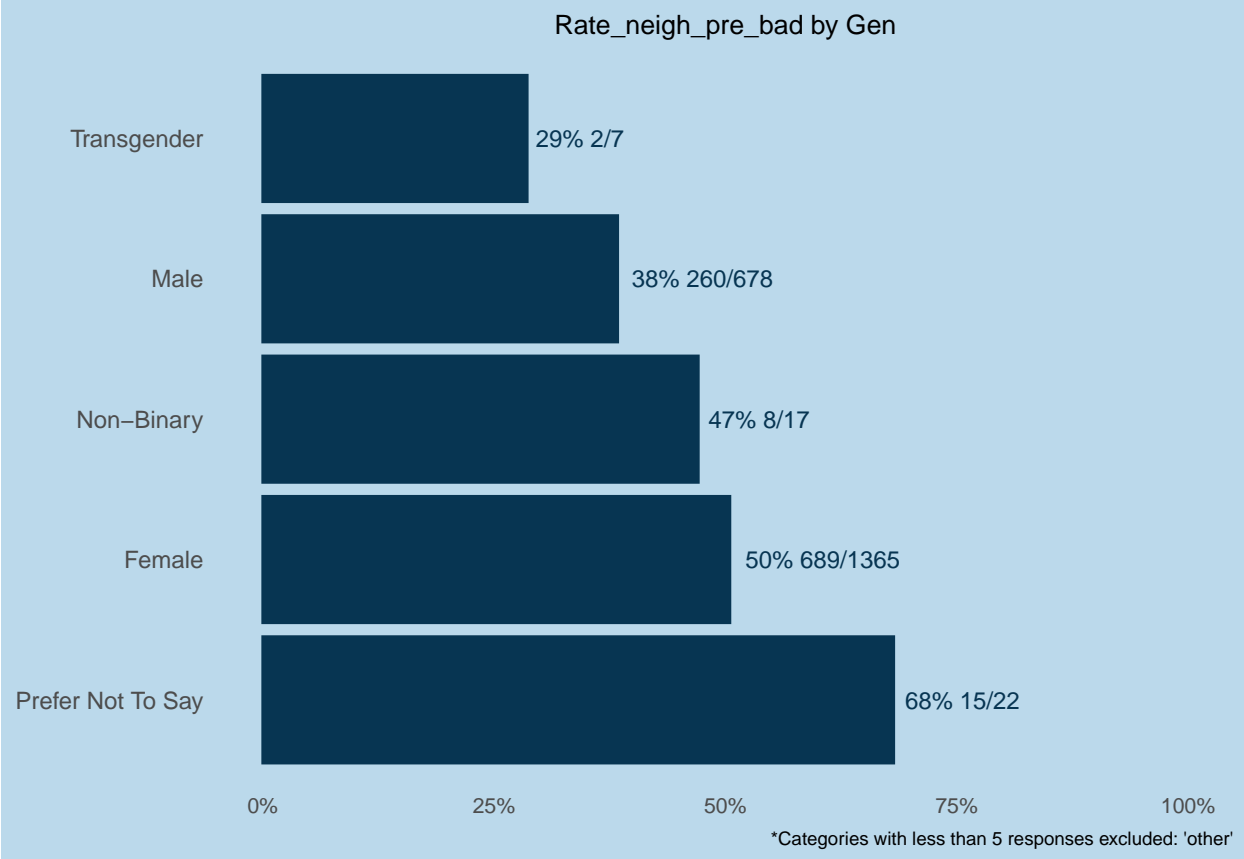


```
##
## [[4]]$gen$p.values
## [[4]]$gen$p.values$rate_neigh_pol_good
##           prefer not to say non-binary  female    male transgender
## prefer not to say          NA         NA      NA      NA          NA
## non-binary                 NA         NA      NA      NA          NA
## female                     NA         NA      NA 0.00015          NA
## male                       NA         NA 0.00015      NA          NA
## transgender                 NA         NA      NA      NA          NA
##
##
##
## [[4]]$race_census
## NULL
##
## [[4]]$hh_ch_0_17_bi
## NULL
##
## [[4]]$hh_sn_65_bi
## NULL
##
## [[4]]$inc_dist
## NULL
##
##
## [[5]]
```

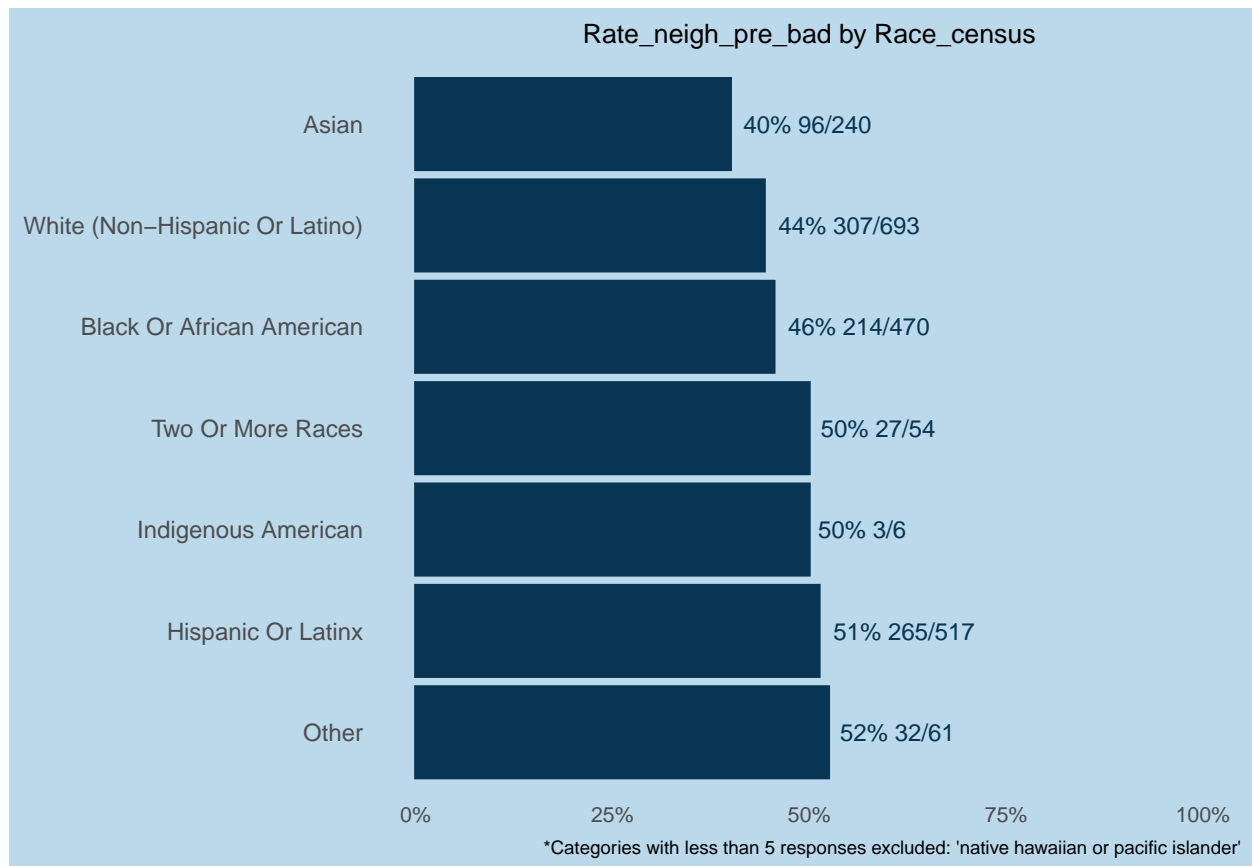
```
## [[5]]$borough
## [[5]]$borough$plot
```



```
##
## [[5]]$borough$p.values
## [[5]]$borough$p.values$rate_neigh_pre_bad
##      brooklyn  queens  staten island  manhattan  bronx
## brooklyn      NA      NA            NA    1.9e-09  2.4e-08
## queens        NA      NA            NA    2.0e-08  1.2e-07
## staten island  NA      NA            NA         NA      NA
## manhattan     1.9e-09  2.0e-08        NA         NA      NA
## bronx         2.4e-08  1.2e-07        NA         NA      NA
##
##
##
## [[5]]$gen
## [[5]]$gen$plot
```

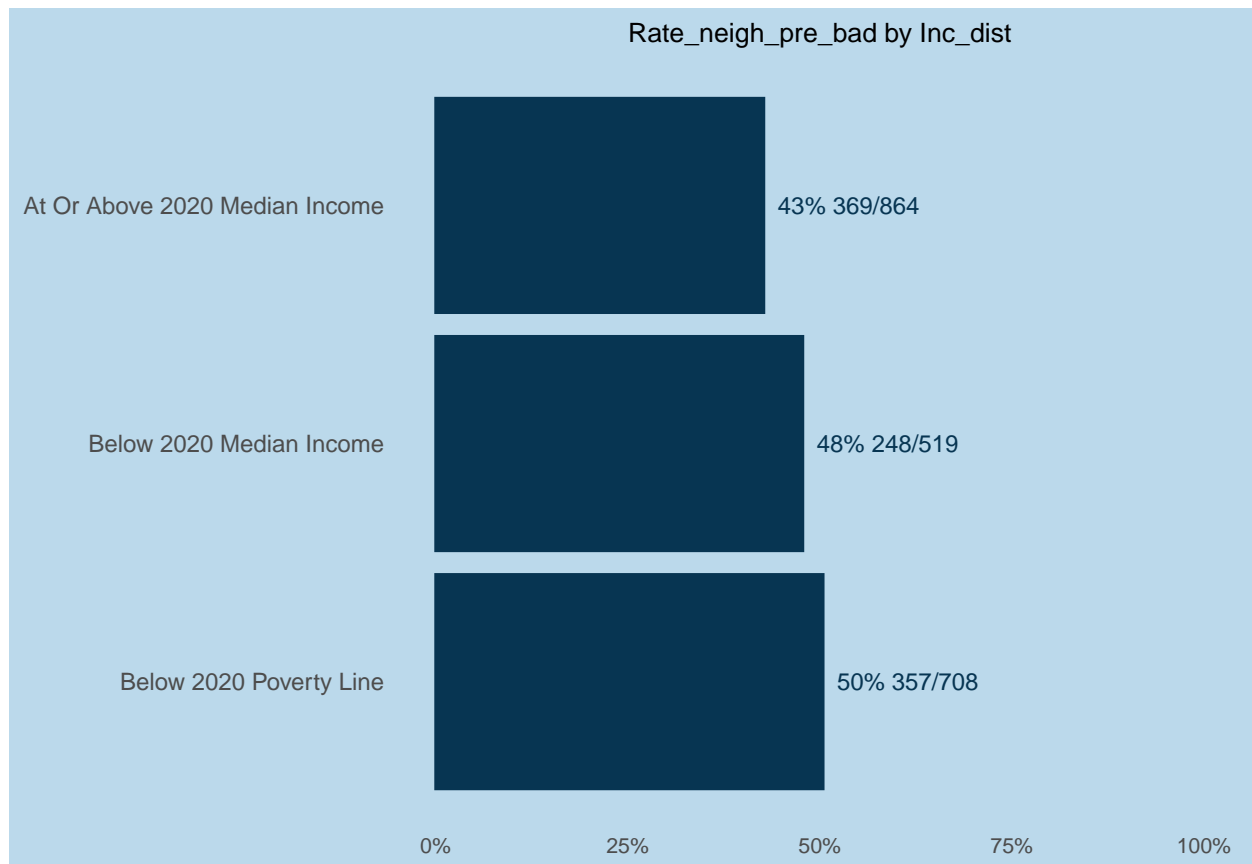


```
##
## [[5]]$gen$p.values
## [[5]]$gen$p.values$rate_neigh_pre_bad
##
##      transgender      male non-binary  female prefer not to say
## transgender          NA      NA          NA      NA              NA
## male                 NA      NA          NA  2.9e-07            0.0094
## non-binary           NA      NA          NA      NA              NA
## female               NA  2.9e-07          NA      NA              NA
## prefer not to say    NA  9.4e-03          NA      NA              NA
##
##
##
## [[5]]$race_census
## [[5]]$race_census$plot
```



