

poa_access_gov

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4/10/2022

Contents

7.1) People who had difficulty accessing social services or benefits [21]	1
7.2) Households with children in public schools are more likely to give higher ratings to neighborhood public schools [32, 26]	6
7.3) Attitude towards Police Responsiveness	7
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]	15
7.5) Respondents from low income brackets (at or below median income) are more likely to rate neighbourhood safety poorly	16
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	18
7.7) Run distribution over the rating of each neighborhood service	20
7.8 - 7.9	60
7.8) Respondents who experienced a reduced income were more likely to rate government response poorly [12 & 13]	60
7.9) Respondents who faced housing insecurity were more likely to rate government response poorly [21, 31]	61

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)

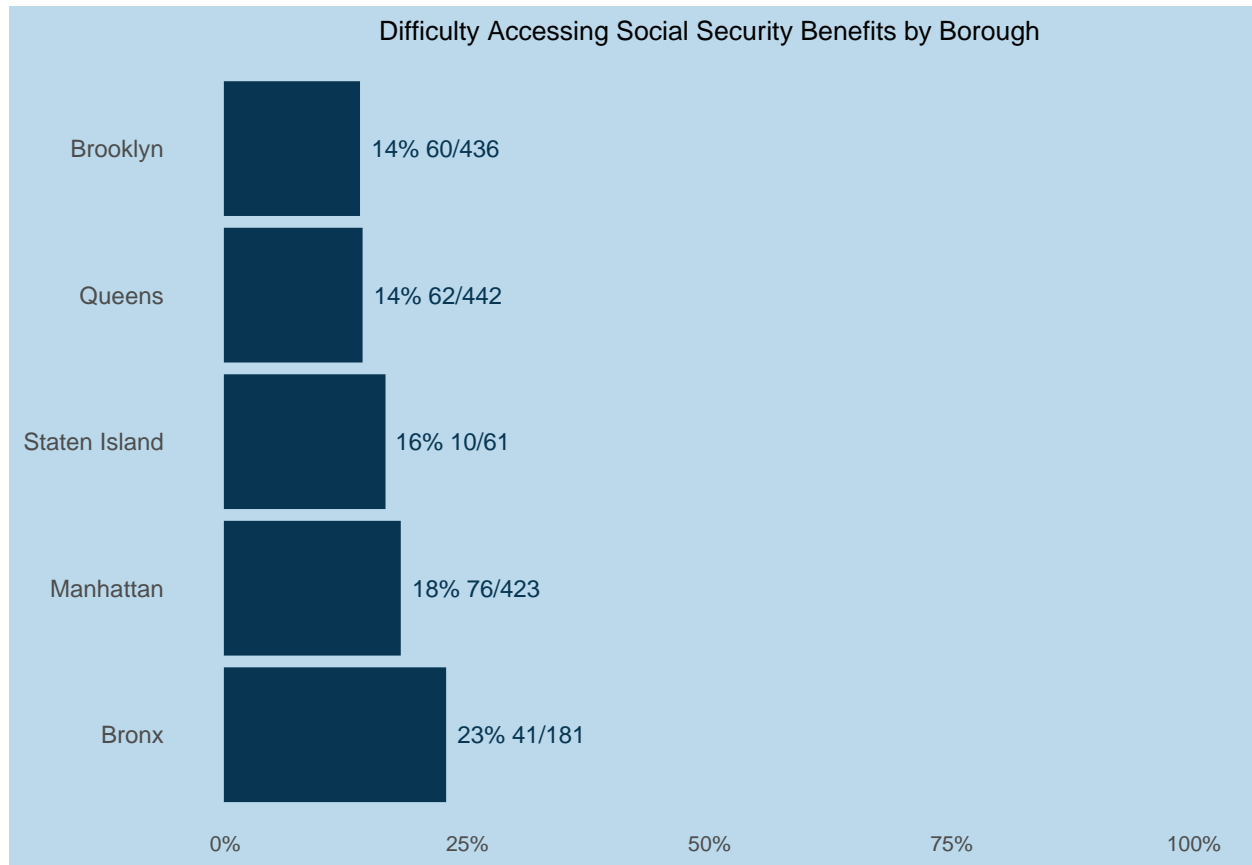
```
mean(wrangled$diff_ss, na.rm = TRUE)
```

```
## [1] 0.1613739
```

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

```
## $borough
```

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



```
##
```

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

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

```
##      brooklyn queens staten island manhattan  bronx
## brooklyn      NA    NA           NA      NA 0.0094
## queens        NA    NA           NA      NA    NA
## staten island  NA    NA           NA      NA    NA
## manhattan      NA    NA           NA      NA    NA
## bronx          0.0094 NA           NA      NA    NA
```

```
##
```

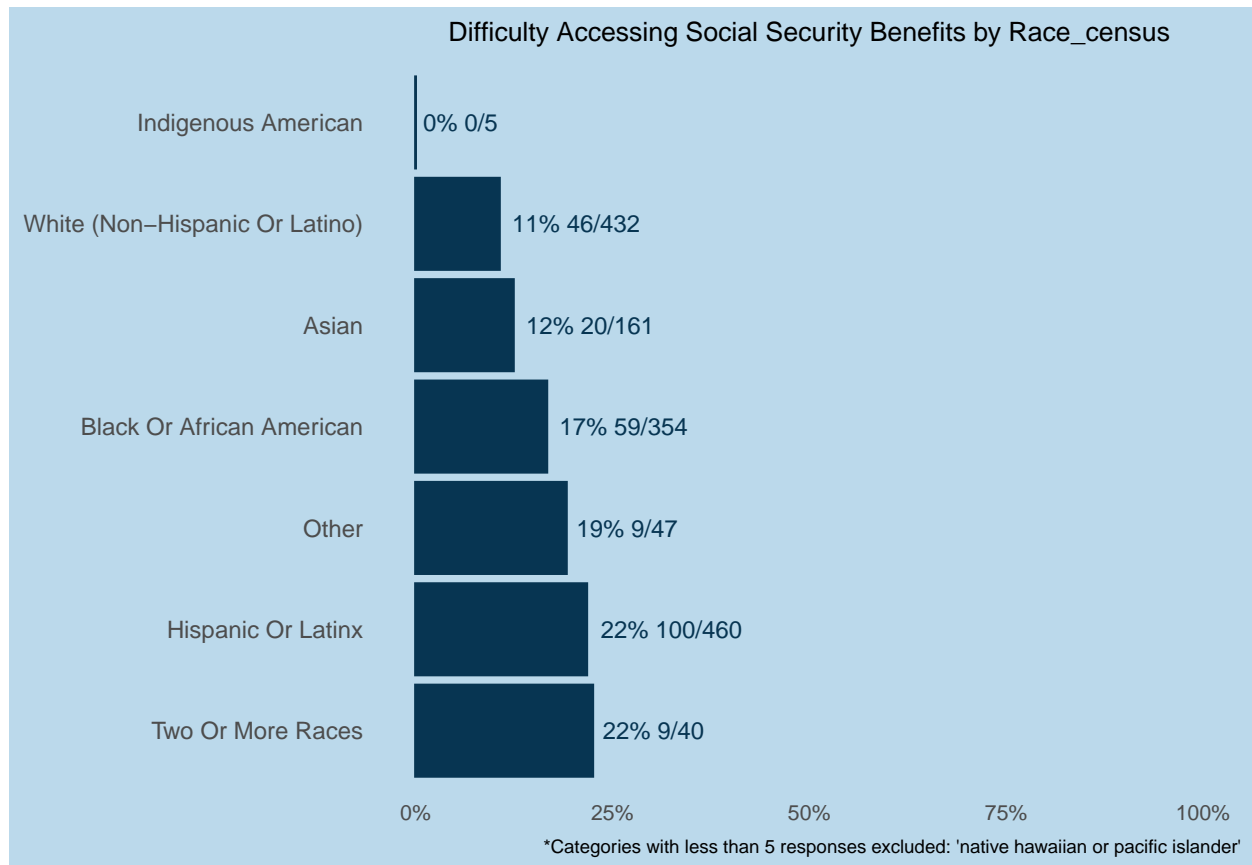
```
##
```

```
##
```

```
## $gen
```

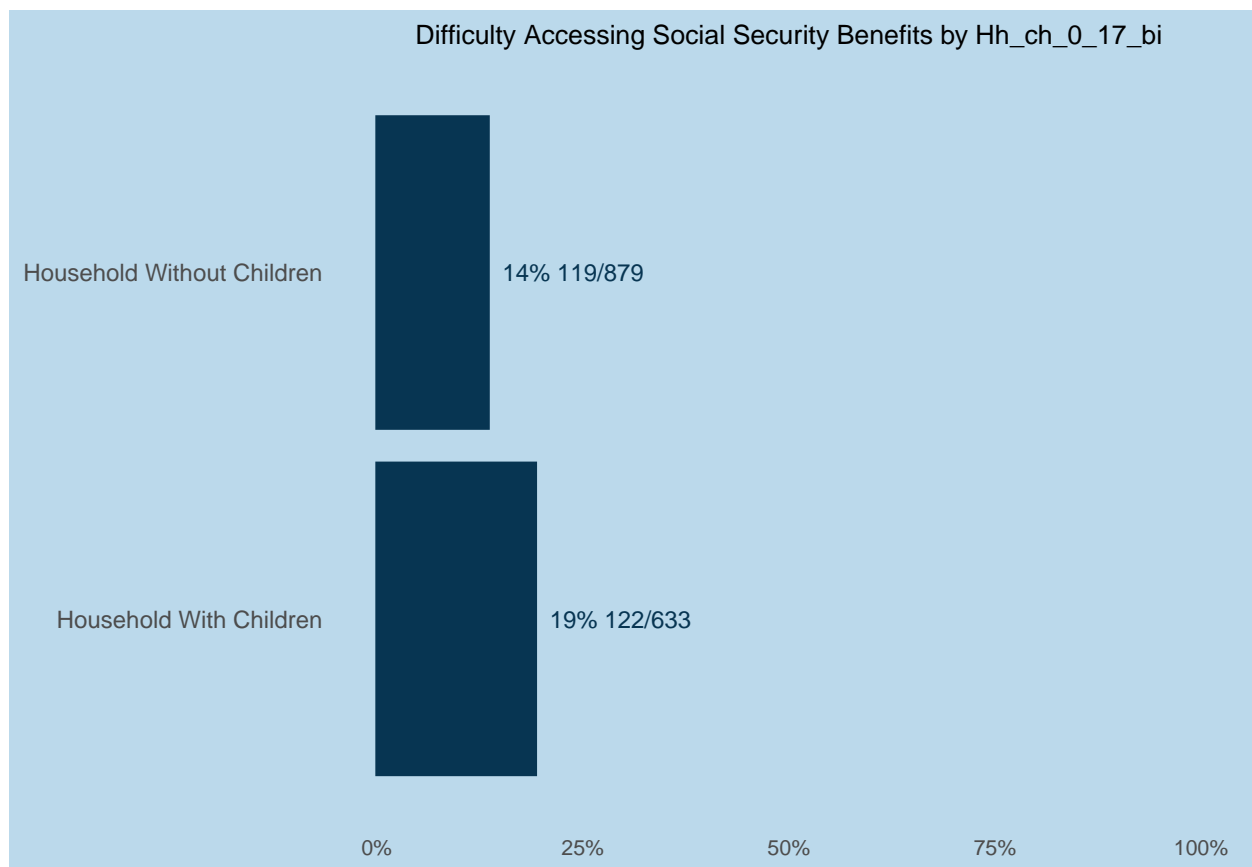
```
## NULL
```

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



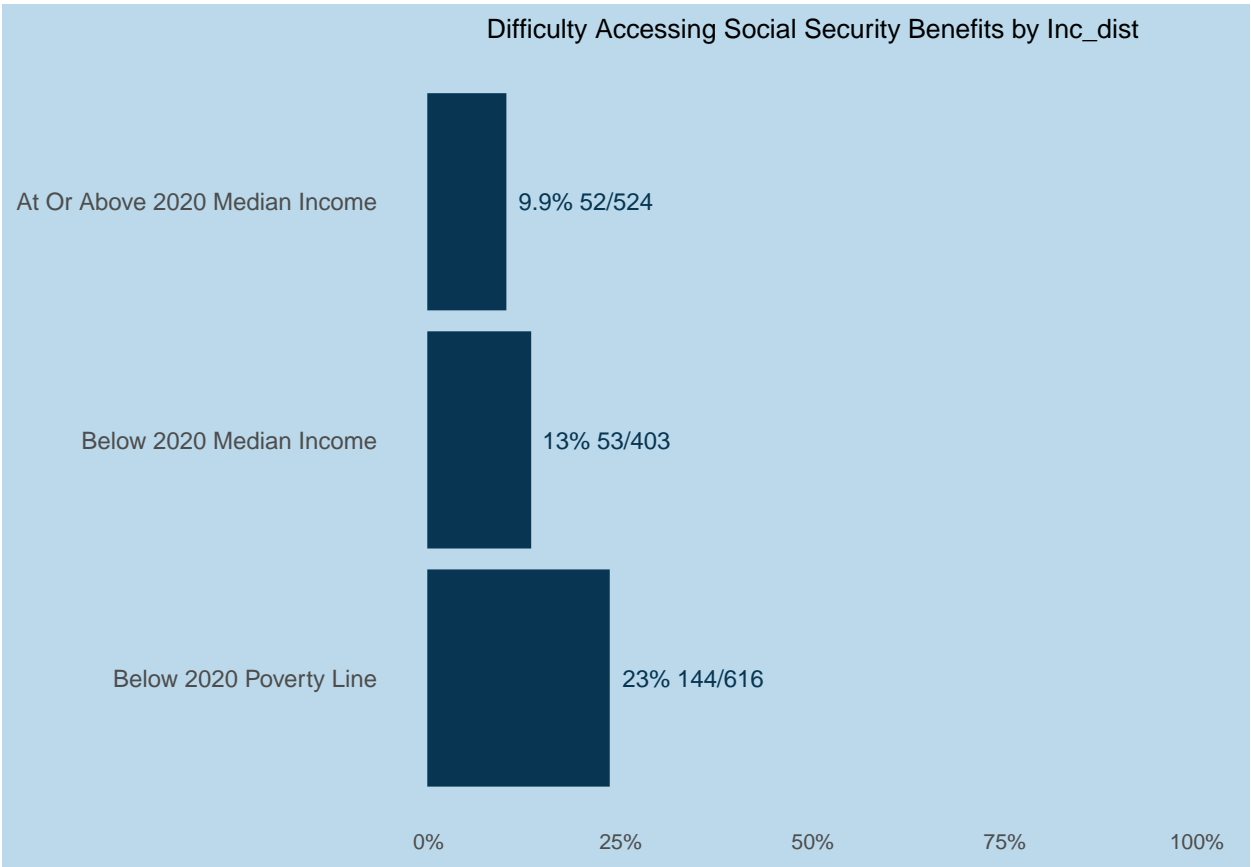
```
##
## $race_census$p.values
## $race_census$p.values$diff_ss
##
## Indigenous American
## Indigenous American NA
## white (non-hispanic or latino) NA
## asian NA
## black or african american NA
## other NA
## hispanic or latinx NA
## two or more races NA
##
## white (non-hispanic or latino) asian
## 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 1.2e-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)      1.2e-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                                     0.0033
```

```
## household with children          0.0033          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              3.2e-09
##          below 2020 median income below 2020 poverty line
## at or above 2020 median income          NA          3.2e-09
## below 2020 median income              NA          7.5e-05
## below 2020 poverty line              7.5e-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] 3.115865
```

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

```
## [1] 0.3738859
```

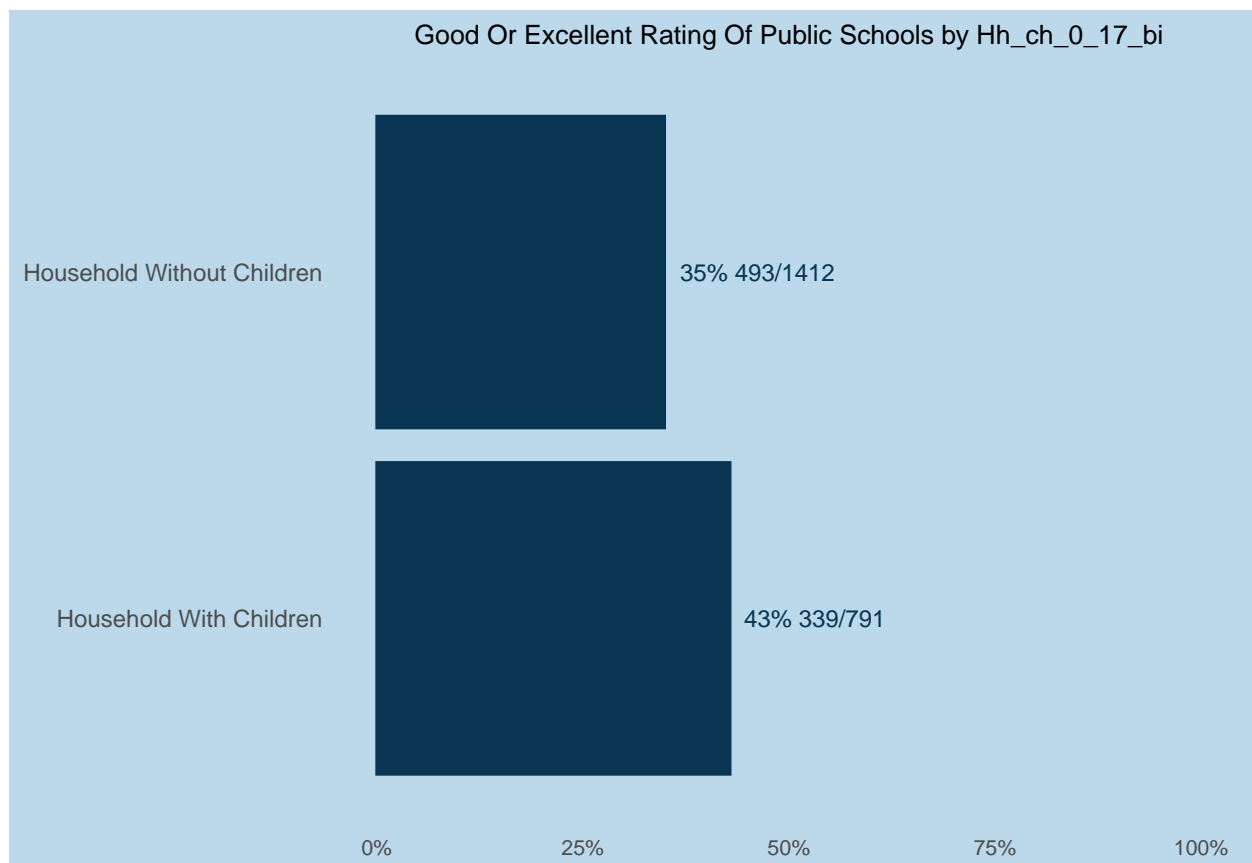
```
mean(wrangled$rate_neigh_pub_bad, na.rm = TRUE)
```

```
## [1] 0.3582888
```

```
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
```

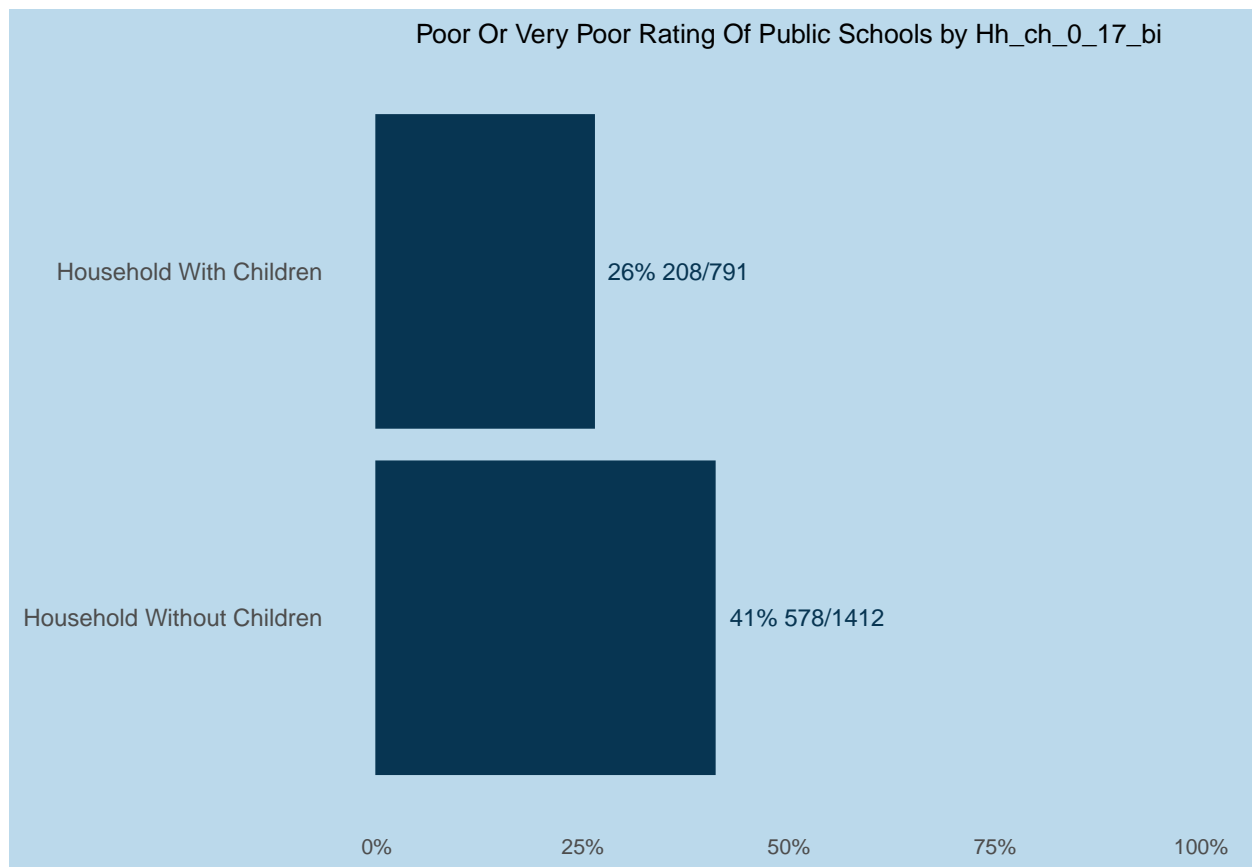
```
## $hh_ch_0_17_bi$plot
```



```
##
## $hh_ch_0_17_bi$p.values
## $hh_ch_0_17_bi$p.values$rate_neigh_pub_good
##                household without children household with children
## household without children                NA                0.00027
## household with children                0.00027                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                8.2e-12
## household without children            8.2e-12                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] 3.176471
```

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

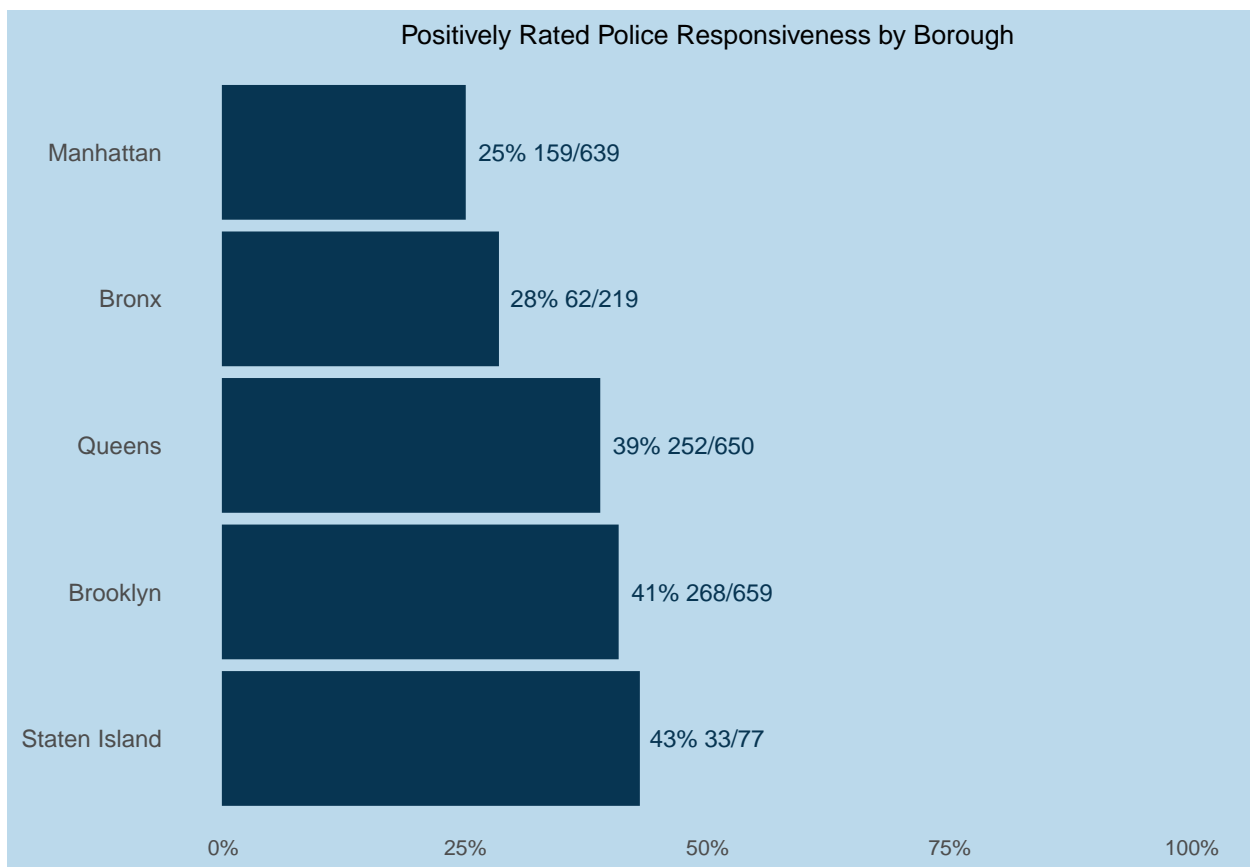
```
## [1] 0.3449198
```

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

```
## [1] 0.4059715
```

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

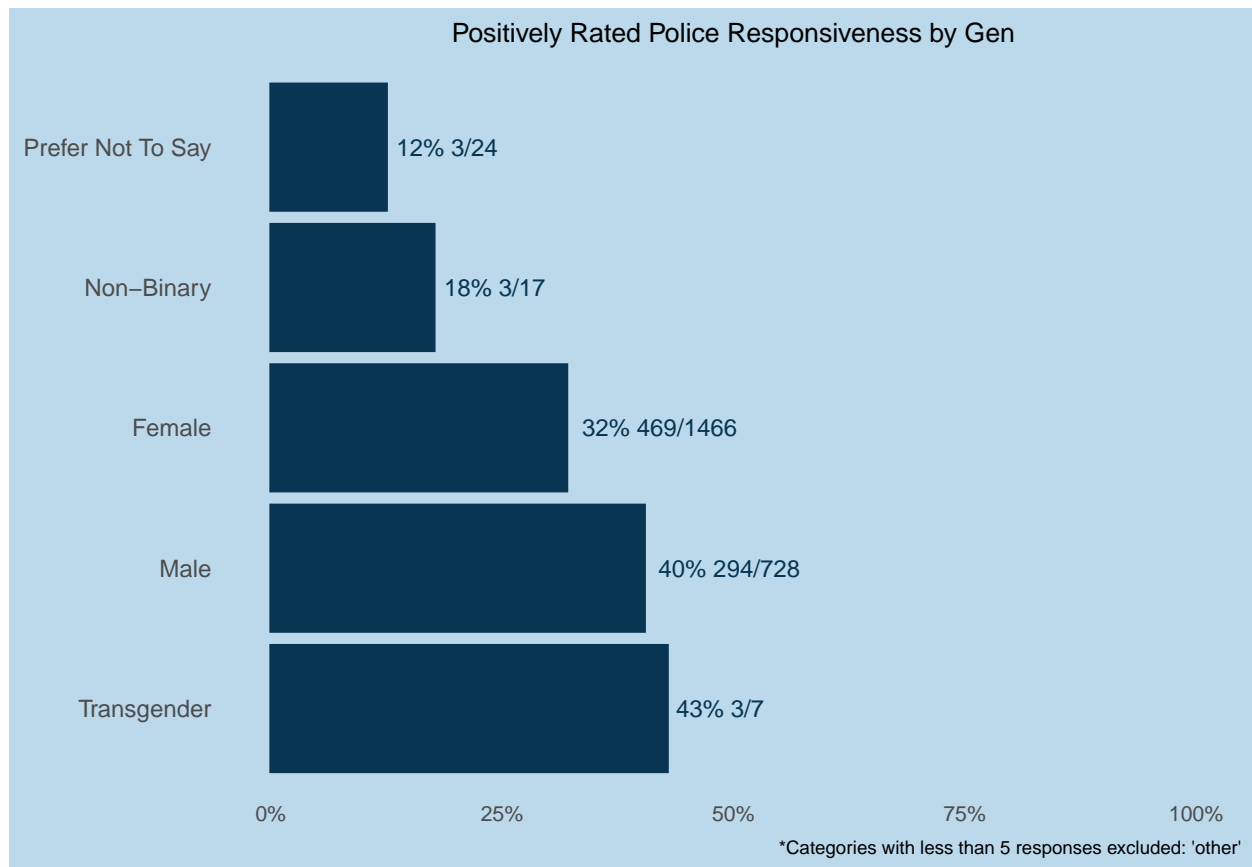
```
## $borough
## $borough$plot
```



```
##
## $borough$p.values
## $borough$p.values$rate_neigh_pol_good
##      manhattan  bronx  queens  brooklyn  staten  island
## manhattan      NA      NA 1.2e-07  2.1e-09      0.0012
```

