Frequency of job counts for NTAs

Frequency of the natural log for job counts for NTAs

Figure 1: 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.
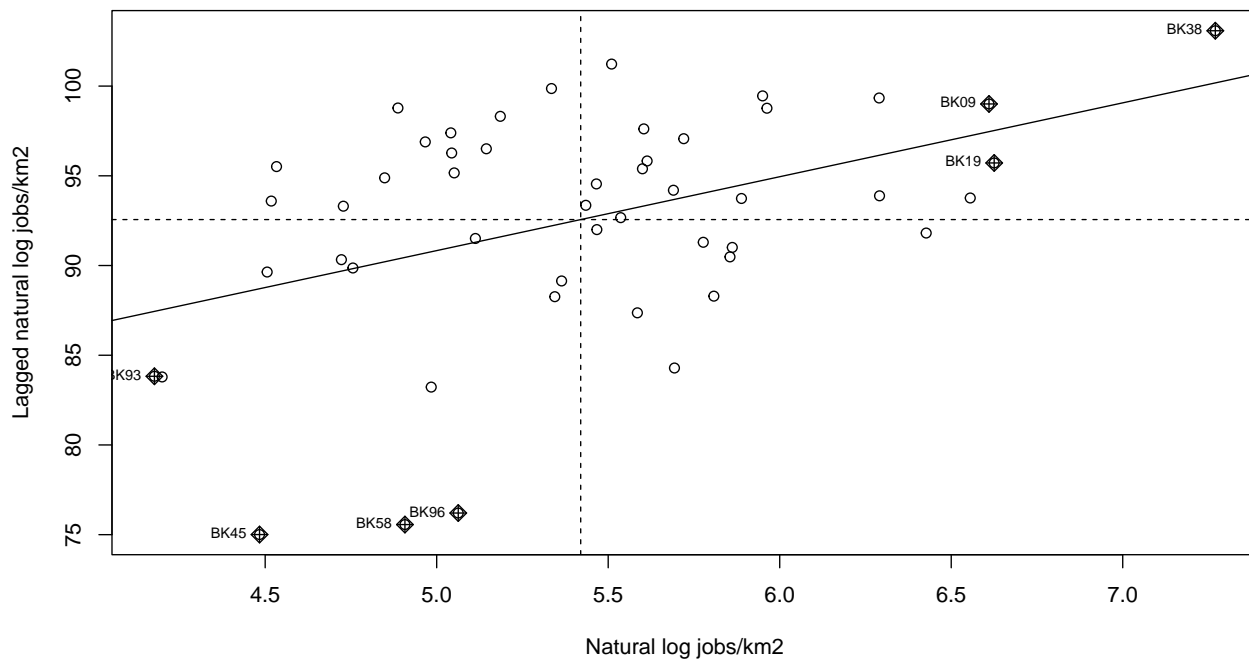
Figure 2: Global auto-correlation of job count using subway transit time for neighborhood wieghts
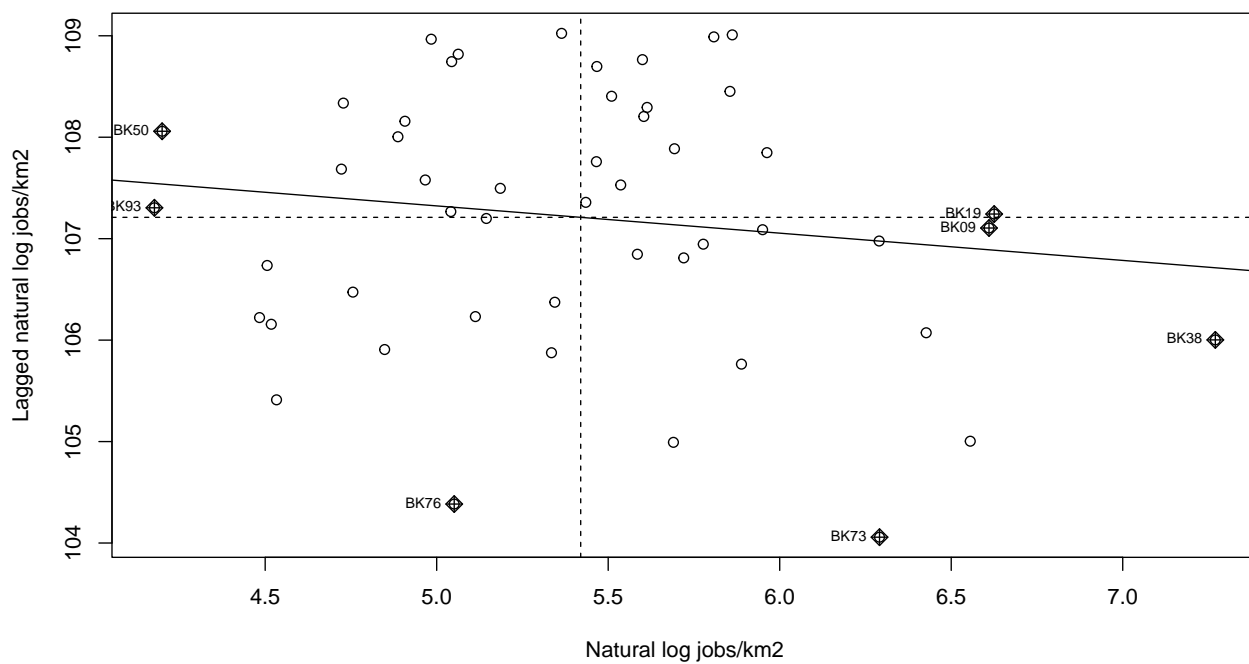

