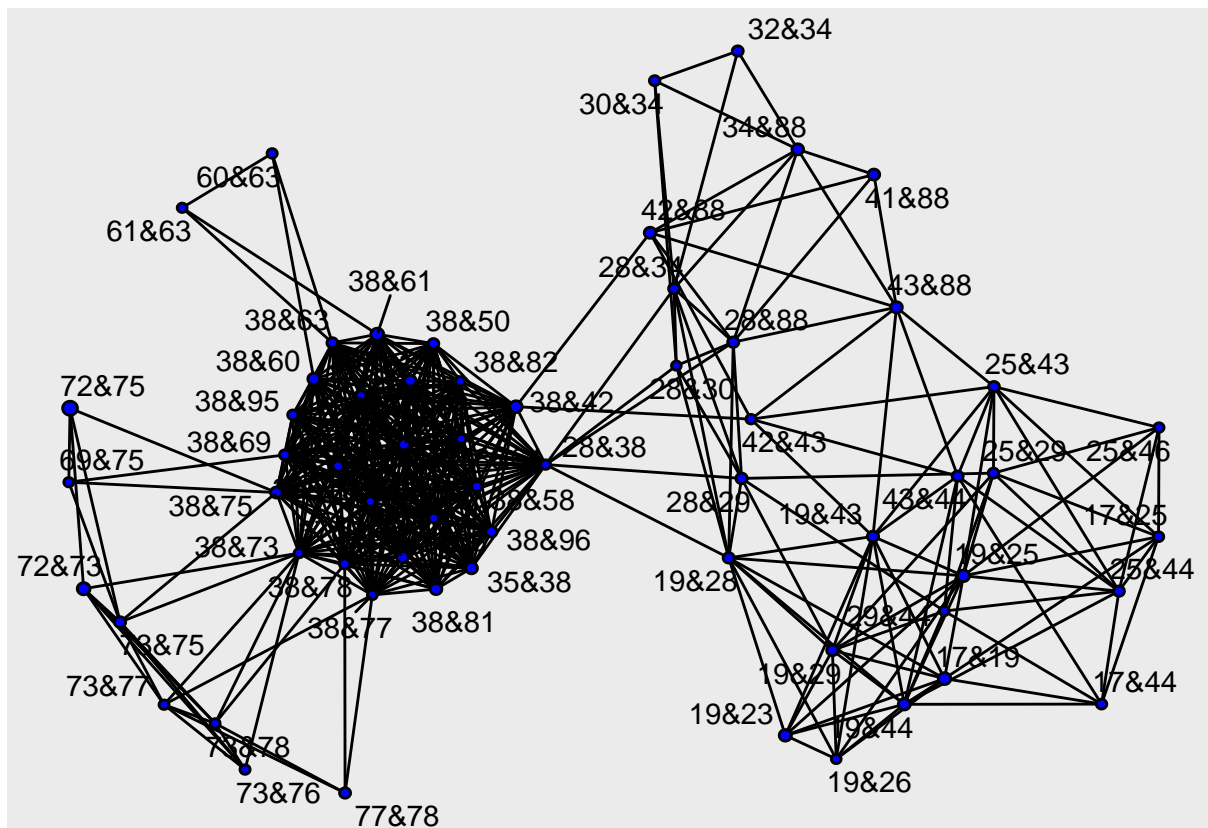


Figure 1: Frequency of job counts in each NTAs, standardized by the area of the NTA.

```
tmap::tmap_arrange(queen_map, driving_map, walking_map, subway_map, nrow = 2, ncol = 2)
```



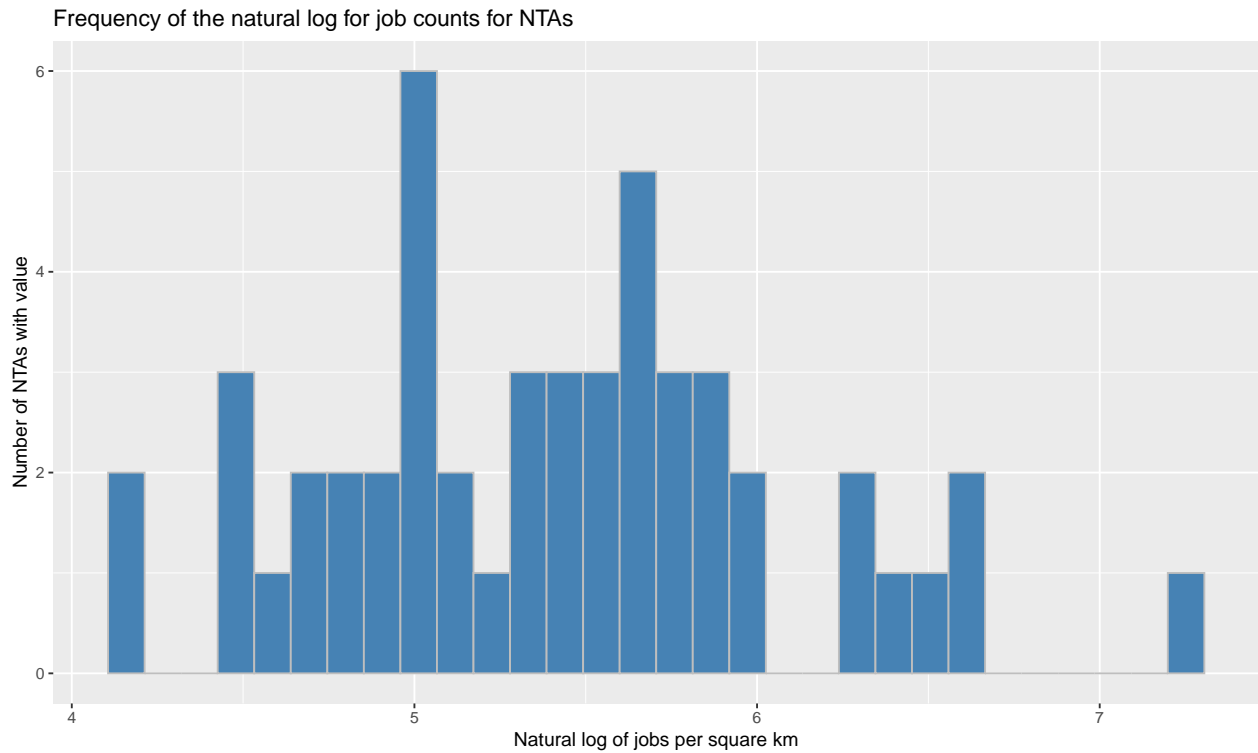
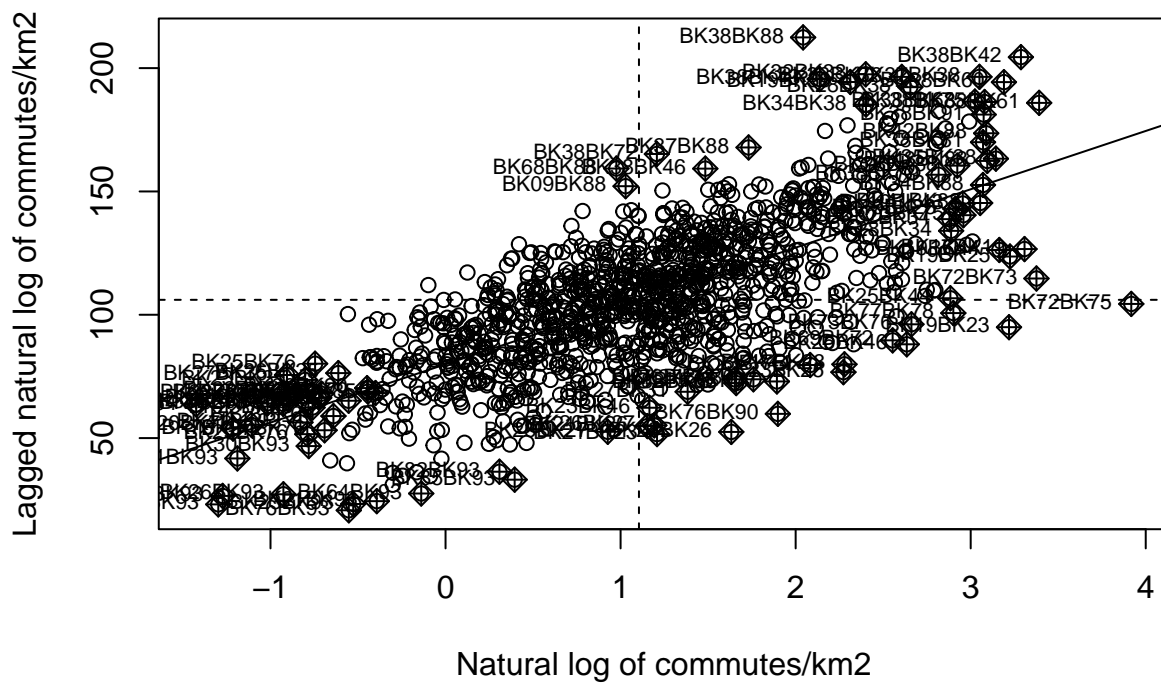


Figure 2: Frequency of job counts in each NTAs, standardized by the area of the NTA and tranformed with a natural log.