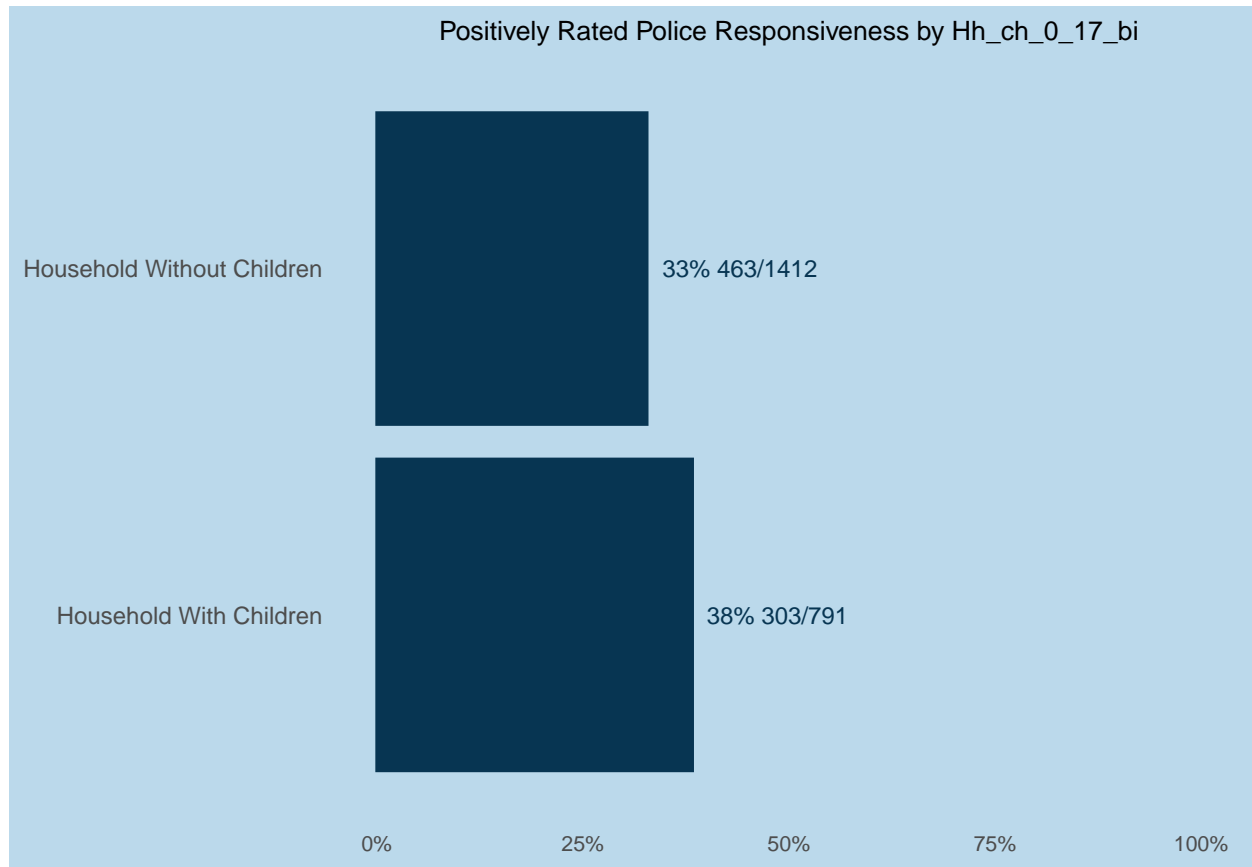


```
## bronx          NA      NA 6.8e-03 1.4e-03      NA
## queens        1.2e-07 0.0068      NA      NA      NA
## brooklyn       2.1e-09 0.0014      NA      NA      NA
## staten island  1.2e-03      NA      NA      NA      NA
##
##
##
## $gen
## $gen$plot
```



```
##
## $gen$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 0.00012      NA
## male                       NA         NA 0.00012      NA      NA
## transgender                 NA         NA      NA      NA      NA
##
##
##
## $race_census
## NULL
##
```

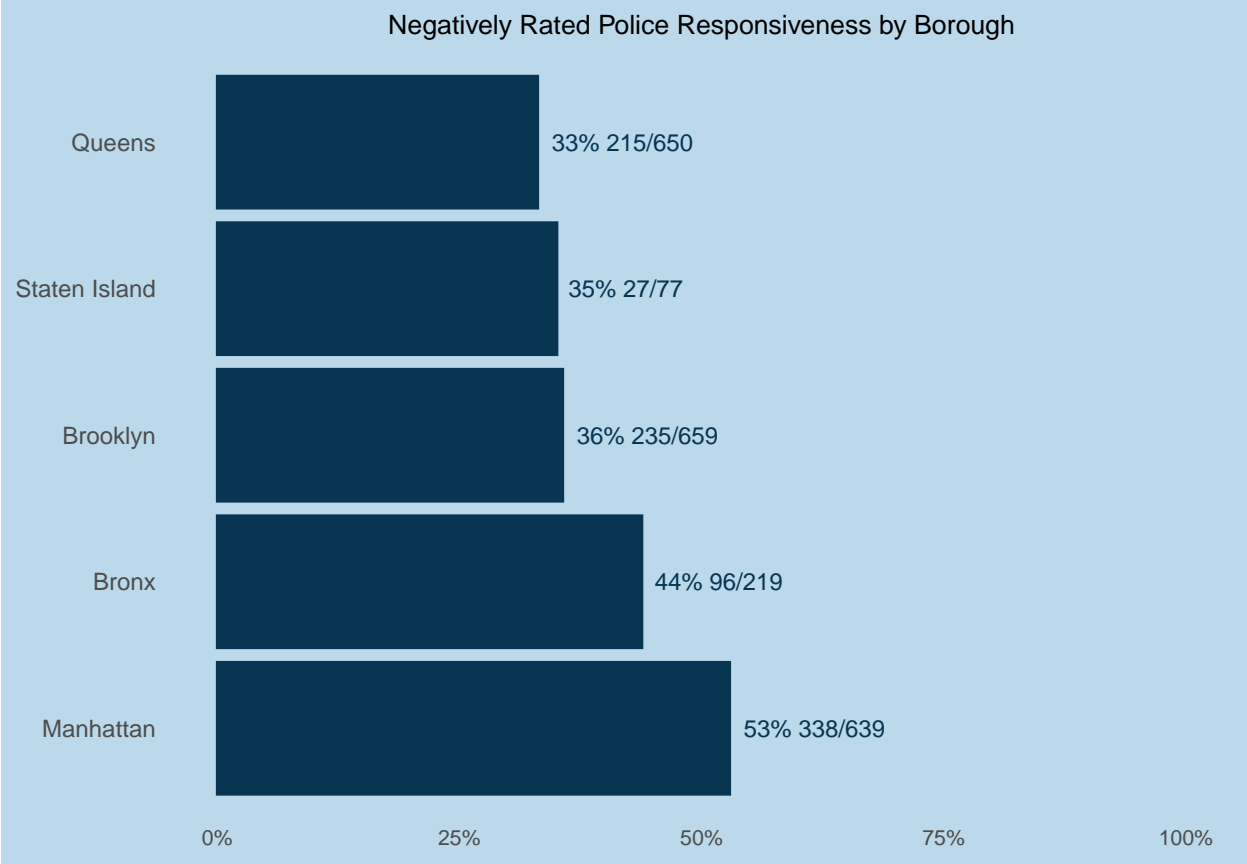
```
## $hh_ch_0_17_bi
## $hh_ch_0_17_bi$plot
```



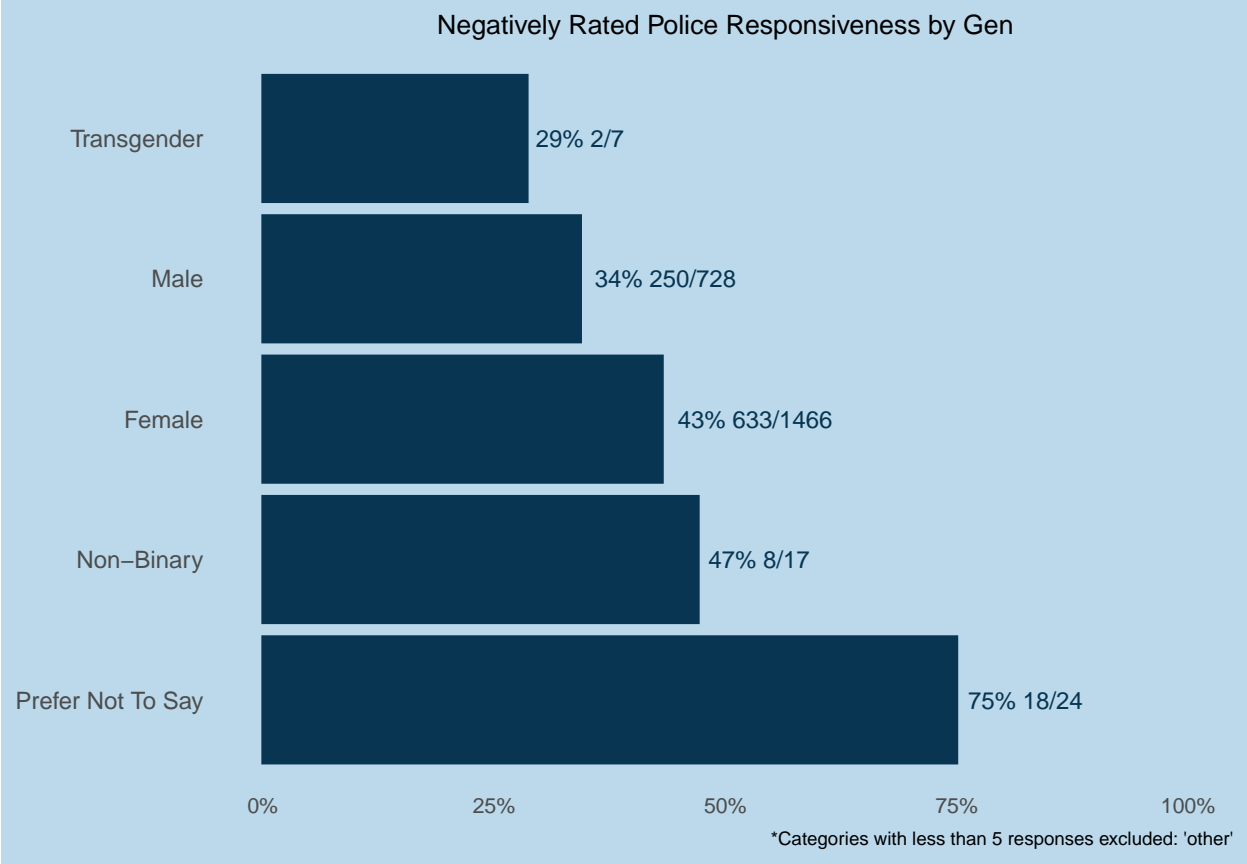
```
##
## $hh_ch_0_17_bi$p.values
## $hh_ch_0_17_bi$p.values$rate_neigh_pol_good
##           household without children household with children
## household without children           NA           0.01
## household with children           0.01           NA
##
##
##
## $hh_sn_65_bi
## NULL
##
## $inc_dist
## NULL
```

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

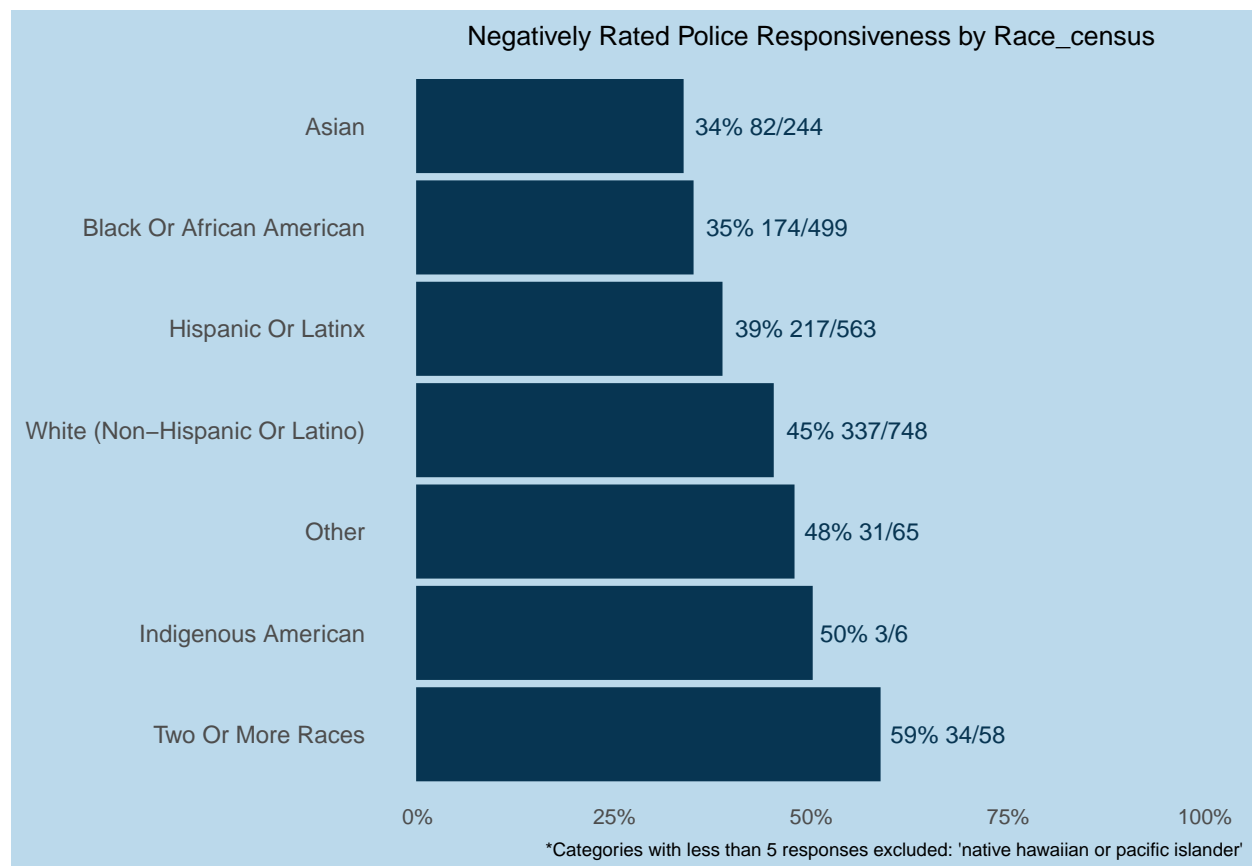
```
## $borough
## $borough$plot
```



```
##
## $borough$p.values
## $borough$p.values$rate_neigh_pol_bad
##      queens  staten island brooklyn  bronx manhattan
## queens      NA      NA      NA 0.0053  9.9e-13
## staten island  NA      NA      NA  NA   4.6e-03
## brooklyn      NA      NA      NA  NA   5.8e-10
## bronx      5.3e-03      NA      NA  NA      NA
## manhattan    9.9e-13    0.0046  5.8e-10  NA      NA
##
##
##
## $gen
## $gen$plot
```

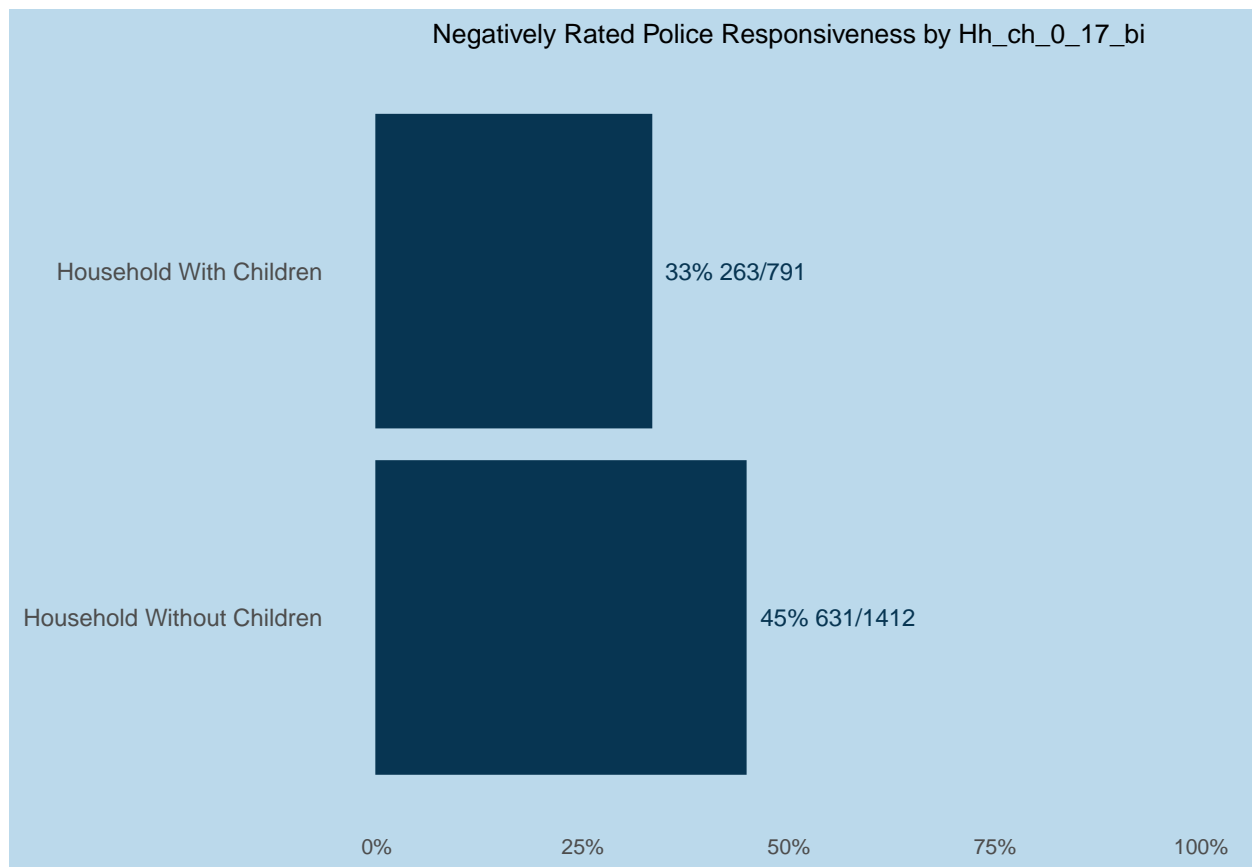


```
##
## $gen$p.values
## $gen$p.values$rate_neigh_pol_bad
##      transgender      male    female non-binary prefer not to say
## transgender          NA      NA      NA          NA          NA
## male                 NA      NA 8.5e-05          NA      0.00011
## female               NA 8.5e-05      NA          NA      0.00360
## non-binary           NA      NA      NA          NA          NA
## prefer not to say    NA 1.1e-04 3.6e-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) 0.00210          0.00043
## other                     NA                      NA
## Indigenous American          NA                      NA
## two or more races           0.00075          0.00068
##               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
##               0.0047
##               white (non-hispanic or latino) other
## asian                0.00210    NA
## black or african american    0.00043    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 2e-07
## household without children 2e-07 NA
##
##
## $hh_sn_65_bi
```

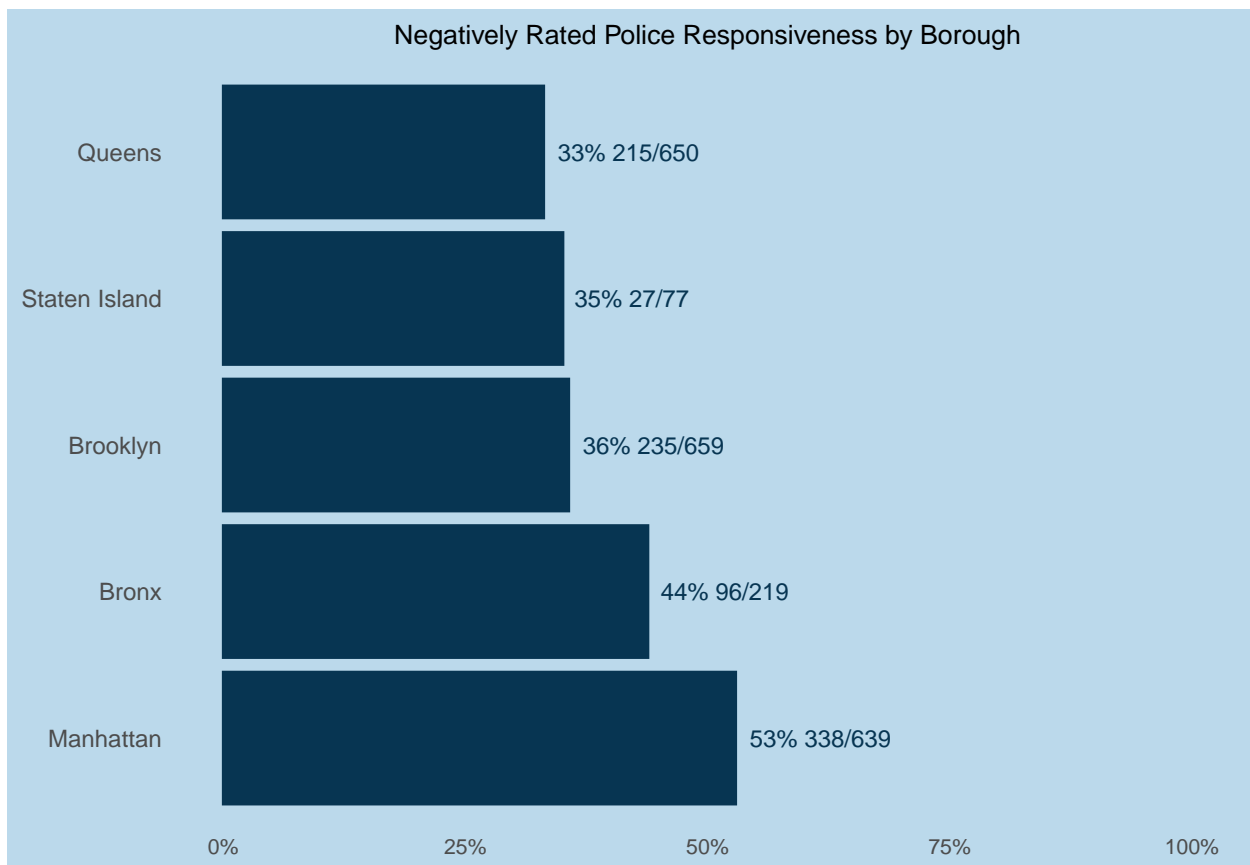
```
## NULL
##
## $inc_dist
## NULL
```

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
```

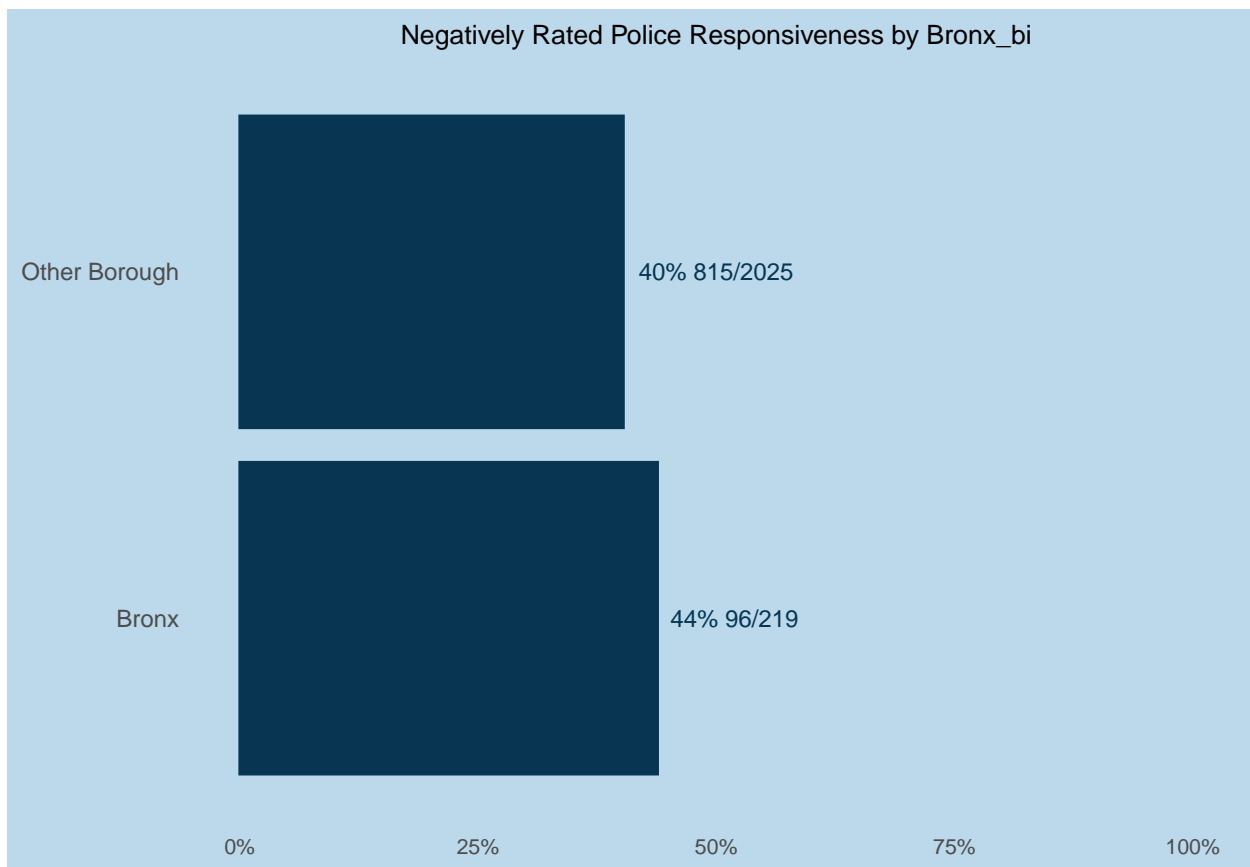


```
##
## $borough$p.values
```

```
## $borough$p.values$rate_neigh_pol_bad
##               queens staten island brooklyn  bronx manhattan
## queens              NA              NA      NA 0.0053  9.9e-13
## staten island        NA              NA      NA  NA   4.6e-03
## brooklyn             NA              NA      NA  NA   5.8e-10
## bronx                5.3e-03          NA      NA  NA      NA
## manhattan            9.9e-13          0.0046  5.8e-10 NA      NA
```

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

```
## $bronx_bi
## $bronx_bi$plot
```



```
##
## $bronx_bi$p.values
## $bronx_bi$p.values$rate_neigh_pol_bad
##               other borough bronx
## other borough              NA    NA
## bronx                      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)

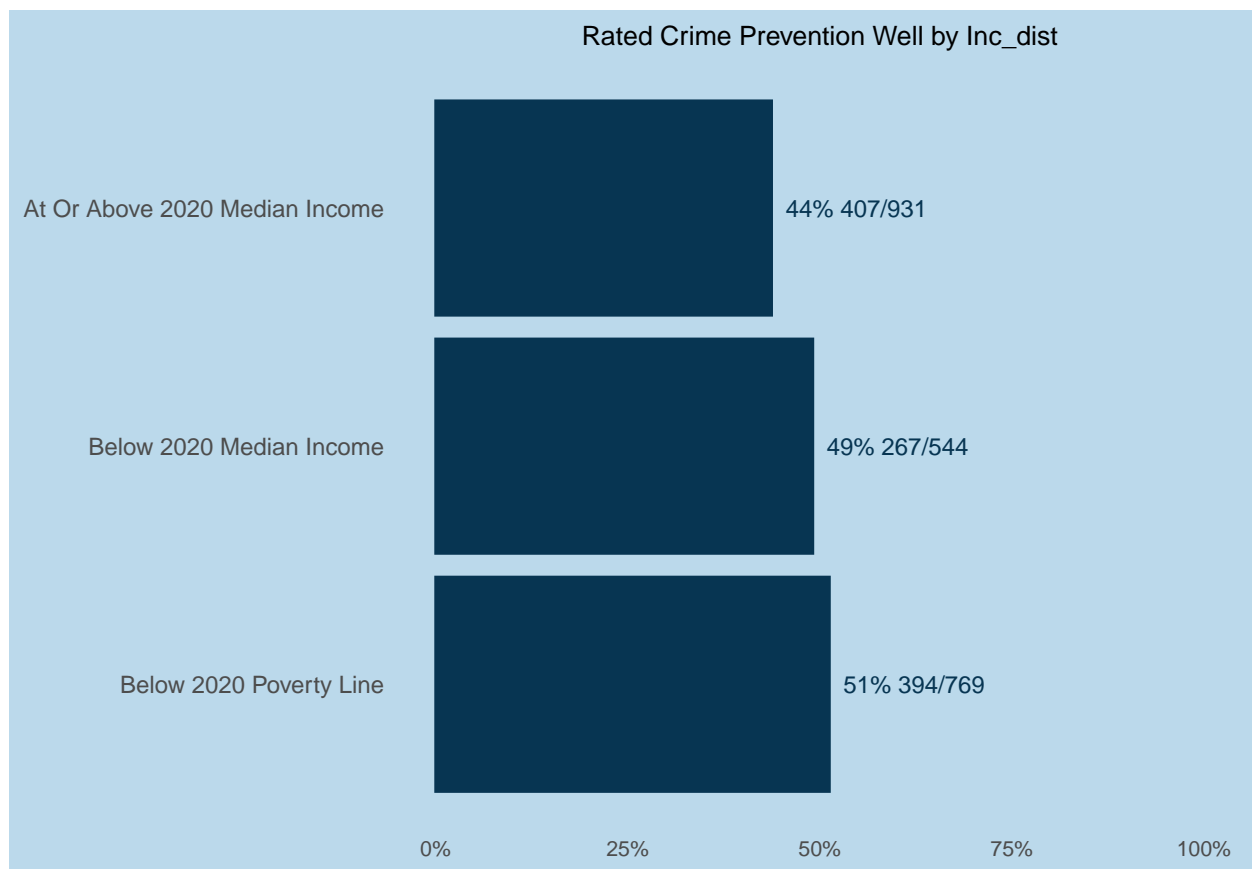
4. Find subset of population who are from above median income in both the category responses
 - b. Compare and contrast the responses between high and low income population