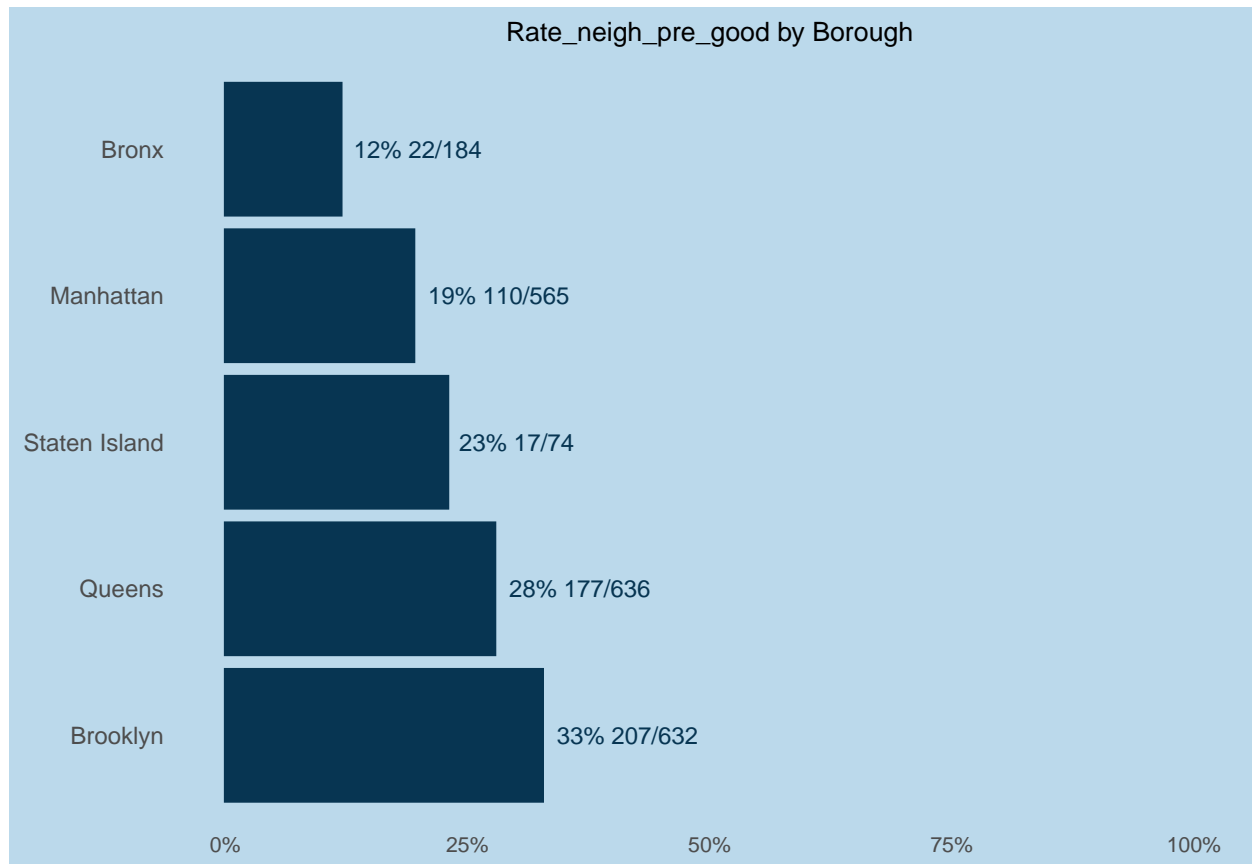
```
##
## [[5]]$race_census$p.values
## [[5]]$race_census$p.values$rate_neigh_pre_bad
##               asian white (non-hispanic or latino)
## asian                NA                          NA
## white (non-hispanic or latino)  NA              NA
## black or african american      NA              NA
## Indigenous American            NA              NA
## two or more races              NA              NA
## hispanic or latinx             0.005           NA
## other                         NA              NA
##               black or african american Indigenous American
## asian                NA                          NA
## white (non-hispanic or latino)  NA              NA
## black or african american      NA              NA
## Indigenous American            NA              NA
## two or more races              NA              NA
## hispanic or latinx             NA              NA
## other                         NA              NA
##               two or more races hispanic or latinx other
## asian                NA                      0.005    NA
## white (non-hispanic or latino)  NA              NA    NA
## black or african american      NA              NA    NA
## Indigenous American            NA              NA    NA
## two or more races              NA              NA    NA
## hispanic or latinx             NA              NA    NA
```

```
## other NA NA NA
##
##
##
## [[5]]$hh_ch_0_17_bi
## NULL
##
## [[5]]$hh_sn_65_bi
## NULL
##
## [[5]]$inc_dist
## [[5]]$inc_dist$plot
```

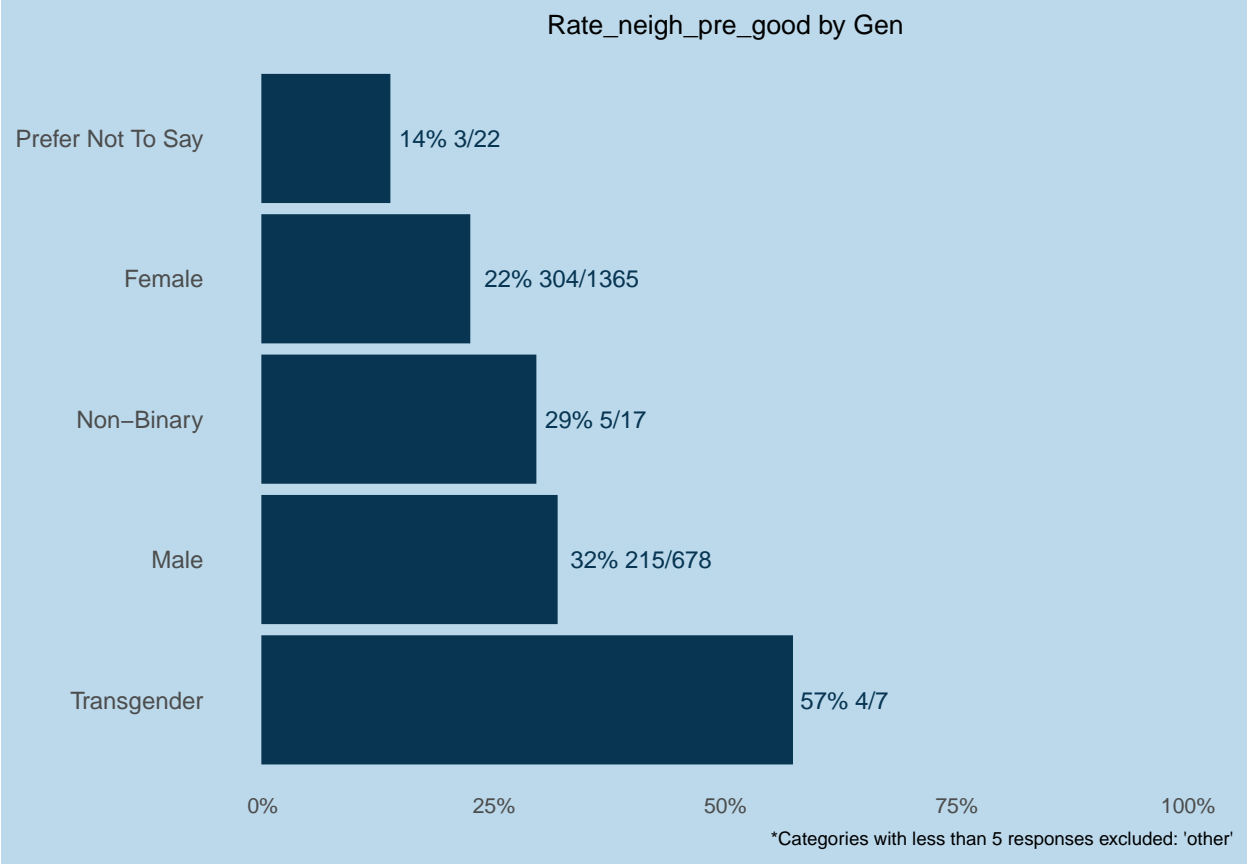


```
##
## [[5]]$inc_dist$p.values
## [[5]]$inc_dist$p.values$rate_neigh_pre_bad
## at or above 2020 median income
## at or above 2020 median income NA
## below 2020 median income NA
## below 2020 poverty line 0.0027
## below 2020 median income below 2020 poverty line
## at or above 2020 median income NA 0.0027
## below 2020 median income NA NA
## below 2020 poverty line NA NA
##
```

```
##
##
##
## [[6]]
## [[6]]$borough
## [[6]]$borough$plot
```