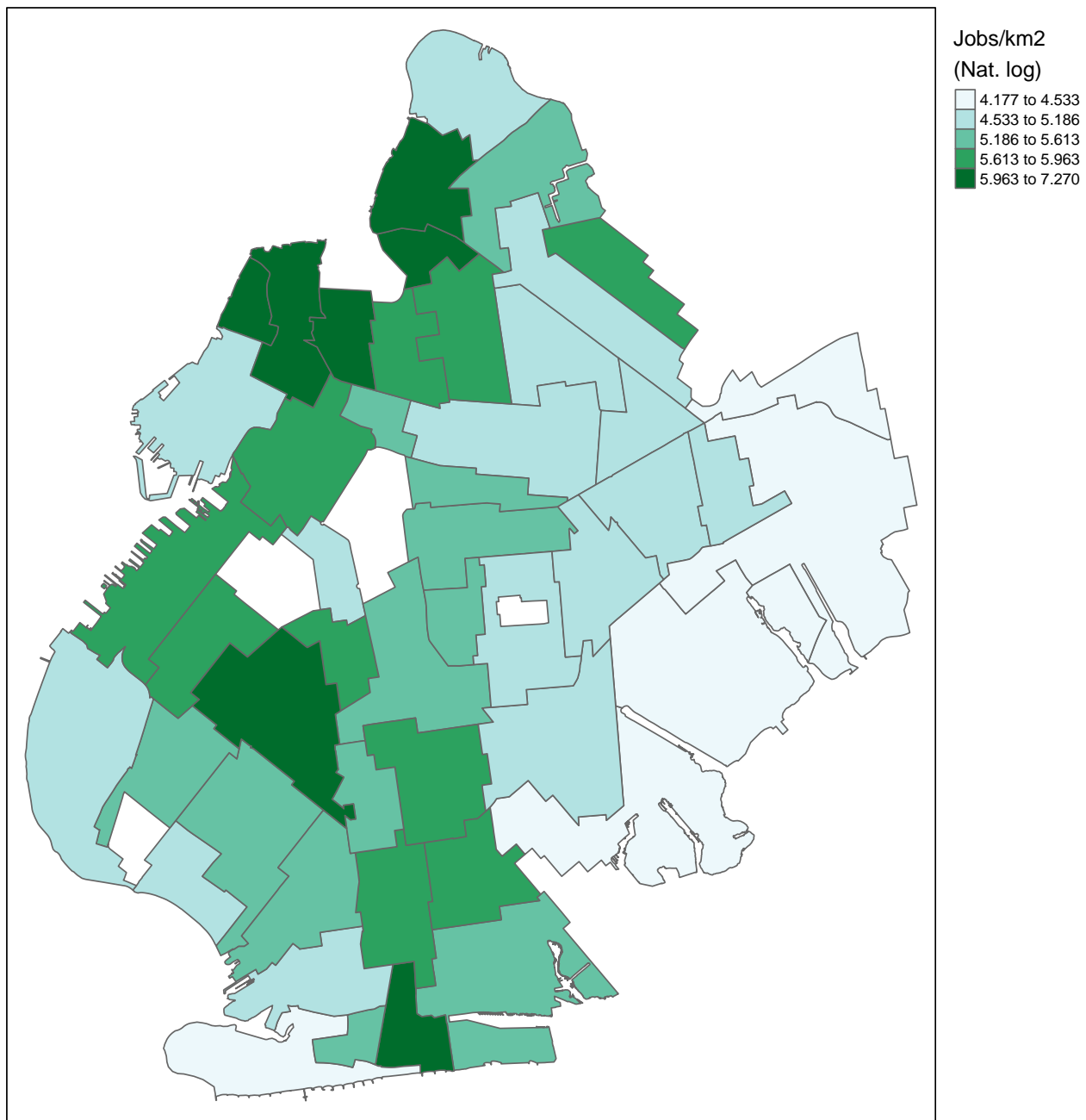


Figure 3: Number of jobs in each NTA tract. Job count is calculated from the sum of all trips which end in that NTA. It is standardized by the total area of the NTA. It is also transformed with a natural log.

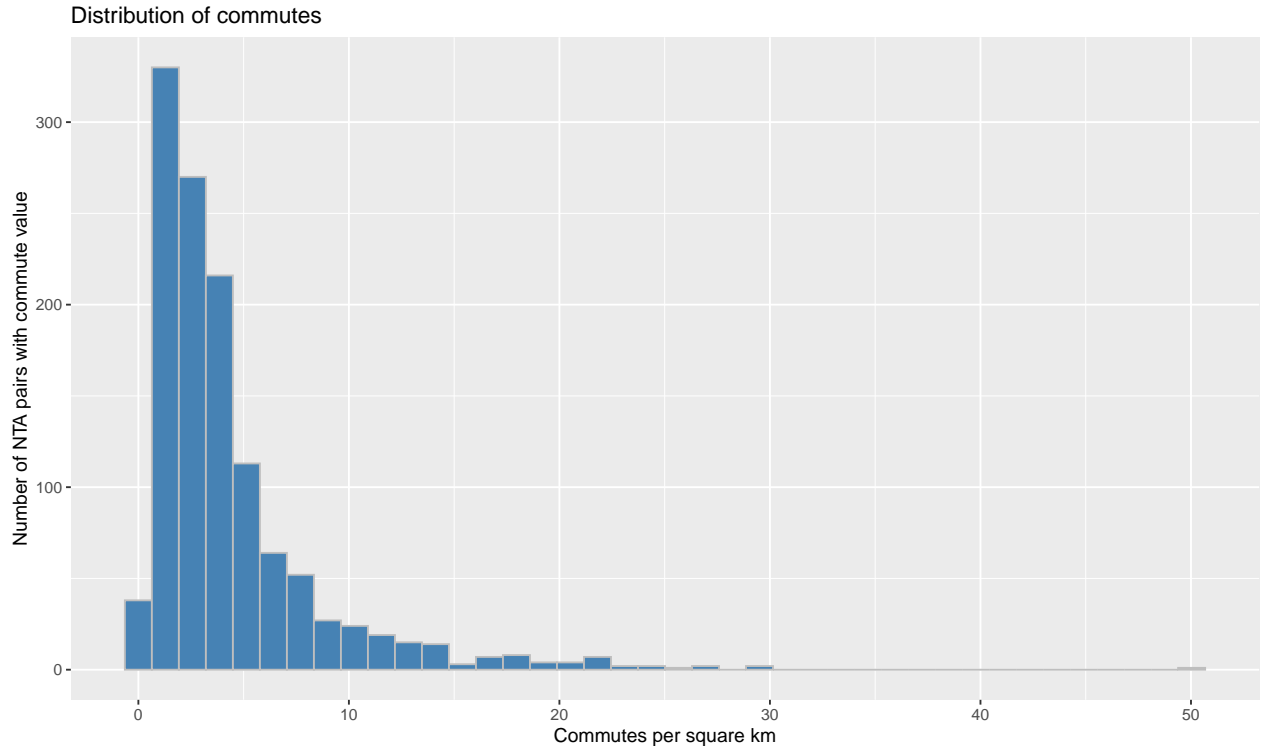


Figure 4: Frequency of commute counts, standardized by the sum of the areas of the commute's origin and destination NTAs

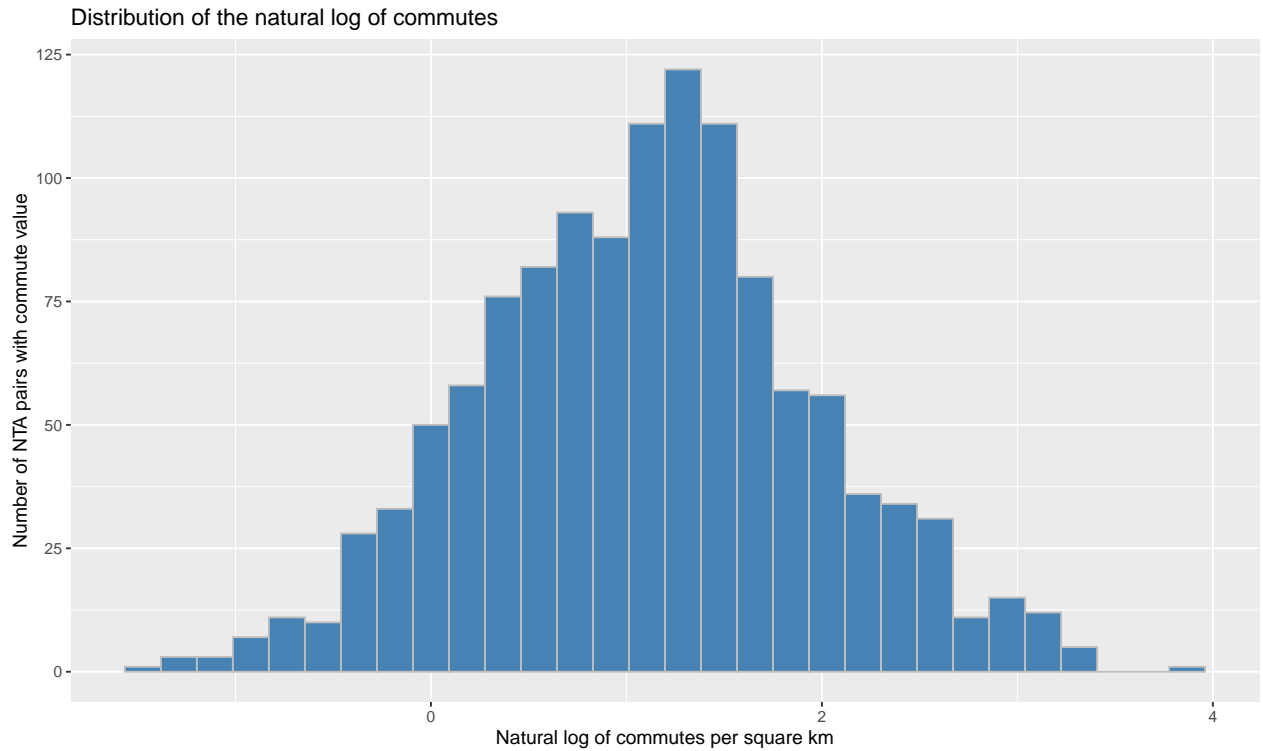


Figure 5: Frequency of the natural log of commute counts, standardized by the sum of the areas of the commute's origin and destination NTAs