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

```
## [1] 3.294563
```

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

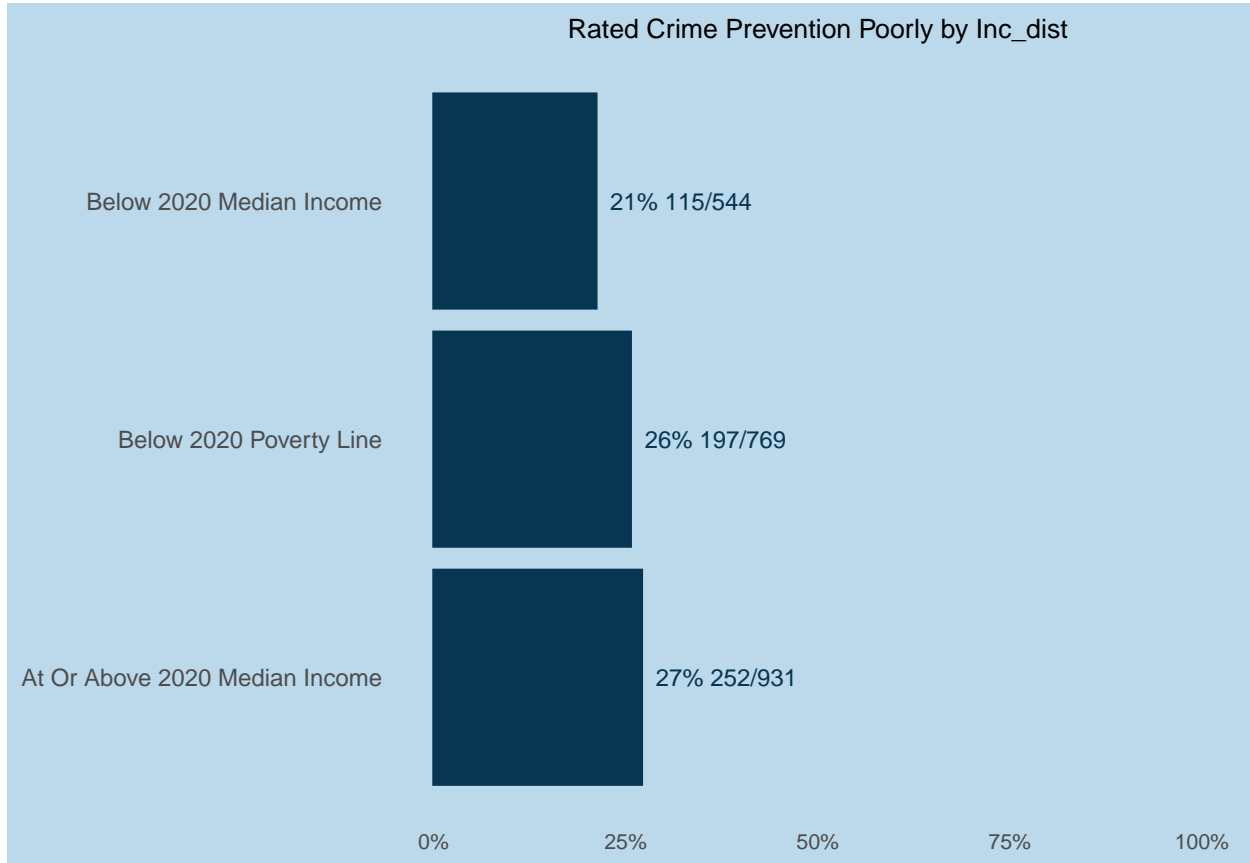
```
## $inc_dist
## $inc_dist$plot
```



```
##
## $inc_dist$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 0.0023
## below 2020 median income below 2020 poverty line
## at or above 2020 median income NA 0.0023
## 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", show =
```

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



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

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

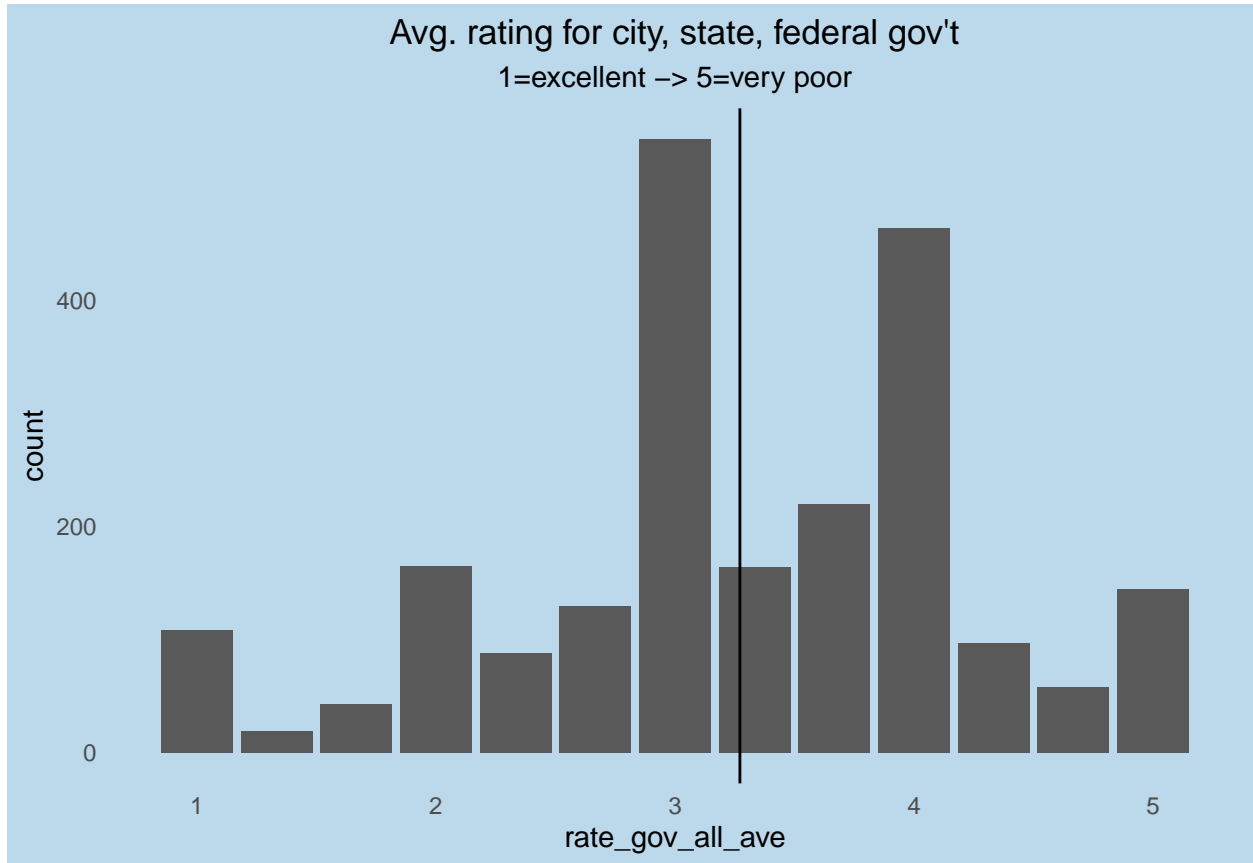
1. Find respondents who rated city/state/federal government response as good or excellent [31]

- Find proportion of subset who indicated they would use the government for at least one need [33]
- 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)

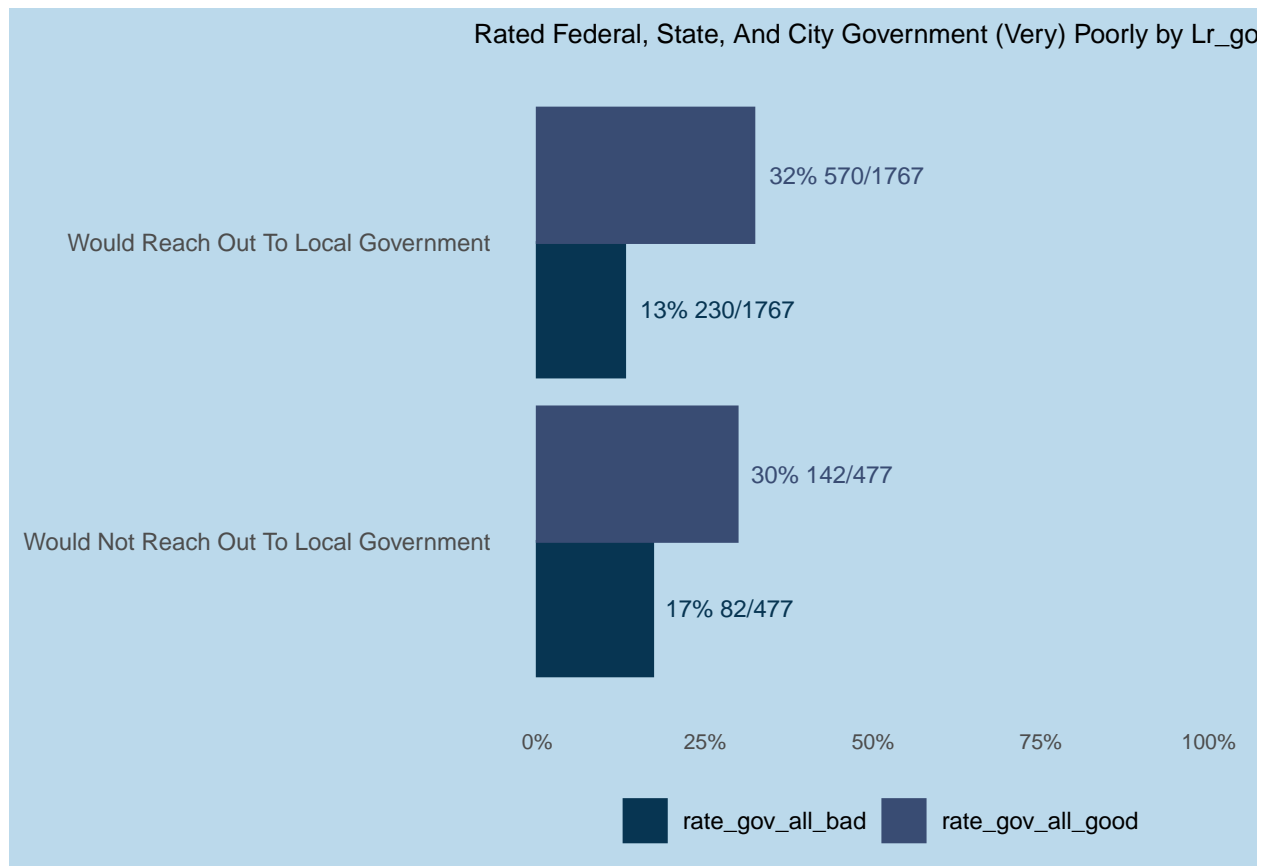
mean_val <- mean(6 - wrangled %>% select(rate_gov_fed, rate_gov_sta, rate_gov_cit) %>% unlist, na.rm = TRUE)

wrangled %>% ggplot(aes(x = rate_gov_all_ave)) + geom_bar() + geom_vline(xintercept = mean_val) + ggtitle("Avg. rating for city, state, federal gov't")
```



```
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
```



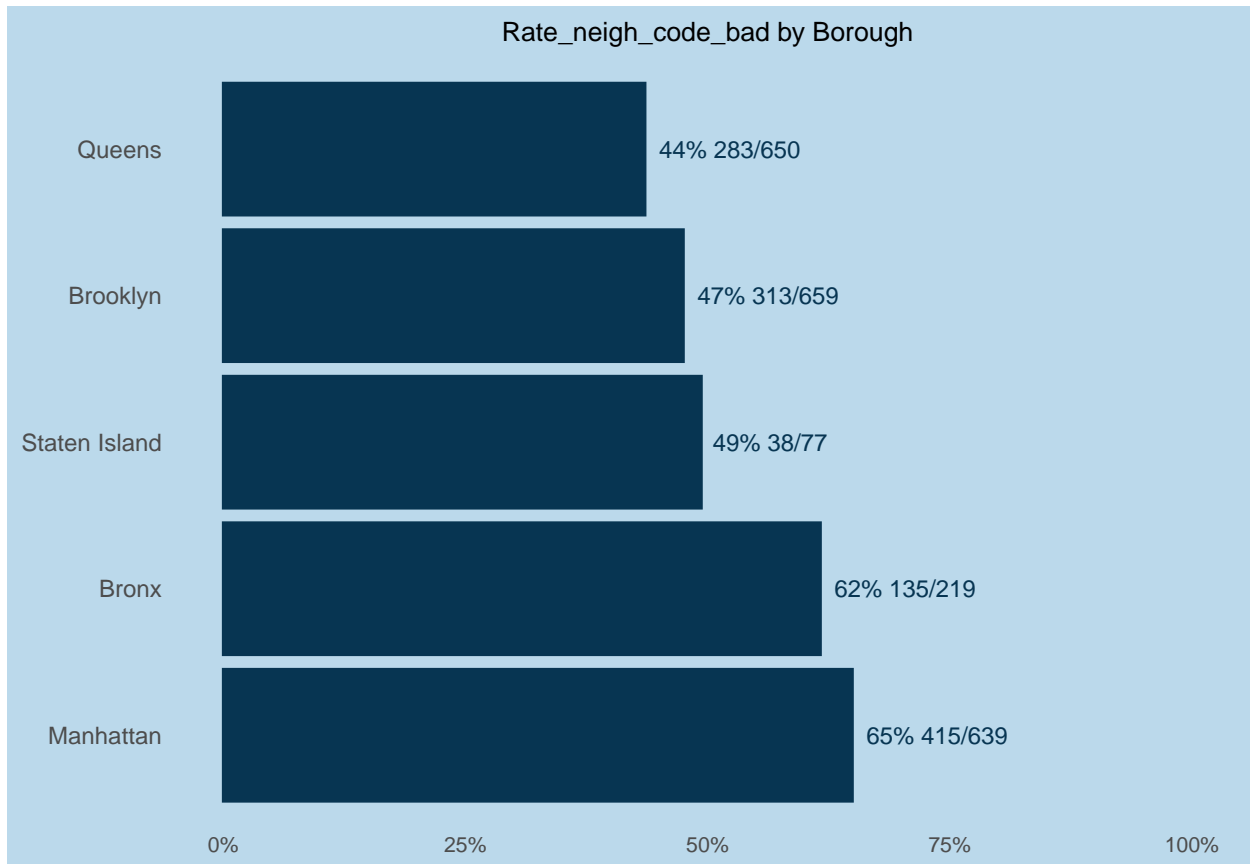
```
##
## $lr_gov$p.values
## $lr_gov$p.values$rate_gov_all_bad
## would reach out to local government
## would reach out to local government NA
## would not reach out to local government NA
## would not reach out to local government
## would reach out to local government NA
## would not reach out to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

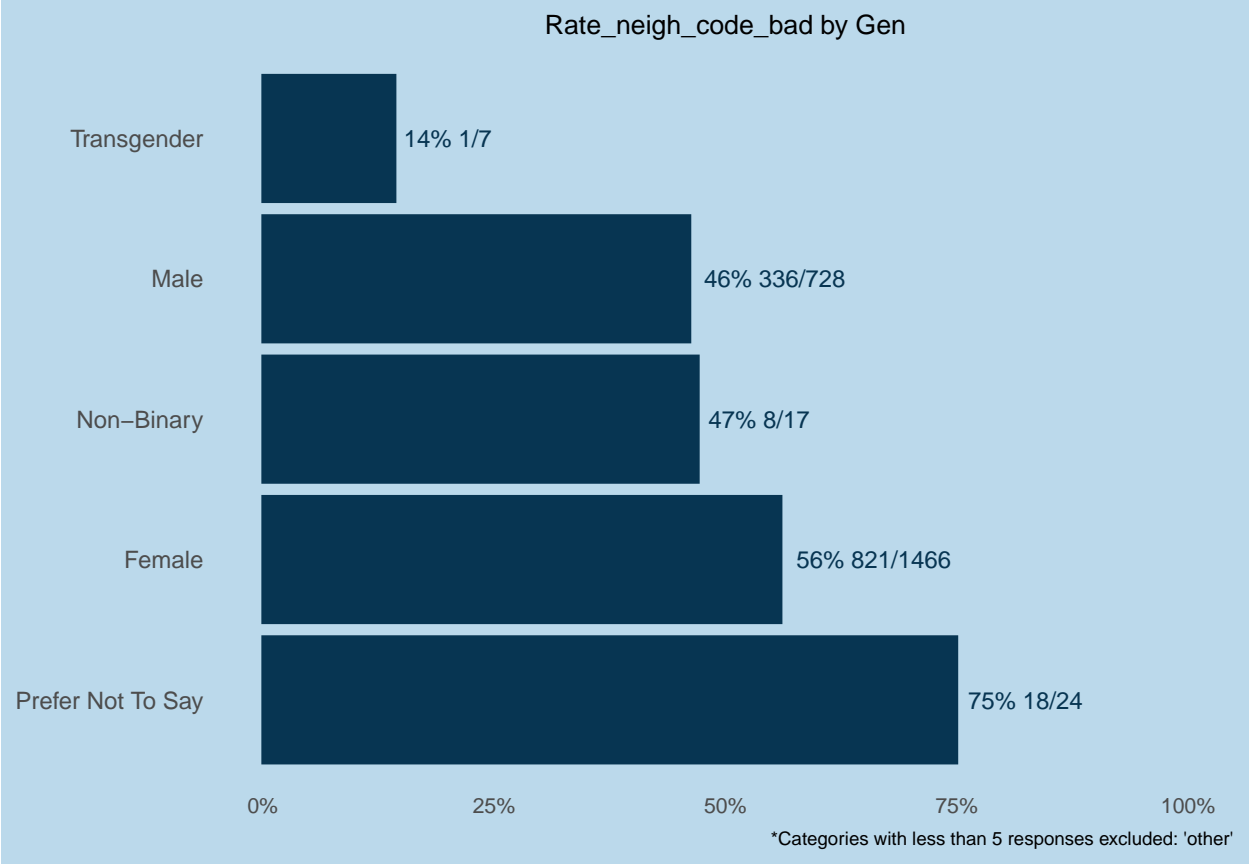
1. Run binary distribution for overall rating of all neighborhood services as done for police responsiveness in 7.2

```
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)
  })
```

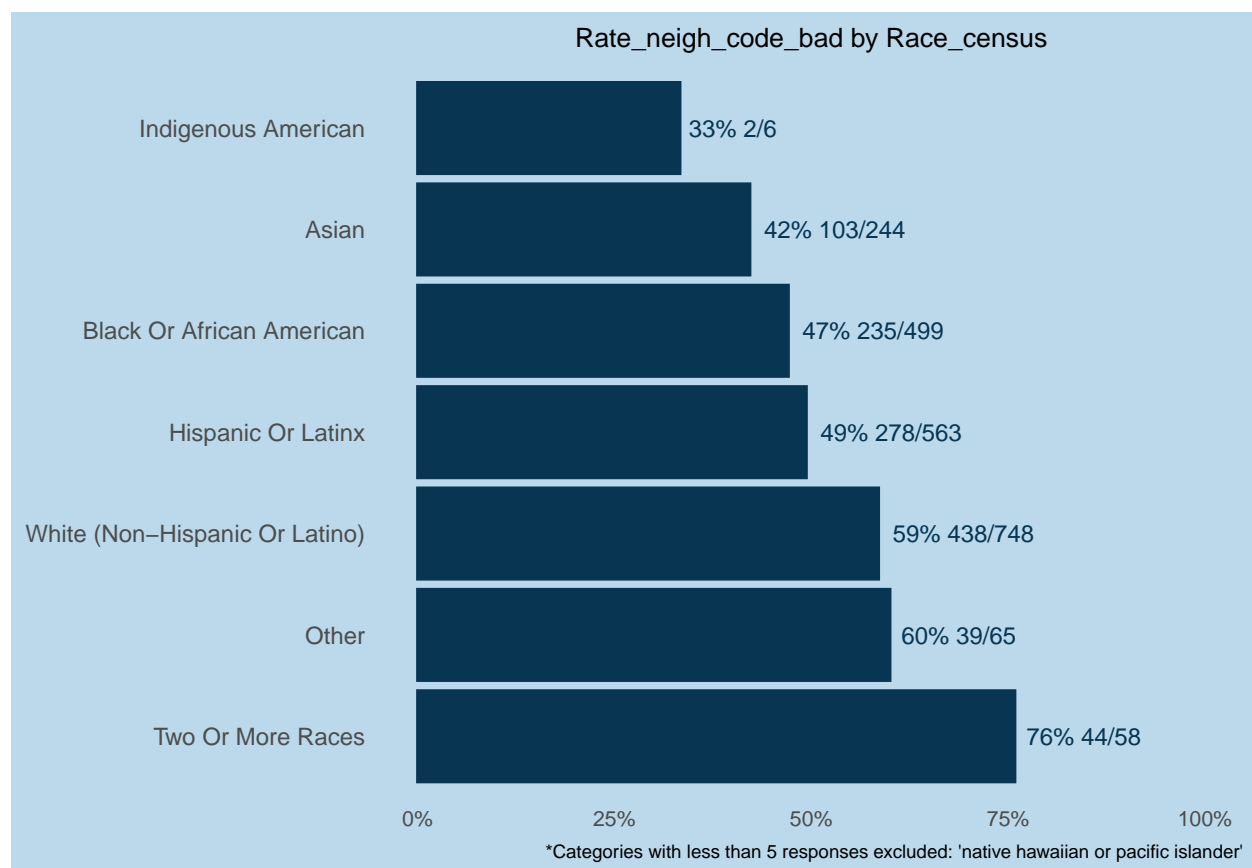
```
## [[1]]
## [[1]]$borough
## [[1]]$borough$plot
```



```
##
## [[1]]$borough$p.values
## [[1]]$borough$p.values$rate_neigh_code_bad
##
##      queens  brooklyn  staten island  bronx  manhattan
## queens      NA      NA      NA  5.1e-06  1.9e-14
## brooklyn      NA      NA      NA  3.8e-04  3.5e-10
## staten island  NA      NA      NA      NA      NA
## bronx      5.1e-06  3.8e-04      NA      NA      NA
## manhattan    1.9e-14  3.5e-10      NA      NA      NA
##
##
##
## [[1]]$gen
## [[1]]$gen$plot
```

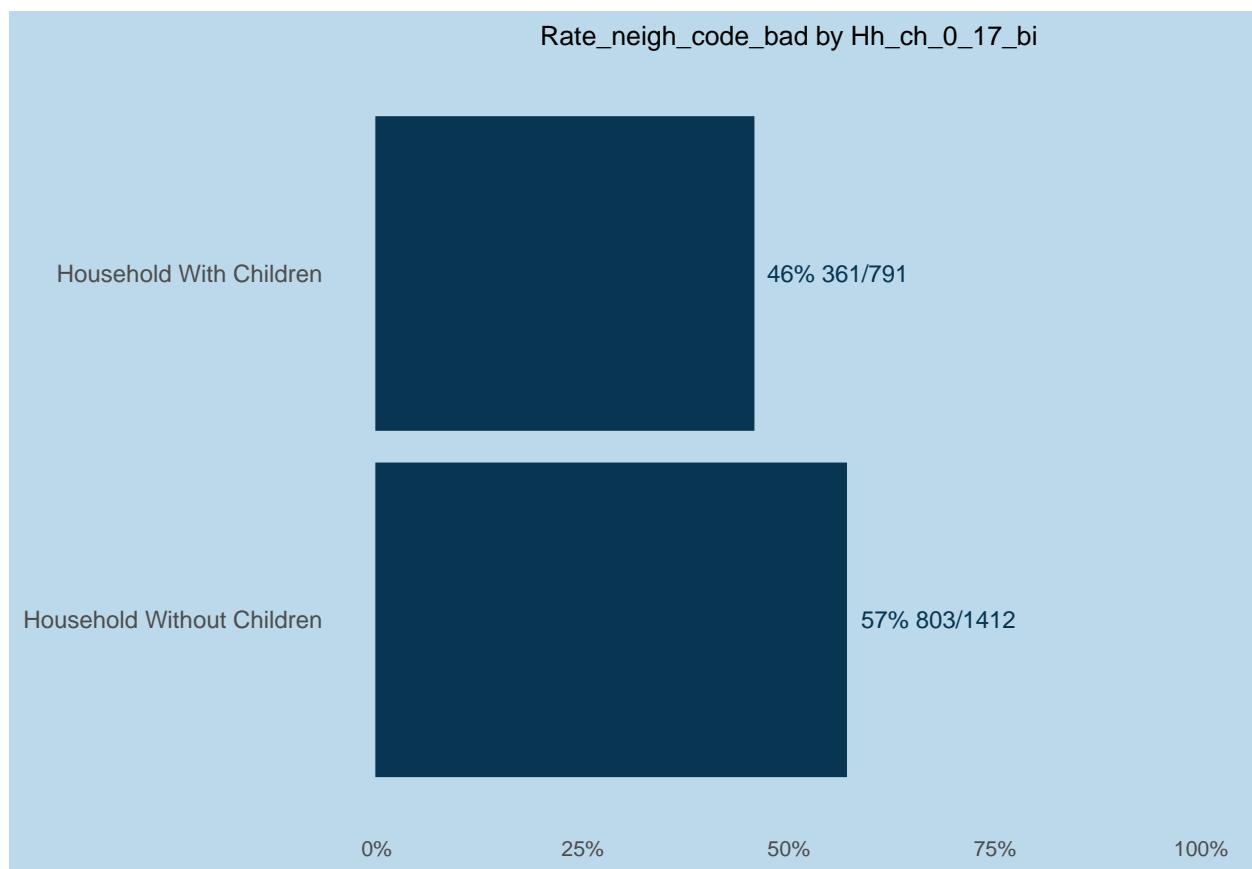


```
##  
## [[1]]$gen$p.values  
## [[1]]$gen$p.values$rate_neigh_code_bad  
##  
##      transgender      male non-binary  female prefer not to say  
## transgender          NA      NA          NA      NA          NA  
## male                 NA      NA          NA 1.7e-05      0.0099  
## non-binary           NA      NA          NA      NA          NA  
## female               NA 1.7e-05      NA      NA          NA  
## prefer not to say    NA 9.9e-03      NA      NA          NA  
##  
##  
##  
## [[1]]$race_census  
## [[1]]$race_census$plot
```

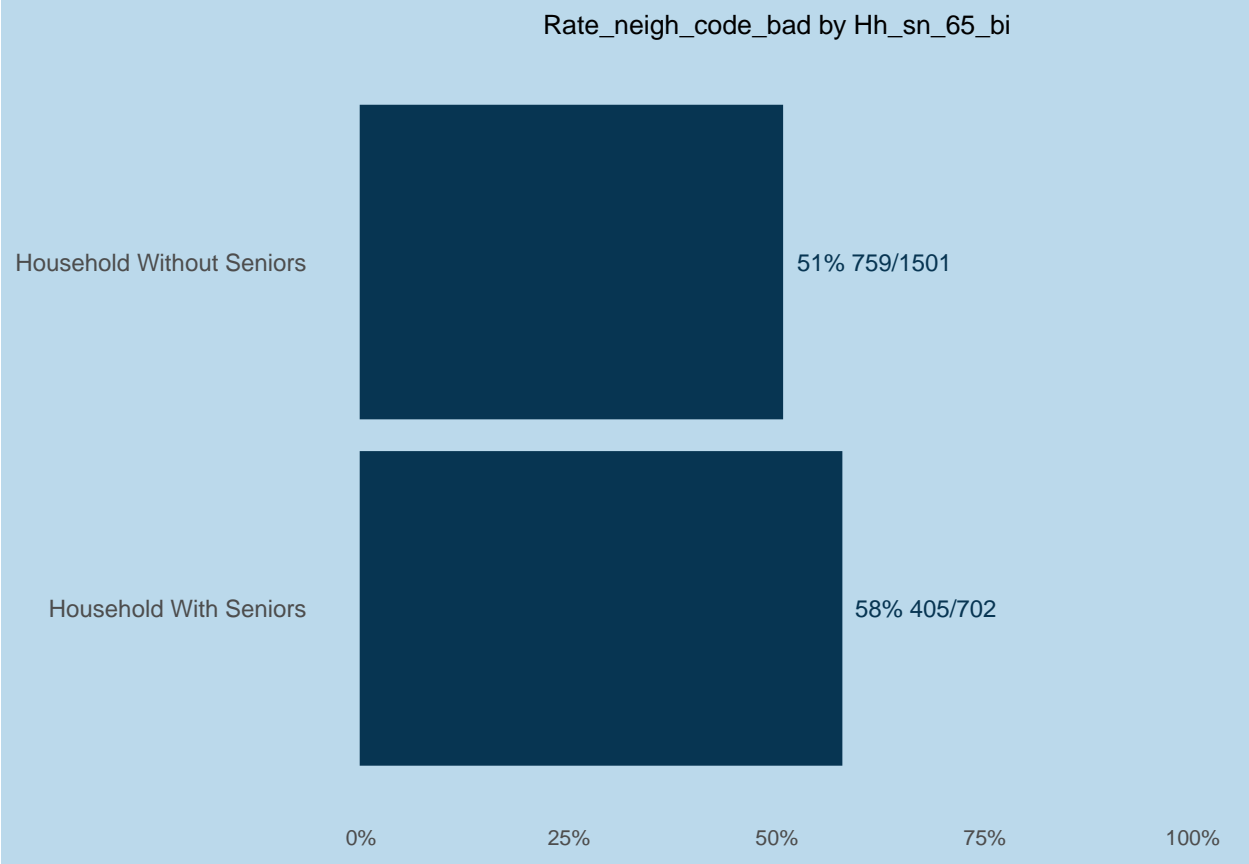


```
##
## [[1]]$race_census$p.values
## [[1]]$race_census$p.values$rate_neigh_code_bad
##
##               Indigenous American      asian
## Indigenous American             NA      NA
## asian                          NA      NA
## black or african american       NA      NA
## hispanic or latinx              NA      NA
## white (non-hispanic or latino)  NA 1.2e-05
## other                          NA      NA
## two or more races              NA 8.1e-06
##
##               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)  8.8e-05 0.00120
## other                          NA      NA
## two or more races              6.1e-05 0.00021
##
##               white (non-hispanic or latino) other
## Indigenous American             NA      NA
## asian                          1.2e-05  NA
## black or african american       8.8e-05  NA
## hispanic or latinx              1.2e-03  NA
## white (non-hispanic or latino)  NA      NA
## other                          NA      NA
```