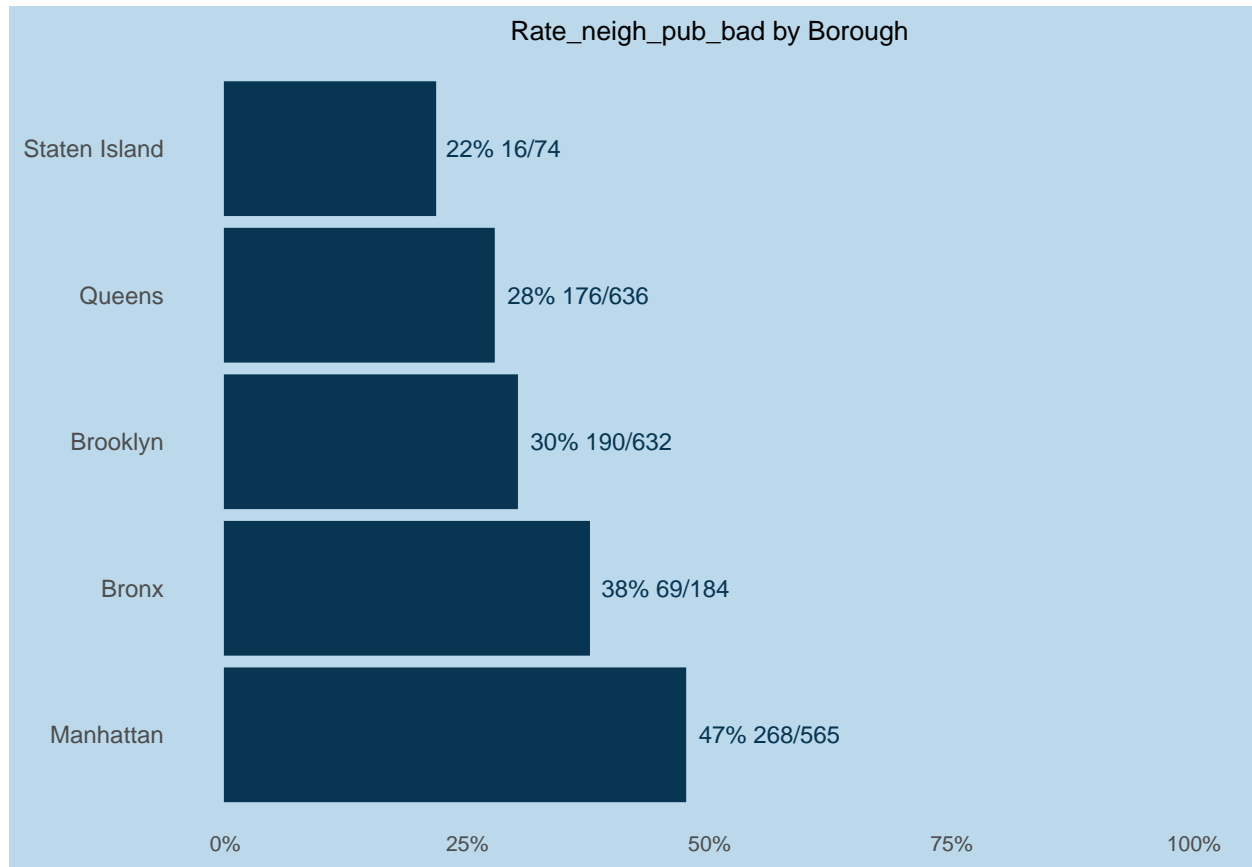


```
##
## [[6]]$borough$p.values
## [[6]]$borough$p.values$rate_neigh_pre_good
##
##      bronx manhattan staten island  queens brooklyn
## bronx      NA      NA      NA 1.5e-05  5.6e-08
## manhattan  NA      NA      NA 8.9e-04  2.8e-07
## staten island NA      NA      NA      NA      NA
## queens    1.5e-05  8.9e-04      NA      NA      NA
## brooklyn   5.6e-08  2.8e-07      NA      NA      NA
##
##
##
## [[6]]$gen
## [[6]]$gen$plot
```

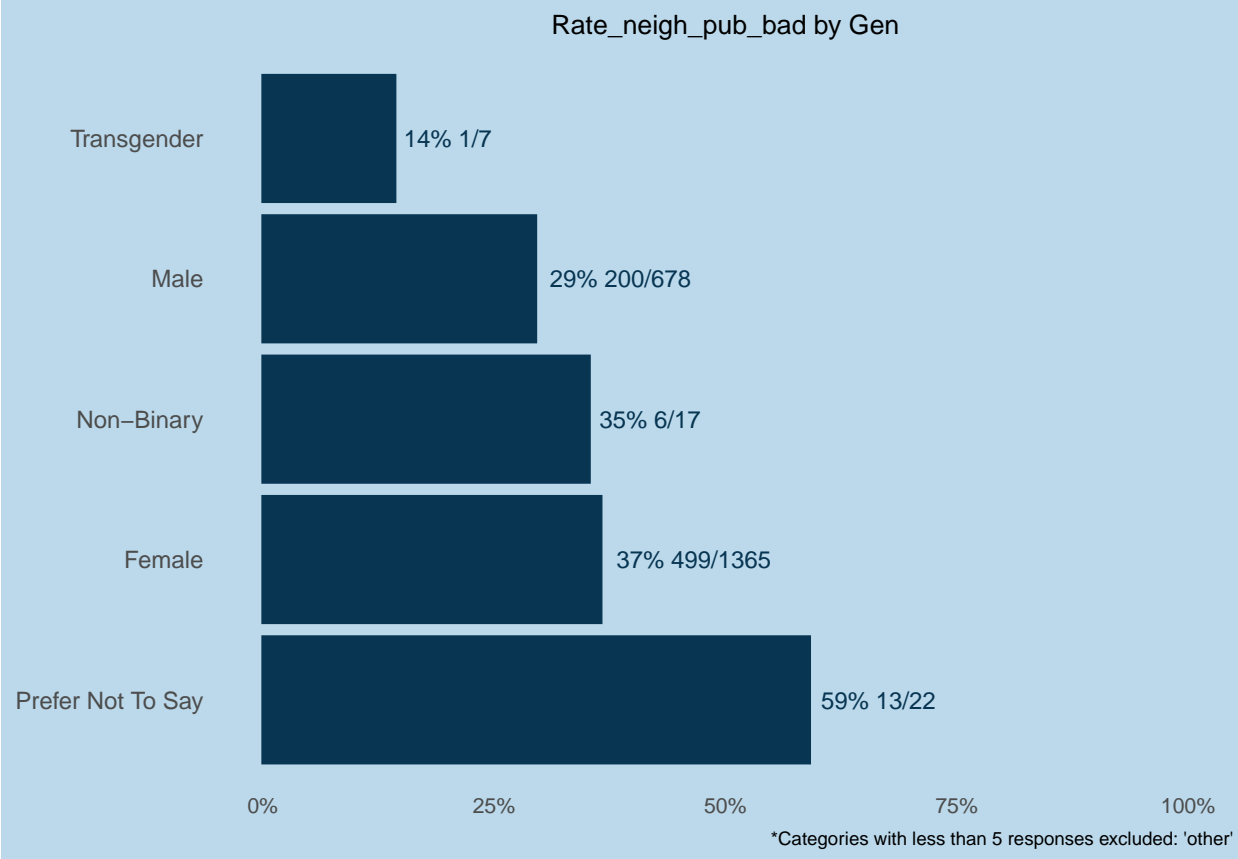



```
##
## [[6]]$gen$p.values
## [[6]]$gen$p.values$rate_neigh_pre_good
##           prefer not to say  female non-binary    male transgender
## prefer not to say          NA      NA          NA      NA      NA
## female                    NA      NA          NA 5.1e-06      NA
## non-binary                 NA      NA          NA      NA      NA
## male                      NA 5.1e-06          NA      NA      NA
## transgender                NA      NA          NA      NA      NA
##
##
##
## [[6]]$race_census
## NULL
##
## [[6]]$hh_ch_0_17_bi
## NULL
##
## [[6]]$hh_sn_65_bi
## NULL
##
## [[6]]$inc_dist
## NULL
##
##
## [[7]]
```

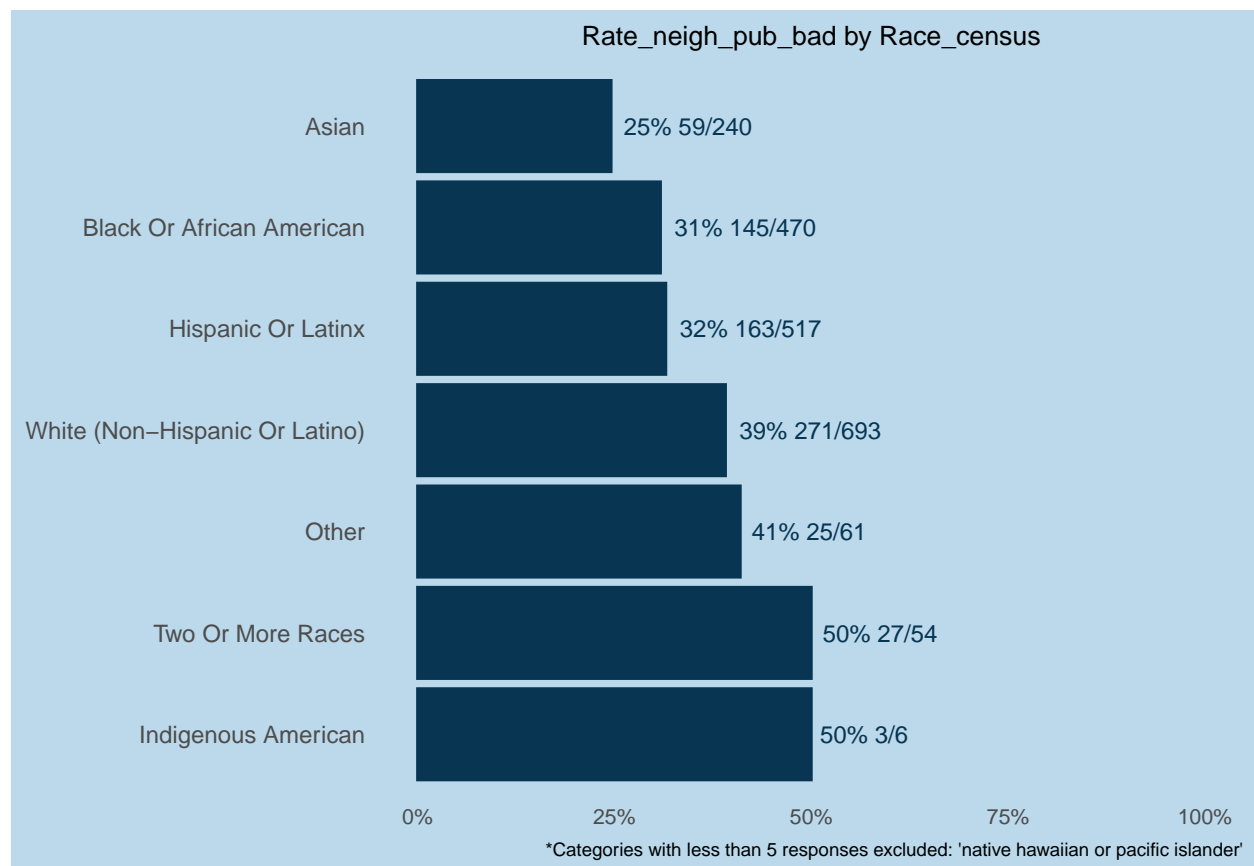
```
## [[7]]$borough
## [[7]]$borough$plot
```



```
##
## [[7]]$borough$p.values
## [[7]]$borough$p.values$rate_neigh_pub_bad
##          staten island  queens brooklyn bronx manhattan
## staten island          NA      NA      NA      NA  4.6e-05
## queens                 NA      NA      NA      NA  2.2e-12
## brooklyn                NA      NA      NA      NA  9.8e-10
## bronx                   NA      NA      NA      NA      NA
## manhattan               4.6e-05 2.2e-12 9.8e-10      NA      NA
##
##
##
## [[7]]$gen
## [[7]]$gen$plot
```