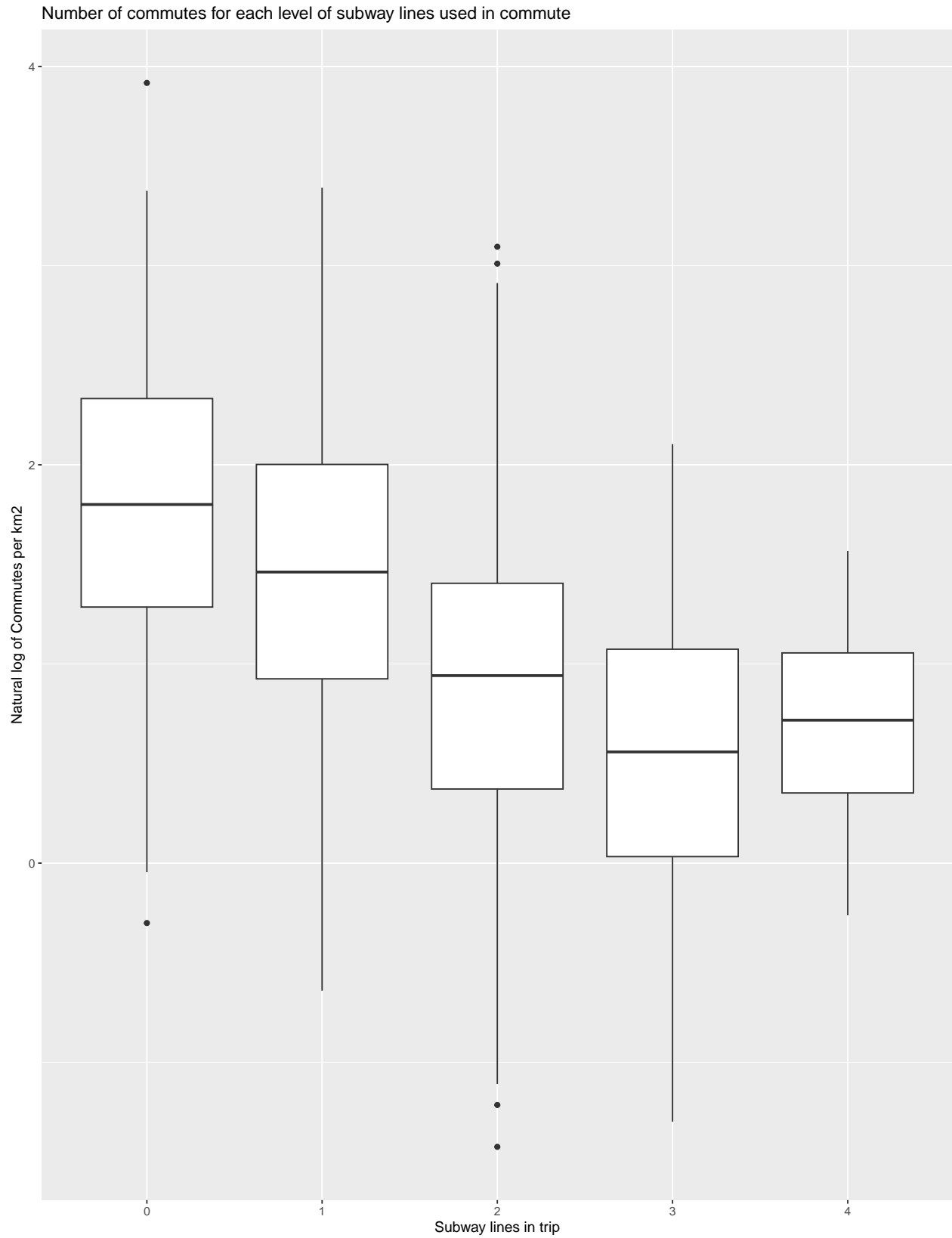


Figure 6: Boxplot for the number of commutes, factored by the number of subway lines used during the commute. Commutes are transformed by a natural log and standardized by area

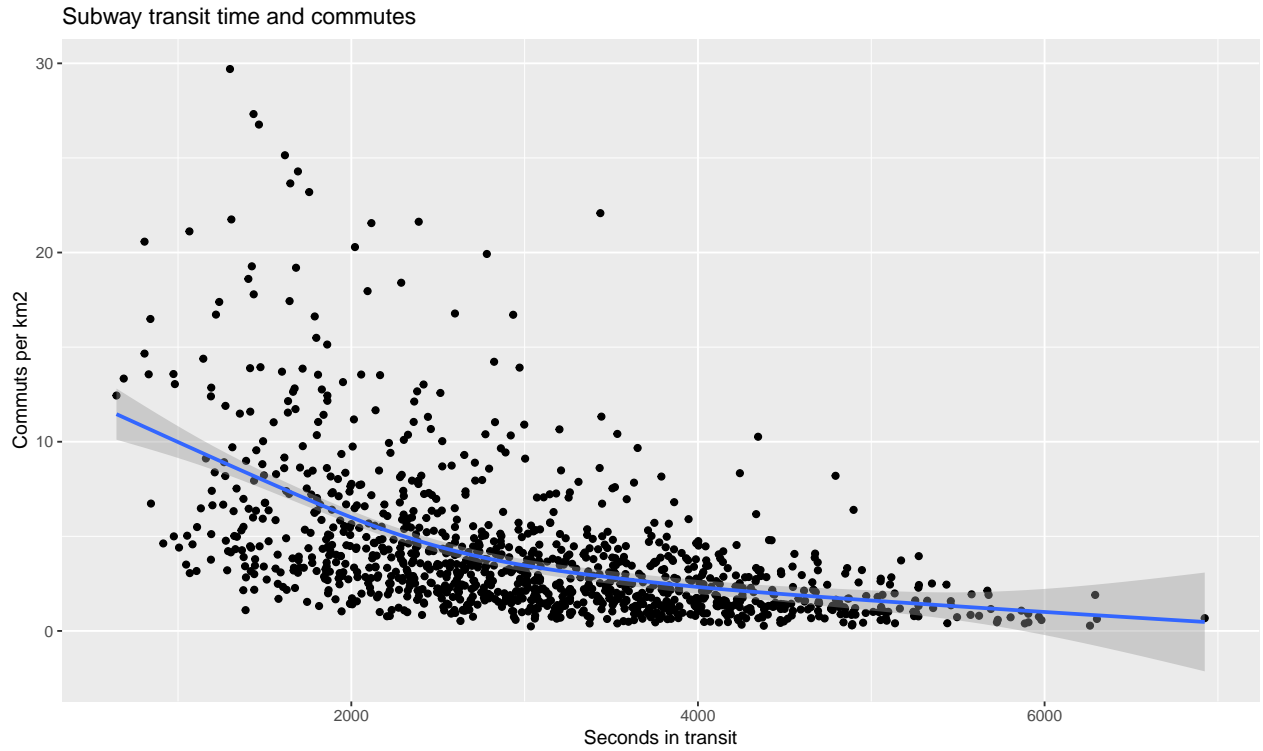


Figure 7: Time in transit on the subway plotted against the number of commutes standardized by area. A smoother line is overlaid in blue.

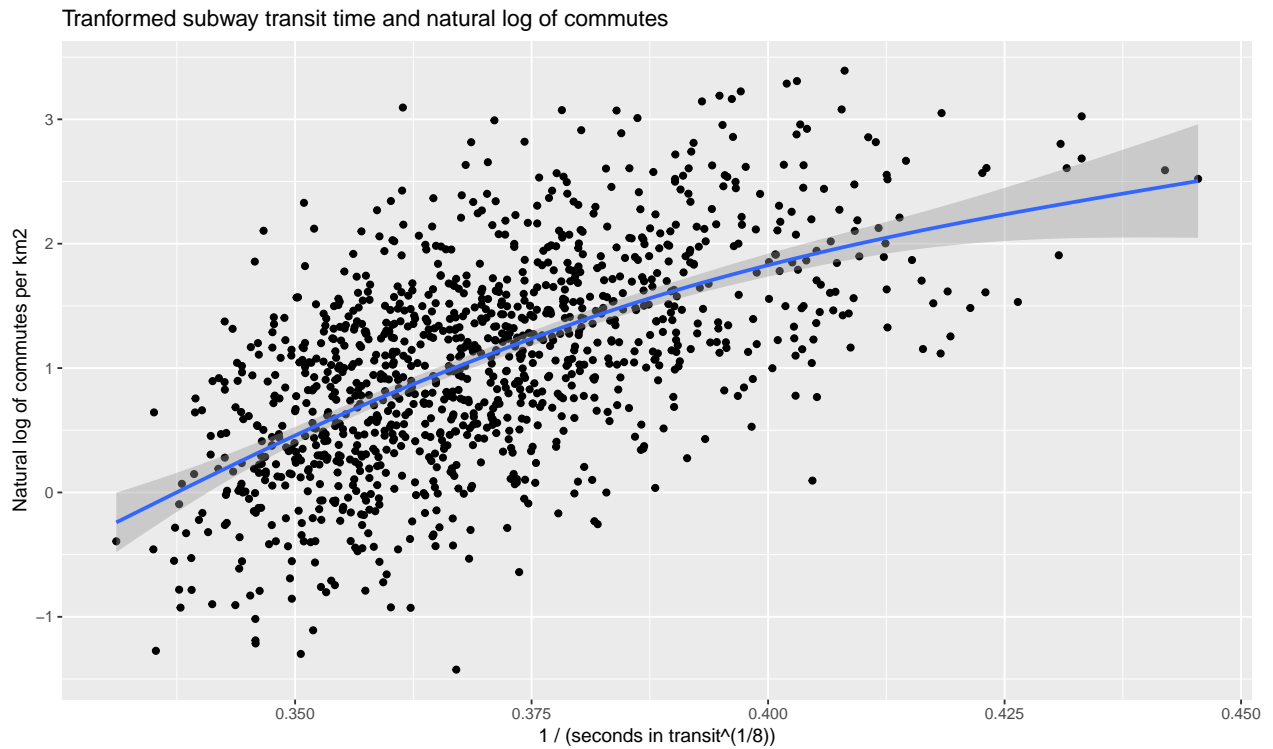


Figure 8: Time in subway transit is tranformed by raising it to the power of one-eighth and taking the inverse. Commute count is transformed with the natural log. The values are plotted against each other. A smoother line is overlaid in blue.