Figure 3: Global auto-correlation of job count using driving time for neighborhood wieghts
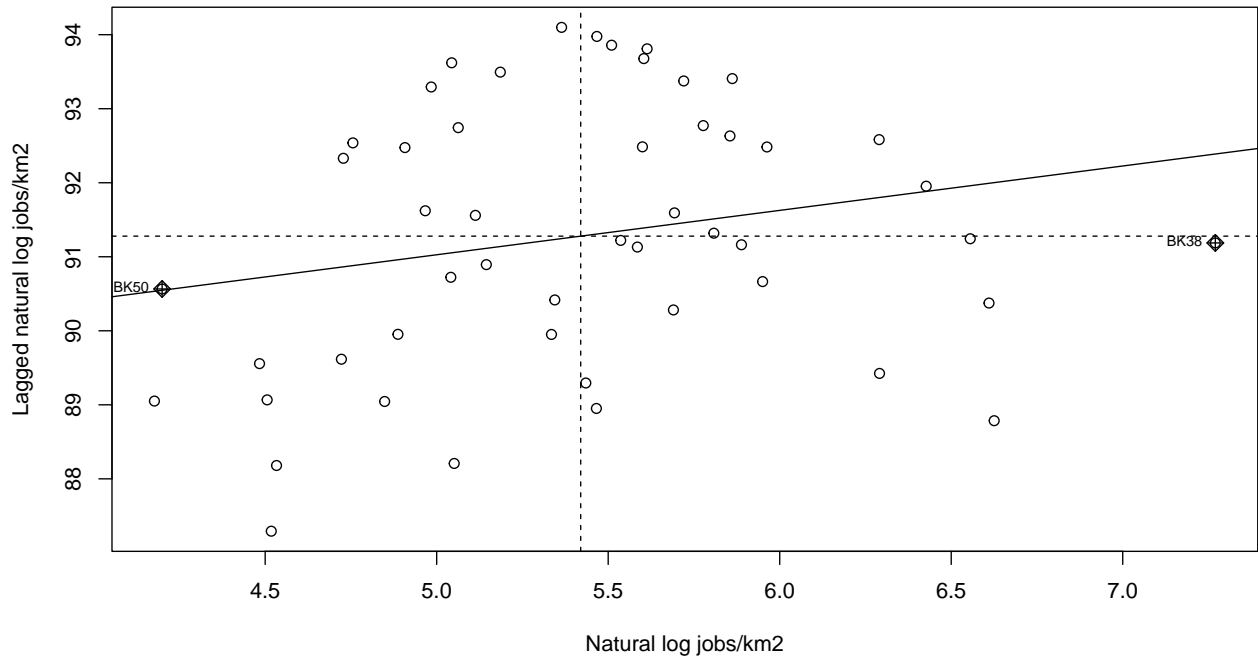
Figure 4: Global auto-correlation of job count using walking time for neighborhood wieghts
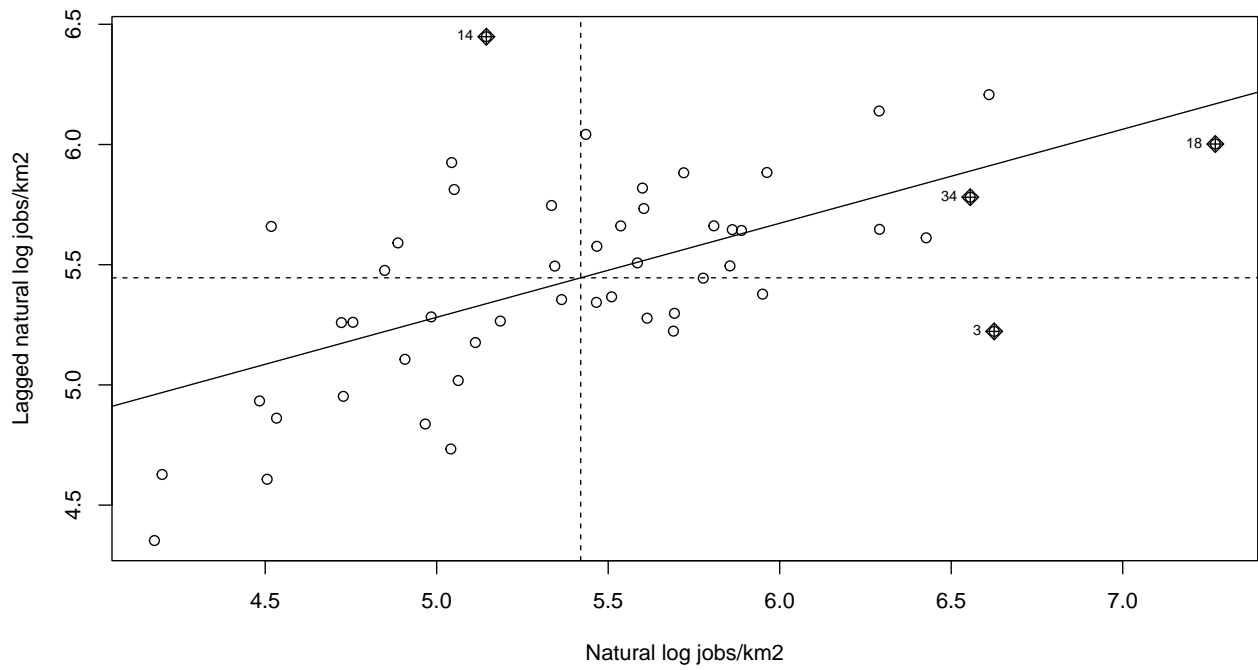

Figure 5: Global auto-correlation of job count using queens contiguity for neighborhood wieghts