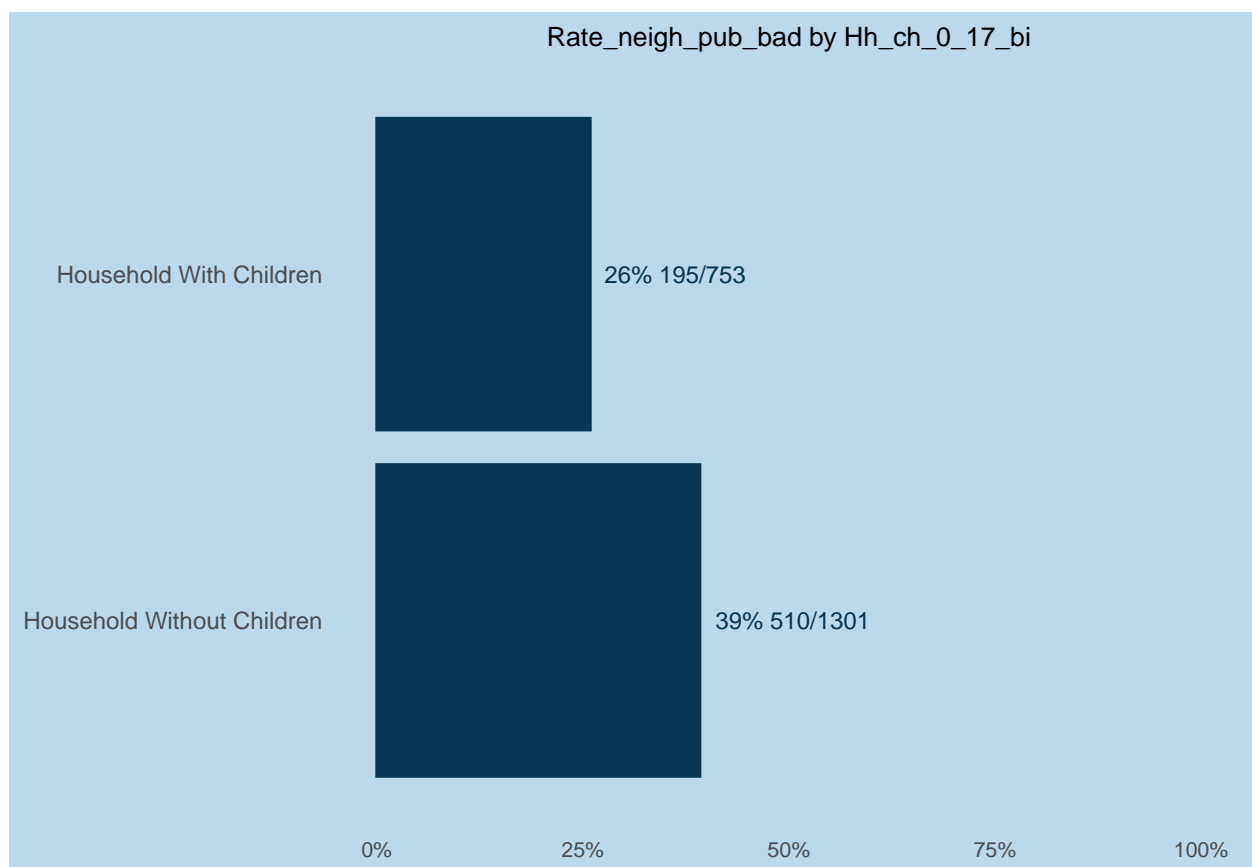


```
##
## [[7]]$gen$p.values
## [[7]]$gen$p.values$rate_neigh_pub_bad
##               transgender    male non-binary female prefer not to say
## transgender                NA     NA         NA     NA             NA
## male                      NA     NA         NA 0.0018         0.0063
## non-binary                NA     NA         NA     NA             NA
## female                    NA 0.0018         NA     NA             NA
## prefer not to say         NA 0.0063         NA     NA             NA
##
##
##
## [[7]]$race_census
## [[7]]$race_census$plot
```



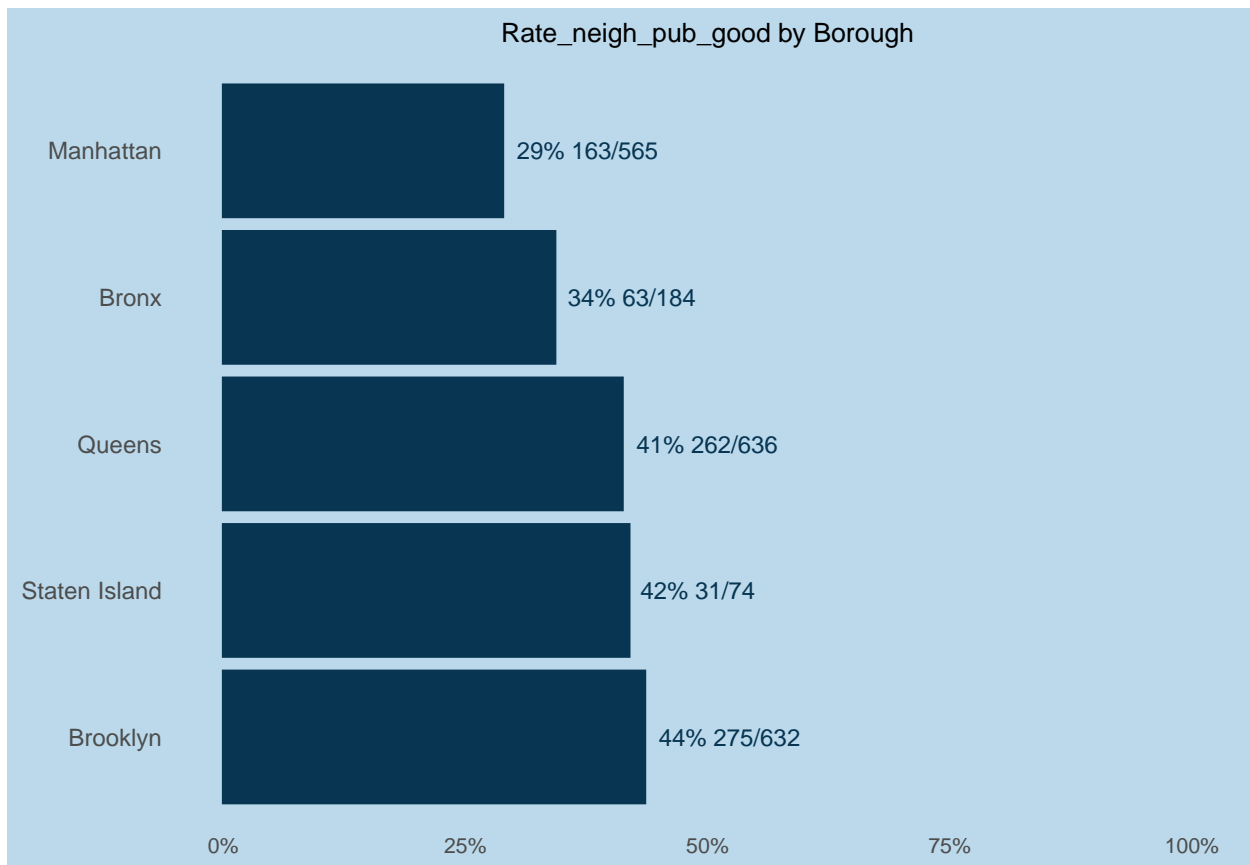
```
##
## [[7]]$race_census$p.values
## [[7]]$race_census$p.values$rate_neigh_pub_bad
##               asian black or african american
## asian                NA                      NA
## black or african american    NA                      NA
## hispanic or latinx           NA                      NA
## white (non-hispanic or latino) 0.00007          0.0048
## other                      NA                      NA
## Indigenous American          NA                      NA
## two or more races           0.00039          0.0073
##               hispanic or latinx
## asian                NA
## black or african american    NA
## hispanic or latinx           NA
## white (non-hispanic or latino) 0.0079
## other                      NA
## Indigenous American          NA
## two or more races           0.0096
##               white (non-hispanic or latino) other
## asian                0.00007    NA
## black or african american    0.00480    NA
## hispanic or latinx           0.00790    NA
## white (non-hispanic or latino)    NA    NA
## other                      NA    NA
## Indigenous American          NA    NA
```

```
## two or more races
##
## asian
## black or african american
## hispanic or latinx
## white (non-hispanic or latino)
## other
## Indigenous American
## two or more races
##
##
## [[7]]$hh_ch_0_17_bi
## [[7]]$hh_ch_0_17_bi$plot
```

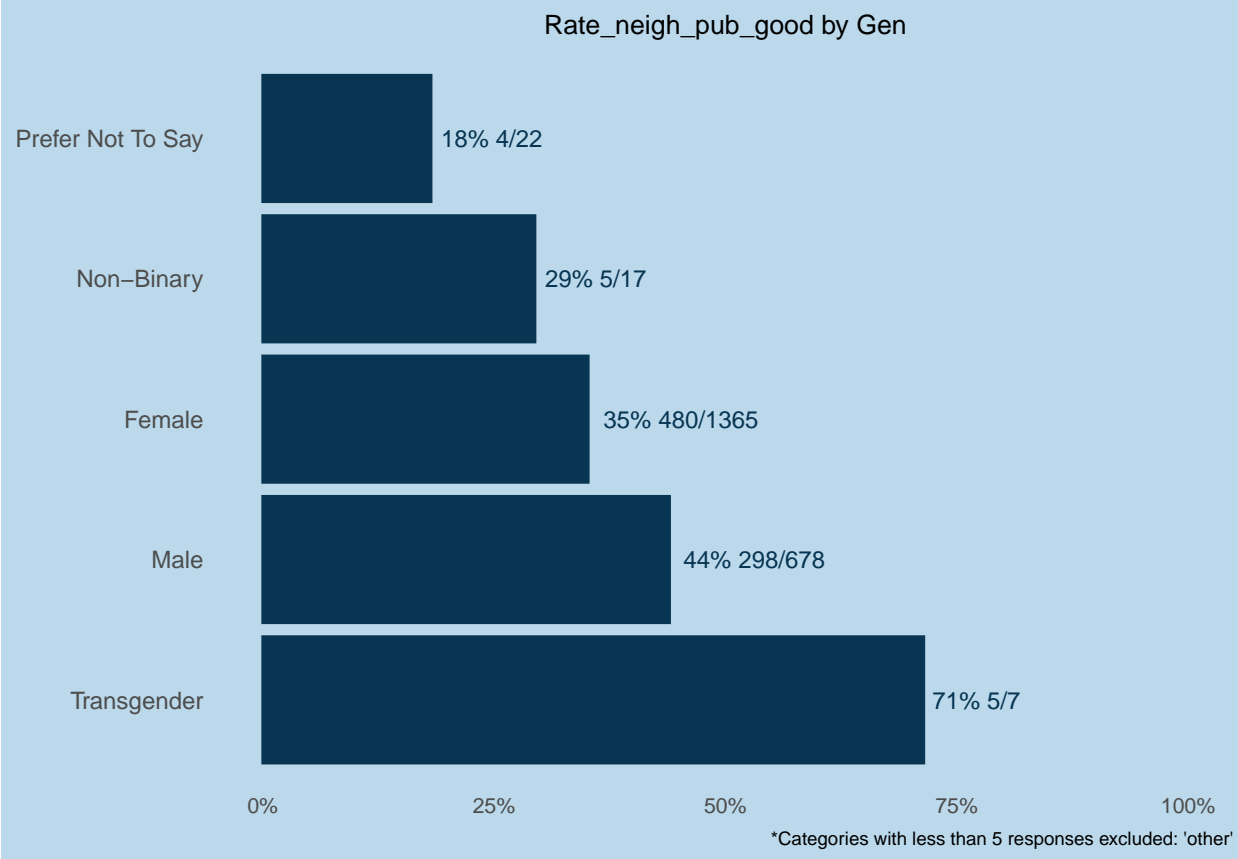


```
##
## [[7]]$hh_ch_0_17_bi$p.values
## [[7]]$hh_ch_0_17_bi$p.values$rate_neigh_pub_bad
##
## household with children household without children
## household with children NA 1.3e-09
## household without children 1.3e-09 NA
##
##
## [[7]]$hh_sn_65_bi
```