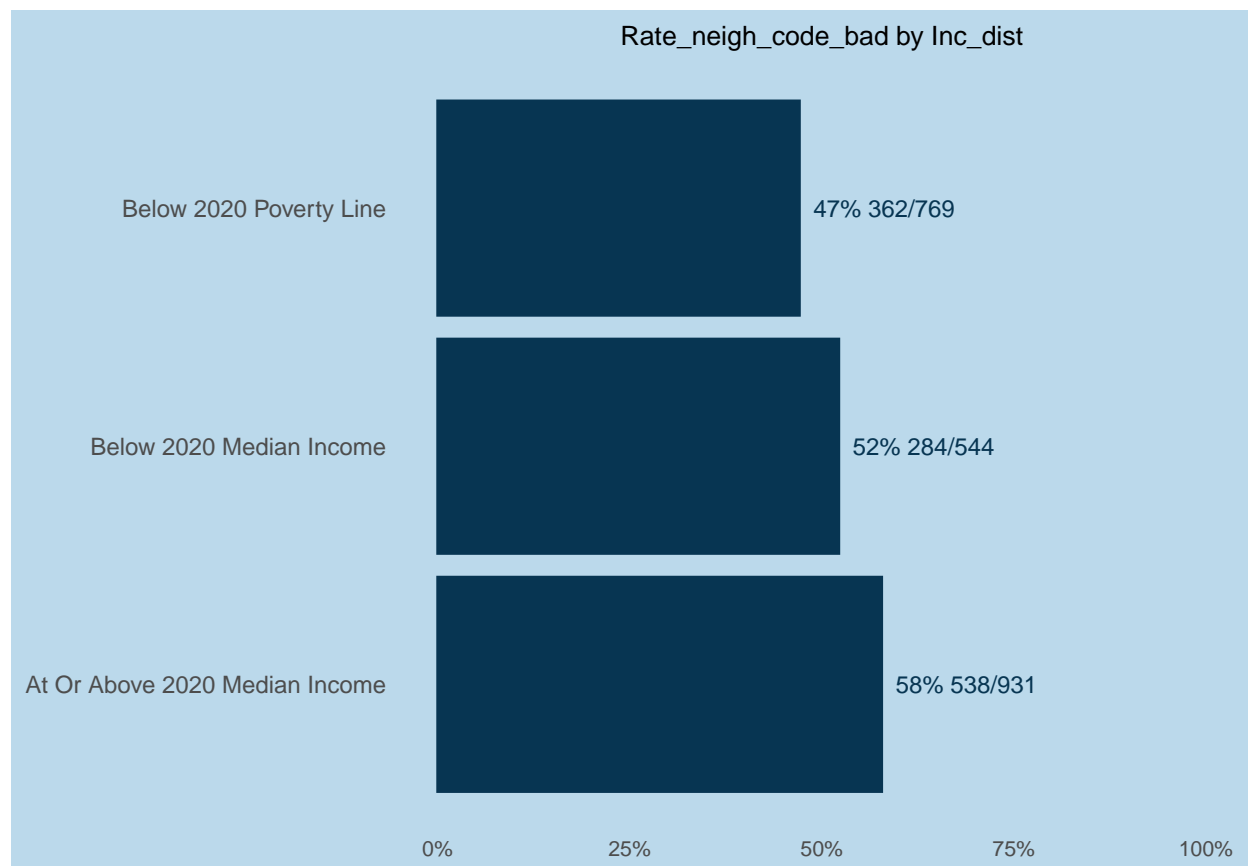
```
## two or more races NA NA
## two or more races
## Indigenous American NA
## asian 8.1e-06
## black or african american 6.1e-05
## hispanic or latinx 2.1e-04
## white (non-hispanic or latino) NA
## other NA
## two or more races NA
##
##
## [[1]]$hh_ch_0_17_bi
## [[1]]$hh_ch_0_17_bi$plot
```



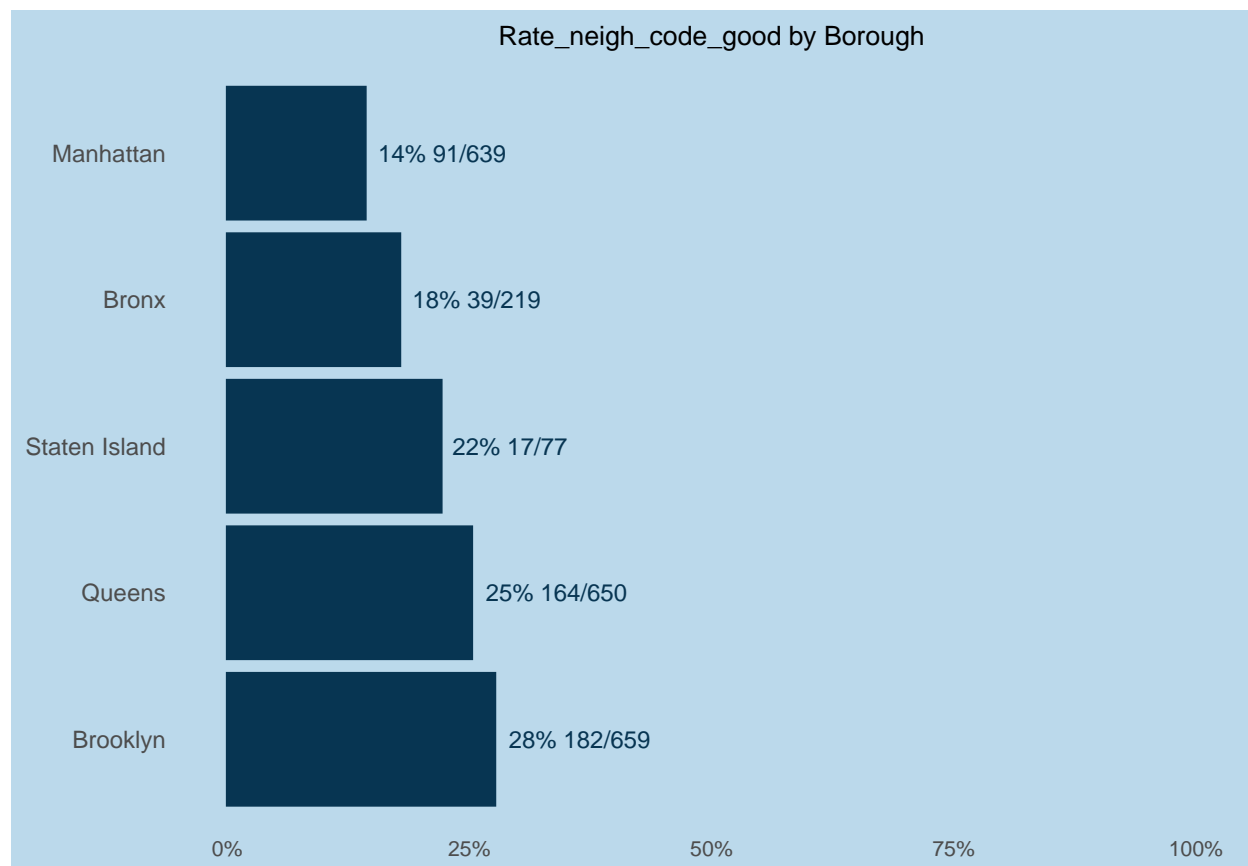
```
##
## [[1]]$hh_ch_0_17_bi$p.values
## [[1]]$hh_ch_0_17_bi$p.values$rate_neigh_code_bad
## household with children household without children
## household with children NA 5.1e-07
## household without children 5.1e-07 NA
##
##
## [[1]]$hh_sn_65_bi
## [[1]]$hh_sn_65_bi$plot
```

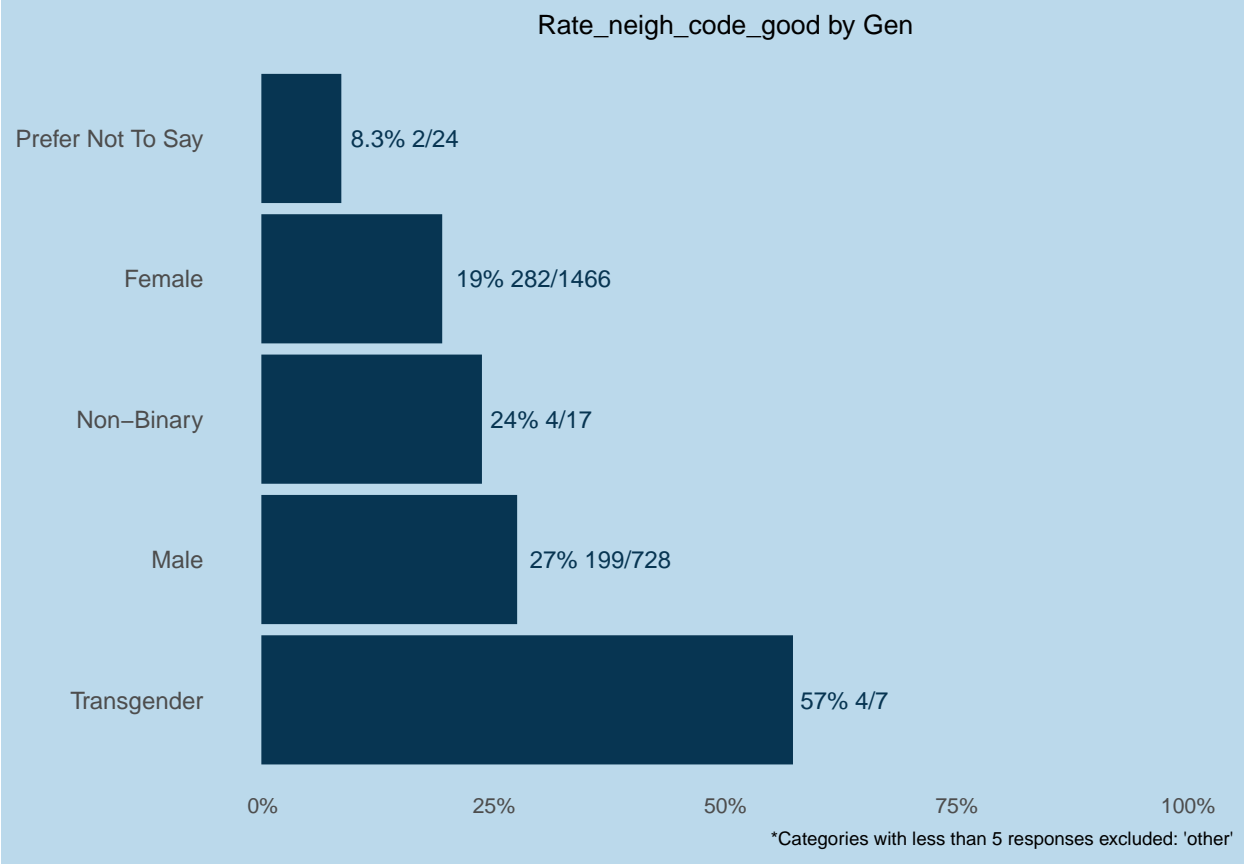
```
##  
## [[1]]$hh_sn_65_bi$p.values  
## [[1]]$hh_sn_65_bi$p.values$rate_neigh_code_bad  
## household without seniors household with seniors  
## household without seniors NA 0.0021  
## household with seniors 0.0021 NA  
##  
##  
##  
## [[1]]$inc_dist  
## [[1]]$inc_dist$plot
```



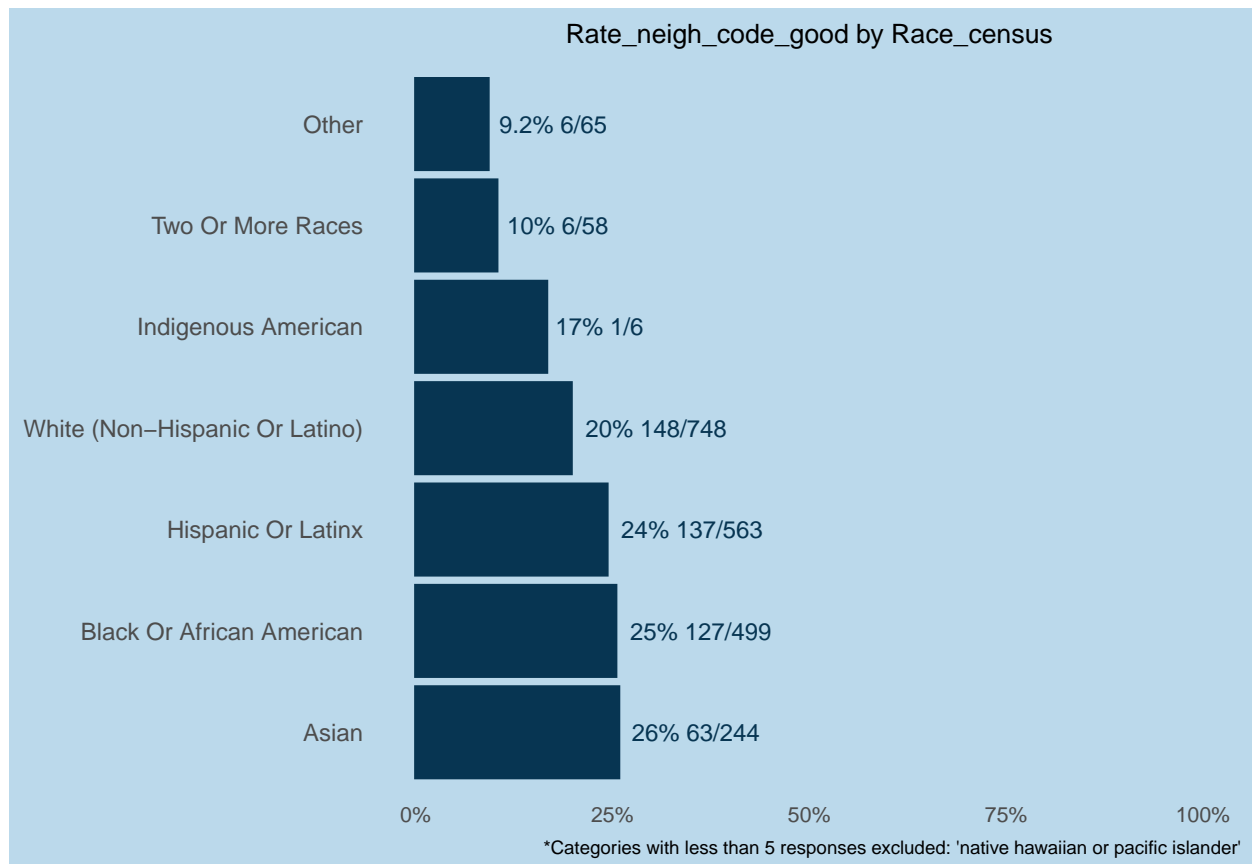
```
##
## [[1]]$inc_dist$p.values
## [[1]]$inc_dist$p.values$rate_neigh_code_bad
##          below 2020 poverty line below 2020 median income
## below 2020 poverty line          NA          NA
## below 2020 median income          NA          NA
## at or above 2020 median income    1.3e-05      NA
##          at or above 2020 median income
## below 2020 poverty line          1.3e-05
## below 2020 median income          NA
## at or above 2020 median income          NA
##
##
##
## [[2]]
## [[2]]$borough
## [[2]]$borough$plot
```



```
##
## [[2]]$borough$p.values
## [[2]]$borough$p.values$rate_neigh_code_good
##      manhattan bronx staten island queens brooklyn
## manhattan      NA   NA           NA  1e-06  5.1e-09
## bronx          NA   NA           NA   NA  5.0e-03
## staten island   NA   NA           NA   NA      NA
## queens         1.0e-06 NA           NA   NA      NA
## brooklyn       5.1e-09 0.005        NA   NA      NA
##
##
##
## [[2]]$gen
## [[2]]$gen$plot
```

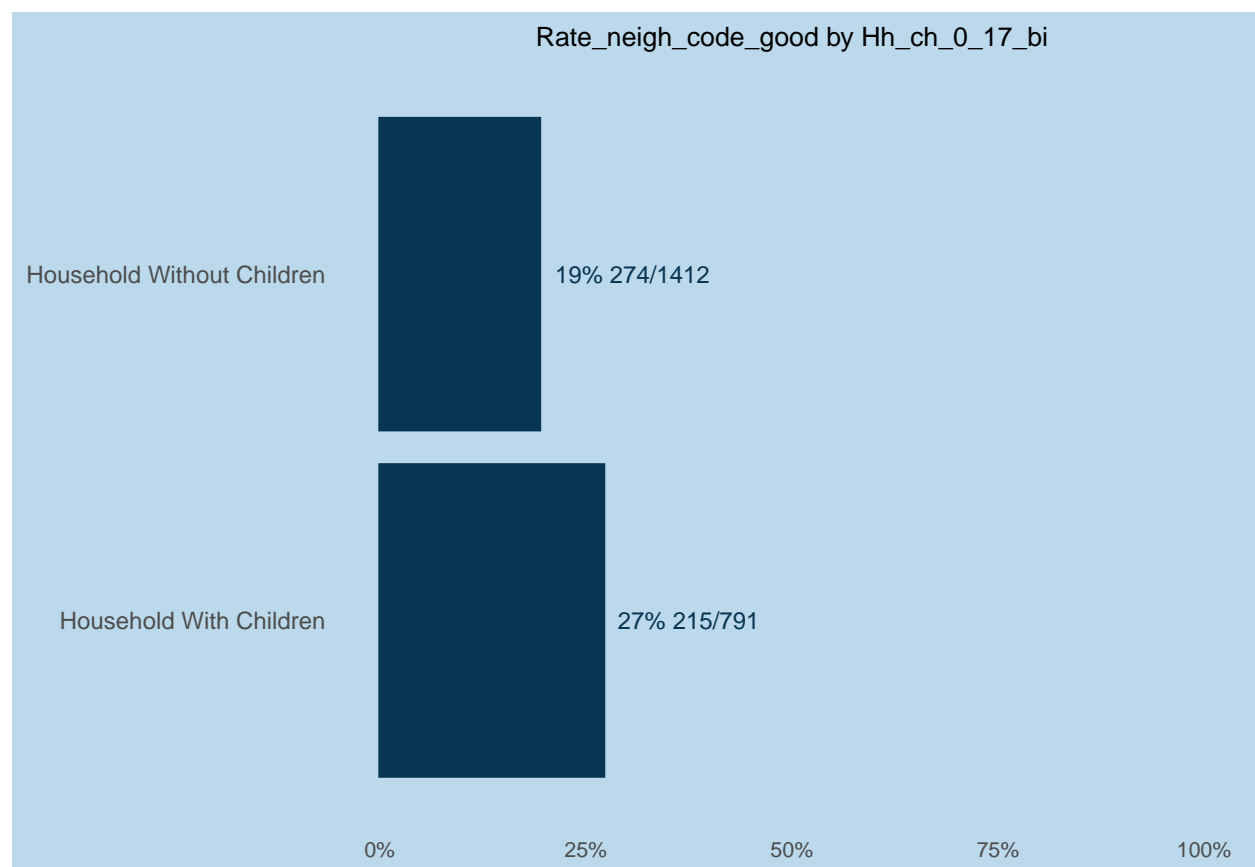


```
##  
## [[2]]$gen$p.values  
## [[2]]$gen$p.values$rate_neigh_code_good  
##  
##           prefer not to say female non-binary  male transgender  
## prefer not to say          NA      NA          NA      NA          NA  
## female                    NA      NA          NA 2e-05          NA  
##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



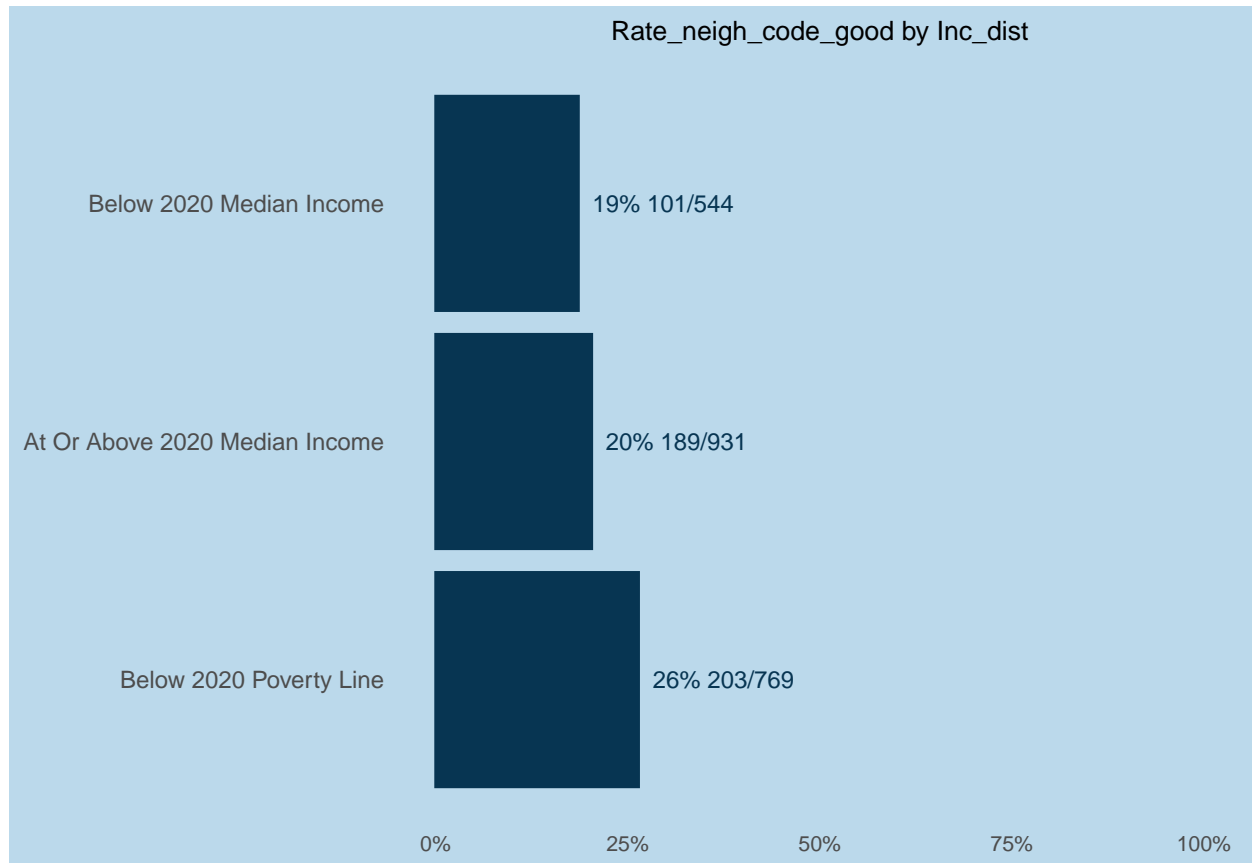
```
##
## [[2]]$race_census$p.values
## [[2]]$race_census$p.values$rate_neigh_code_good
##
##          other two or more races Indigenous American
## other          NA              NA                  NA
## two or more races          NA              NA                  NA
## Indigenous American          NA              NA                  NA
## white (non-hispanic or latino)          NA              NA                  NA
## hispanic or latinx          0.0095              NA                  NA
## black or african american          0.0061              NA                  NA
## asian          0.0072              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          0.0095              0.0061
## 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
```



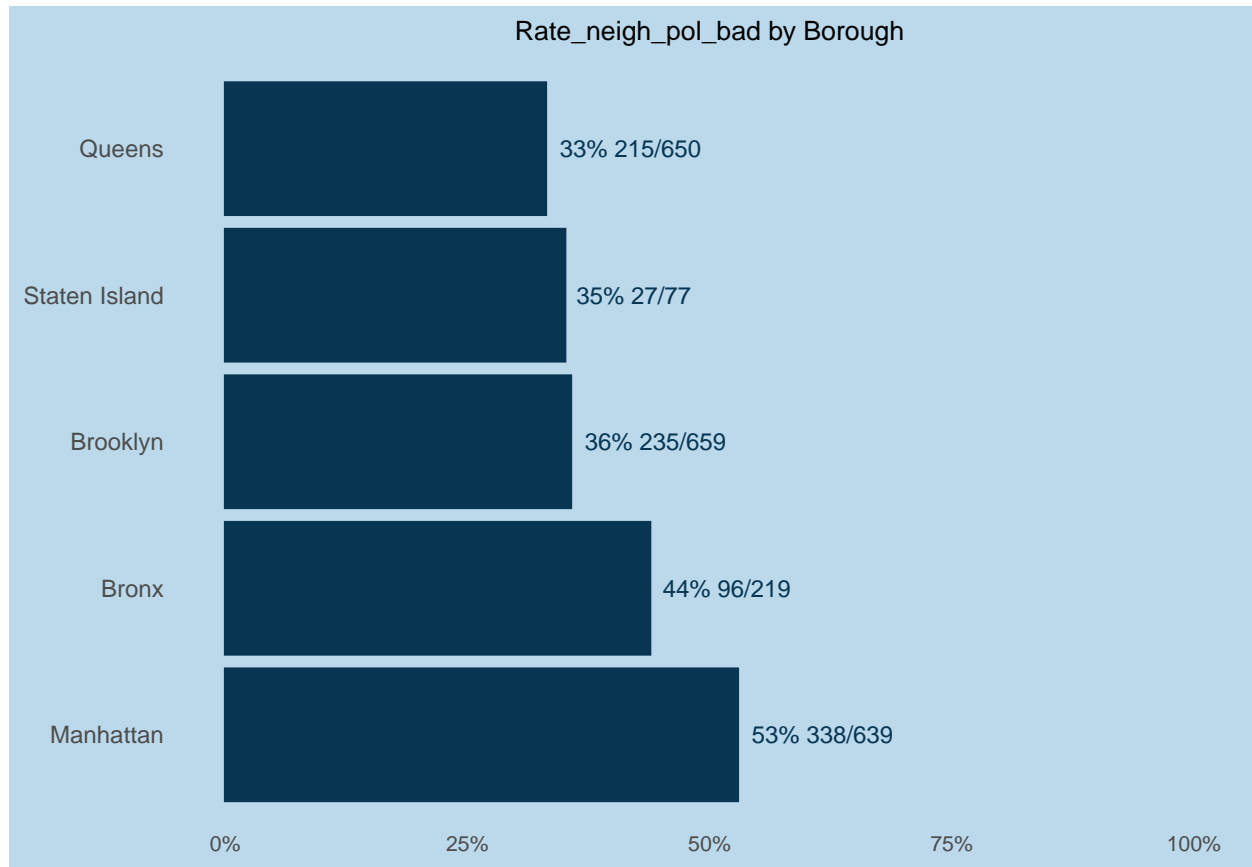
```
##
## [[2]]$hh_ch_0_17_bi$p.values
## [[2]]$hh_ch_0_17_bi$p.values$rate_neigh_code_good
##
## household without children household with children
## household without children
## household with children
##
##
##
## [[2]]$hh_sn_65_bi
```

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

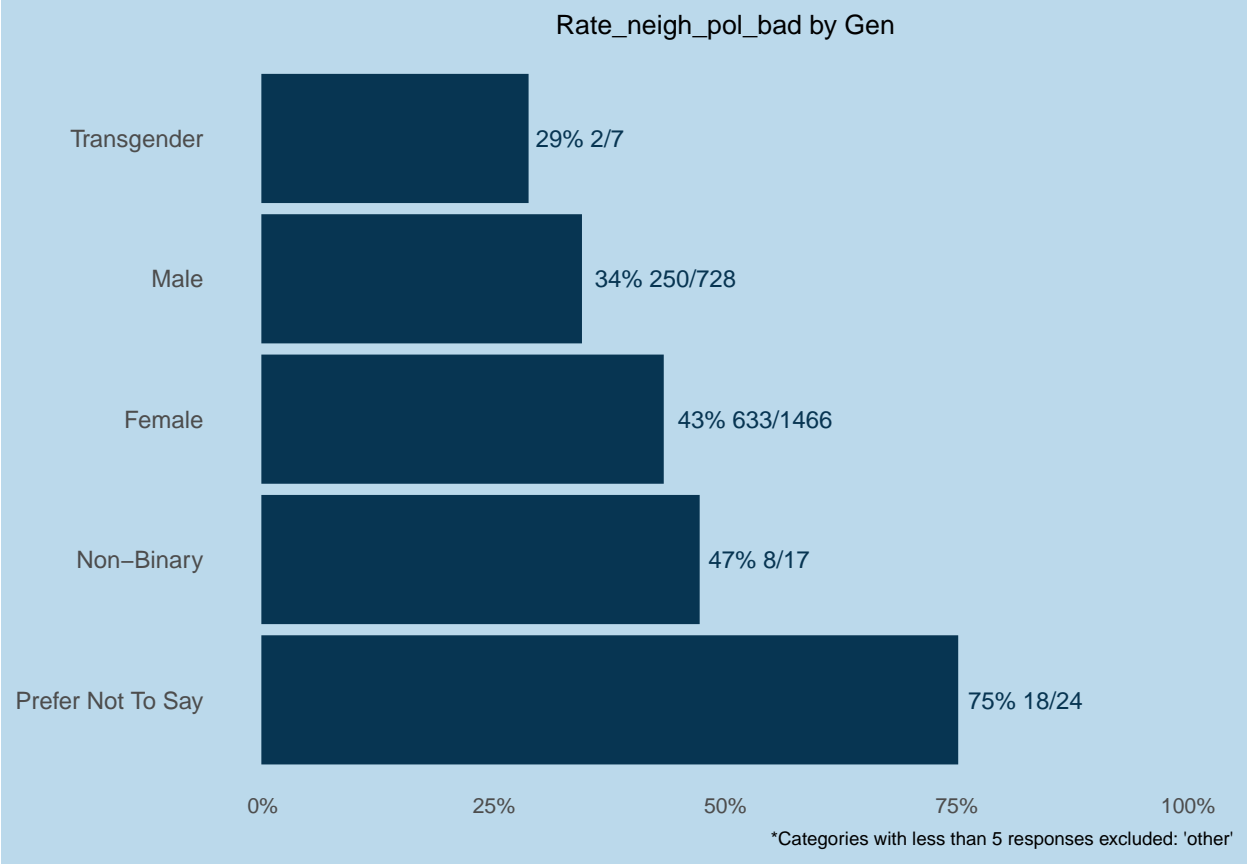