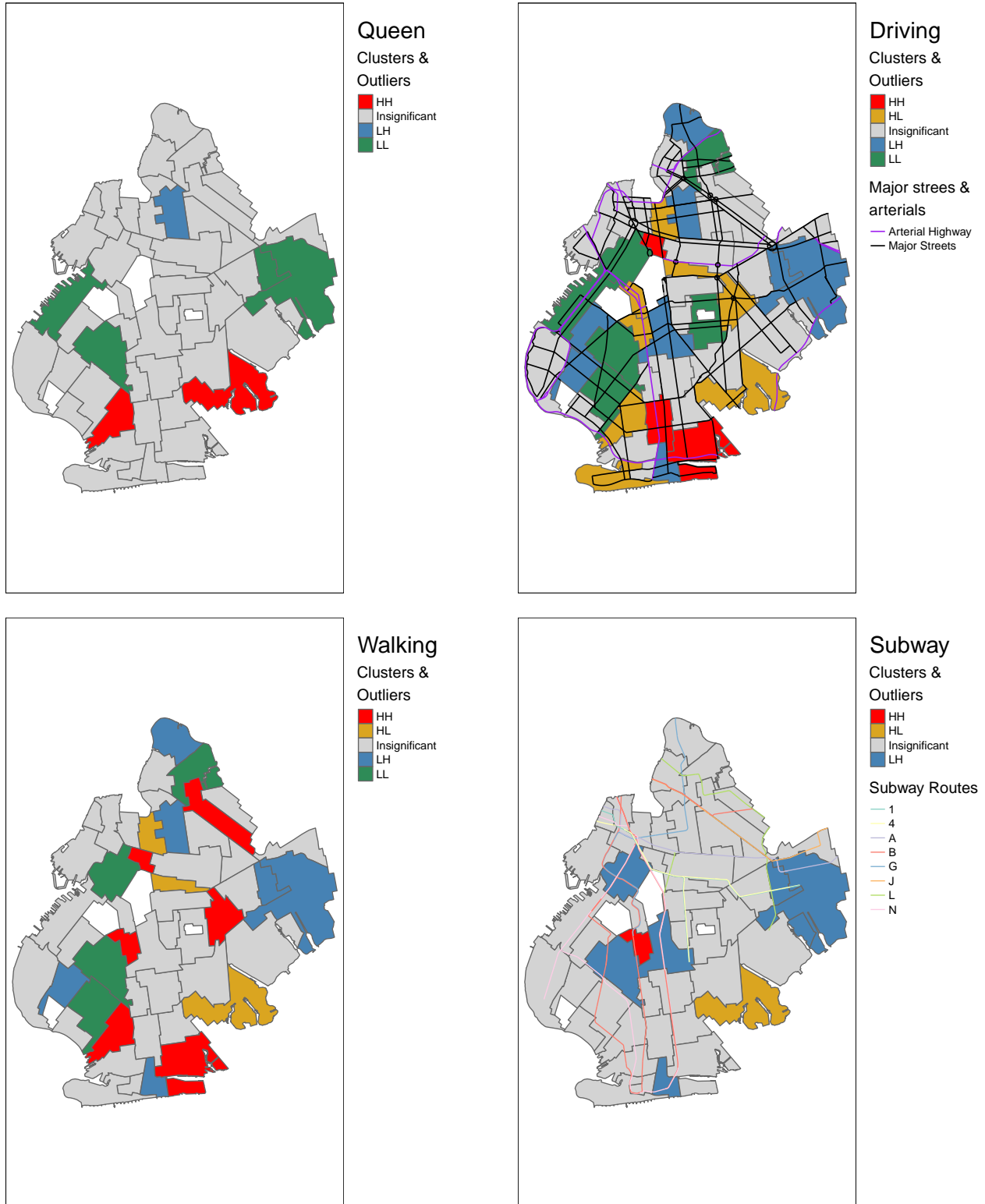
4

Figure 6: Local auto-correlation for job count of NTAs. Each map utilizes a unique neighborhood weighting. Top left uses queen contiguity. Top right uses driving time in traffic and is overlayed with major roads. Bottom left uses walking time. Bottom right uses transit time on the subway and is overlayed with the subway network.