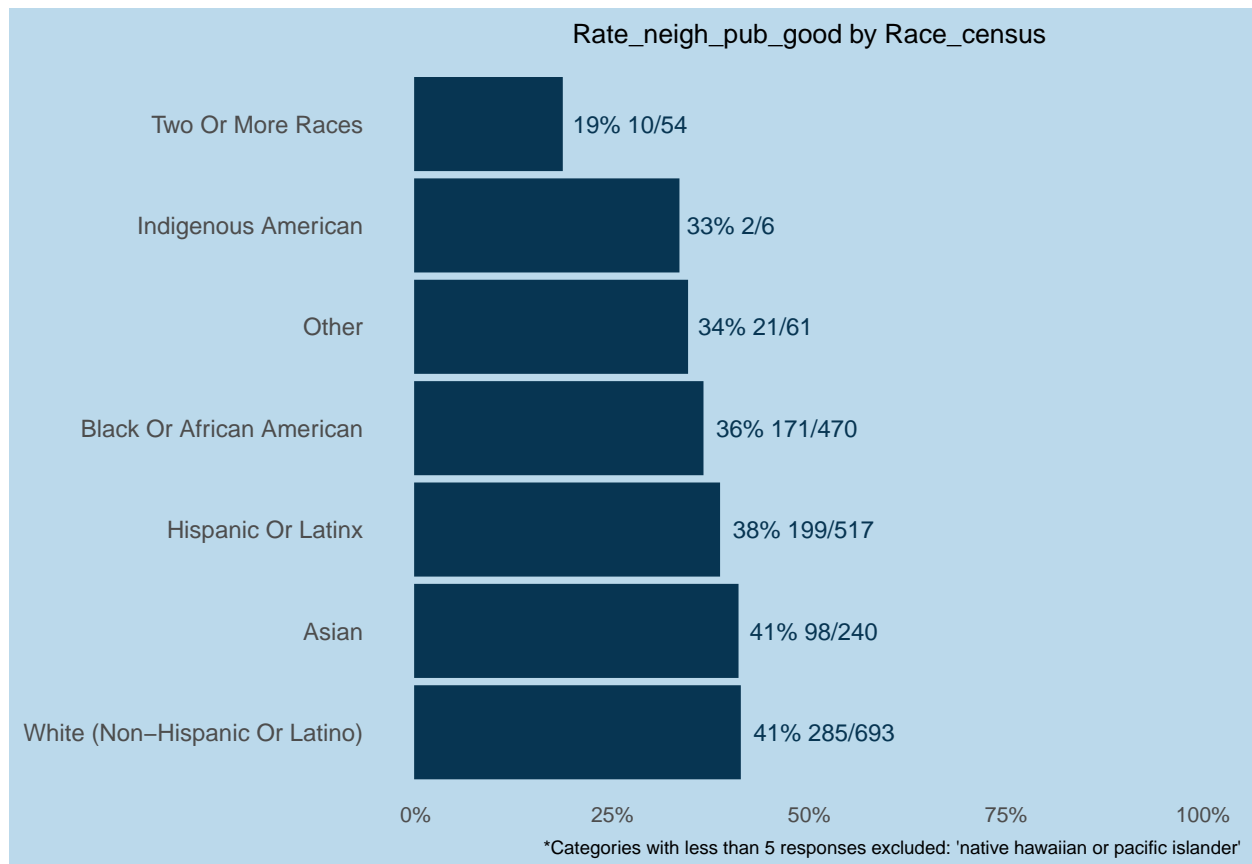
```
## NULL
##
## [[7]]$inc_dist
## NULL
##
##
## [[8]]
## [[8]]$borough
## [[8]]$borough$plot
```



```
##
## [[8]]$borough$p.values
## [[8]]$borough$p.values$rate_neigh_pub_good
##
##      manhattan bronx  queens staten island brooklyn
## manhattan      NA   NA 1.1e-05      NA      2e-07
## bronx          NA   NA    NA      NA      NA
## queens      1.1e-05   NA    NA      NA      NA
## staten island    NA   NA    NA      NA      NA
## brooklyn      2.0e-07   NA    NA      NA      NA
##
##
##
## [[8]]$gen
## [[8]]$gen$plot
```



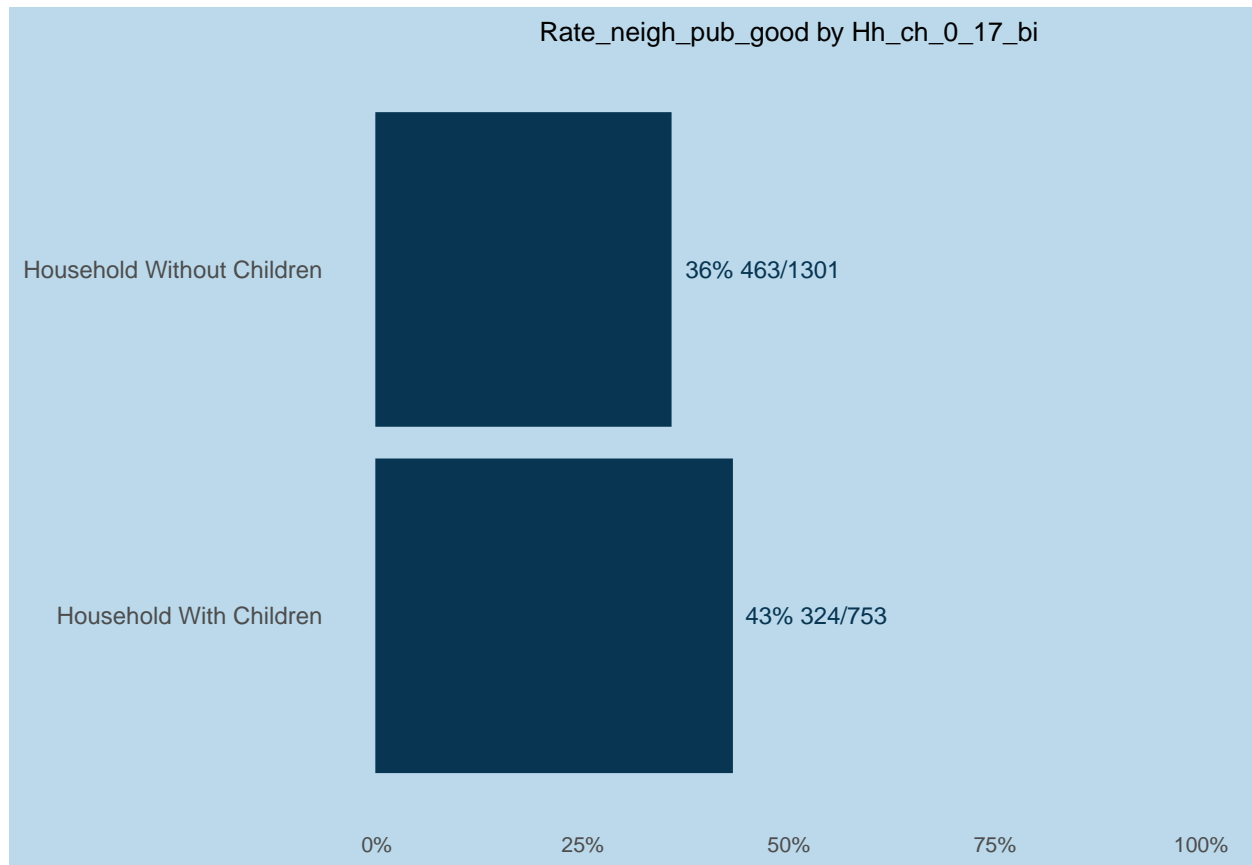
```
##
## [[8]]$gen$p.values
## [[8]]$gen$p.values$rate_neigh_pub_good
##           prefer not to say non-binary  female    male transgender
## prefer not to say           NA         NA      NA      NA         NA
## non-binary                 NA         NA      NA      NA         NA
## female                     NA         NA      NA 0.00014         NA
## male                       NA         NA 0.00014      NA         NA
## transgender                 NA         NA      NA      NA         NA
##
##
##
## [[8]]$race_census
## [[8]]$race_census$plot
```