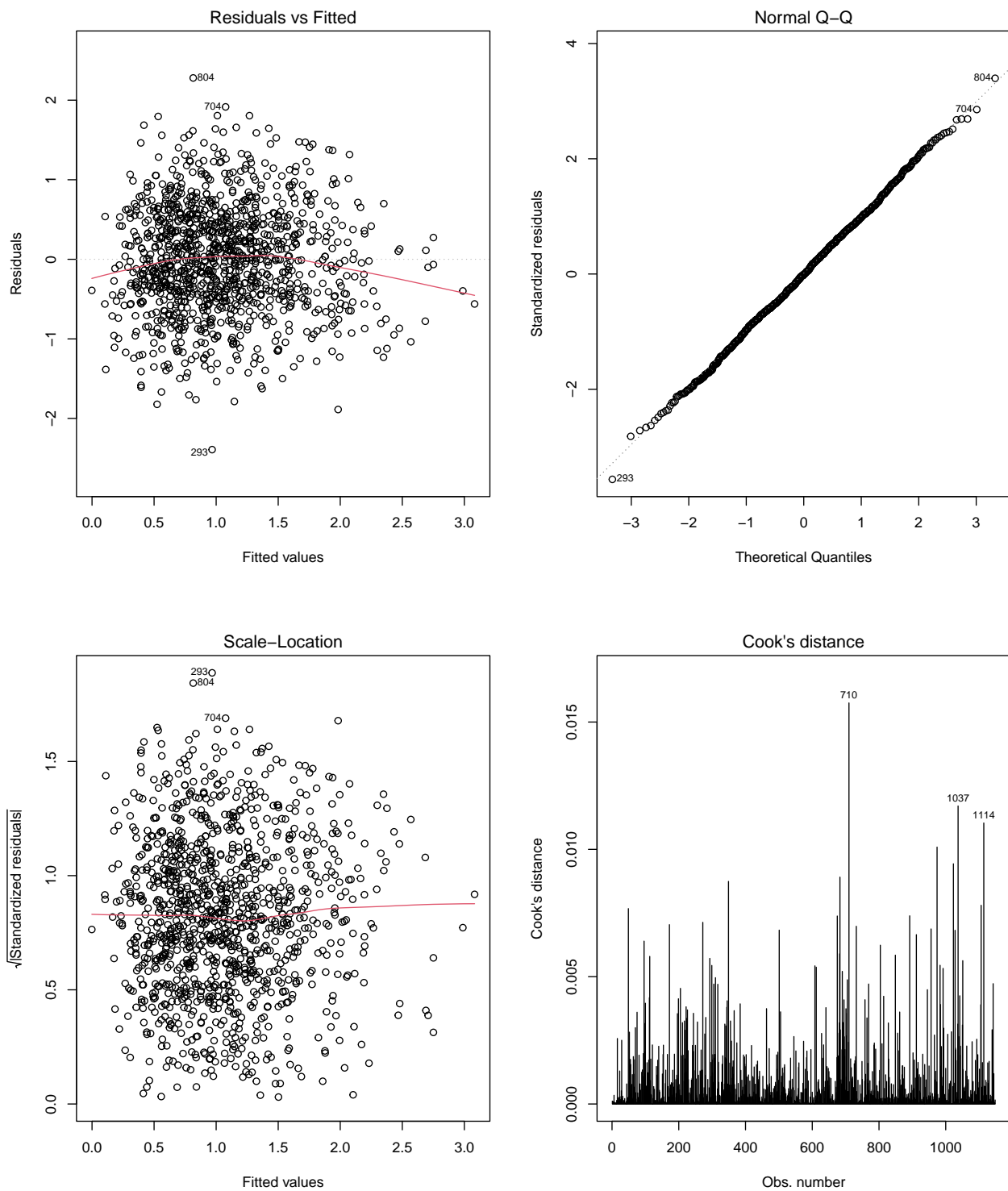


Figure 9: Diagnostic plots for the model of transformed subway transit time

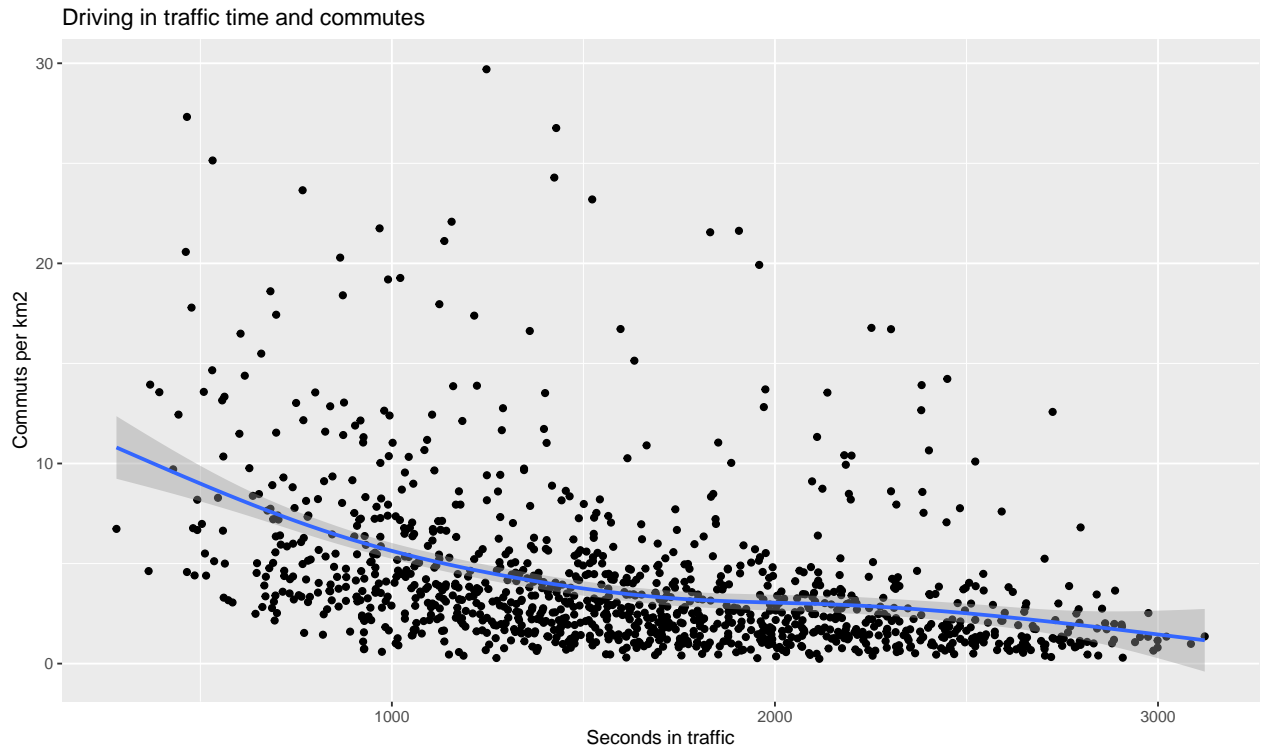


Figure 10: Time driving in traffic plotted against the number of commutes standardized by area. A smoother line is overlaid in blue.