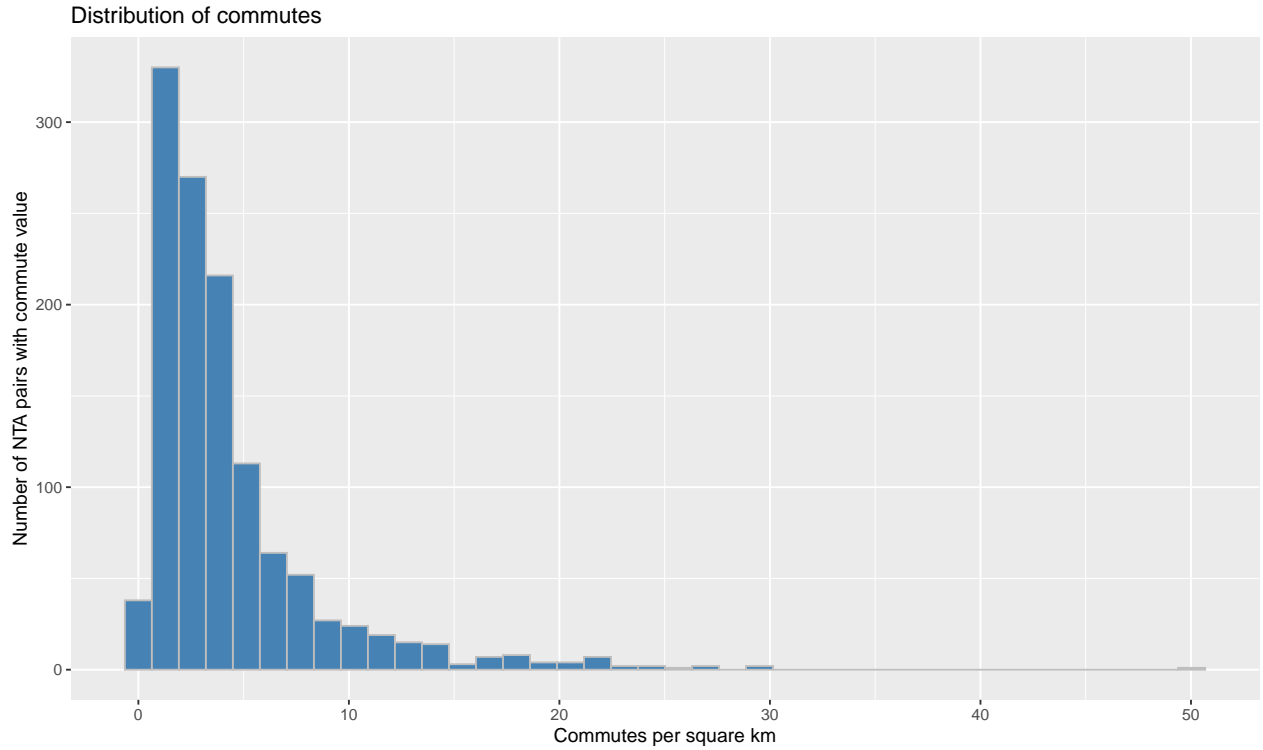
Figure 7: Frequency of commute counts, standardized by the sum of the areas of the commute's origin and destination NTAs
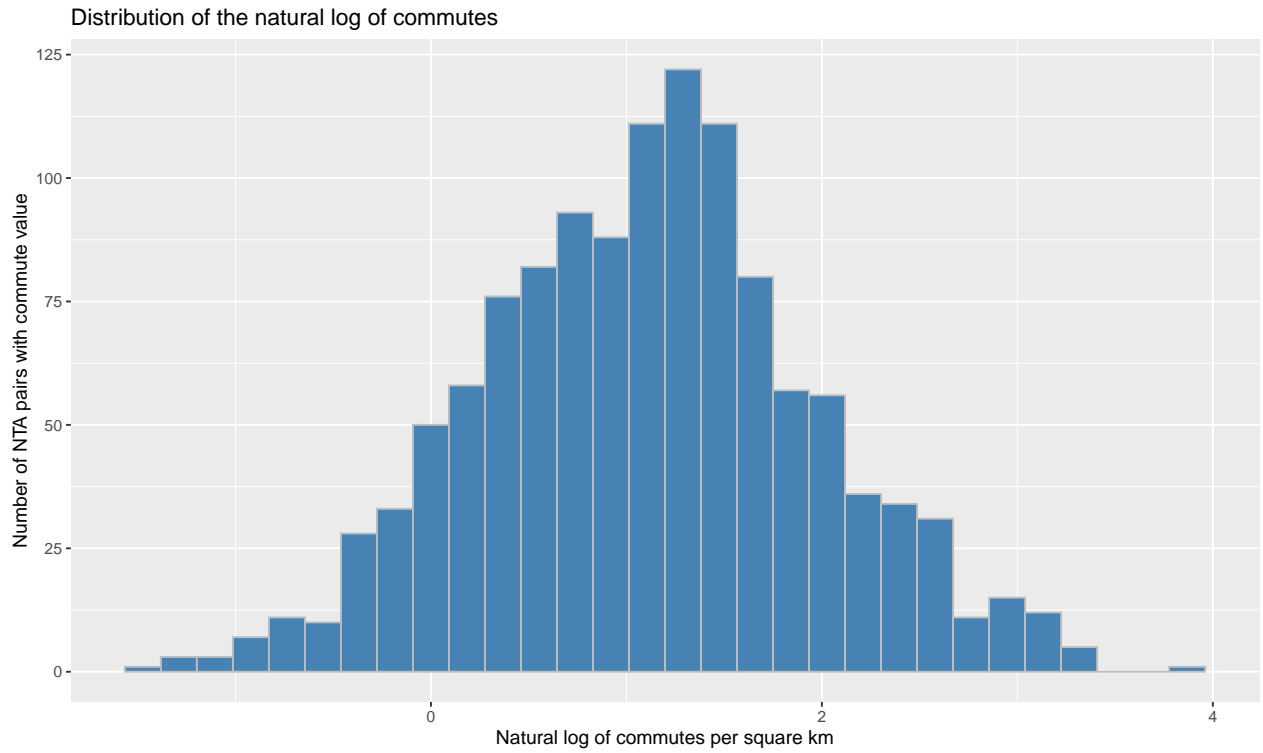

Figure 8: Frequency of the natural log of commute counts, standardized by the sum of the areas of the commute's origin and destination NTAs