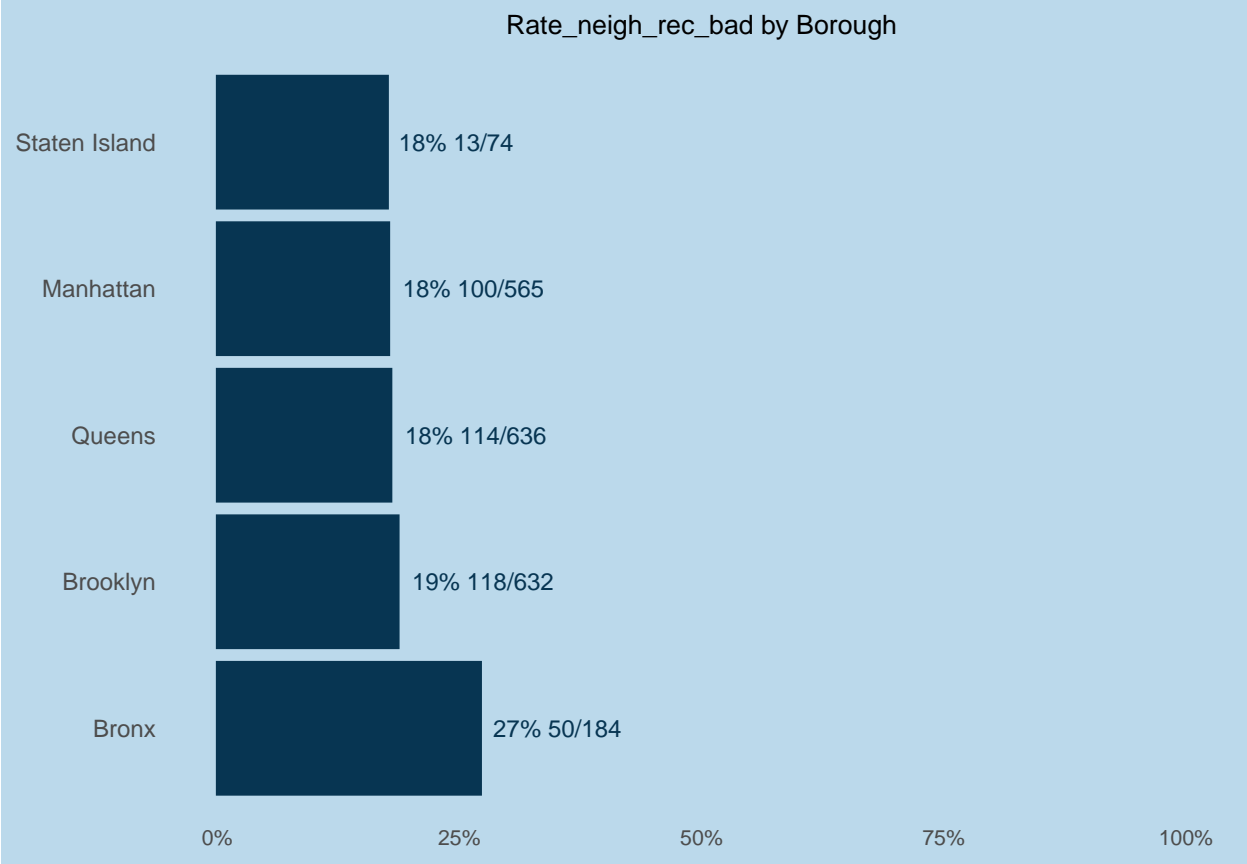
```
##
## [[8]]$race_census$p.values
## [[8]]$race_census$p.values$rate_neigh_pub_good
##               two or more races Indigenous American other
## two or more races                NA                NA    NA
## Indigenous American              NA                NA    NA
## other                            NA                NA    NA
## black or african american        NA                NA    NA
## hispanic or latinx               0.0059             NA    NA
## asian                           0.0035             NA    NA
## white (non-hispanic or latino)   0.0018             NA    NA
##               black or african american hispanic or latinx
## two or more races                NA                0.0059
## Indigenous American              NA                NA
## other                            NA                NA
## black or african american        NA                NA
## hispanic or latinx               NA                NA
## asian                           NA                NA
## white (non-hispanic or latino)   NA                NA
##               asian white (non-hispanic or latino)
## two or more races               0.0035             0.0018
## Indigenous American              NA                NA
## other                            NA                NA
## black or african american        NA                NA
## hispanic or latinx               NA                NA
## asian                           NA                NA
```



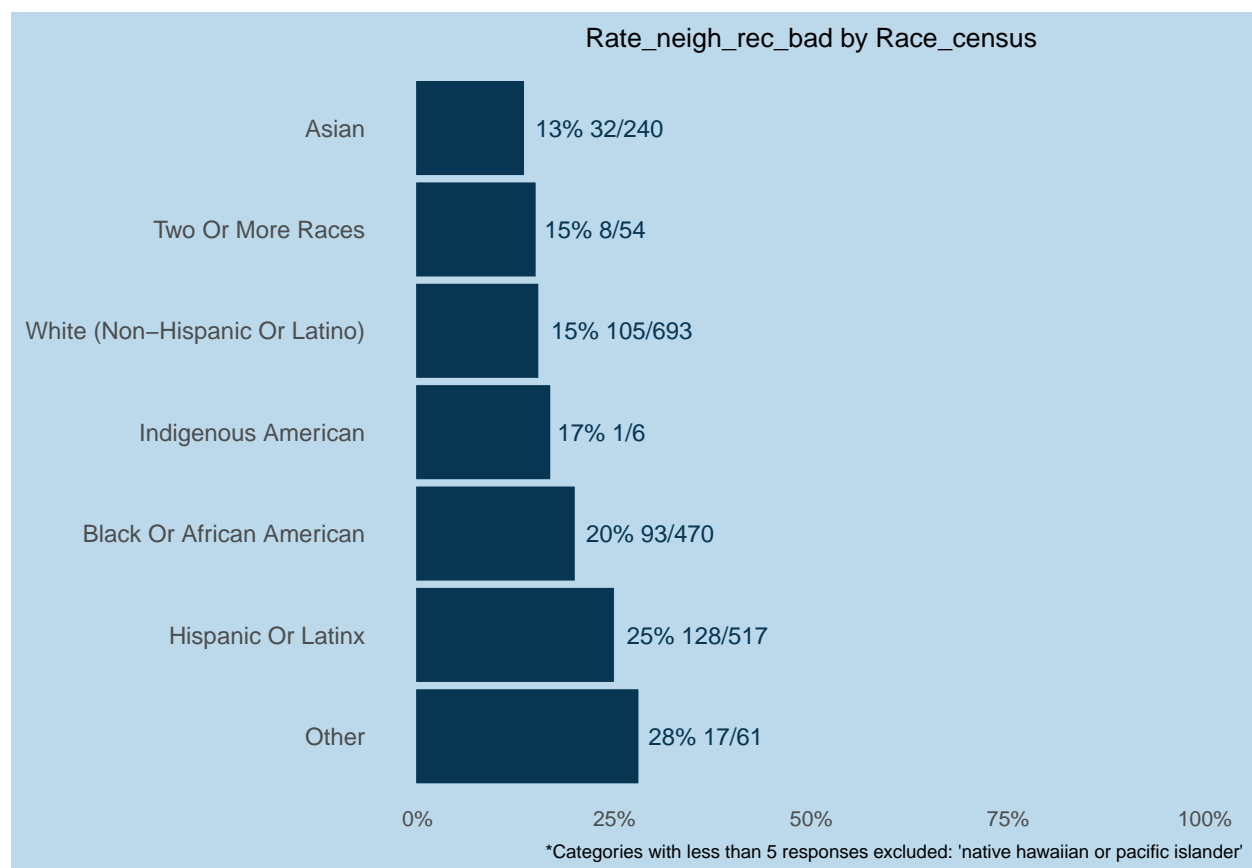
```
## white (non-hispanic or latino)      NA      NA
##
##
##
## [[8]]$hh_ch_0_17_bi
## [[8]]$hh_ch_0_17_bi$plot
```



```
##
## [[8]]$hh_ch_0_17_bi$p.values
## [[8]]$hh_ch_0_17_bi$p.values$rate_neigh_pub_good
## household without children household with children
## household without children      NA      0.00098
## household with children      0.00098      NA
##
##
## [[8]]$hh_sn_65_bi
## NULL
##
## [[8]]$inc_dist
## NULL
##
##
## [[9]]
## [[9]]$borough
## [[9]]$borough$plot
```



```
##
## [[9]]$borough$p.values
## [[9]]$borough$p.values$rate_neigh_rec_bad
##
##      staten island manhattan queens brooklyn  bronx
## staten island      NA      NA      NA      NA      NA
## manhattan          NA      NA      NA      NA 0.0073
## queens             NA      NA      NA      NA 0.0079
## brooklyn           NA      NA      NA      NA      NA
## bronx              NA    0.0073 0.0079      NA      NA
##
##
##
## [[9]]$gen
## NULL
##
## [[9]]$race_census
## [[9]]$race_census$plot
```

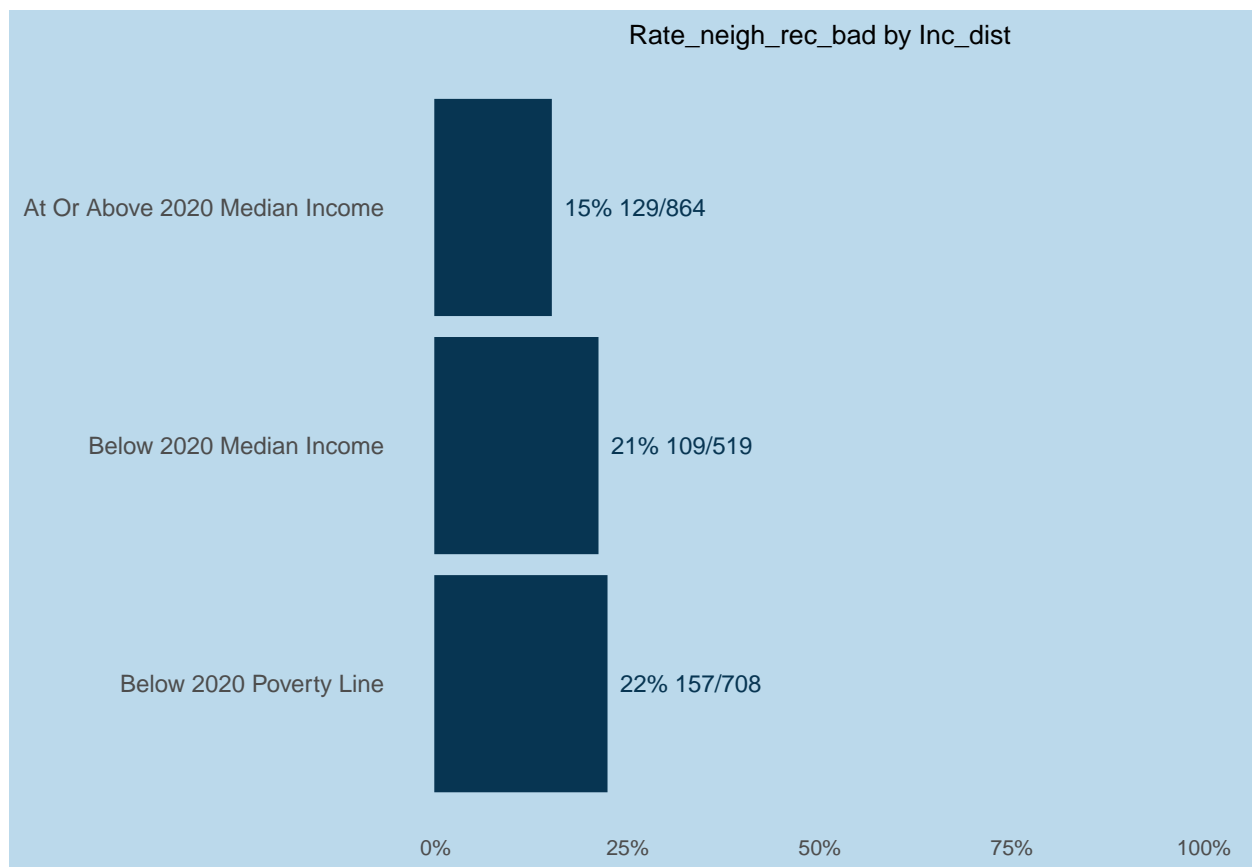


```
##
## [[9]]$race_census$p.values
## [[9]]$race_census$p.values$rate_neigh_rec_bad
##               asian two or more races
## asian                NA                NA
## two or more races    NA                NA
## white (non-hispanic or latino)    NA                NA
## Indigenous American    NA                NA
## black or african american    NA                NA
## hispanic or latinx      0.00049          NA
## other                  NA                NA
##               white (non-hispanic or latino)
## asian                NA
## two or more races    NA
## white (non-hispanic or latino)    NA
## Indigenous American    NA
## black or african american    NA
## hispanic or latinx      3.8e-05
## other                  NA
##               Indigenous American black or african american
## asian                NA                NA
## two or more races    NA                NA
## white (non-hispanic or latino)    NA                NA
## Indigenous American    NA                NA
## black or african american    NA                NA
## hispanic or latinx      NA                NA
```

```

## other
##
## hispanic or latinx other
## asian 4.9e-04 NA
## two or more races NA NA
## white (non-hispanic or latino) 3.8e-05 NA
## Indigenous American NA NA
## black or african american NA NA
## hispanic or latinx NA NA
## other NA NA
##
##
##
## [[9]]$hh_ch_0_17_bi
## NULL
##
## [[9]]$hh_sn_65_bi
## NULL
##
## [[9]]$inc_dist
## [[9]]$inc_dist$plot