```
##
## [[2]]$inc_dist$p.values
## [[2]]$inc_dist$p.values$rate_neigh_code_good
##
## below 2020 median income
## below 2020 median income NA
## at or above 2020 median income NA
## below 2020 poverty line 0.0012
##
## at or above 2020 median income
## below 2020 median income NA
## at or above 2020 median income NA
## below 2020 poverty line 0.0036
##
## below 2020 poverty line
## below 2020 median income 0.0012
## at or above 2020 median income 0.0036
## below 2020 poverty line NA
##
##
##
##
## [[3]]
```

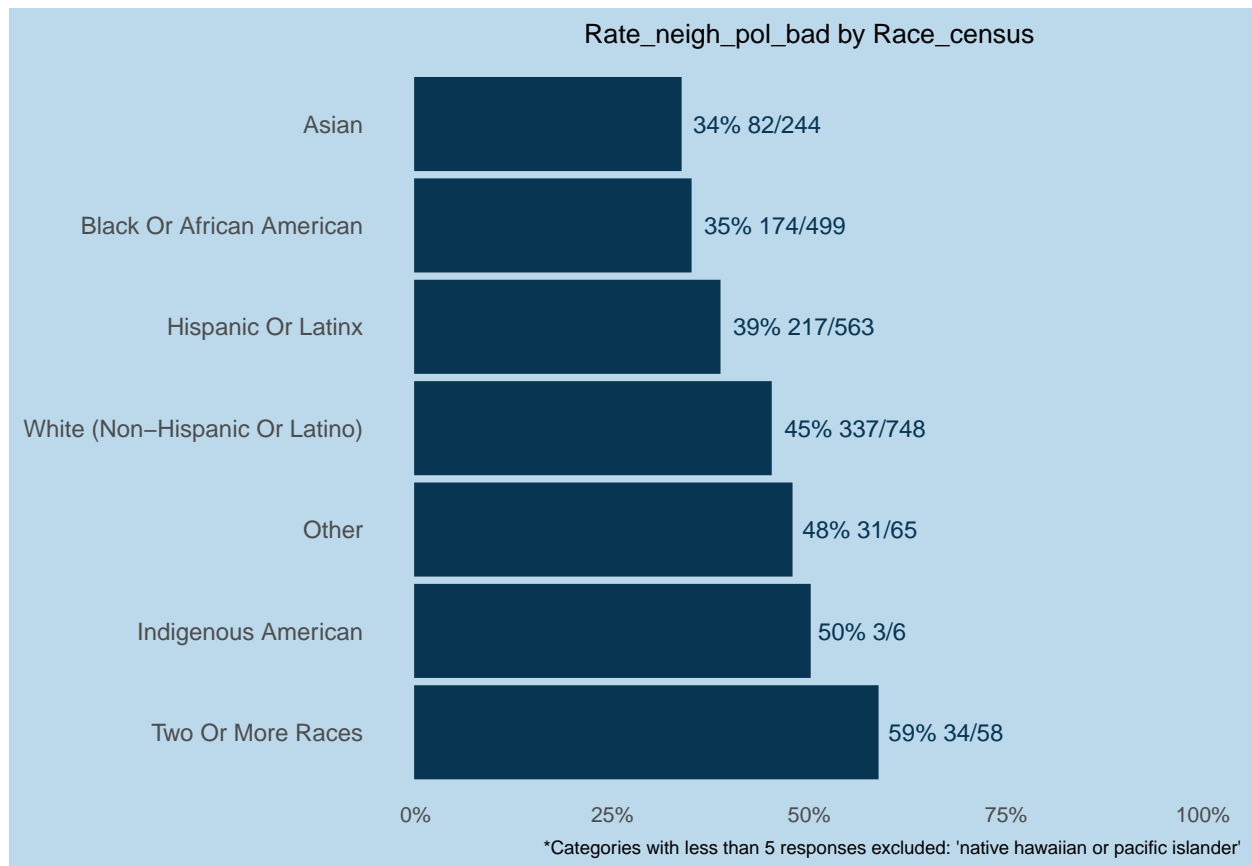
```
## [[3]]$borough
## [[3]]$borough$plot
```



```
##
## [[3]]$borough$p.values
## [[3]]$borough$p.values$rate_neigh_pol_bad
##
##      queens  staten island  brooklyn  bronx  manhattan
## queens      NA           NA        NA 0.0053  9.9e-13
## staten island  NA           NA        NA  NA   4.6e-03
## brooklyn      NA           NA        NA  NA   5.8e-10
## bronx         5.3e-03      NA        NA  NA    NA
## manhattan     9.9e-13    0.0046  5.8e-10  NA    NA
##
##
##
## [[3]]$gen
## [[3]]$gen$plot
```

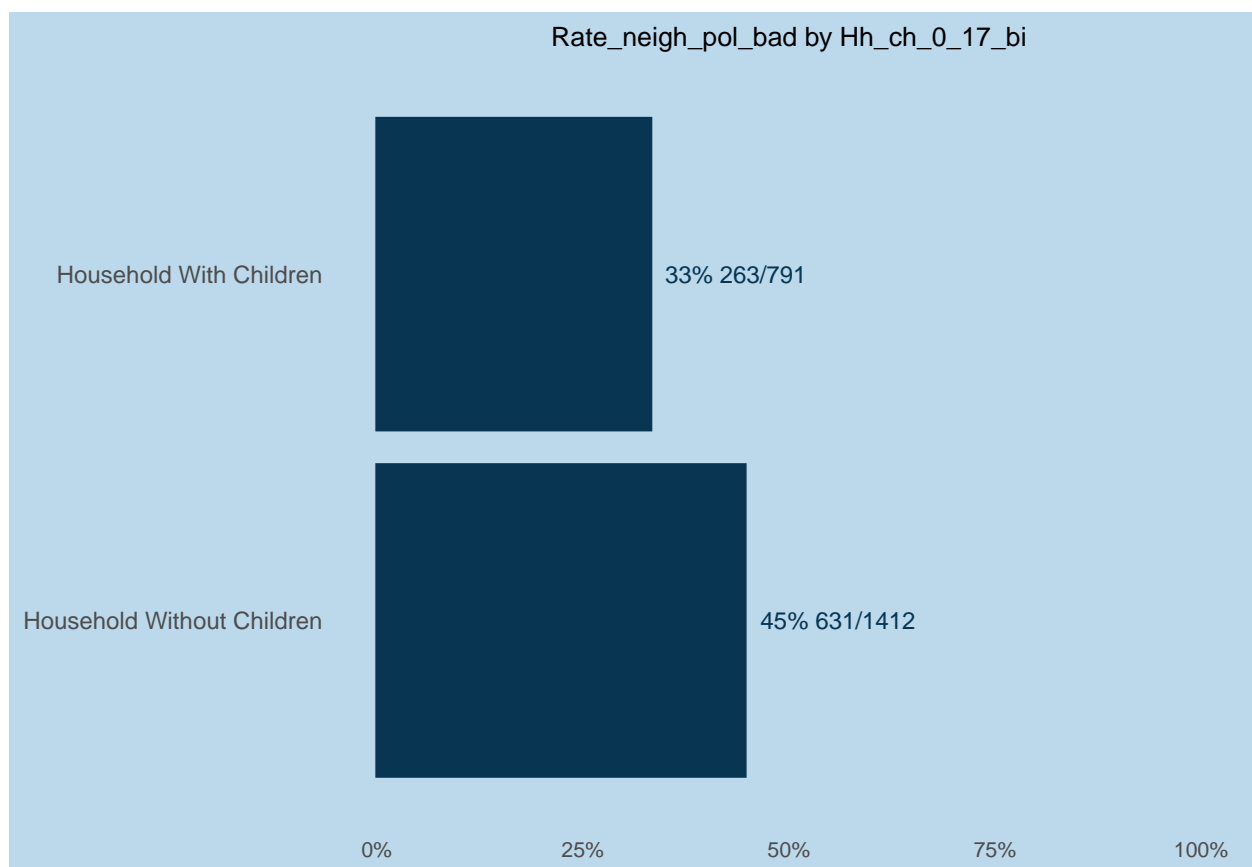



```
##
## [[3]]$gen$p.values
## [[3]]$gen$p.values$rate_neigh_pol_bad
##               transgender      male   female non-binary prefer not to say
## transgender              NA      NA      NA          NA          NA
## male                    NA      NA 8.5e-05          NA      0.00011
## female                  NA 8.5e-05      NA          NA      0.00360
## non-binary              NA      NA      NA          NA          NA
## prefer not to say       NA 1.1e-04 3.6e-03          NA          NA
##
##
##
## [[3]]$race_census
## [[3]]$race_census$plot
```



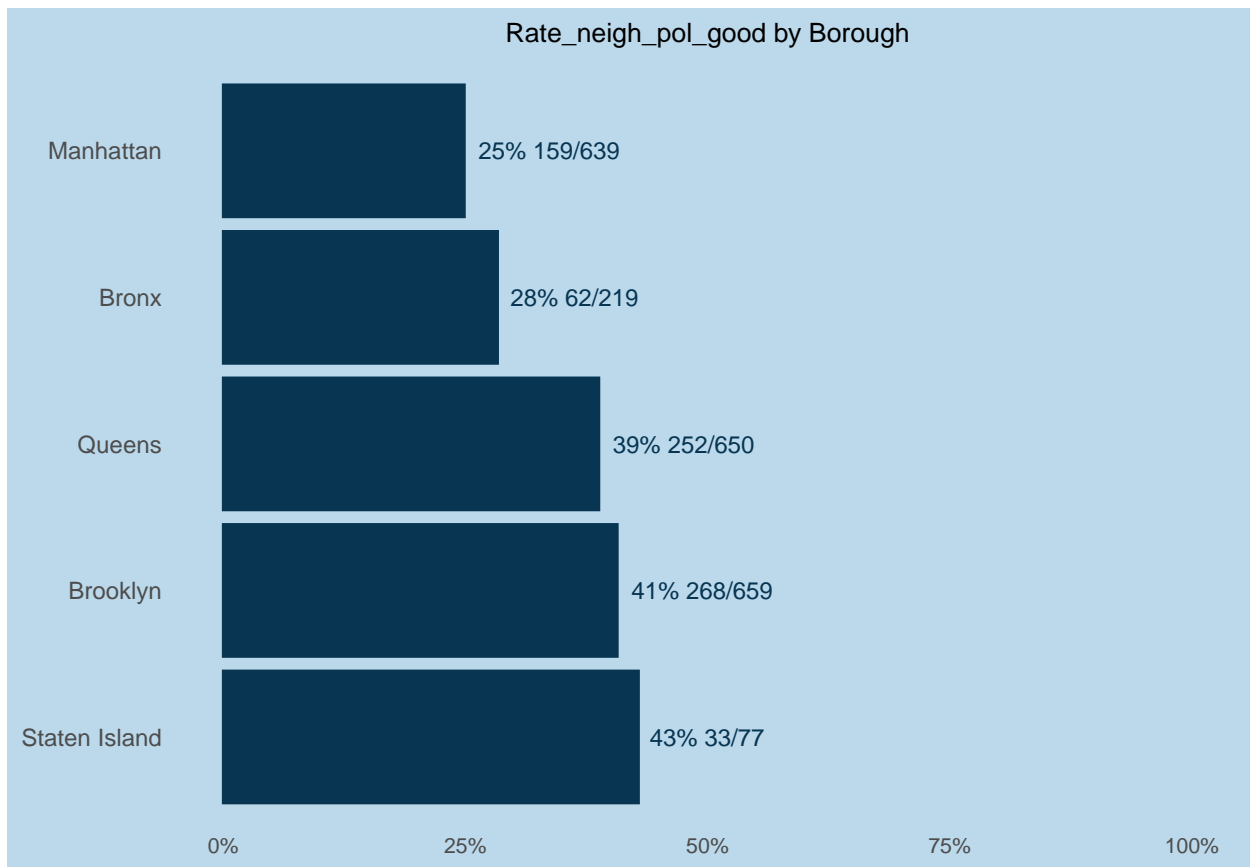
```
##
## [[3]]$race_census$p.values
## [[3]]$race_census$p.values$rate_neigh_pol_bad
##               asian black or african american
## asian                NA                      NA
## black or african american    NA                      NA
## hispanic or latinx           NA                      NA
## white (non-hispanic or latino) 0.00210          0.00043
## other                     NA                      NA
## Indigenous American          NA                      NA
## two or more races           0.00075          0.00068
##               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           0.0047
##               white (non-hispanic or latino) other
## asian                0.00210    NA
## black or african american    0.00043    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
```

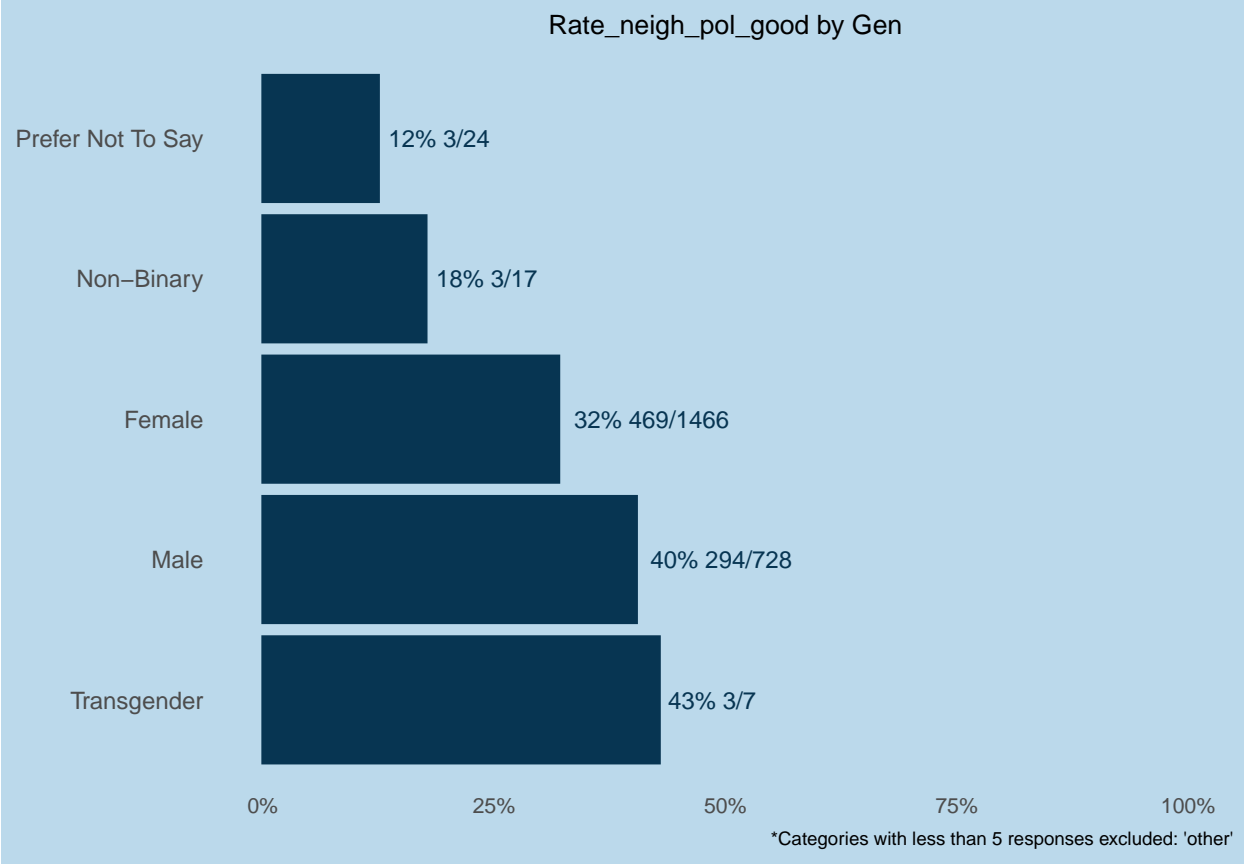


```
##
## [[3]]$hh_ch_0_17_bi$p.values
## [[3]]$hh_ch_0_17_bi$p.values$rate_neigh_pol_bad
##
## household with children household without children
## household with children NA 2e-07
## household without children 2e-07 NA
##
##
## [[3]]$hh_sn_65_bi
```

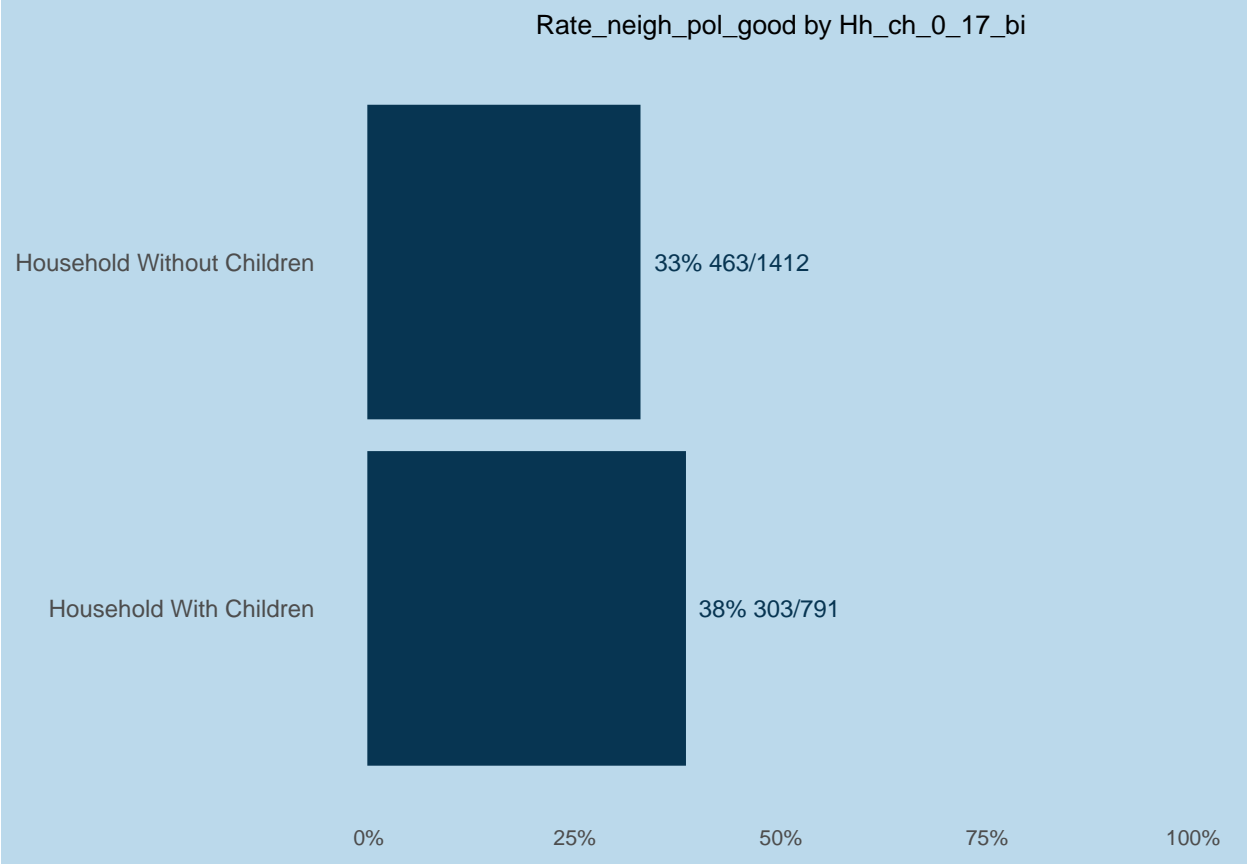
```
## NULL
##
## [[3]]$inc_dist
## NULL
##
##
## [[4]]
## [[4]]$borough
## [[4]]$borough$plot
```



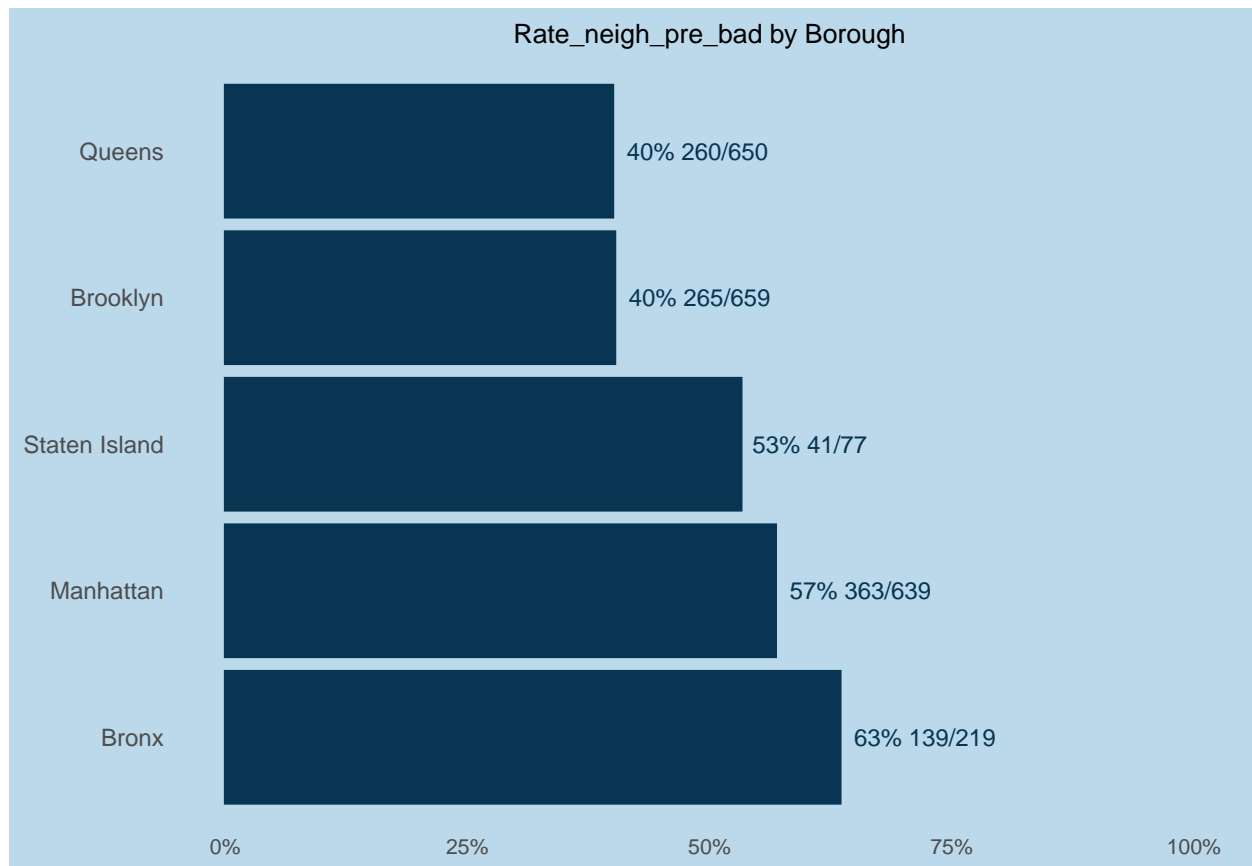
```
##
## [[4]]$borough$p.values
## [[4]]$borough$p.values$rate_neigh_pol_good
##
##      manhattan  bronx  queens  brooklyn  staten  island
## manhattan      NA    NA 1.2e-07  2.1e-09      0.0012
## bronx          NA    NA 6.8e-03  1.4e-03      NA
## queens      1.2e-07 0.0068    NA    NA      NA
## brooklyn     2.1e-09 0.0014    NA    NA      NA
## staten island 1.2e-03    NA    NA    NA      NA
##
##
##
## [[4]]$gen
## [[4]]$gen$plot
```



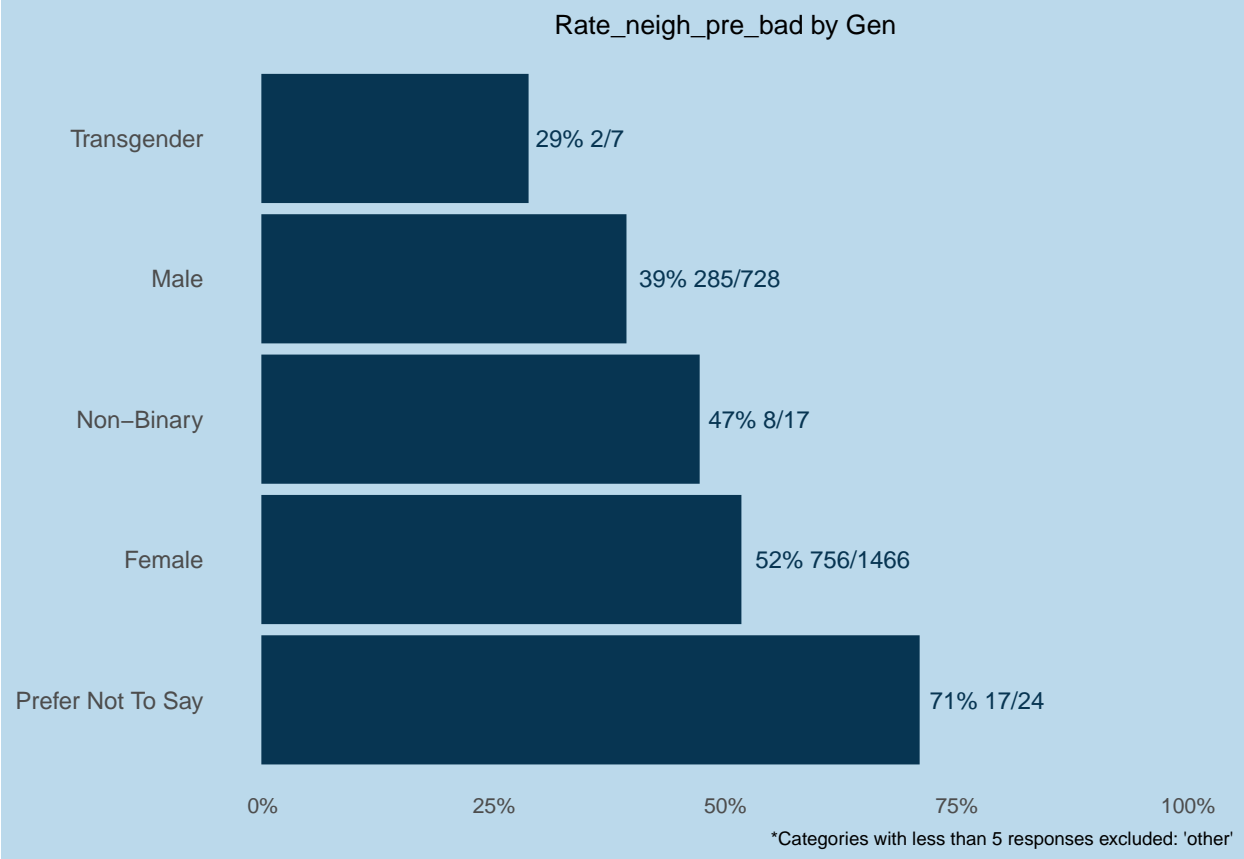
```
##
## [[4]]$gen$p.values
## [[4]]$gen$p.values$rate_neigh_pol_good
##           prefer not to say non-binary  female    male transgender
## prefer not to say          NA         NA      NA      NA         NA
## non-binary                 NA         NA      NA      NA         NA
## female                     NA         NA      NA 0.00012         NA
## male                       NA         NA 0.00012      NA         NA
## transgender                 NA         NA      NA      NA         NA
##
##
##
## [[4]]$race_census
## NULL
##
## [[4]]$hh_ch_0_17_bi
## [[4]]$hh_ch_0_17_bi$plot
```



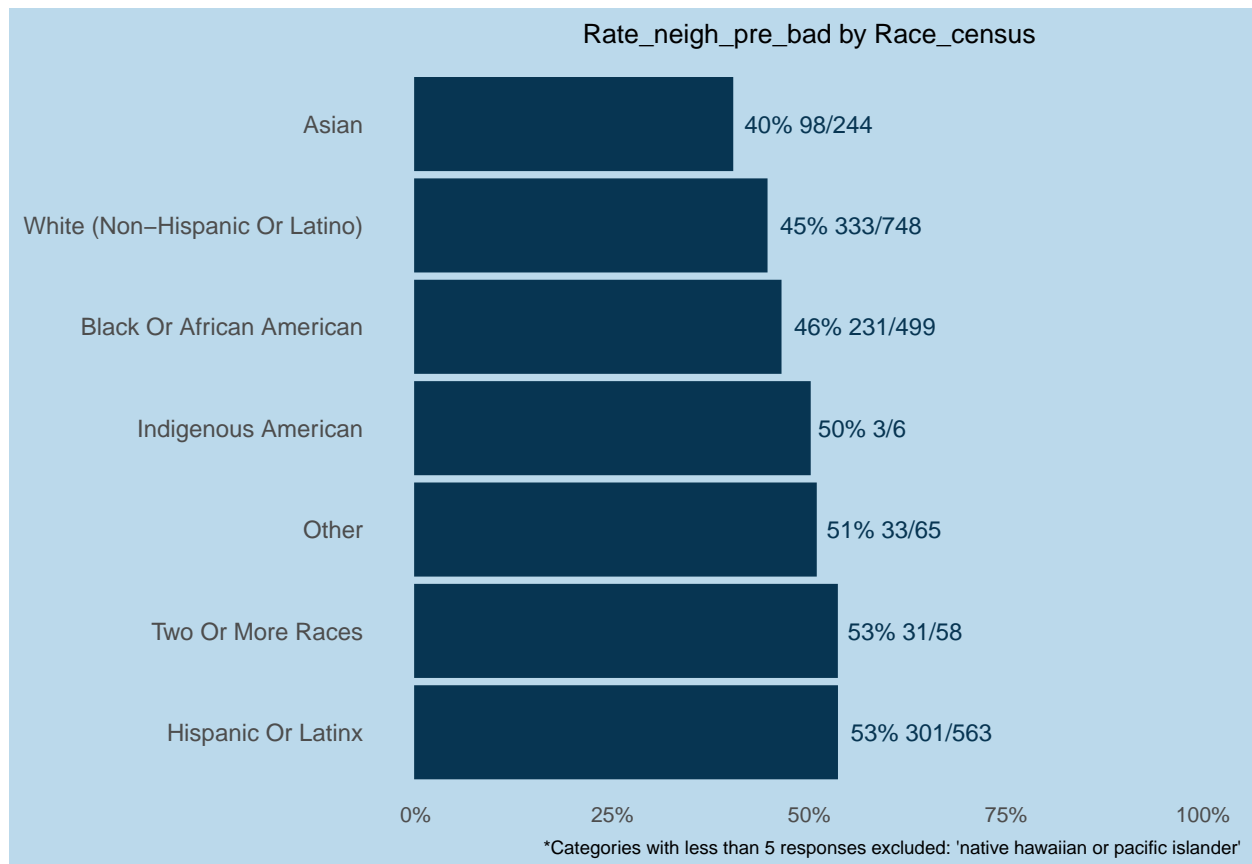
```
##
## [[4]]$hh_ch_0_17_bi$p.values
## [[4]]$hh_ch_0_17_bi$p.values$rate_neigh_pol_good
##           household without children household with children
## household without children           NA           0.01
## household with children           0.01           NA
##
##
##
## [[4]]$hh_sn_65_bi
## NULL
##
## [[4]]$inc_dist
## NULL
##
##
## [[5]]
## [[5]]$borough
## [[5]]$borough$plot
```