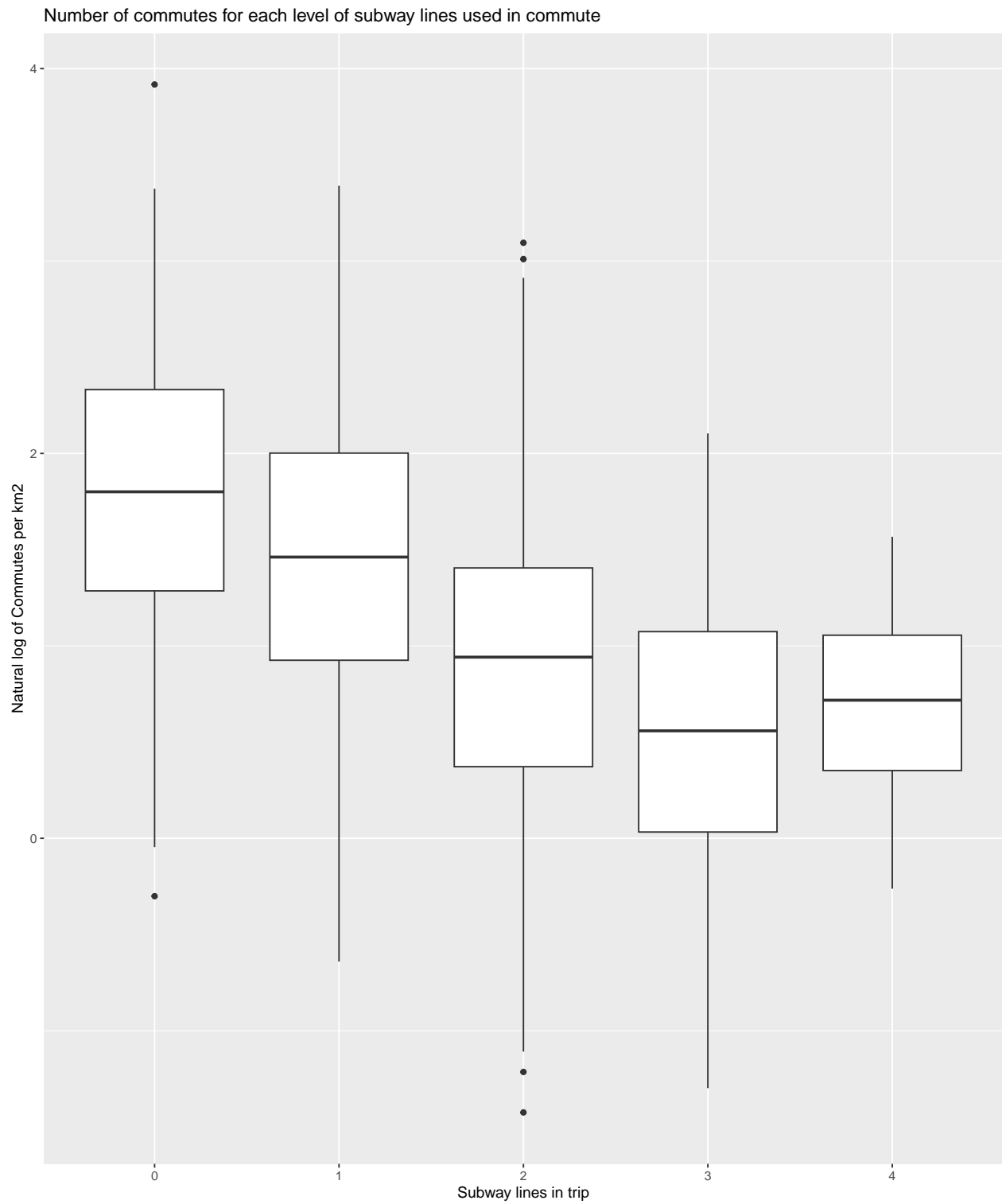Number of commutes for each level of subway lines used in commute

Figure 9: 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
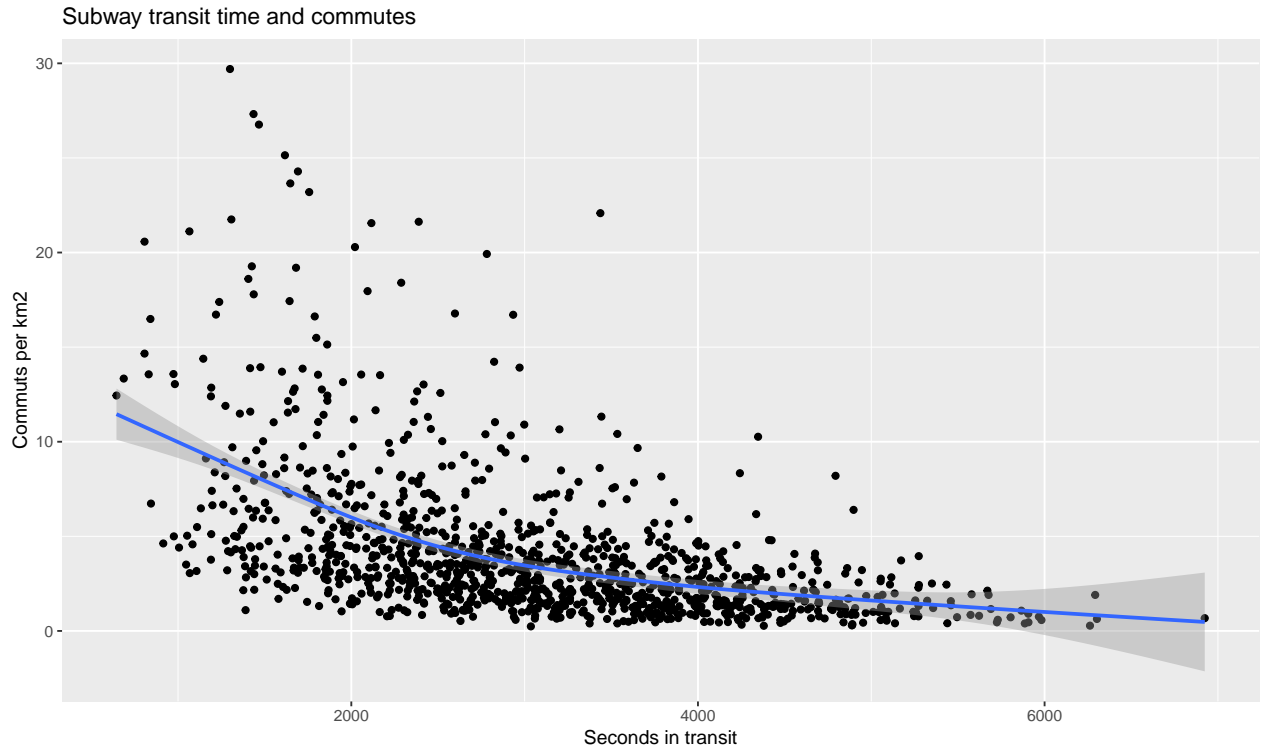
Figure 10: Time in transit on the subway plotted against the number of commutes standardized by area. A smoother line is overlayed in blue.