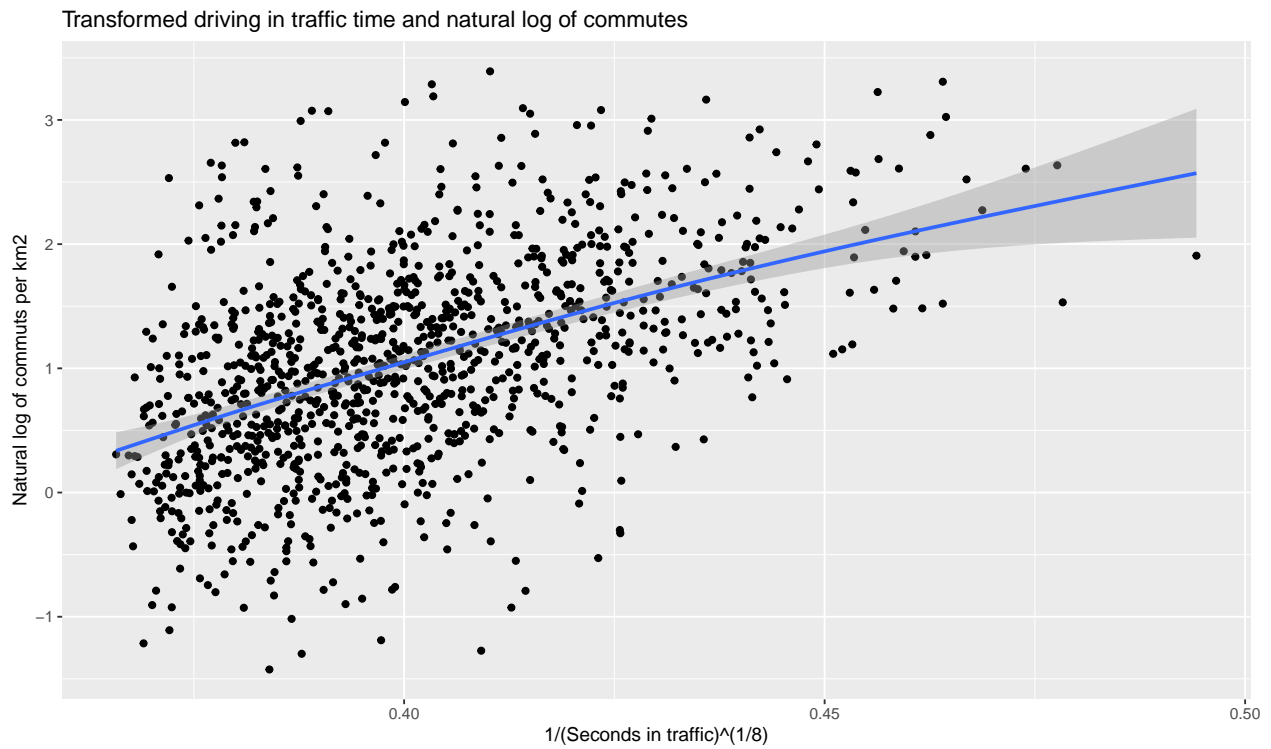


Figure 11: Time driving in traffic is transformed by raising it to the power of one-eighth and taking the inverse. Commute count is transformed with the natural log. The values are plotted against each other. A smoother line is overlaid in blue.



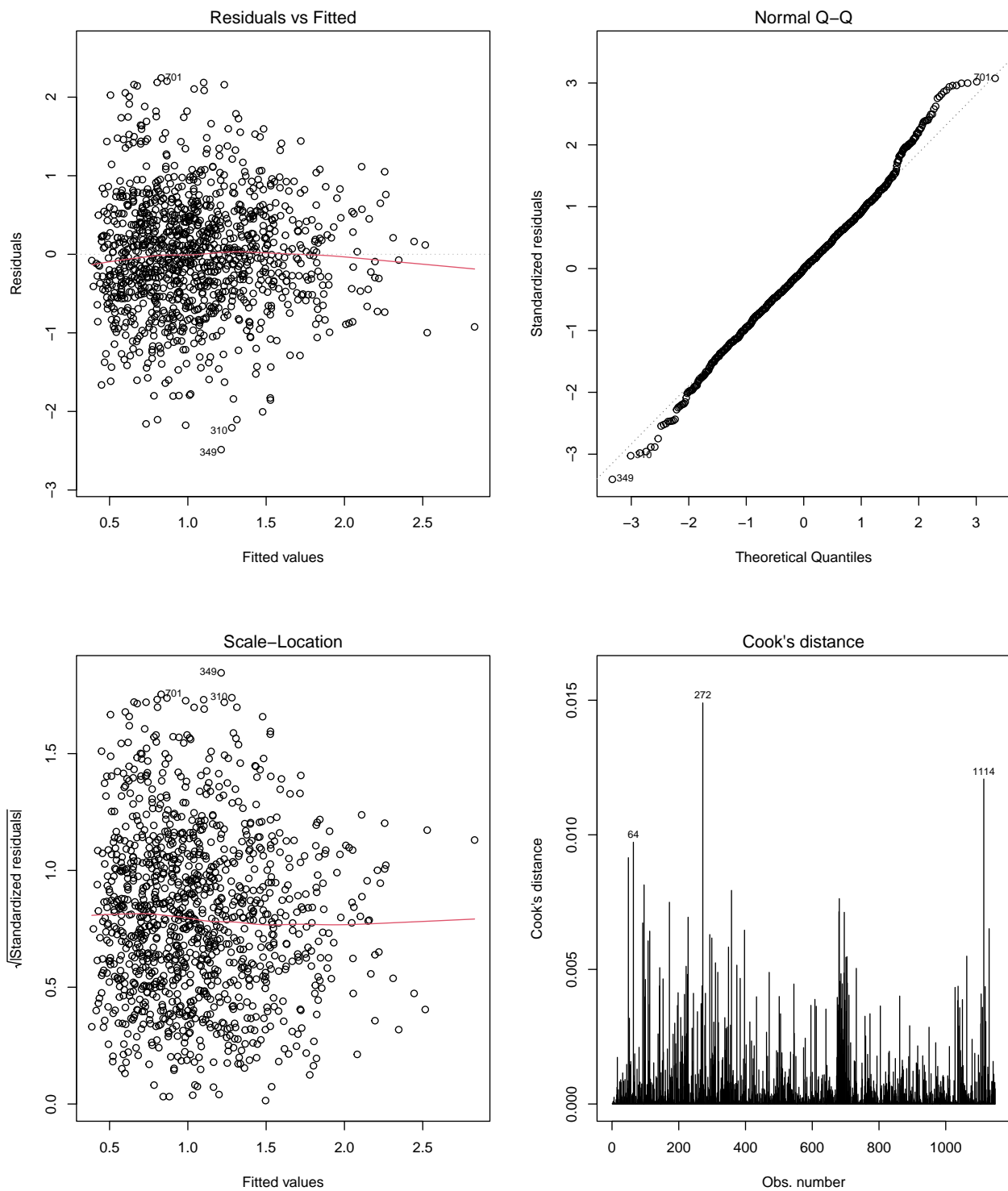


Figure 12: Diagnostic plots for the model of transformed driving time

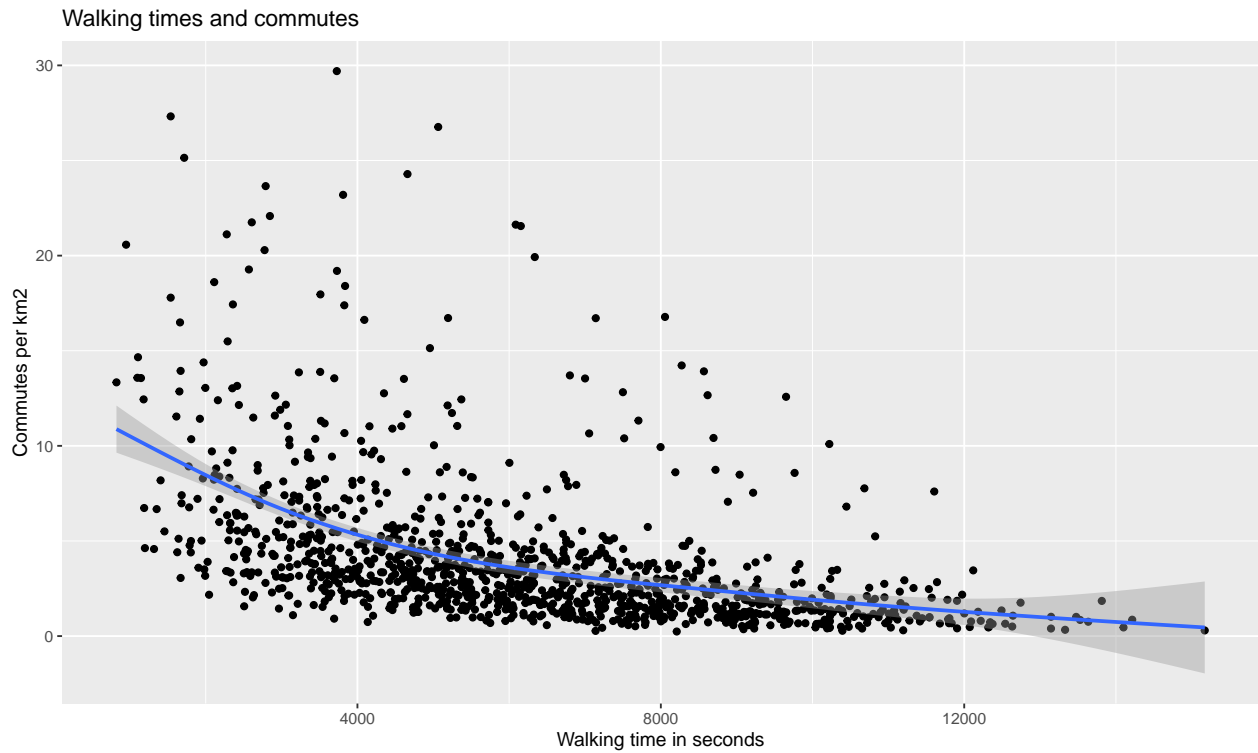


Figure 13: Time spent walking plotted against the number of commutes standardized by area. A smoother line is overlaid in blue.