```
##
## [[5]]$borough$p.values
## [[5]]$borough$p.values$rate_neigh_pre_bad
##
##      queens brooklyn staten island manhattan  bronx
## queens      NA      NA      NA    2.2e-09 2.7e-09
## brooklyn     NA      NA      NA    3.1e-09 3.5e-09
## staten island NA      NA      NA      NA      NA
## manhattan    2.2e-09 3.1e-09      NA      NA      NA
## bronx        2.7e-09 3.5e-09      NA      NA      NA
##
##
##
## [[5]]$gen
## [[5]]$gen$plot
```

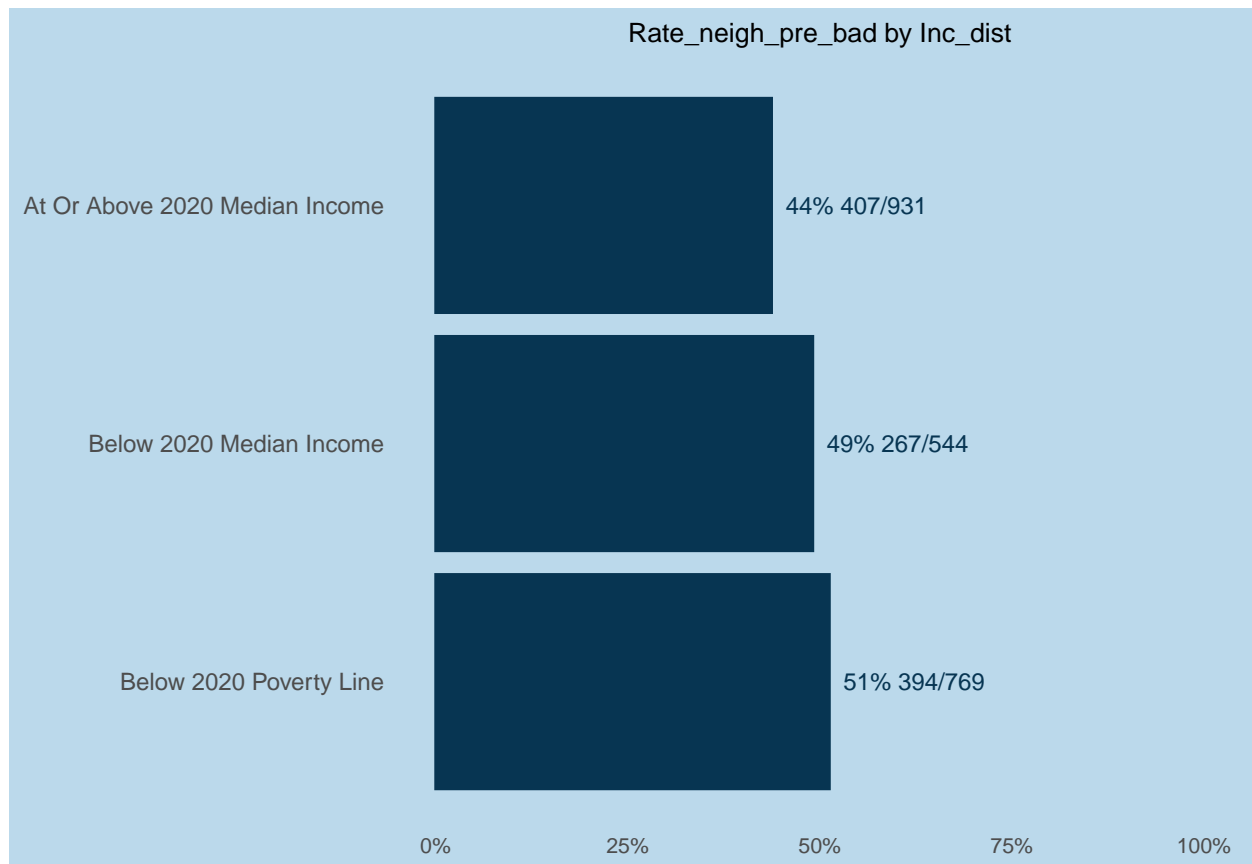


```
##  
## [[5]]$gen$p.values  
## [[5]]$gen$p.values$rate_neigh_pre_bad  
##  
##      transgender      male non-binary  female prefer not to say  
## transgender          NA      NA          NA      NA          NA  
## male                 NA      NA          NA 5.3e-08      0.0037  
## non-binary           NA      NA          NA      NA          NA  
## female               NA 5.3e-08      NA      NA          NA  
## prefer not to say    NA 3.7e-03      NA      NA          NA  
##  
##  
##  
## [[5]]$race_census  
## [[5]]$race_census$plot
```

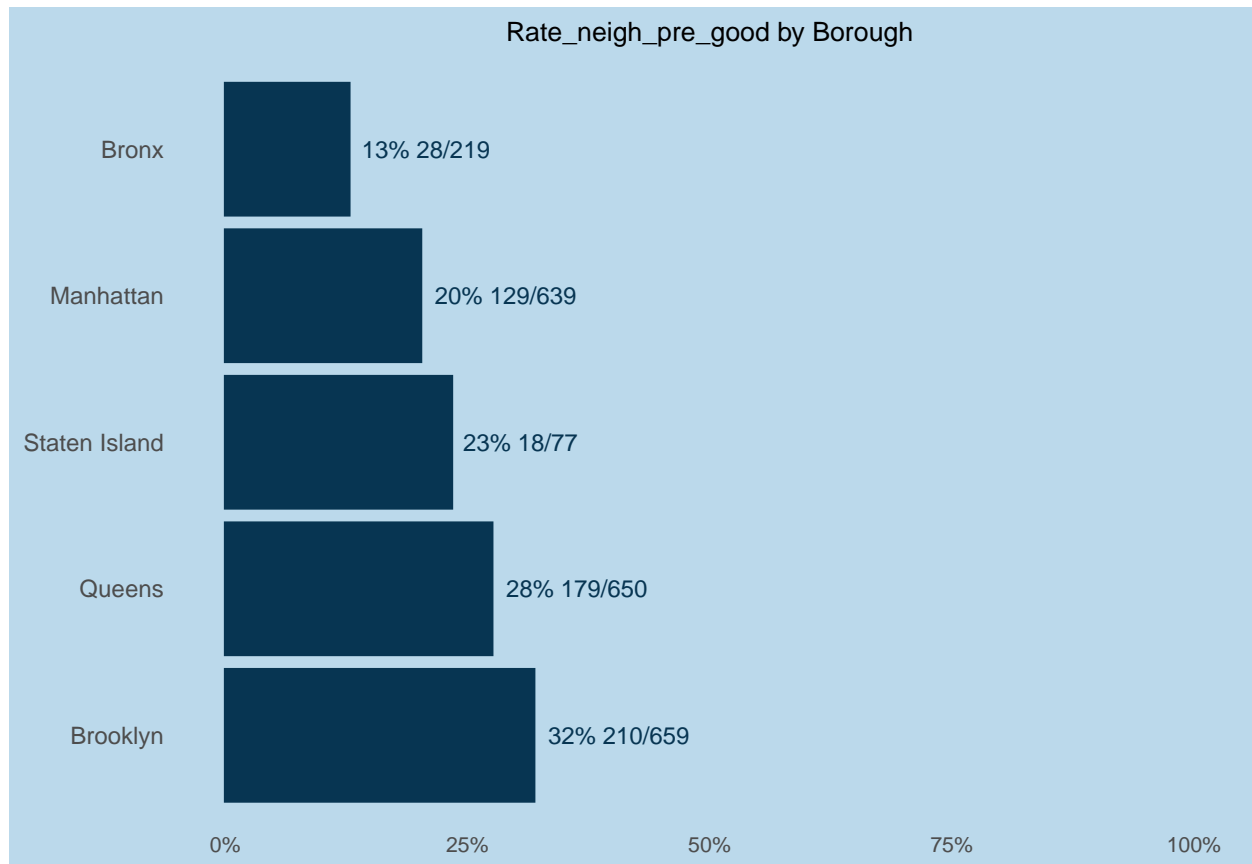
```
##
## [[5]]$race_census$p.values
## [[5]]$race_census$p.values$rate_neigh_pre_bad
##               asian white (non-hispanic or latino)
## asian                NA                          NA
## white (non-hispanic or latino)  NA              NA
## black or african american      NA              NA
## Indigenous American            NA              NA
## other                         NA              NA
## two or more races             NA              NA
## hispanic or latinx            0.00069          0.0016
##               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
## other                         NA              NA
## two or more races             NA              NA
## hispanic or latinx            NA              NA
##               other two or more races hispanic or latinx
## asian                NA                          NA          0.00069
## white (non-hispanic or latino)  NA              NA          0.00160
## black or african american      NA              NA              NA
## Indigenous American            NA              NA              NA
## other                         NA              NA              NA
## two or more races             NA              NA              NA
```

```
## hispanic or latinx      NA      NA      NA
##
##
##
## [[5]]$hh_ch_0_17_bi
## NULL
##
## [[5]]$hh_sn_65_bi
## NULL
##
## [[5]]$inc_dist
## [[5]]$inc_dist$plot
```

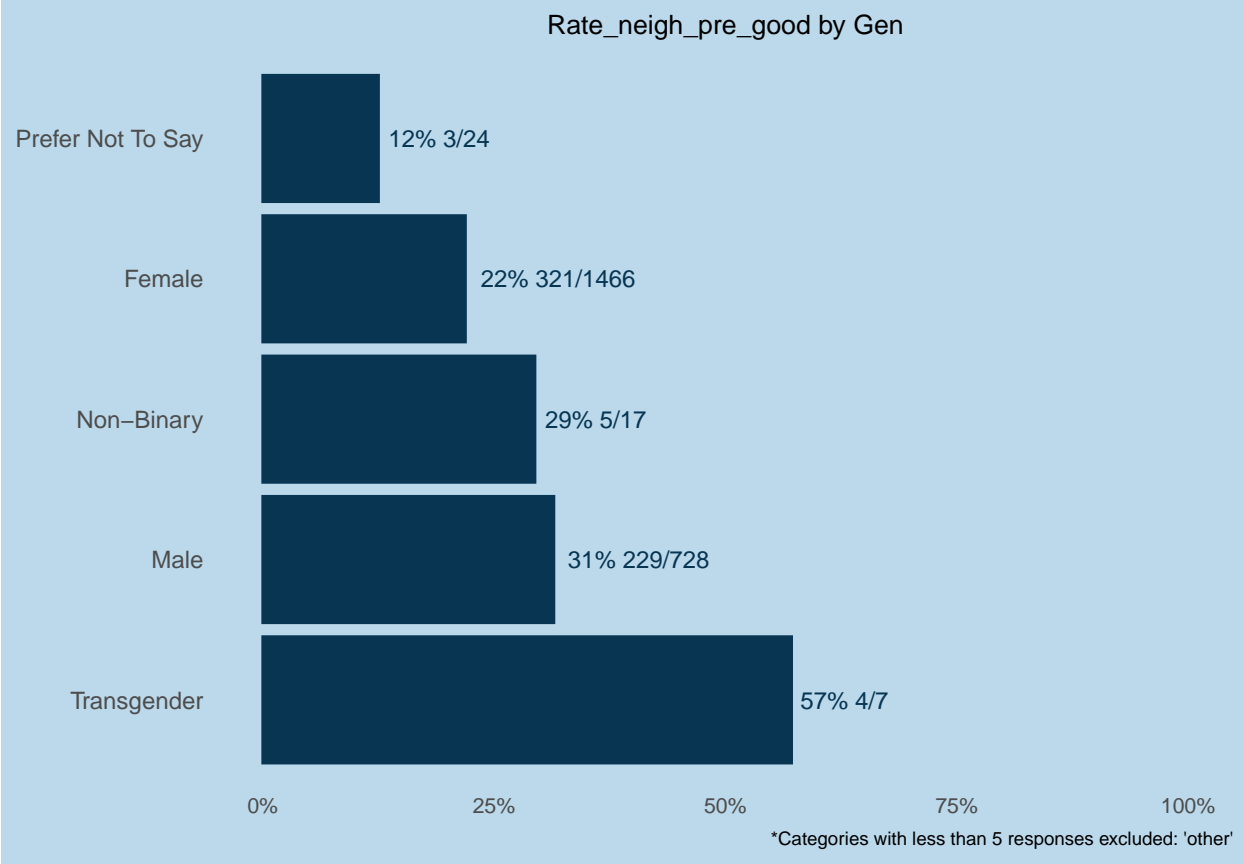


```
##
## [[5]]$inc_dist$p.values
## [[5]]$inc_dist$p.values$rate_neigh_pre_bad
## at or above 2020 median income
## at or above 2020 median income      NA
## below 2020 median income      NA
## below 2020 poverty line      0.0023
## below 2020 median income below 2020 poverty line
## at or above 2020 median income      NA      0.0023
## below 2020 median income      NA      NA
## below 2020 poverty line      NA      NA
##
```

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

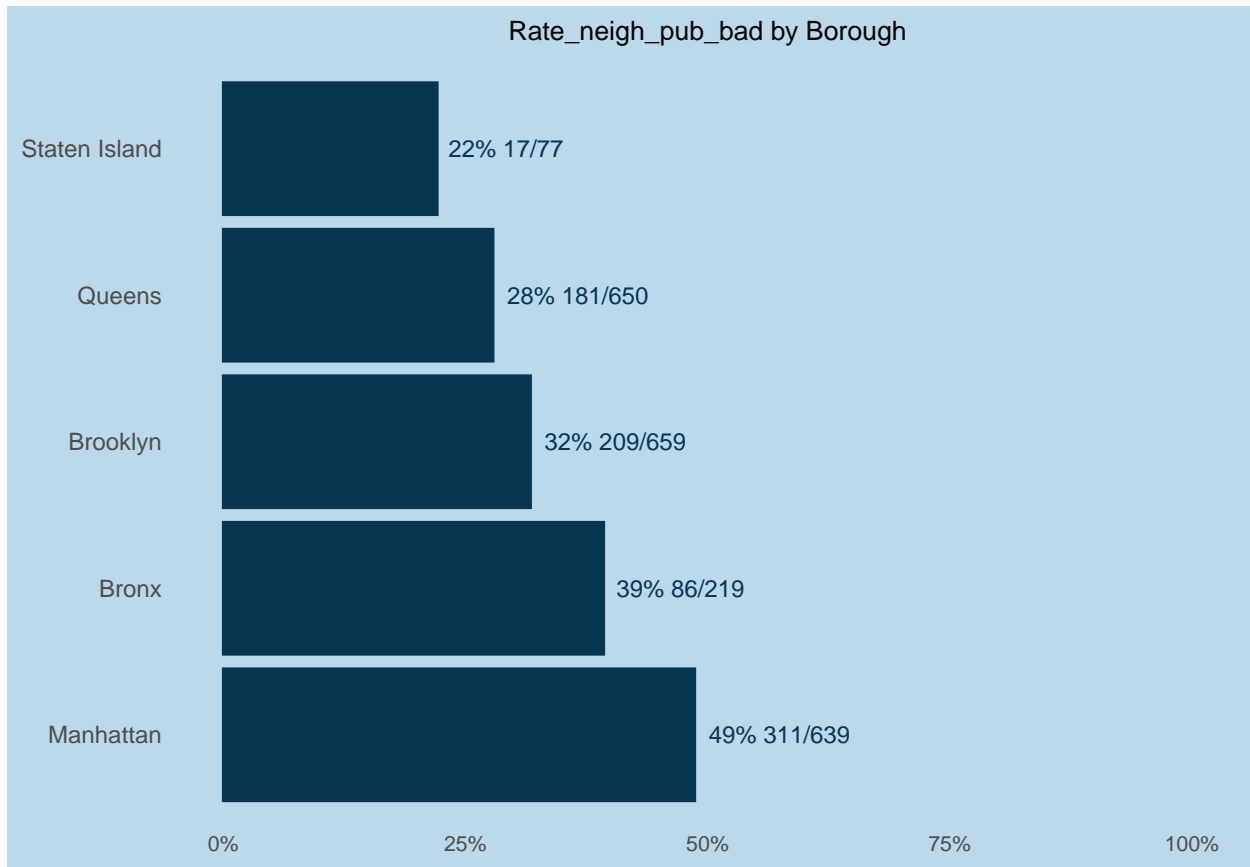


```
##
## [[6]]$borough$p.values
## [[6]]$borough$p.values$rate_neigh_pre_good
##
##      bronx manhattan staten island  queens brooklyn
## bronx      NA      NA      NA 1.4e-05  6.1e-08
## manhattan  NA      NA      NA 2.5e-03  2.3e-06
## staten island NA      NA      NA      NA      NA
## queens    1.4e-05  2.5e-03      NA      NA      NA
## brooklyn   6.1e-08  2.3e-06      NA      NA      NA
##
##
##
## [[6]]$gen
## [[6]]$gen$plot
```

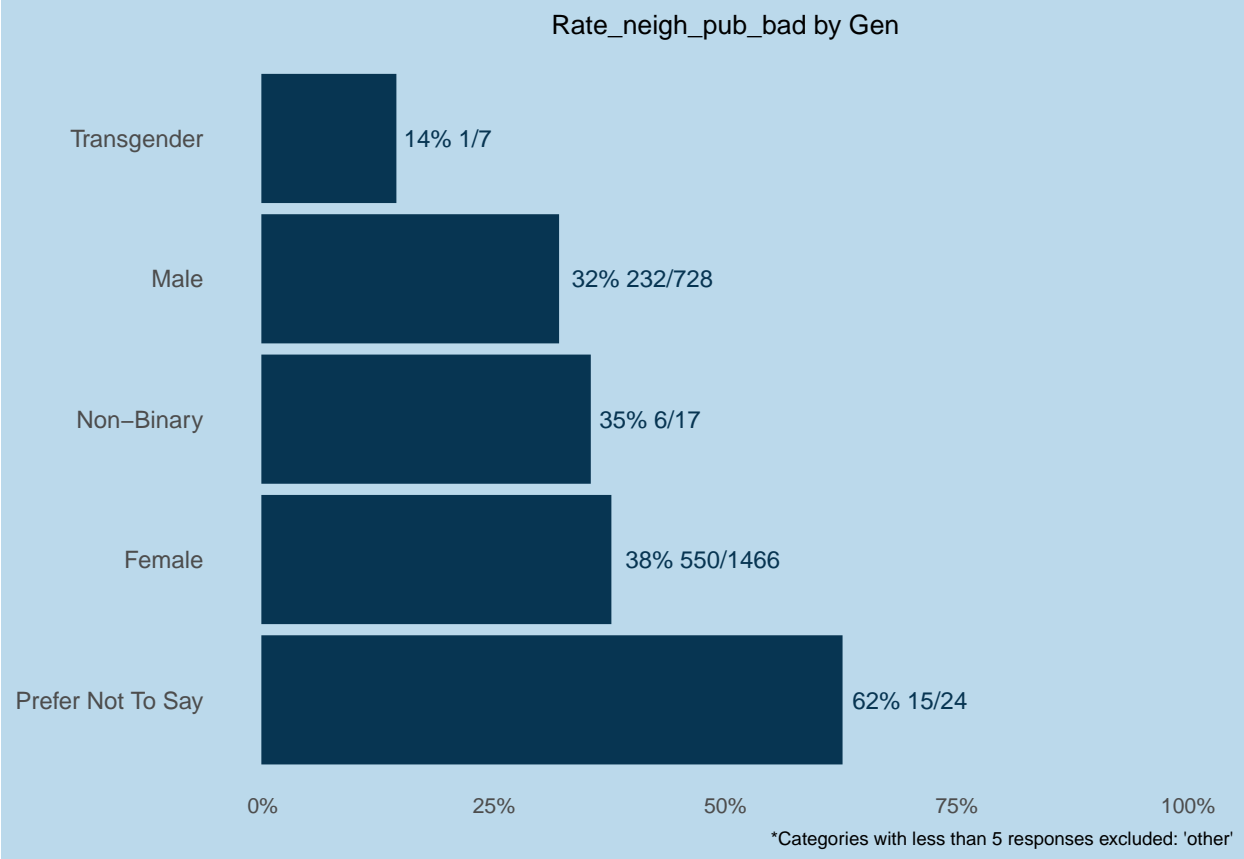


```
##
## [[6]]$gen$p.values
## [[6]]$gen$p.values$rate_neigh_pre_good
##           prefer not to say  female non-binary    male transgender
## prefer not to say          NA      NA          NA      NA      NA
## female                    NA      NA          NA 1.5e-06      NA
## non-binary                 NA      NA          NA      NA      NA
## male                       NA 1.5e-06          NA      NA      NA
## transgender                 NA      NA          NA      NA      NA
##
##
##
## [[6]]$race_census
## NULL
##
## [[6]]$hh_ch_0_17_bi
## NULL
##
## [[6]]$hh_sn_65_bi
## NULL
##
## [[6]]$inc_dist
## NULL
##
##
## [[7]]
```

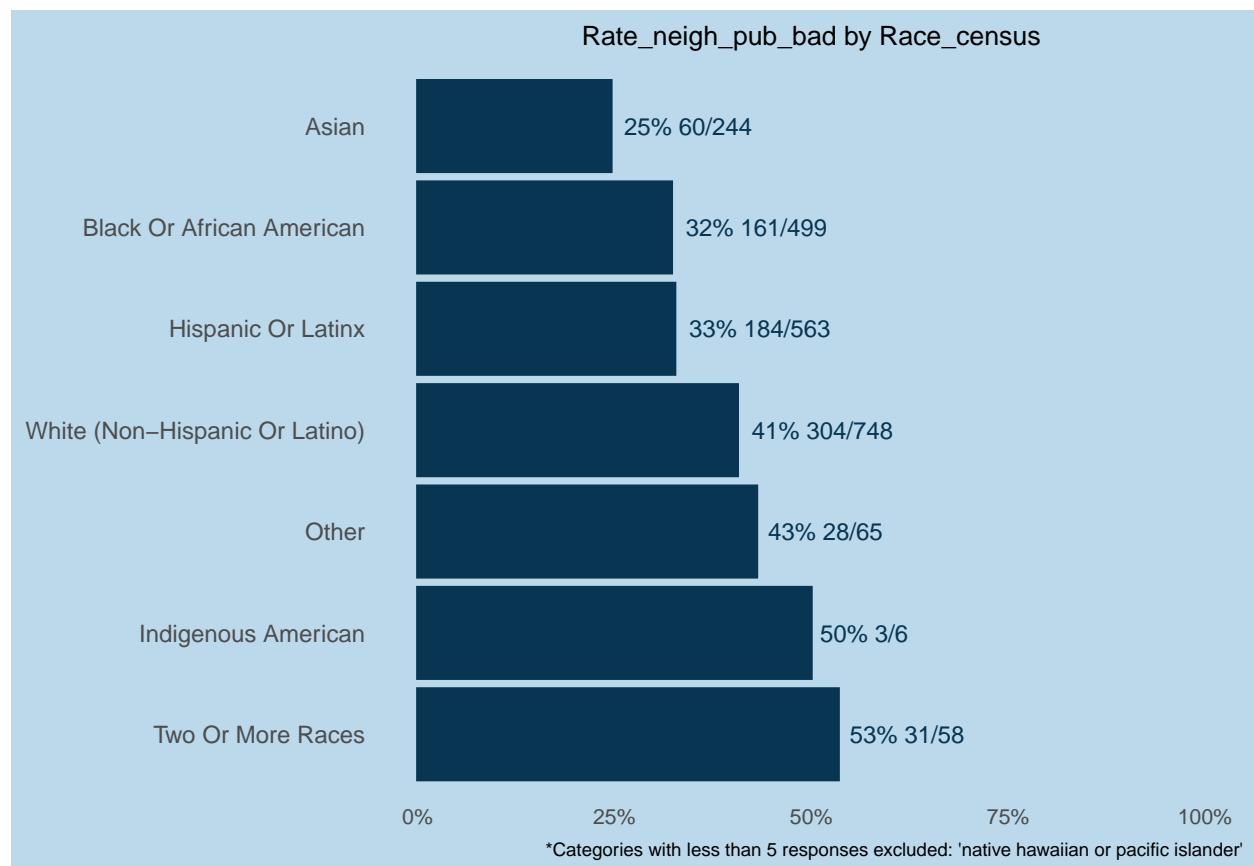
```
## [[7]]$borough
## [[7]]$borough$plot
```