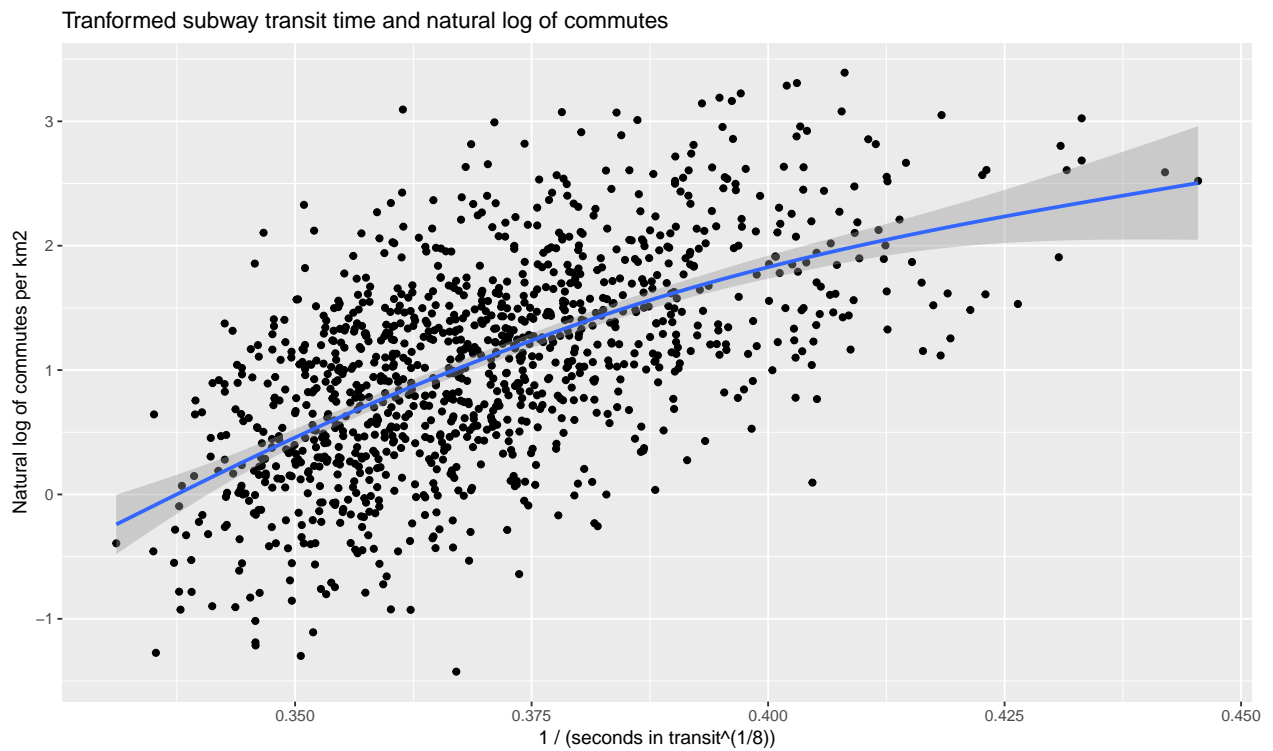

Figure 11: Time in subway transit is transormed by raising it to the power of one-eighth and taking the inverse. Commute count is transformed with the natural log. The values are plotted against each other. A smoother line is overlayed in blue.