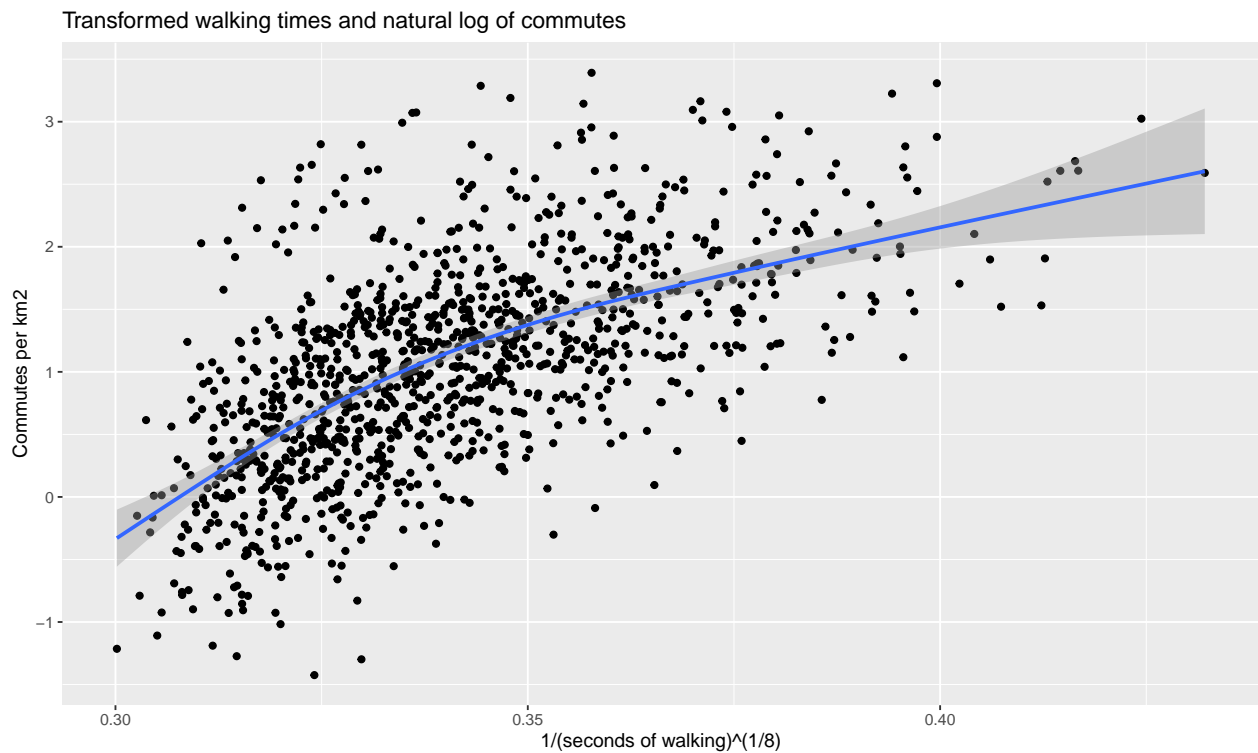


Figure 14: Time spent walking is transformed by raising it to the power of one-eighth and taking the inverse. Commute count is transformed with the natural log. The values are plotted against each other. A smoother line is overlaid in blue.

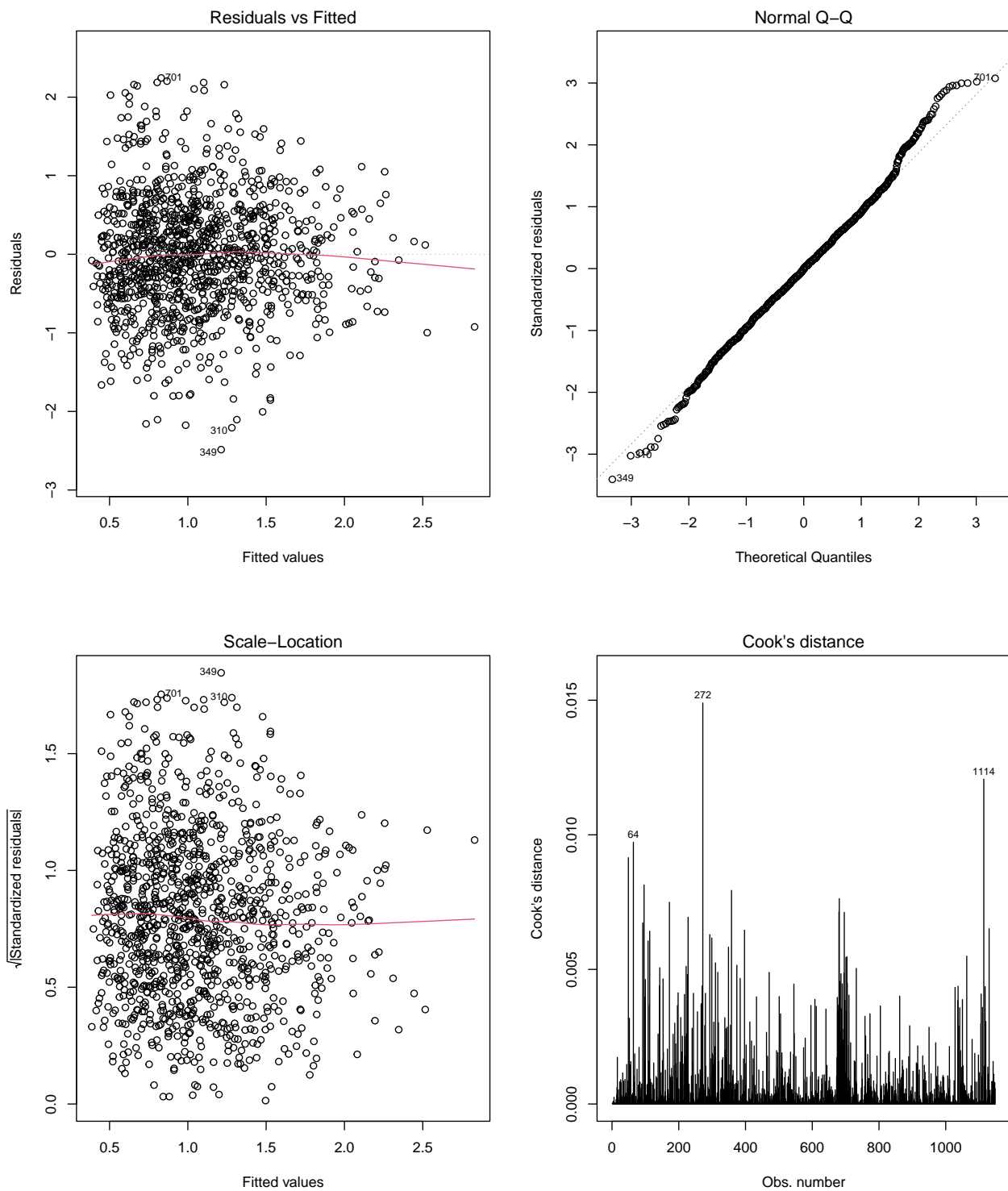


Figure 15: Diagnostic plots for the model of transformed walking time

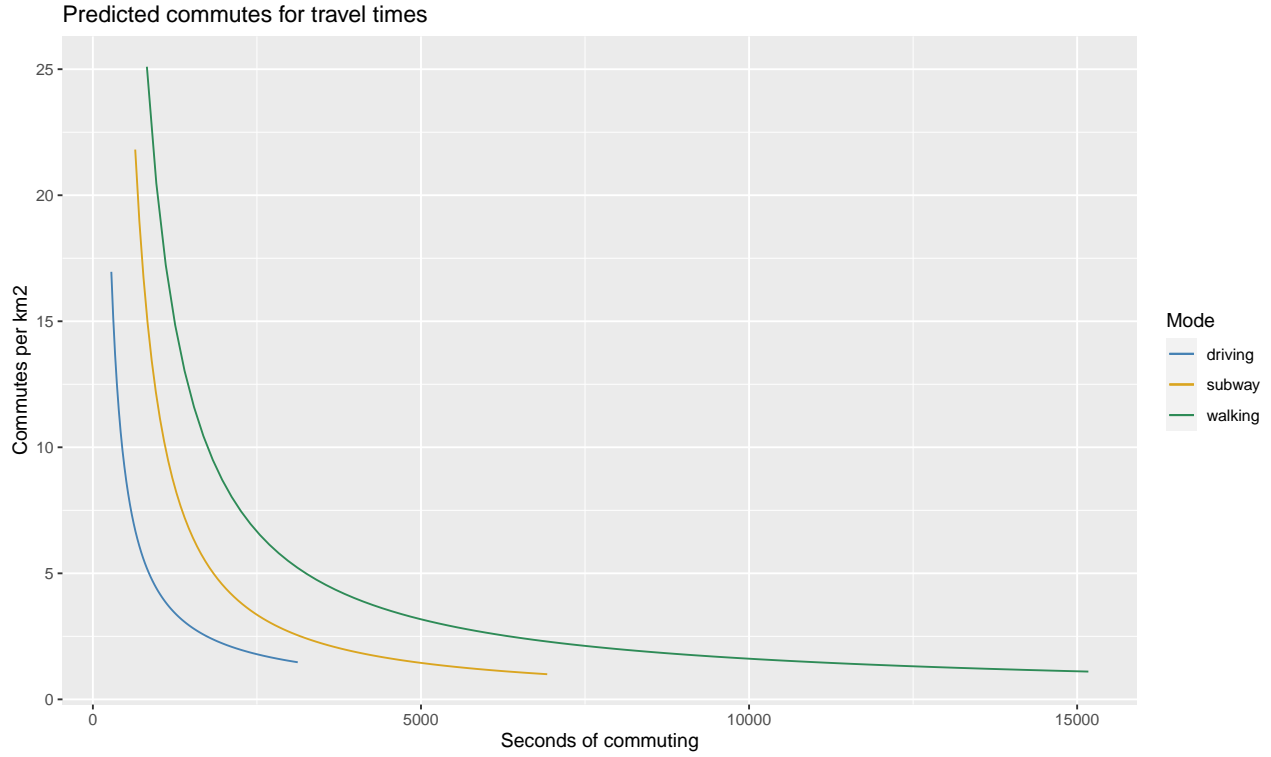


Figure 16: Models for transportation modes. Each model is only plotted from their minimum to maximum observed travel time.