```
##
## [[7]]$borough$p.values
## [[7]]$borough$p.values$rate_neigh_pub_bad
##          staten island  queens brooklyn  bronx manhattan
## staten island          NA      NA      NA 0.0097 1.7e-05
## queens                 NA      NA      NA 0.0020 2.2e-14
## brooklyn                NA      NA      NA      NA 6.6e-10
## bronx                   9.7e-03 2.0e-03      NA      NA      NA
## manhattan               1.7e-05 2.2e-14 6.6e-10      NA      NA
##
##
##
## [[7]]$gen
## [[7]]$gen$plot
```

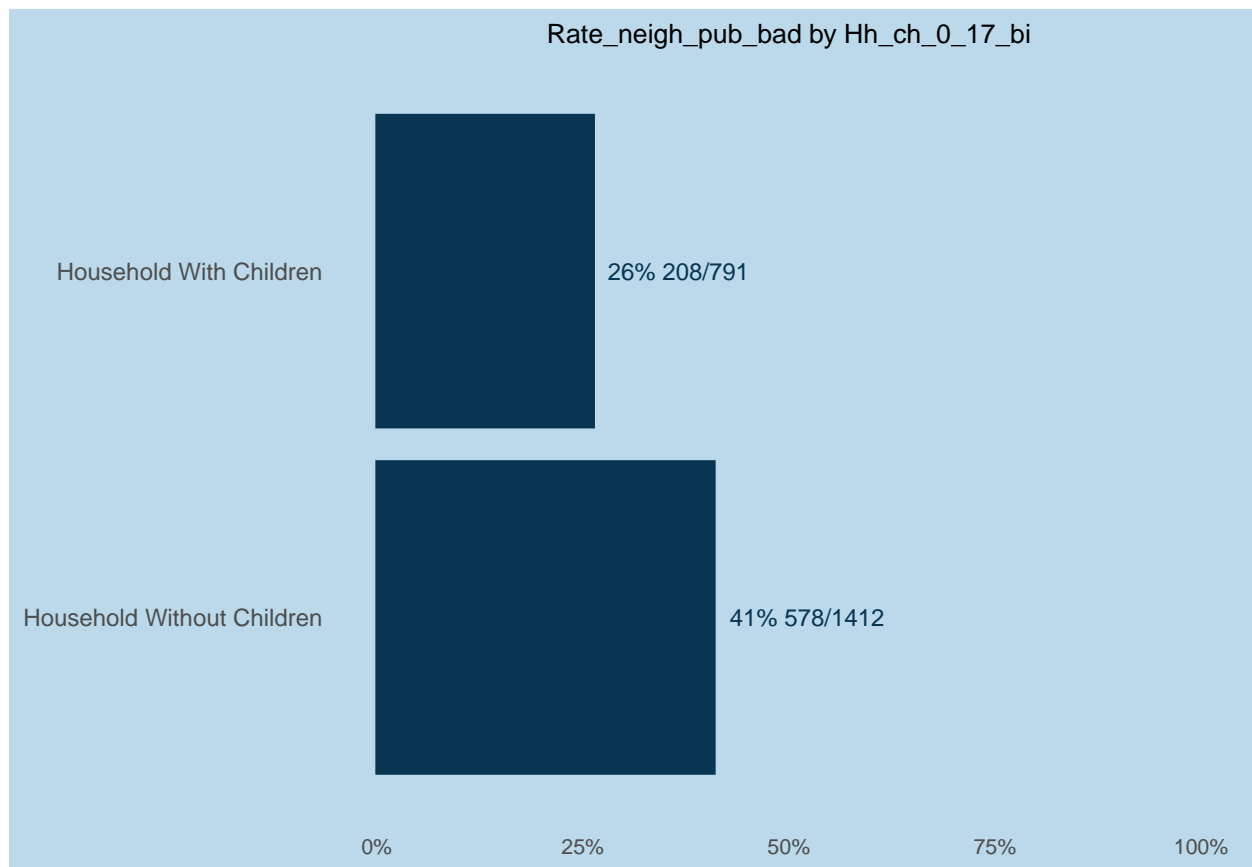


```
##
## [[7]]$gen$p.values
## [[7]]$gen$p.values$rate_neigh_pub_bad
##               transgender    male non-binary female prefer not to say
## transgender                NA     NA         NA     NA             NA
## male                      NA     NA         NA     NA             0.0035
## non-binary                NA     NA         NA     NA             NA
## female                    NA     NA         NA     NA             NA
## prefer not to say         NA 0.0035         NA     NA             NA
##
##
##
## [[7]]$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) 9.0e-06          0.0033
## other                     5.4e-03              NA
## Indigenous American          NA                      NA
## two or more races           3.4e-05          0.0022
##               hispanic or latinx
## asian                NA
## black or african american    NA
## hispanic or latinx           NA
## white (non-hispanic or latino) 0.0038
## other                     NA
## Indigenous American          NA
## two or more races           0.0025
##               white (non-hispanic or latino) other
## asian                9.0e-06 0.0054
## black or african american    3.3e-03  NA
## hispanic or latinx           3.8e-03  NA
## white (non-hispanic or latino)  NA    NA
## other                     NA    NA
## Indigenous American          NA    NA
```

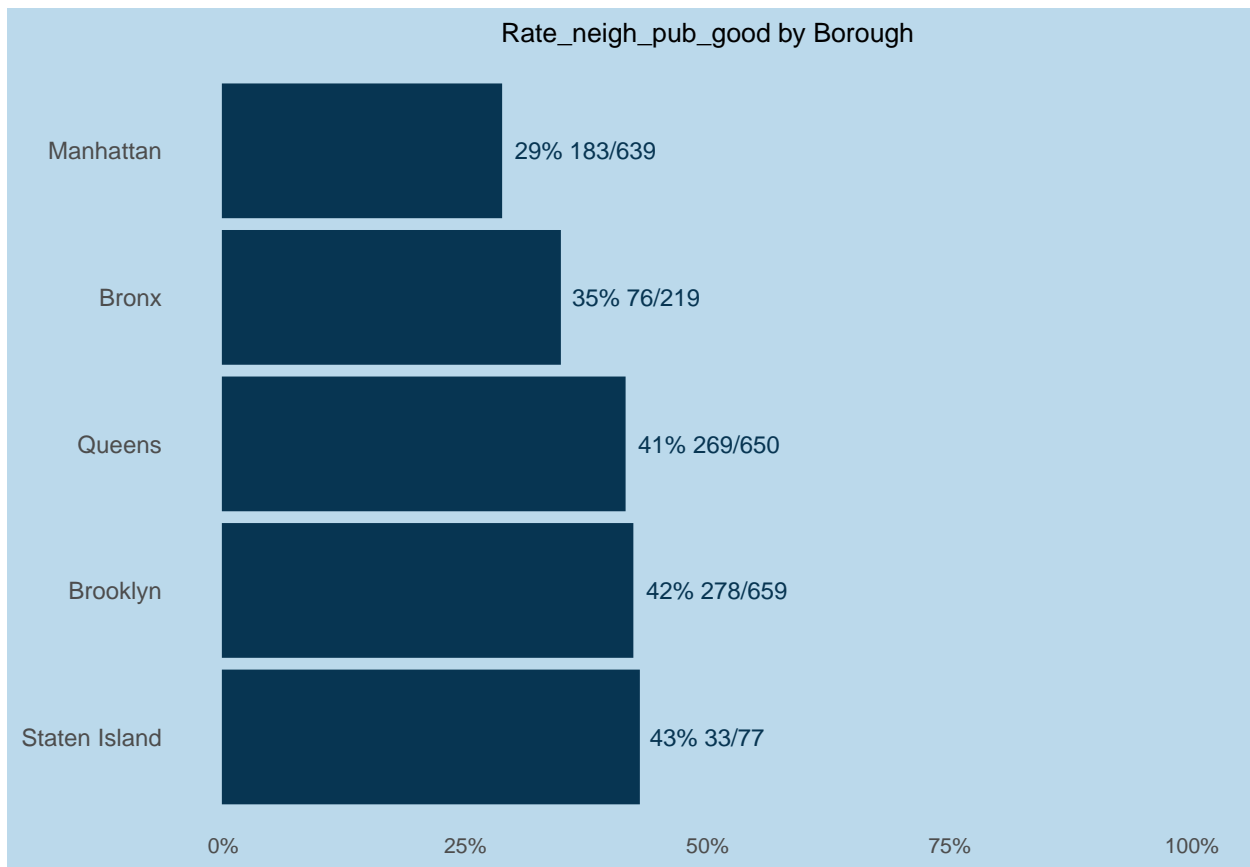
```
## two or more races
##
## asian
## black or african american
## hispanic or latinx
## white (non-hispanic or latino)
## other
## Indigenous American
## two or more races
##
##
## [[7]]$hh_ch_0_17_bi
## [[7]]$hh_ch_0_17_bi$plot
```



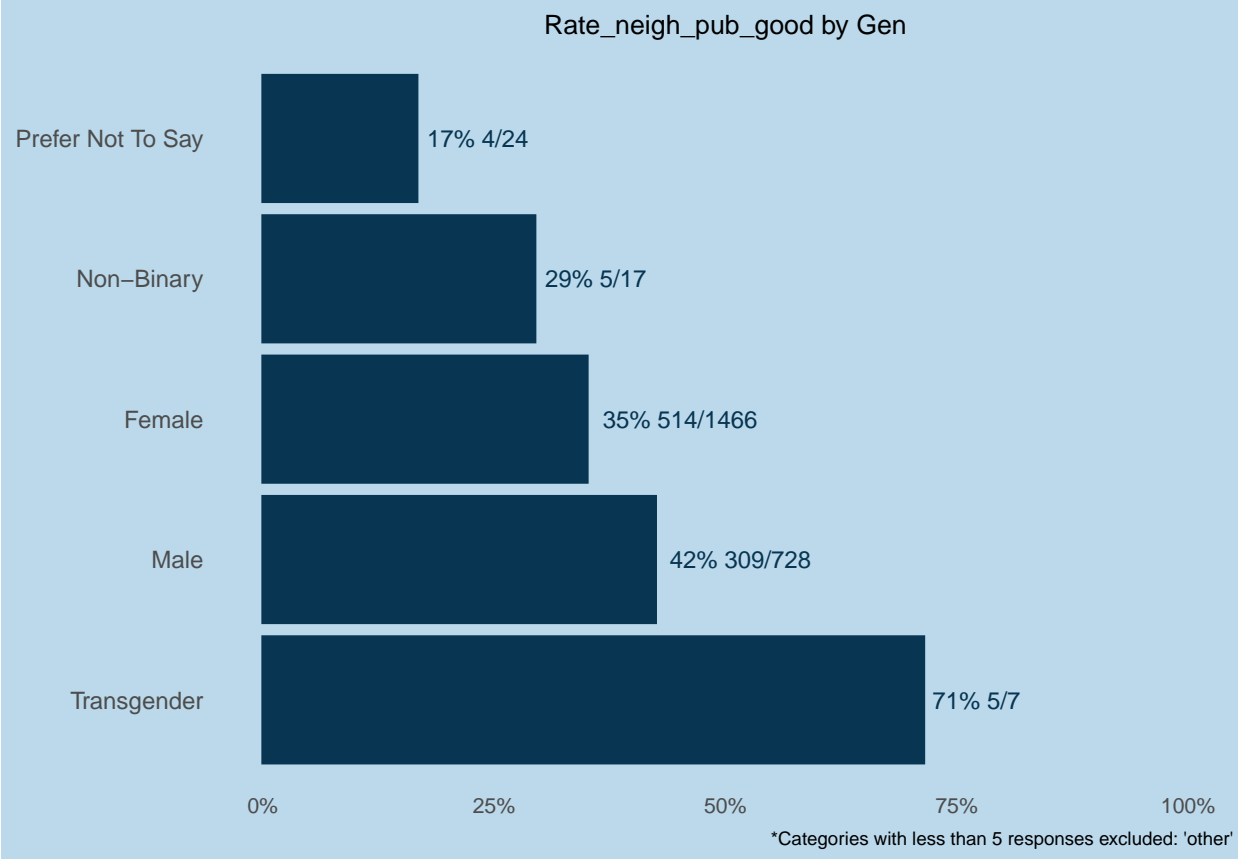
```
##
## [[7]]$hh_ch_0_17_bi$p.values
## [[7]]$hh_ch_0_17_bi$p.values$rate_neigh_pub_bad
##
## household with children household without children
## household with children NA 8.2e-12
## household without children 8.2e-12 NA
##
##
## [[7]]$hh_sn_65_bi
```



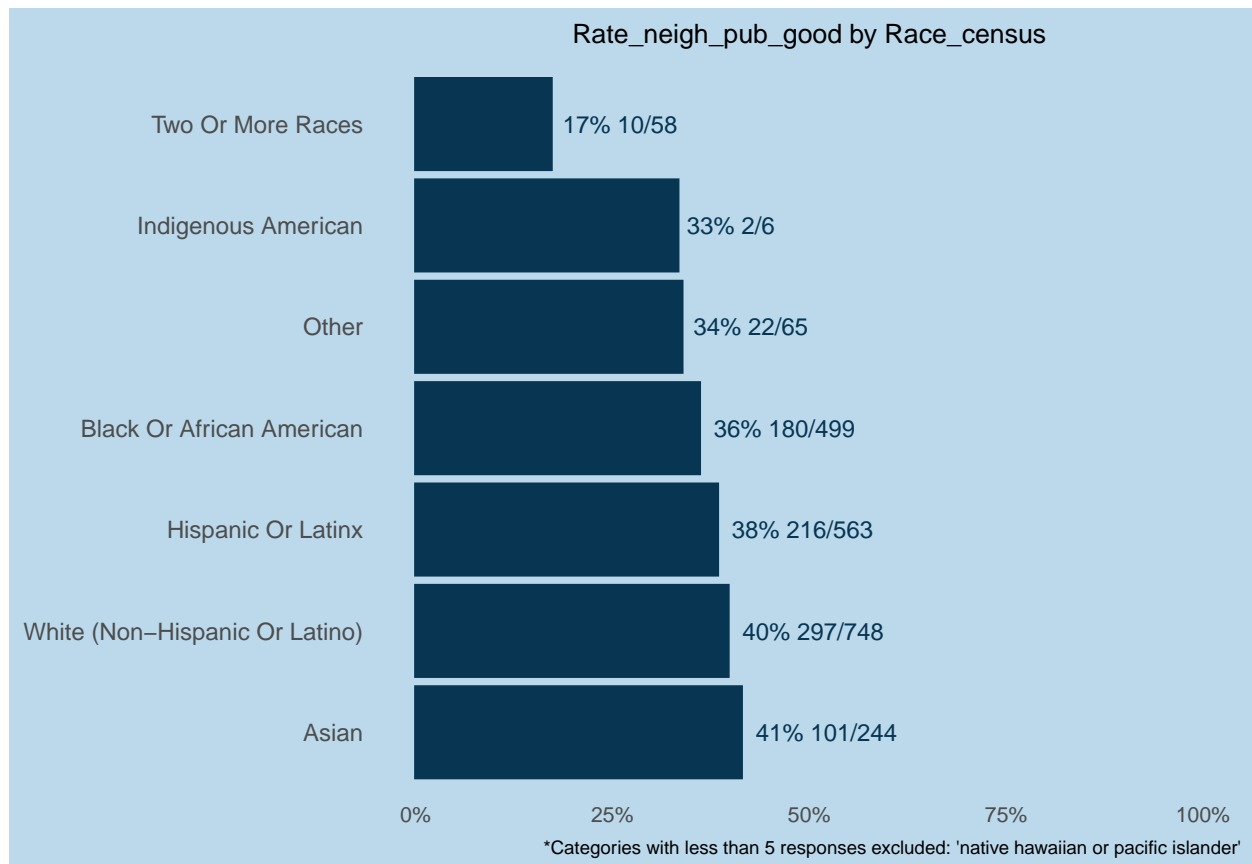
```
## NULL
##
## [[7]]$inc_dist
## NULL
##
##
## [[8]]
## [[8]]$borough
## [[8]]$borough$plot
```



```
##
## [[8]]$borough$p.values
## [[8]]$borough$p.values$rate_neigh_pub_good
##
##      manhattan bronx  queens brooklyn staten island
## manhattan      NA   NA 2.2e-06 4.6e-07           NA
## bronx          NA   NA    NA      NA           NA
## queens      2.2e-06   NA    NA      NA           NA
## brooklyn     4.6e-07   NA    NA      NA           NA
## staten island    NA   NA    NA      NA           NA
##
##
##
## [[8]]$gen
## [[8]]$gen$plot
```

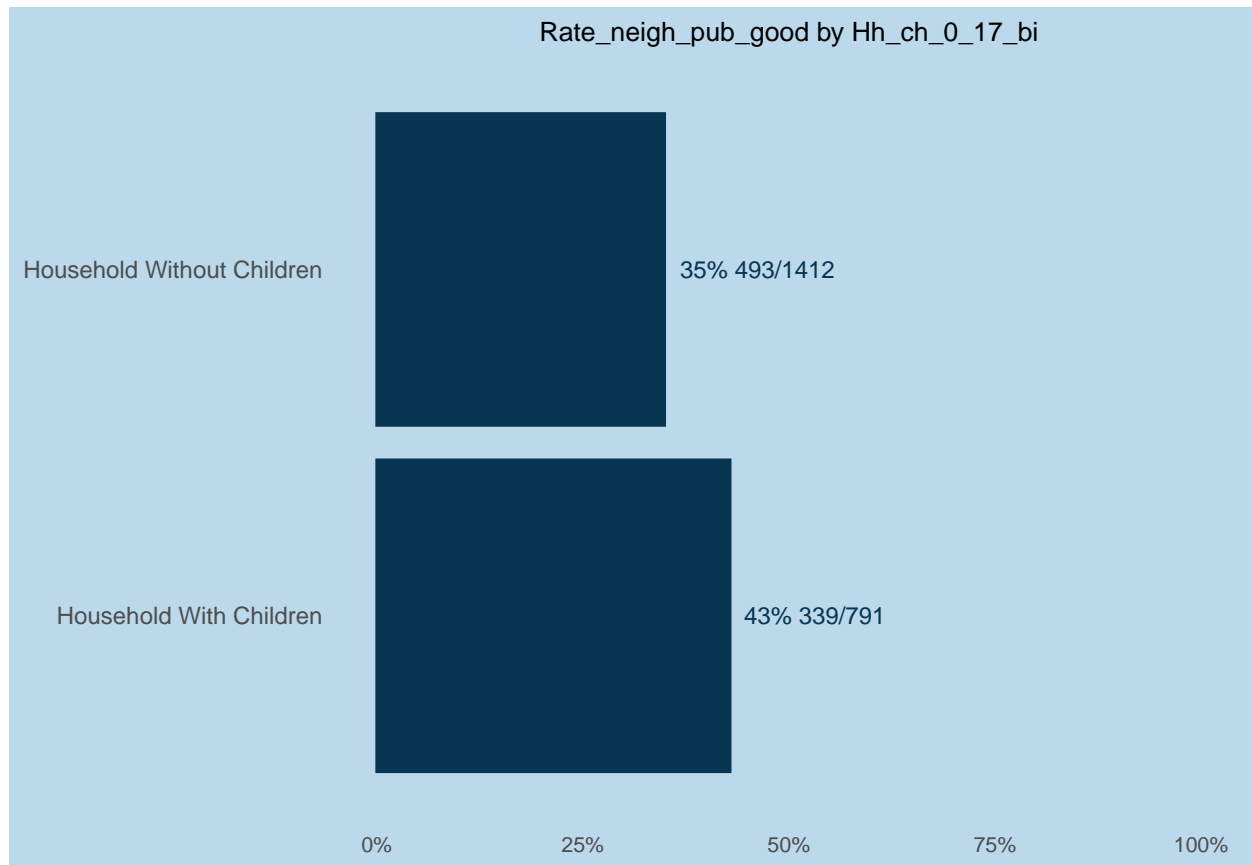


```
##
## [[8]]$gen$p.values
## [[8]]$gen$p.values$rate_neigh_pub_good
##           prefer not to say non-binary  female    male transgender
## prefer not to say           NA         NA      NA      NA         NA
## non-binary                  NA         NA      NA      NA         NA
## female                      NA         NA      NA 0.00091         NA
## male                        NA         NA 0.00091      NA         NA
## transgender                  NA         NA      NA      NA         NA
##
##
##
## [[8]]$race_census
## [[8]]$race_census$plot
```

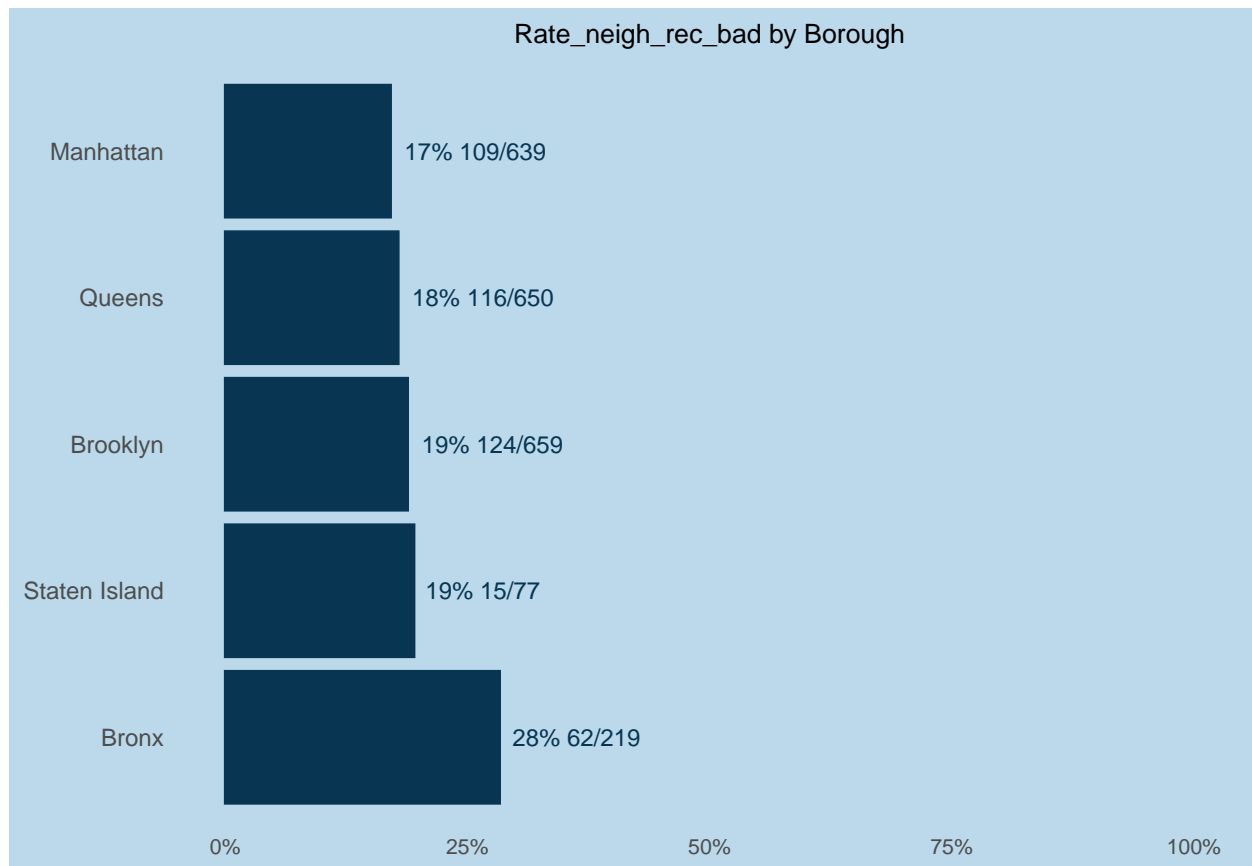


```
##
## [[8]]$race_census$p.values
## [[8]]$race_census$p.values$rate_neigh_pub_good
##               two or more races Indigenous American other
## two or more races                NA                NA  NA
## Indigenous American              NA                NA  NA
## other                            NA                NA  NA
## black or african american        0.0066            NA  NA
## hispanic or latinx               0.0024            NA  NA
## white (non-hispanic or latino)   0.0011            NA  NA
## asian                           0.0010            NA  NA
##               black or african american hispanic or latinx
## two or more races                0.0066                0.0024
## Indigenous American              NA                    NA
## other                            NA                    NA
## black or african american        NA                    NA
## hispanic or latinx               NA                    NA
## white (non-hispanic or latino)   NA                    NA
## asian                           NA                    NA
##               white (non-hispanic or latino) asian
## two or more races                0.0011 0.001
## Indigenous American              NA    NA
## other                            NA    NA
## black or african american        NA    NA
## hispanic or latinx               NA    NA
## white (non-hispanic or latino)   NA    NA
```

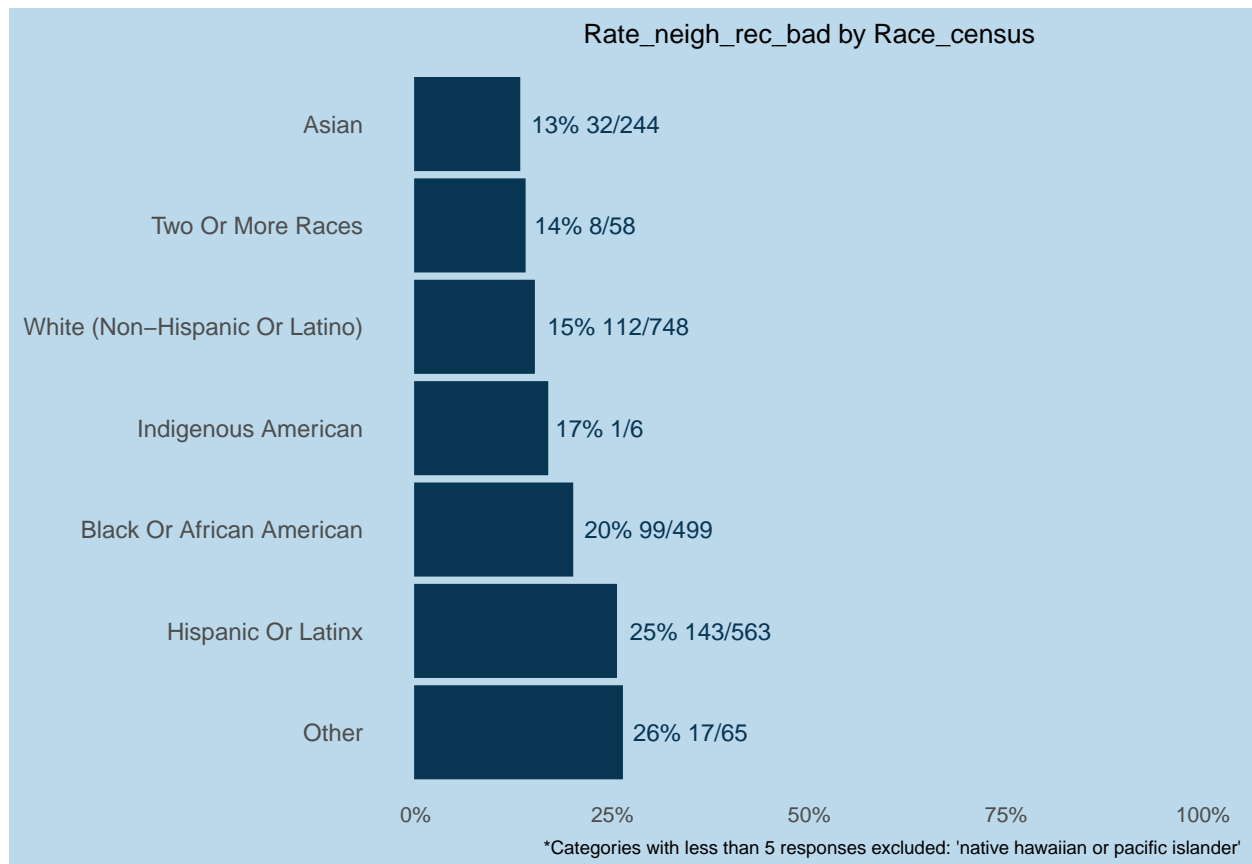
```
## asian
##
##
##
## [[8]]$hh_ch_0_17_bi
## [[8]]$hh_ch_0_17_bi$plot
```



```
##
## [[8]]$hh_ch_0_17_bi$p.values
## [[8]]$hh_ch_0_17_bi$p.values$rate_neigh_pub_good
## household without children household with children
## household without children NA 0.00027
## household with children 0.00027 NA
##
##
## [[8]]$hh_sn_65_bi
## NULL
##
## [[8]]$inc_dist
## NULL
##
##
## [[9]]
## [[9]]$borough
## [[9]]$borough$plot
```