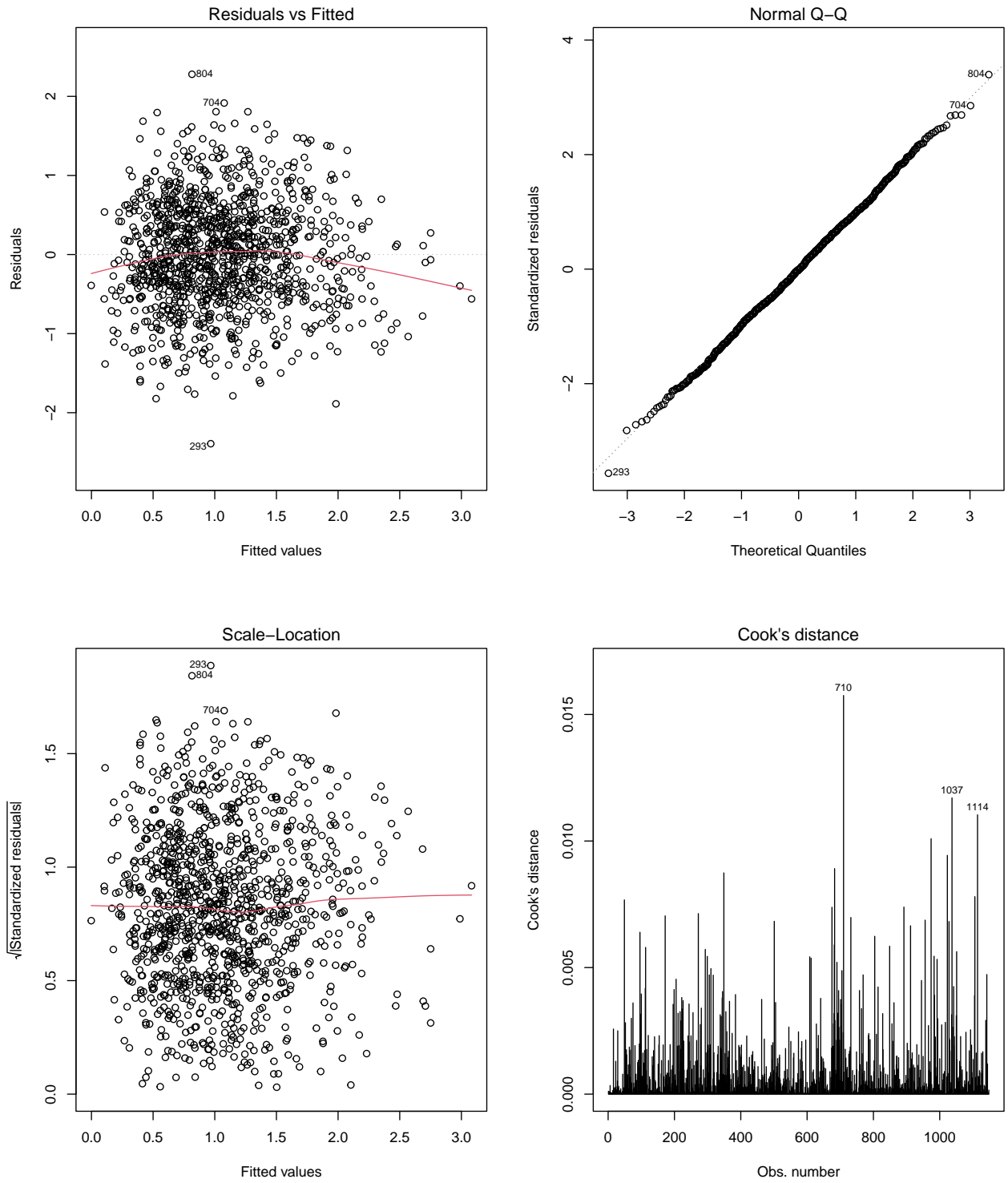
Figure 12: Diagnostic plots for the model of transformed subway transit time
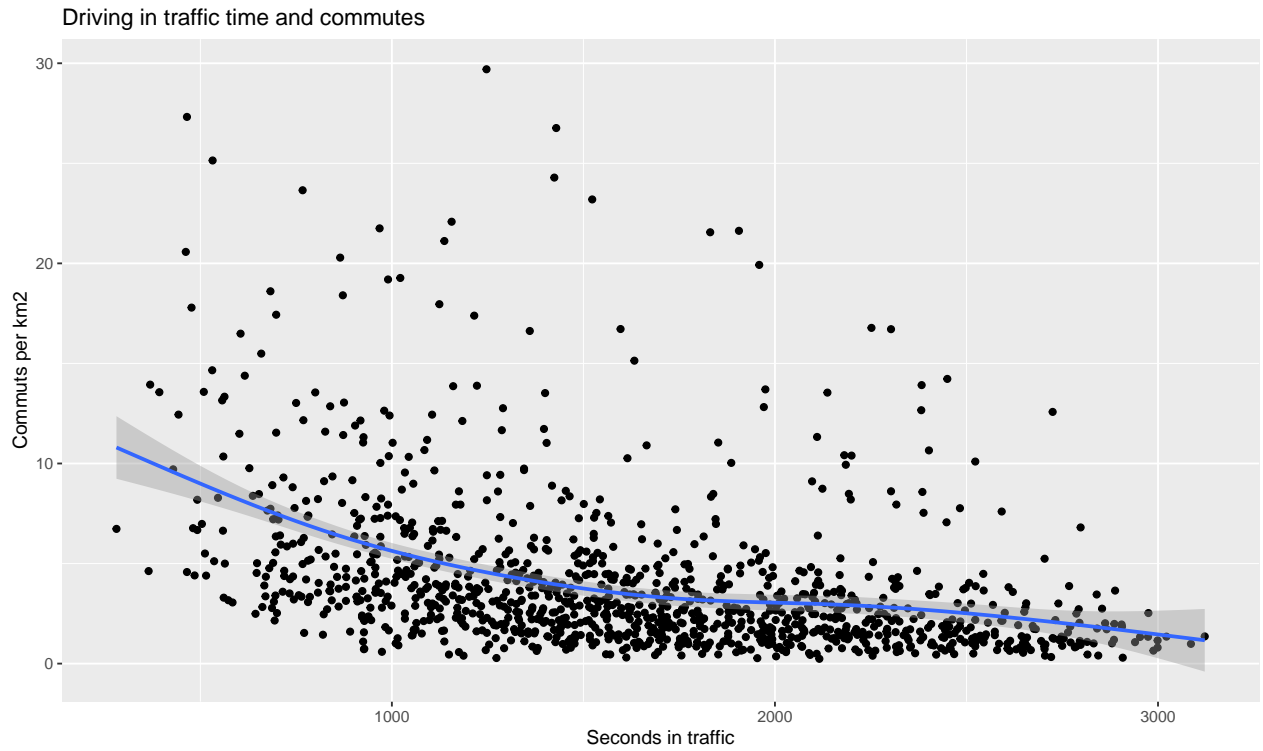
Figure 13: Time driving in traffic plotted against the number of commutes standardized by area. A smoother line is overlayed in blue.