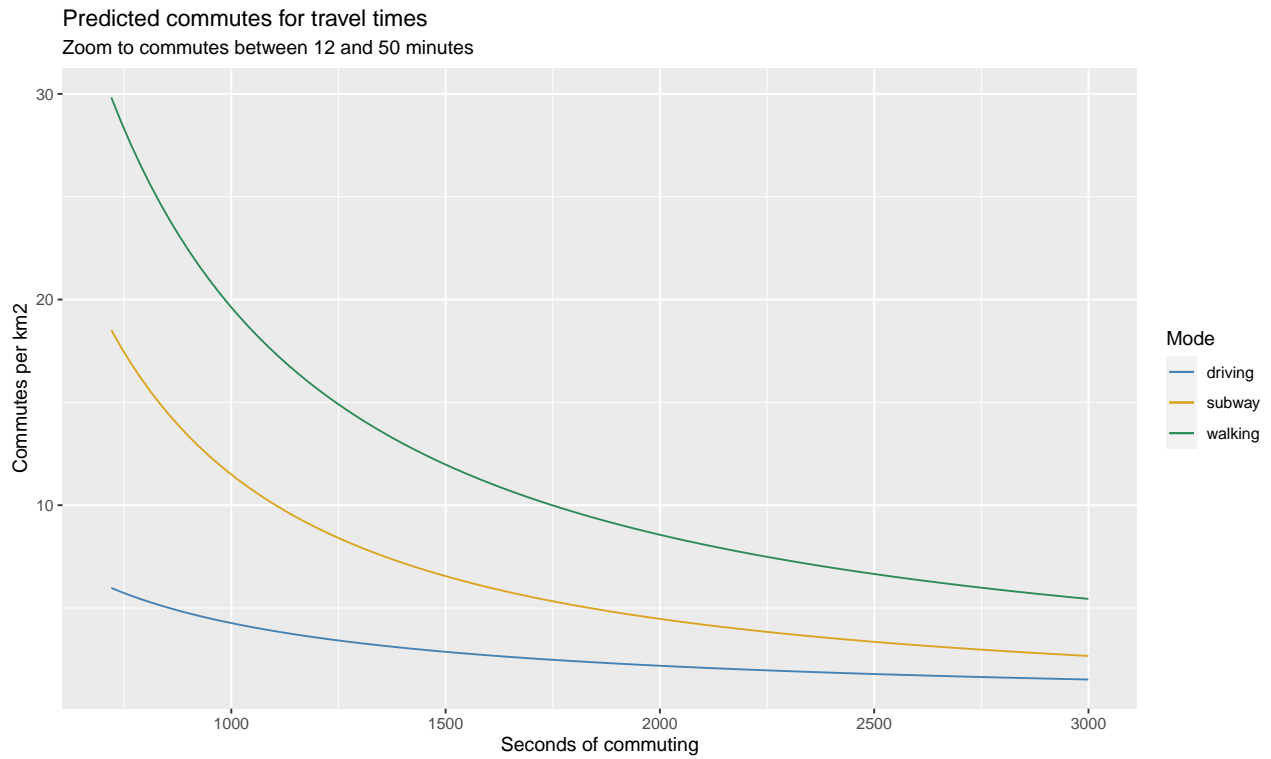


Figure 17: Models of transportation modes, zoomed on the range of 12min to 50mins. This range is seen in the travel time values for each transportation mode.

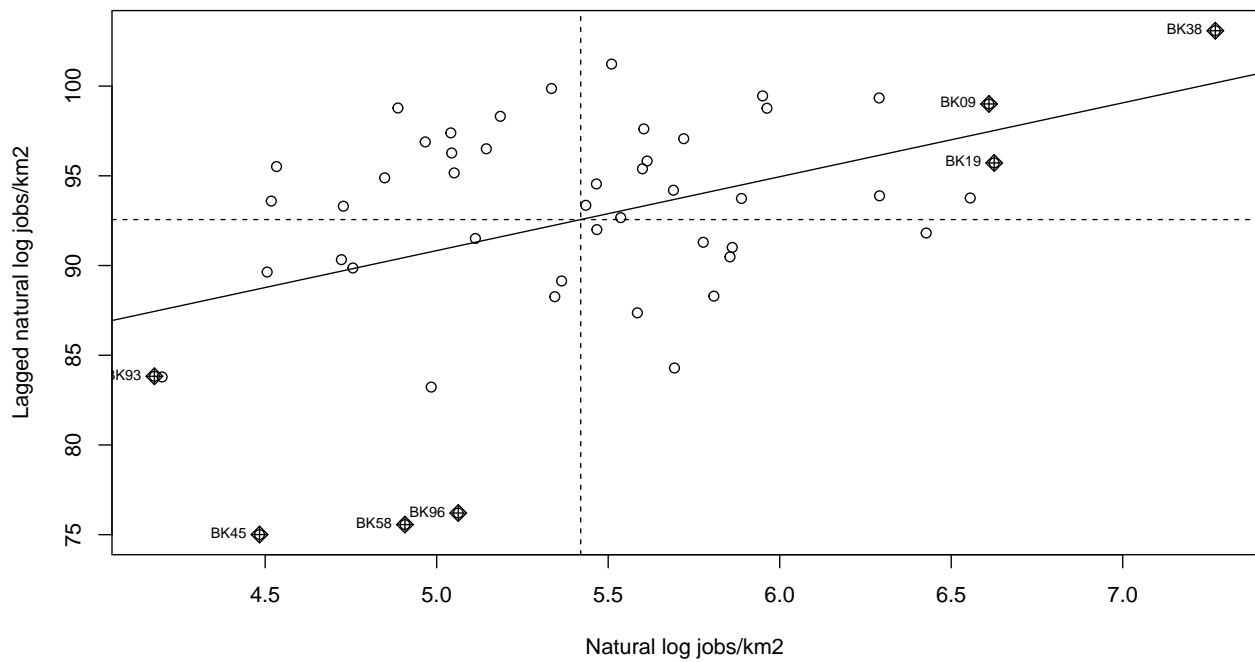


Figure 18: Global auto-correlation of job count using subway transit time for neighborhood weights

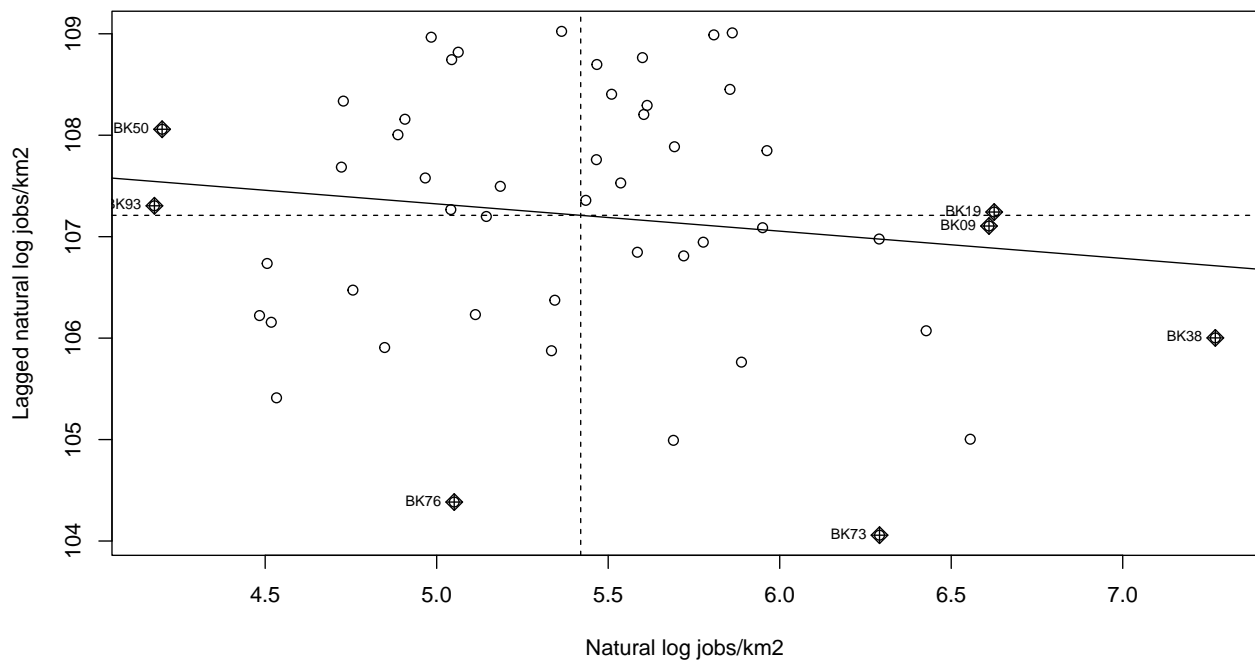


Figure 19: Global auto-correlation of job count using driving time for neighborhood weights