```
##
## [[9]]$borough$p.values
## [[9]]$borough$p.values$rate_neigh_rec_bad
##           manhattan queens brooklyn staten island  bronx
## manhattan          NA     NA      NA              NA 0.00047
## queens             NA     NA      NA              NA 0.00130
## brooklyn           NA     NA      NA              NA 0.00390
## staten island      NA     NA      NA              NA      NA
## bronx              0.00047 0.0013  0.0039          NA      NA
##
##
##
## [[9]]$gen
## NULL
##
## [[9]]$race_census
## [[9]]$race_census$plot
```

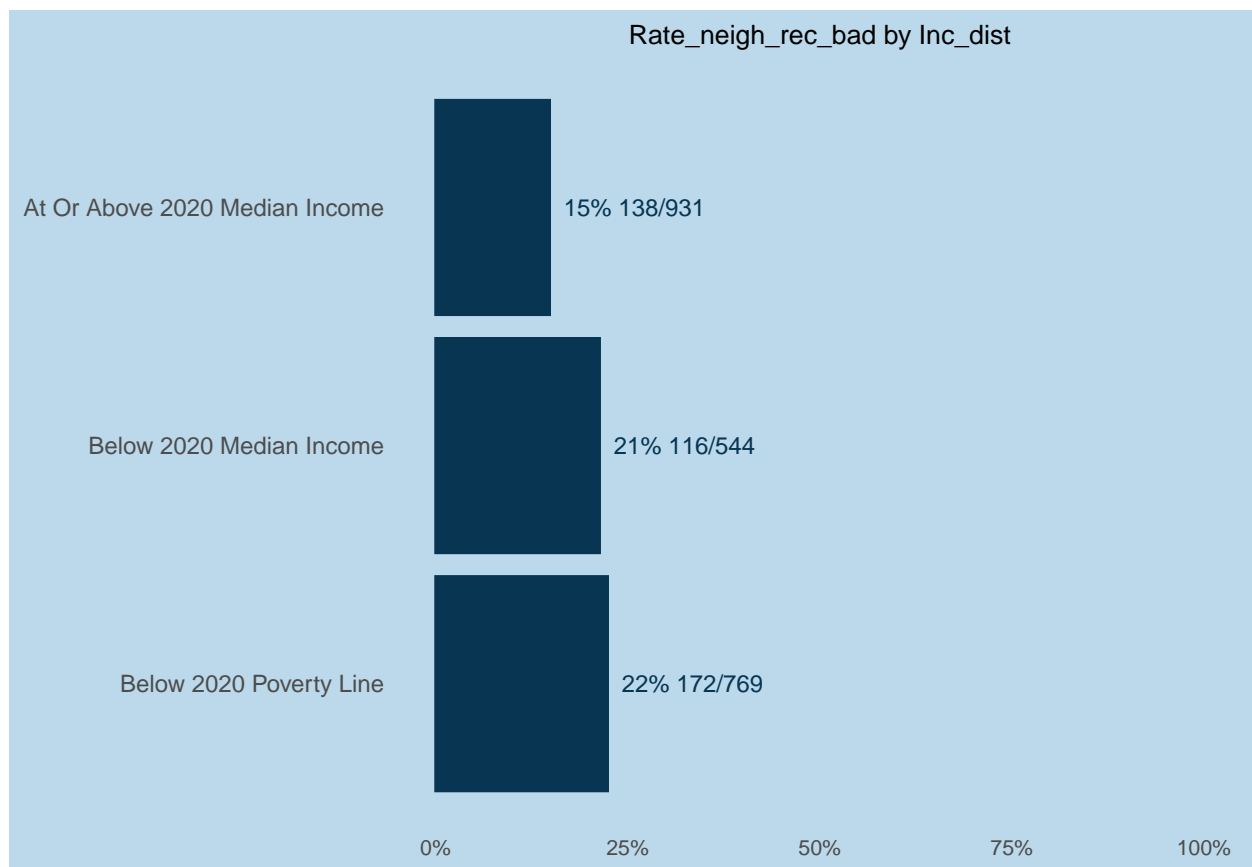


```
##
## [[9]]$race_census$p.values
## [[9]]$race_census$p.values$rate_neigh_rec_bad
##               asian two or more races
## asian                NA                NA
## two or more races    NA                NA
## white (non-hispanic or latino)    NA                NA
## Indigenous American    NA                NA
## black or african american    NA                NA
## hispanic or latinx      0.00015          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      3.3e-06
## 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 1.5e-04 NA
## two or more races NA NA
## white (non-hispanic or latino) 3.3e-06 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

```

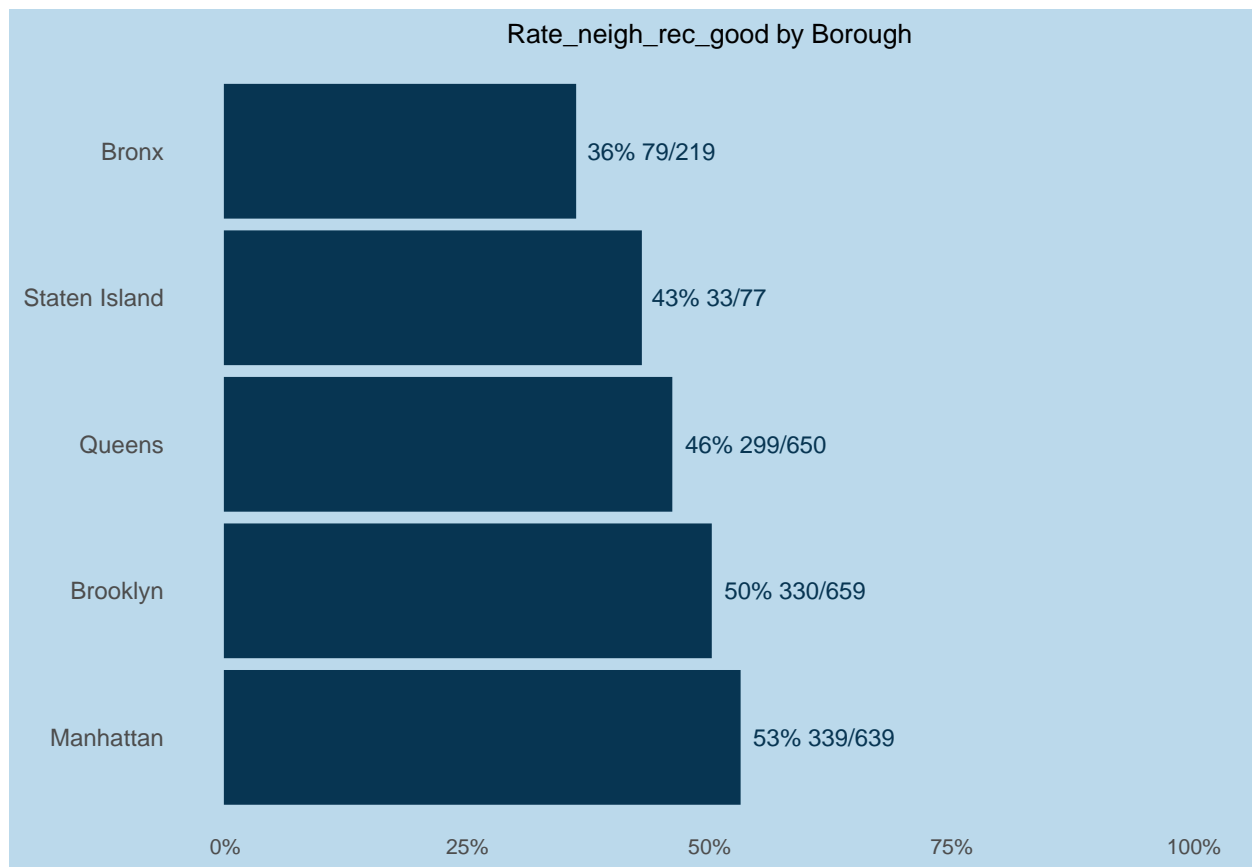


```

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

```

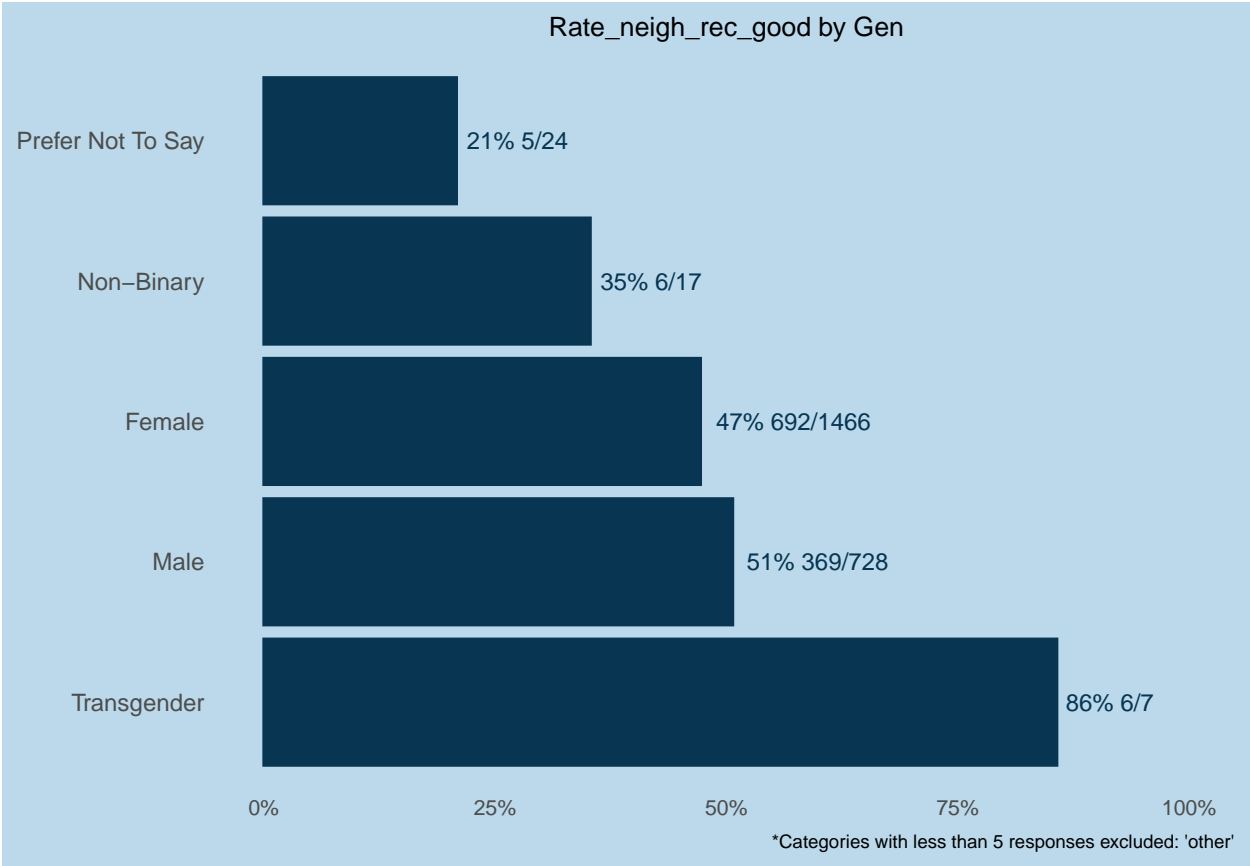
```
## at or above 2020 median income NA
## below 2020 median income 1.8e-03
## below 2020 poverty line 7.9e-05
## below 2020 median income below 2020 poverty line
## at or above 2020 median income 0.0018 7.9e-05
## below 2020 median income NA NA
## below 2020 poverty line NA NA
##
##
##
##
## [[10]]
## [[10]]$borough
## [[10]]$borough$plot
```



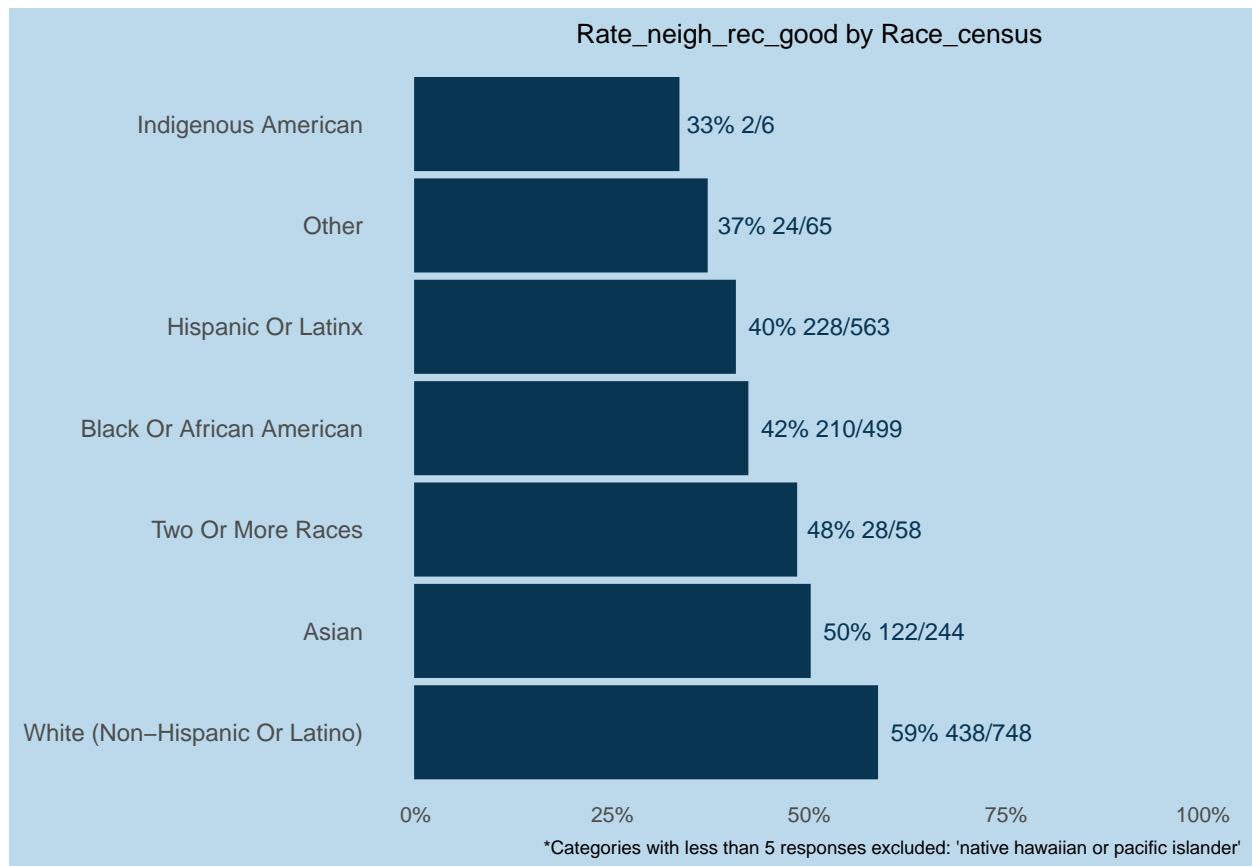
```
##
## [[10]]$borough$p.values
## [[10]]$borough$p.values$rate_neigh_rec_good
## bronx staten island queens brooklyn manhattan
## bronx NA NA NA 0.00043 2e-05
## staten island NA NA NA NA NA
## queens NA NA NA NA NA
## brooklyn 0.00043 NA NA NA NA
## manhattan 0.00002 NA NA NA NA
##
```



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

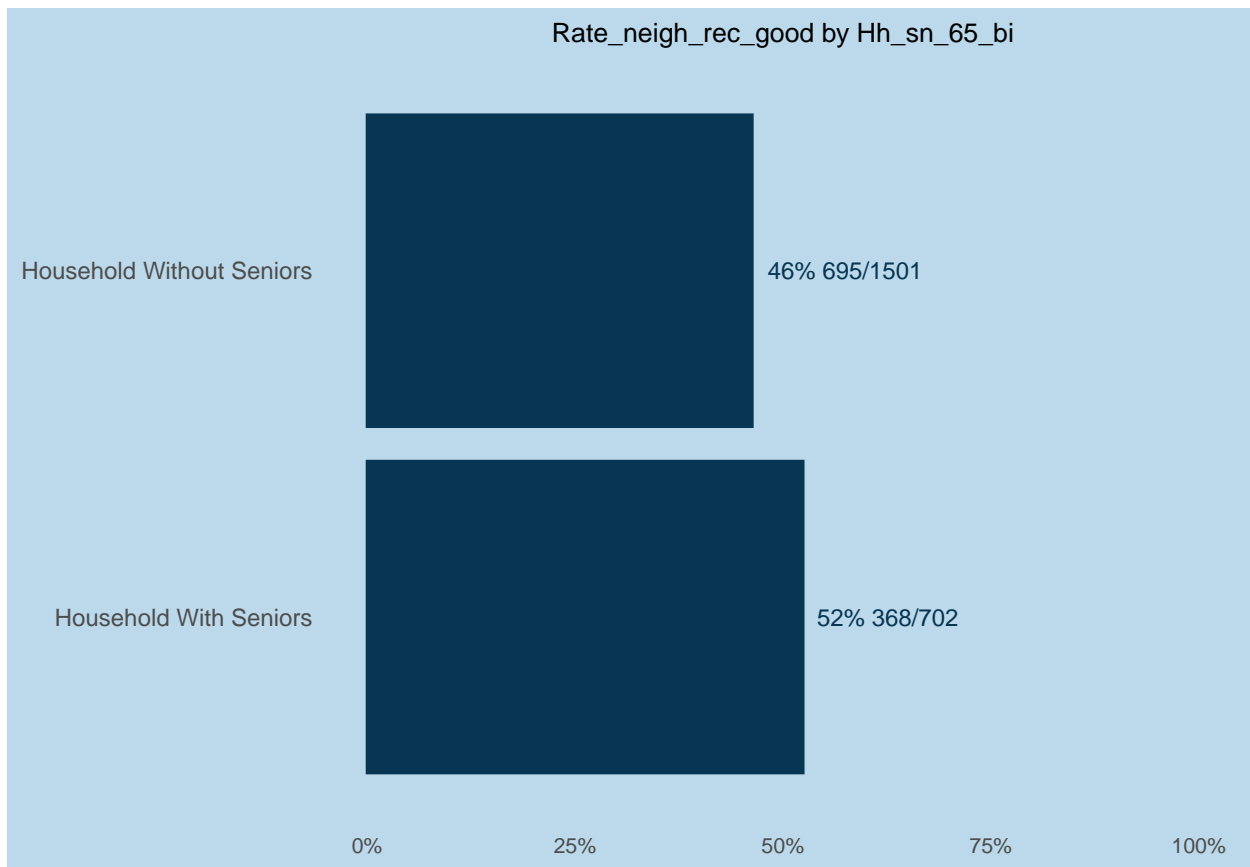


```
##
## [[10]]$gen$p.values
## [[10]]$gen$p.values$rate_neigh_rec_good
##           prefer not to say non-binary female   male transgender
## prefer not to say           NA           NA   NA 0.0076           NA
## non-binary                   NA           NA   NA   NA           NA
## female                       NA           NA   NA   NA           NA
## male                         0.0076       NA   NA   NA           NA
## transgender                   NA           NA   NA   NA           NA
##
##
##
## [[10]]$race_census
## [[10]]$race_census$plot
```

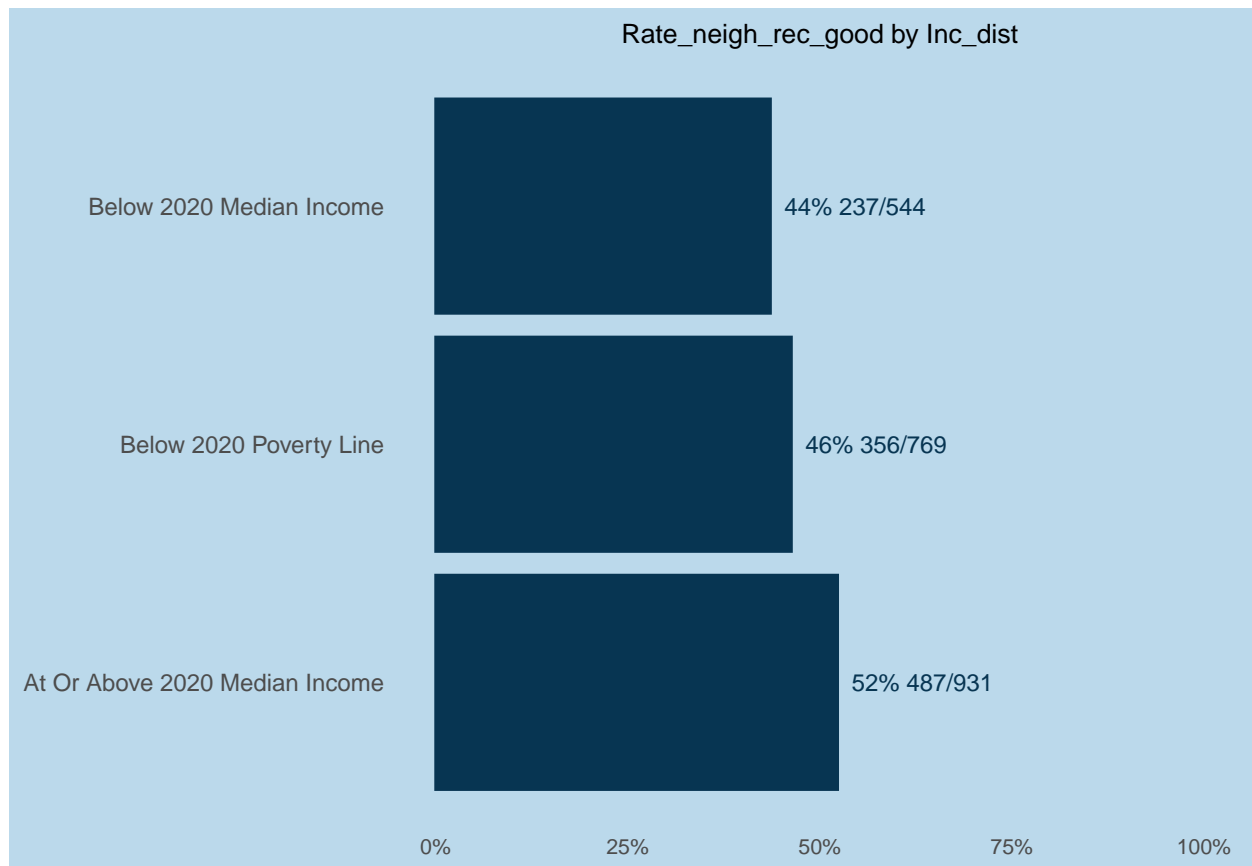


```
##
## [[10]]$race_census$p.values
## [[10]]$race_census$p.values$rate_neigh_rec_good
##
##      Indigenous American  other hispanic or latinx
## Indigenous American      NA      NA              NA
## other                    NA      NA              NA
## hispanic or latinx       NA      NA              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 0.0012          1.4e-10
##
##      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) 1.6e-08          NA
##
##      asian white (non-hispanic or latino)
## Indigenous American      NA              NA
## other                    NA              1.2e-03
## hispanic or latinx       NA              1.4e-10
## black or african american NA              1.6e-08
## two or more races        NA              NA
## asian                    NA              NA
```

```
## white (non-hispanic or latino)    NA
##
##
##
## [[10]]$hh_ch_0_17_bi
## NULL
##
## [[10]]$hh_sn_65_bi
## [[10]]$hh_sn_65_bi$plot
```



```
##
## [[10]]$hh_sn_65_bi$p.values
## [[10]]$hh_sn_65_bi$p.values$rate_neigh_rec_good
## household without seniors household with seniors
## household without seniors    NA    0.0085
## household with seniors    0.0085    NA
##
##
##
## [[10]]$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    0.0014                  NA
##
##          at or above 2020 median income
## below 2020 median income          0.0014
## 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]

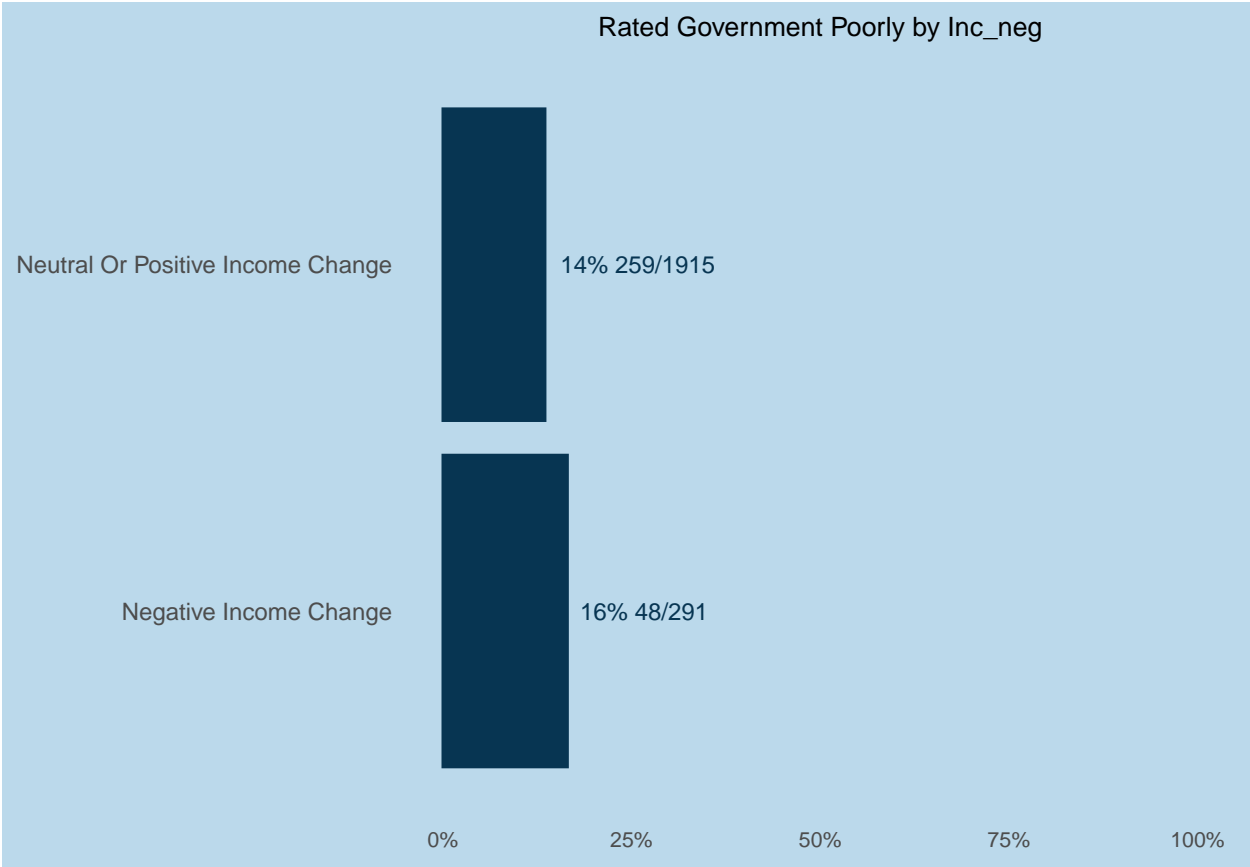
1. Run binary distribution over rating government response question Poor=Poor or Very Poor Not Poor=Good, Excellent, Average
2. Find proportion which rated government response poorly [31] Poorly=Poor or Very Poor
 - a. Find subset of population who witnessed a reduced income
 - b. Compare with others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

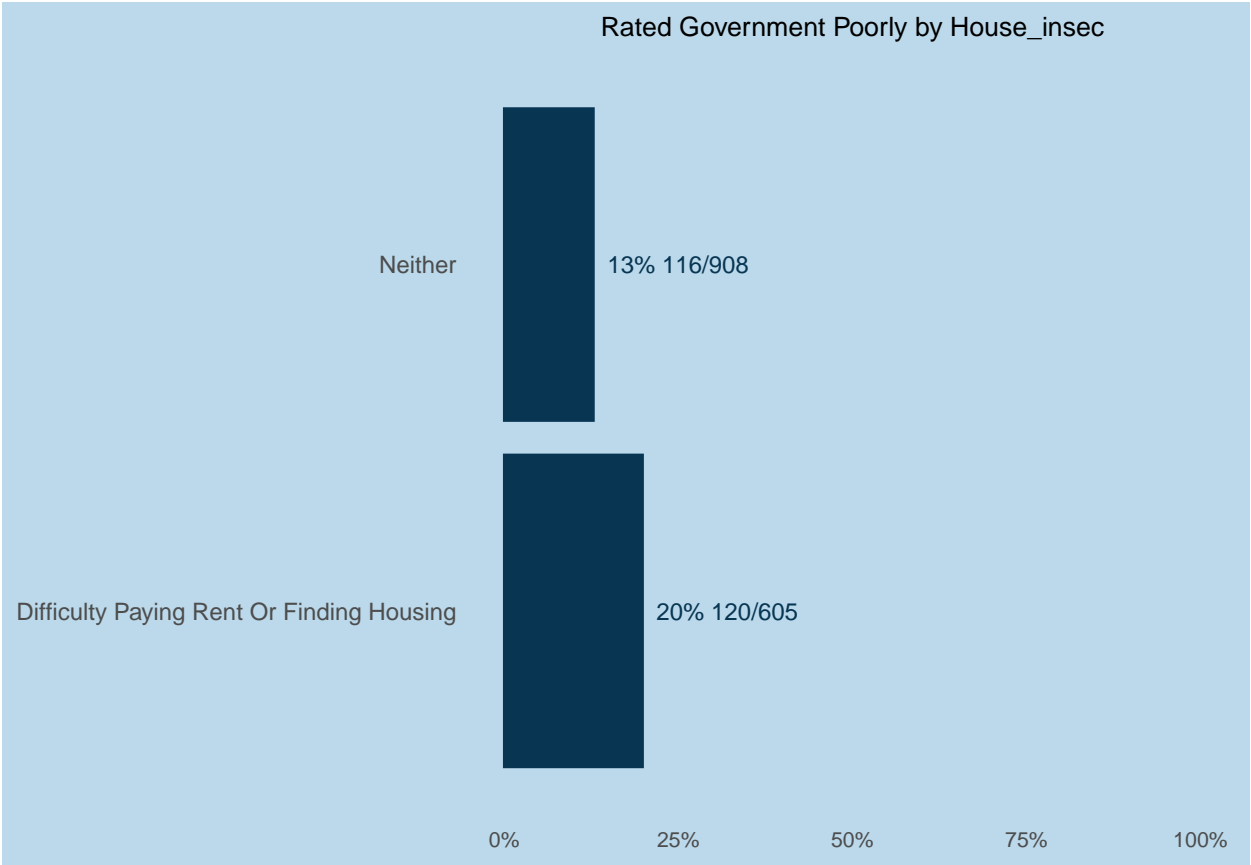
```
make_plots(wrangled, c("inc_neg", "house_insec"), "rate_gov_all_bad", show = TRUE,
           title = "Rated Government Poorly")
```

```
## $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 0.00028
##           difficulty paying rent or finding housing
## neither           0.00028
## difficulty paying rent or finding housing           NA
```