```

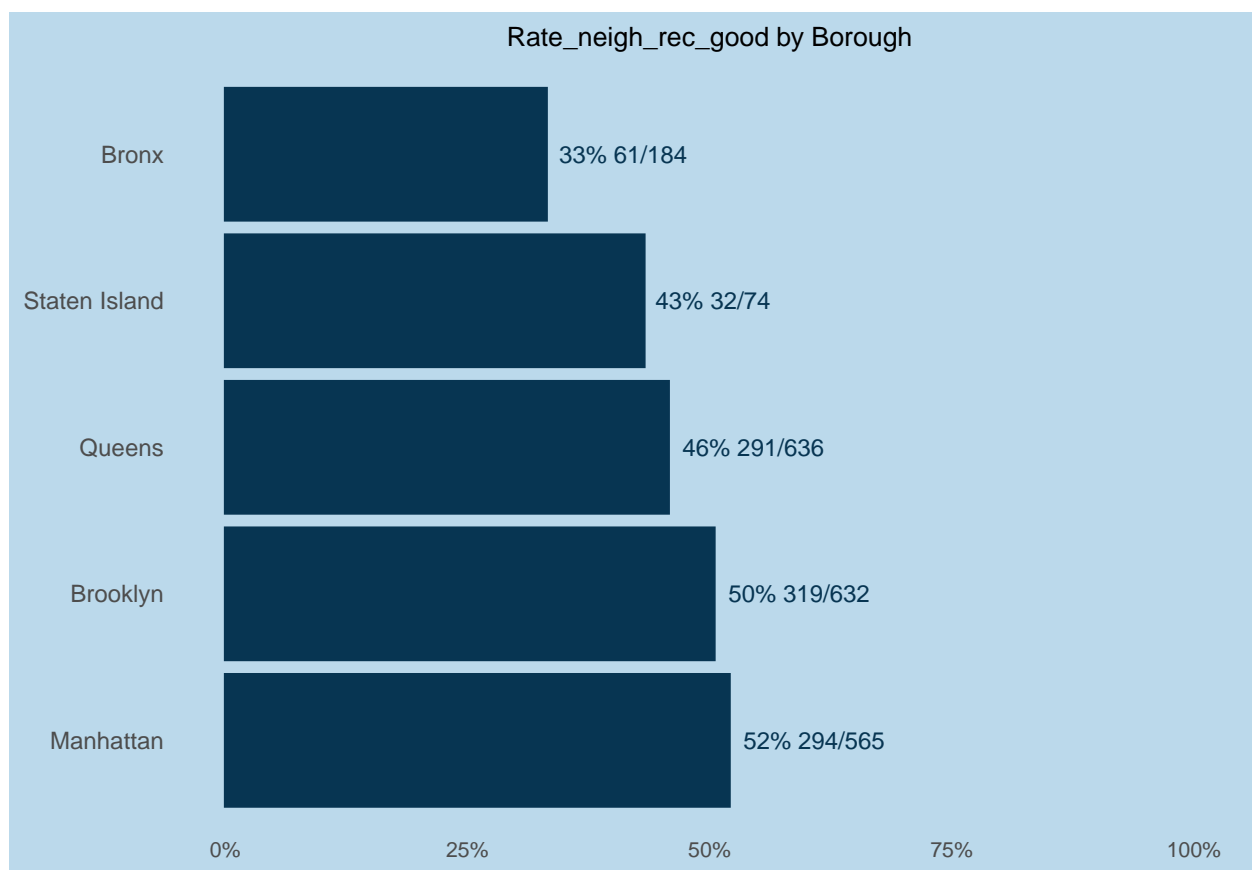


```

##
## [[9]]$inc_dist$p.values
## [[9]]$inc_dist$p.values$rate_neigh_rec_bad
## at or above 2020 median income

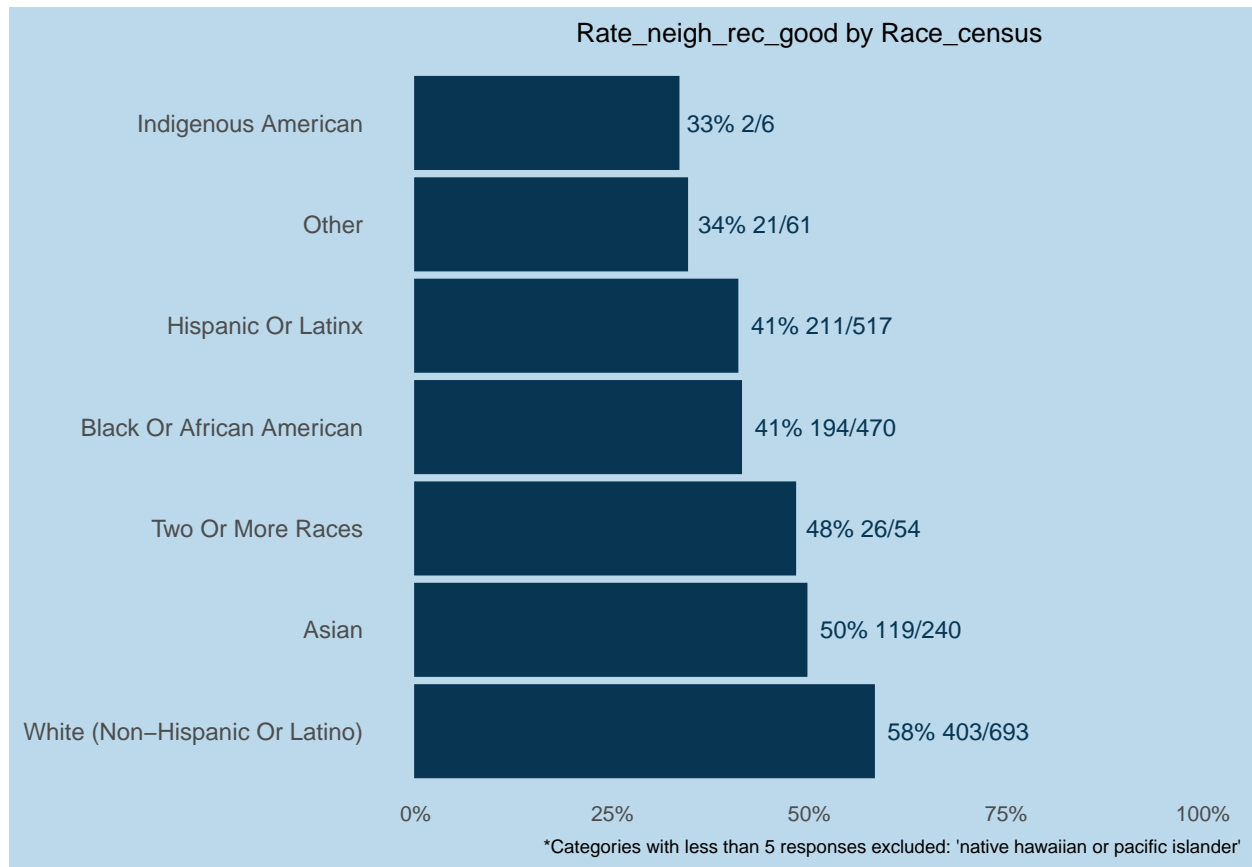
```

```
## at or above 2020 median income NA
## below 2020 median income 0.00480
## below 2020 poverty line 0.00027
## below 2020 median income below 2020 poverty line
## at or above 2020 median income 0.0048 0.00027
## below 2020 median income NA NA
## below 2020 poverty line NA NA
##
##
##
##
## [[10]]
## [[10]]$borough
## [[10]]$borough$plot
```



```
##
## [[10]]$borough$p.values
## [[10]]$borough$p.values$rate_neigh_rec_good
## bronx staten island queens brooklyn manhattan
## bronx NA NA 0.0031 4.9e-05 1.2e-05
## staten island NA NA NA NA NA
## queens 3.1e-03 NA NA NA NA
## brooklyn 4.9e-05 NA NA NA NA
## manhattan 1.2e-05 NA NA NA NA
##
```

```
##
##
## [[10]]$gen
## NULL
##
## [[10]]$race_census
## [[10]]$race_census$plot
```