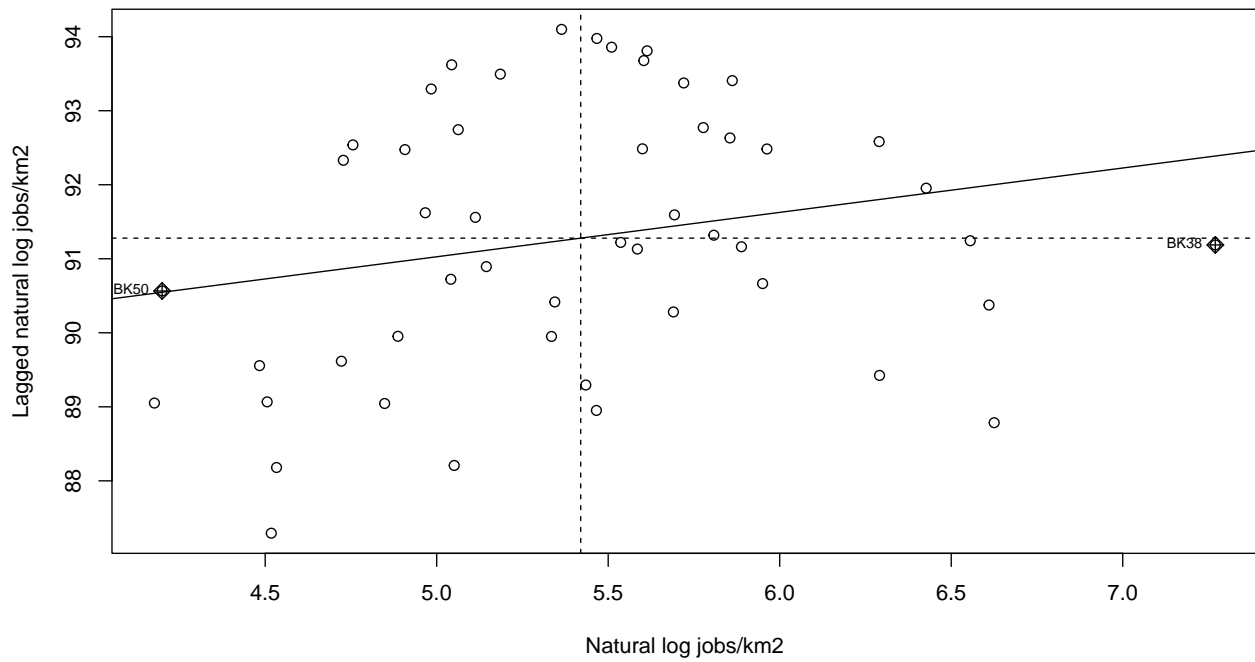


Figure 20: Global auto-correlation of job count using walking time for neighborhood weights

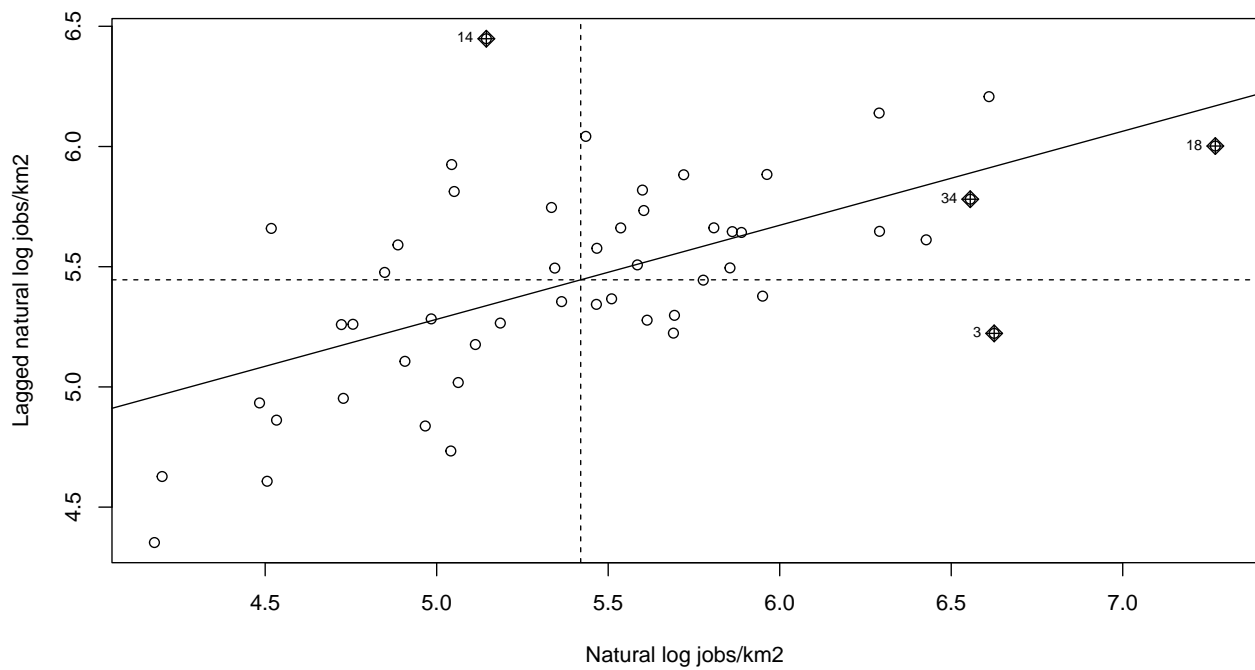


Figure 21: Global auto-correlation of job count using queens contiguity for neighborhood weights

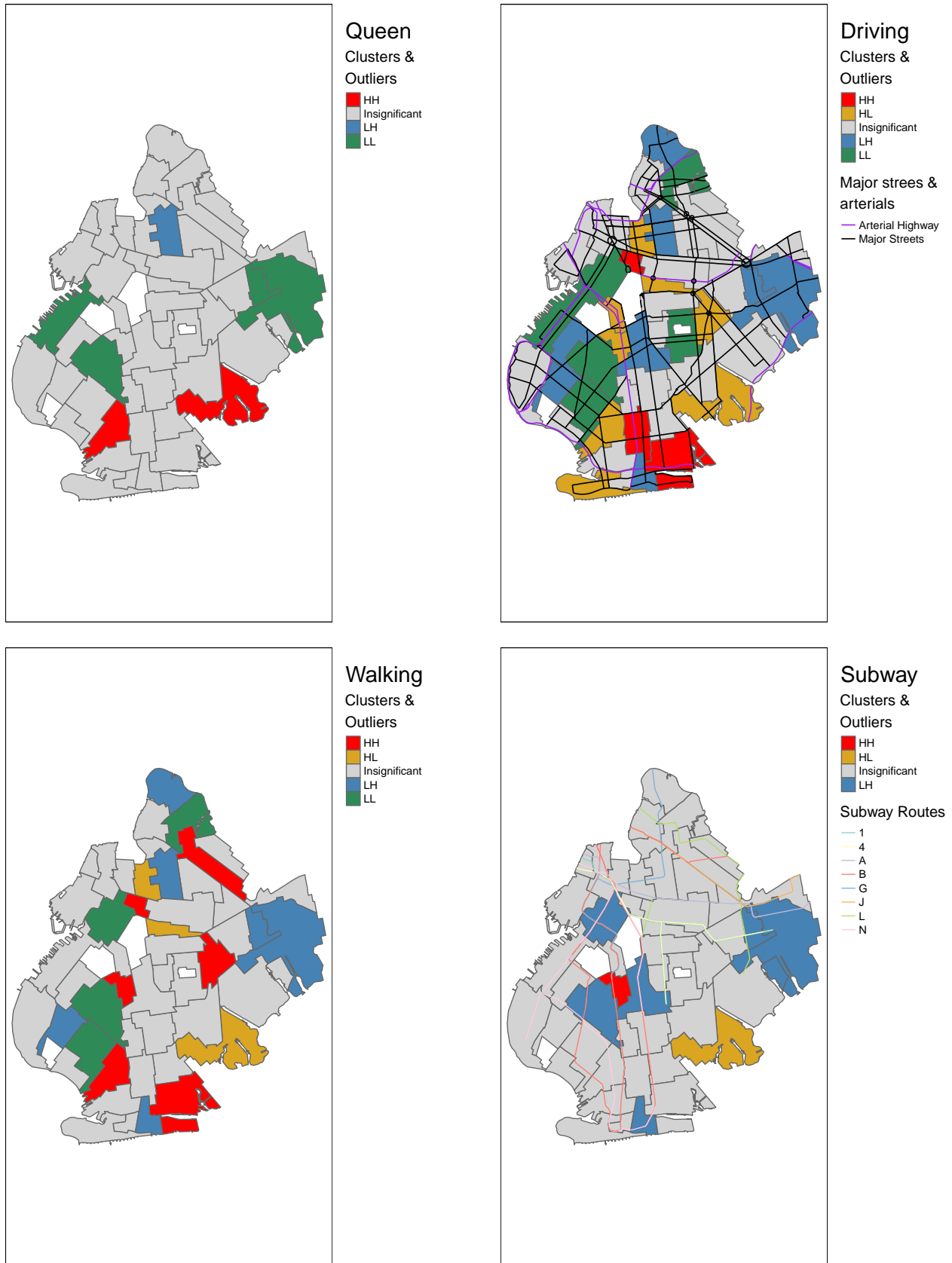


Figure 22: Local auto-correlation for job count of NTAs. Each map utilizing a unique neighborhood weighting. Top left uses queen contiguity. Top right uses driving time in traffic. Bottom left uses walking time. Bottom right uses transit time on the subway.