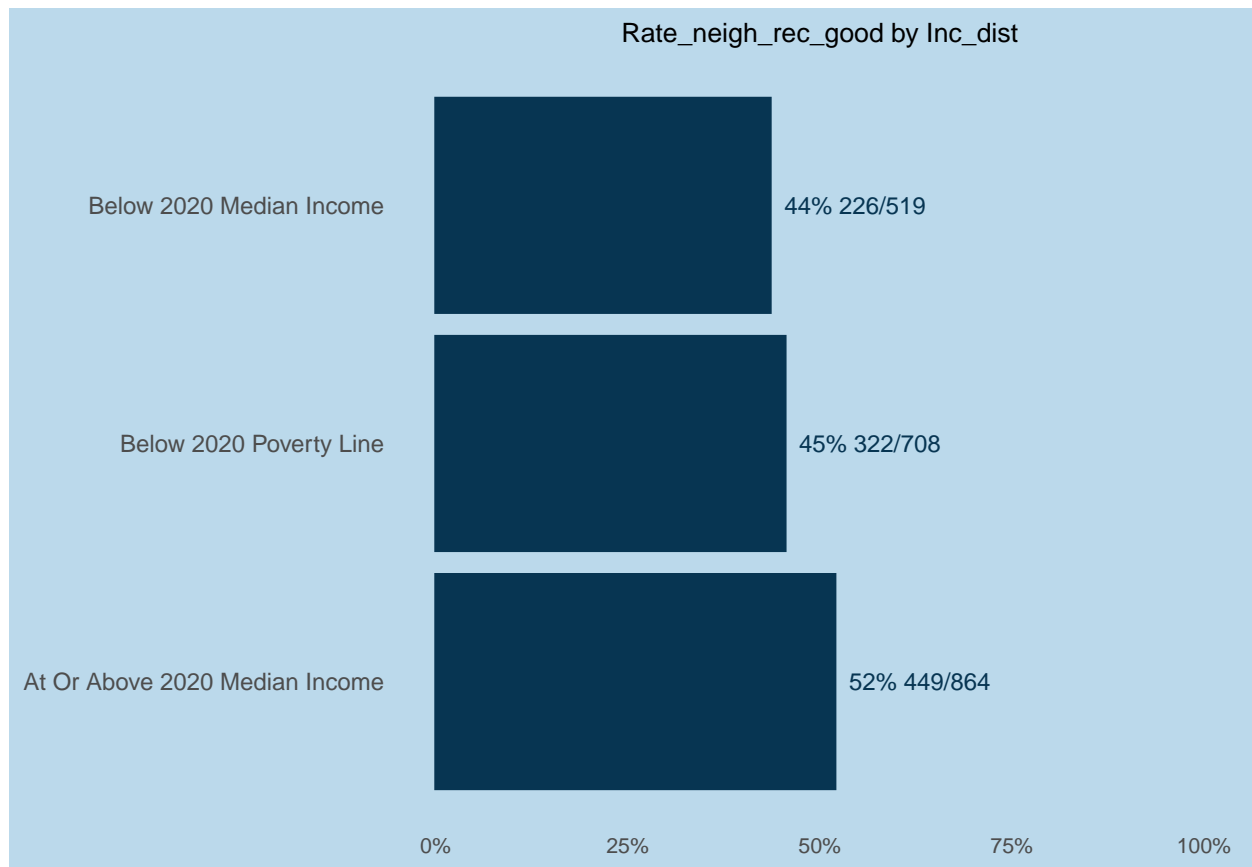


```
##
## [[10]]$race_census$p.values
## [[10]]$race_census$p.values$rate_neigh_rec_good
##
##               Indigenous American   other hispanic or latinx
## Indigenous American              NA      NA                  NA
## other                           NA      NA                  NA
## hispanic or latinx              NA      NA                  NA
## black or african american        NA      NA                  NA
## two or more races               NA      NA                  NA
## asian                           NA      NA                  NA
## white (non-hispanic or latino)   NA 0.00057              3.4e-09
##
##               black or african american two or more races
## Indigenous American              NA      NA
## other                           NA      NA
## hispanic or latinx              NA      NA
## black or african american        NA      NA
## two or more races               NA      NA
```

```

## asian NA NA
## white (non-hispanic or latino) 2.3e-08 NA
## asian white (non-hispanic or latino)
## Indigenous American NA NA
## other NA 5.7e-04
## hispanic or latinx NA 3.4e-09
## black or african american NA 2.3e-08
## two or more races NA NA
## asian NA NA
## white (non-hispanic or latino) NA NA
##
##
## [[10]]$hh_ch_0_17_bi
## NULL
##
## [[10]]$hh_sn_65_bi
## NULL
##
## [[10]]$inc_dist
## [[10]]$inc_dist$plot

```



```

##
## [[10]]$inc_dist$p.values
## [[10]]$inc_dist$p.values$rate_neigh_rec_good

```

```
##                                below 2020 median income below 2020 poverty line
## below 2020 median income                                NA                      NA
## below 2020 poverty line                                NA                      NA
## at or above 2020 median income                          0.0029                     NA
##                                at or above 2020 median income
## below 2020 median income                                0.0029
## below 2020 poverty line                                NA
## at or above 2020 median income                          NA
```

7.8 - 7.9

7.8) Respondents who experienced a reduced income were more likely to rate government response poorly [12 &13]

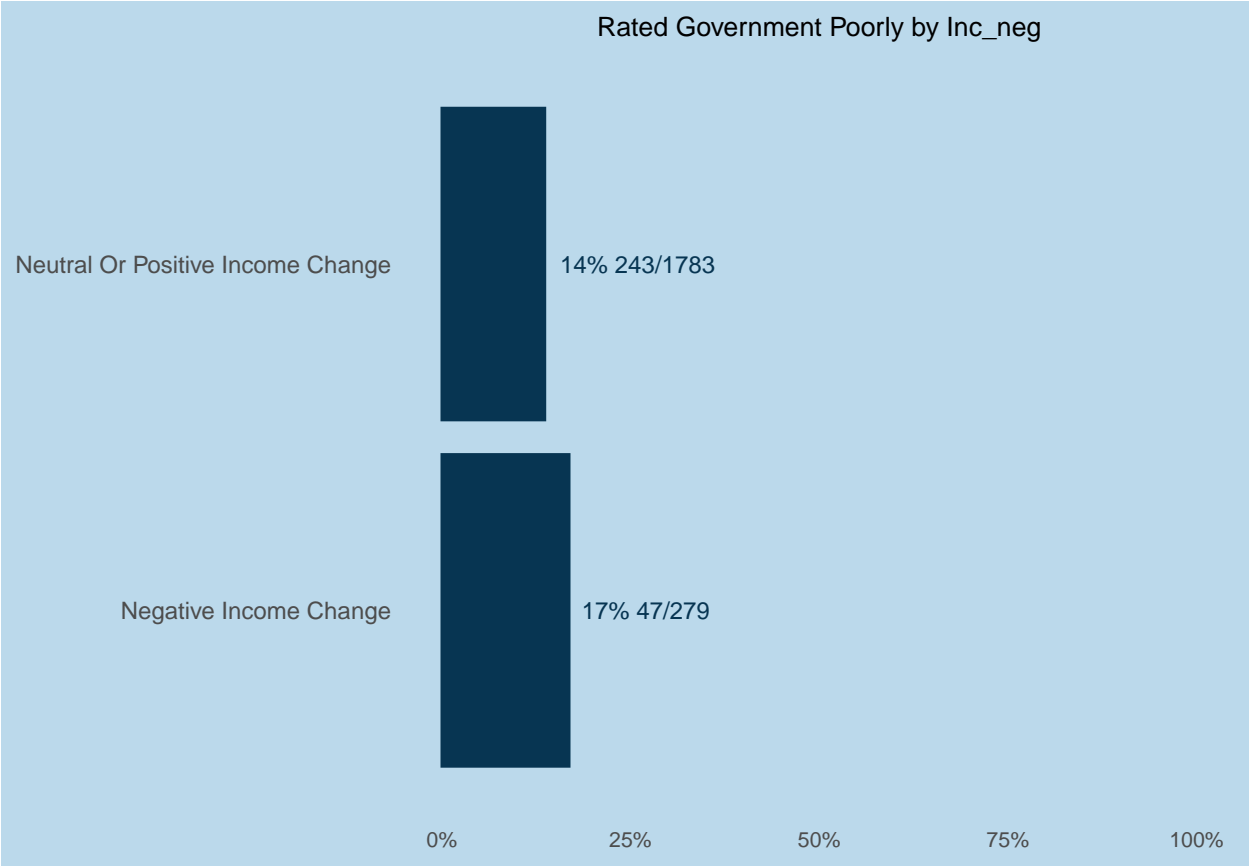
1. Run binary distribution over rating government response question Poor=Poor or Very Poor Not Poor=Good, Excellent, Average
2. Find proportion which rated government response poorly [31] Poorly=Poor or Very Poor
 - a. Find subset of population who witnessed a reduced income
 - b. Compare with others who did not

7.9) Respondents who faced housing insecurity were more like to rate government response poorly [21, 31]

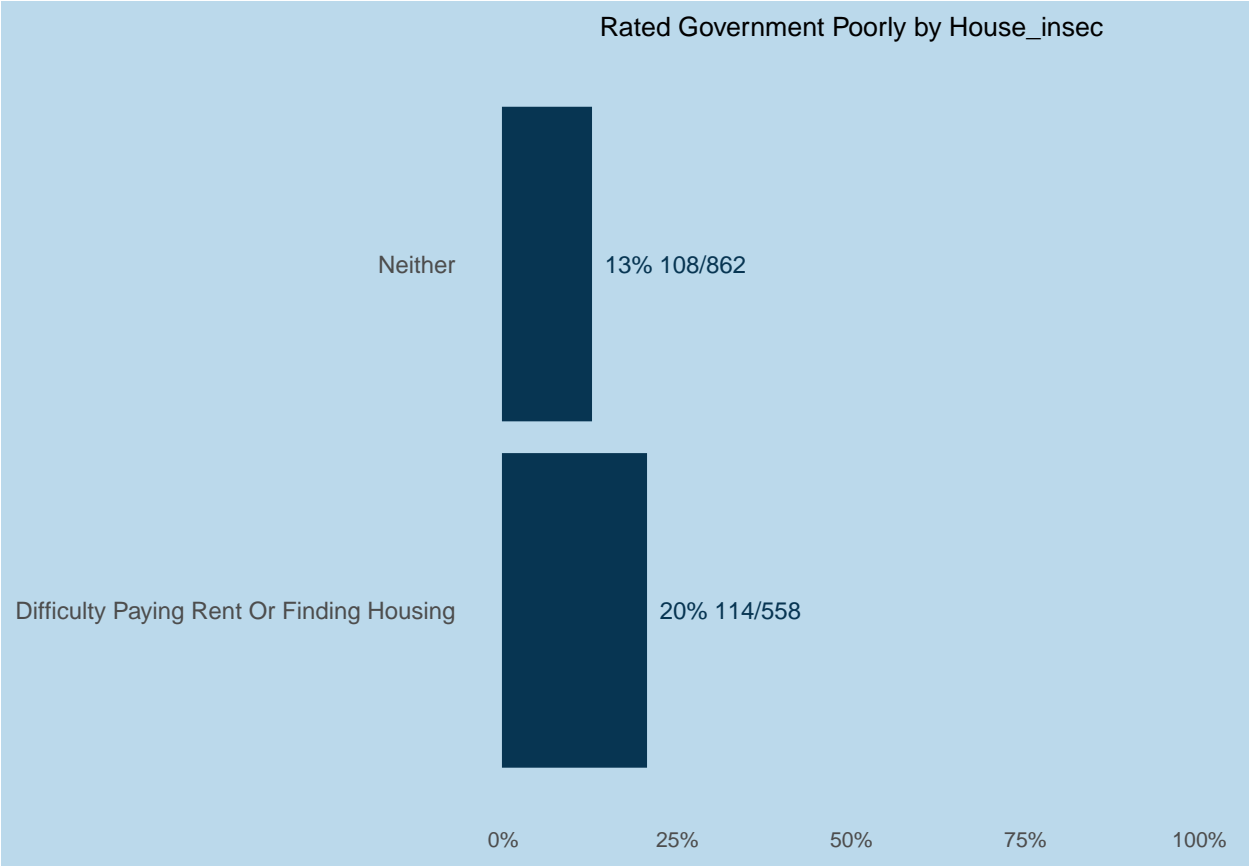
1. Find proportion of households who faced housing security [21]
2. Find subset of population who rated government response poorly and compare with other group

```
make_plots(wrangled, c("inc_neg", "house_insec"), "rate_gov_all_bad", show = TRUE,
           title = "Rated Government Poorly")
```

```
## $inc_neg
## $inc_neg$plot
```

```
##
## $inc_neg$p.values
## $inc_neg$p.values$rate_gov_all_bad
##
## neutral or positive income change
## neutral or positive income change NA
## negative income change NA
##
## negative income change
## neutral or positive income change NA
## negative income change NA
##
##
##
## $house_insec
## $house_insec$plot
```



```
##
## $house_insec$p.values
## $house_insec$p.values$rate_gov_all_bad
##
## neither
## neither NA
## difficulty paying rent or finding housing 8.5e-05
##
## difficulty paying rent or finding housing
## neither 8.5e-05
## difficulty paying rent or finding housing NA
```