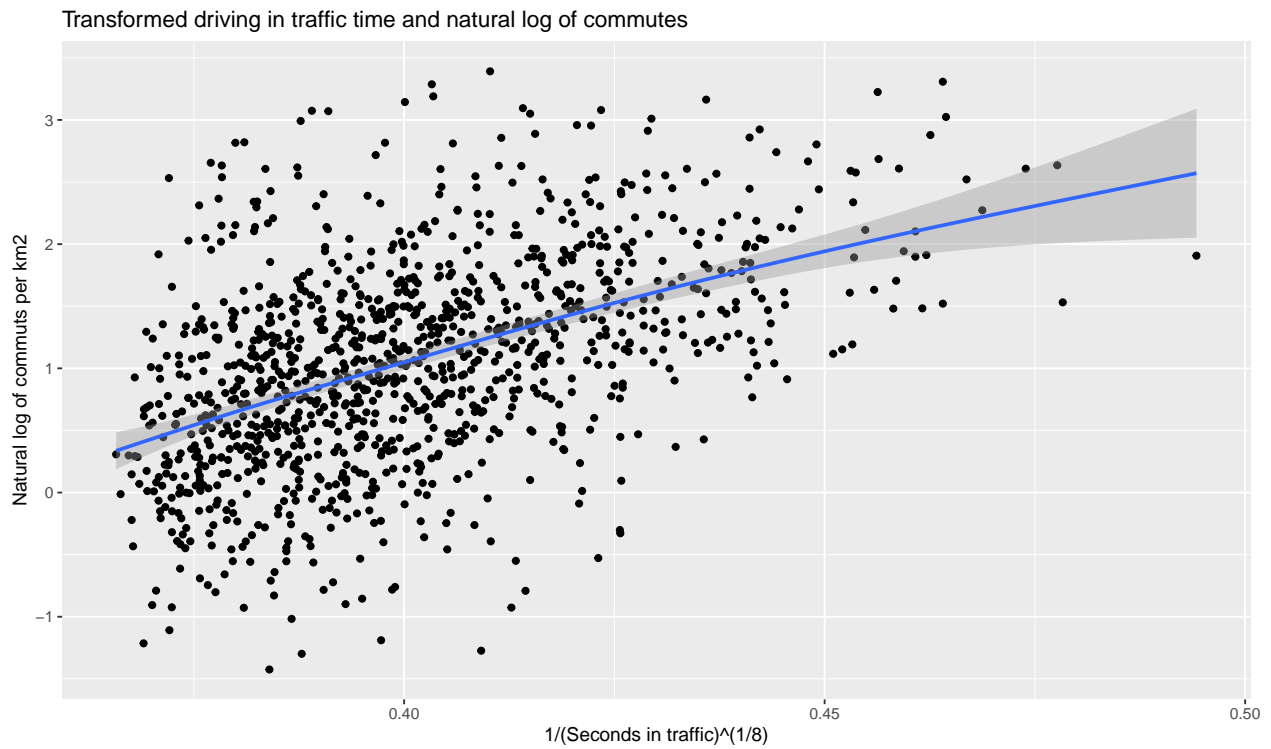

Figure 14: Time driving in traffic is transormed by raising it to the power of one-eighth and taking the inverse. Commute count is transformed with the natural log. The values are plotted against each other. A smoother line is overlayed in blue.
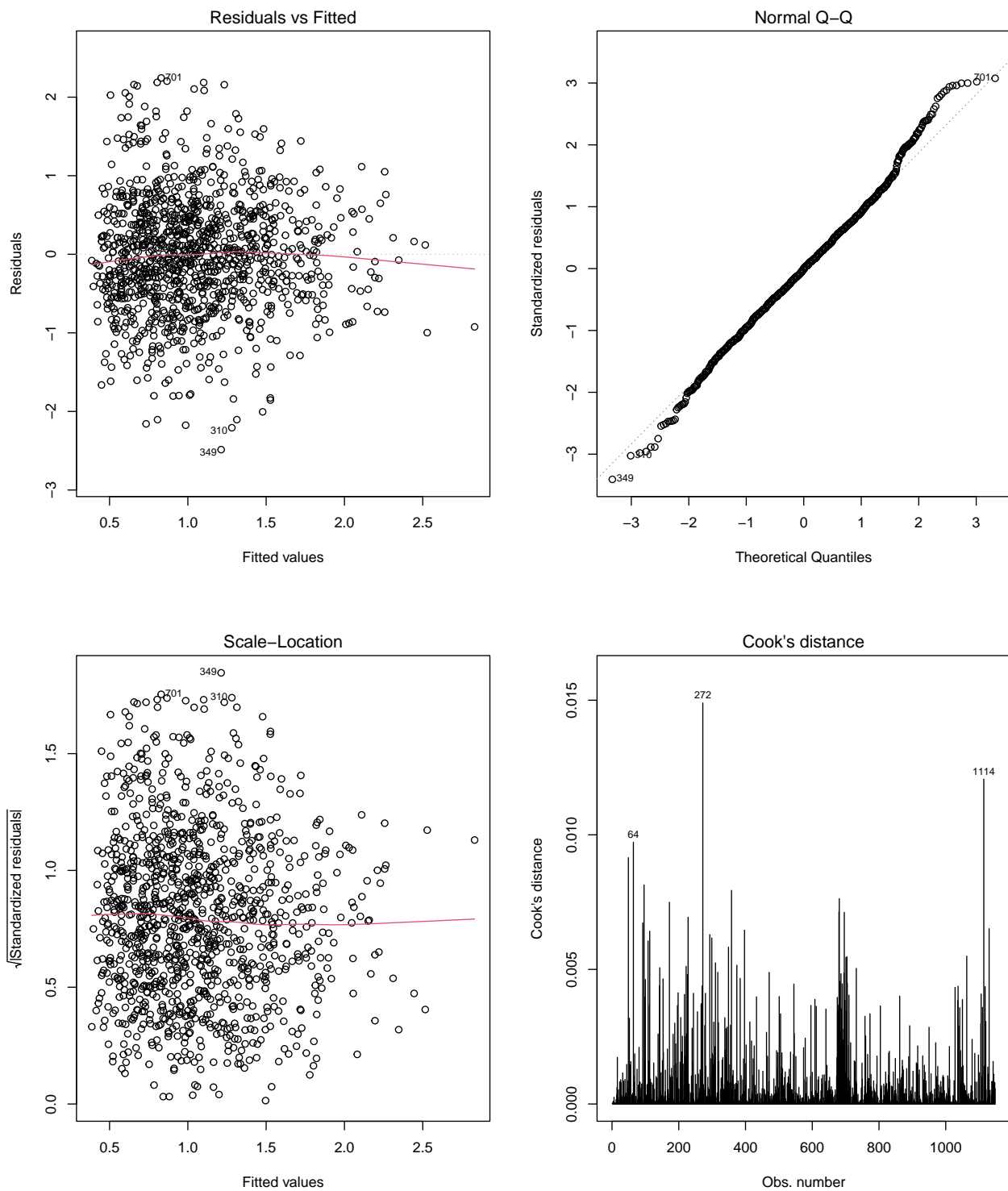
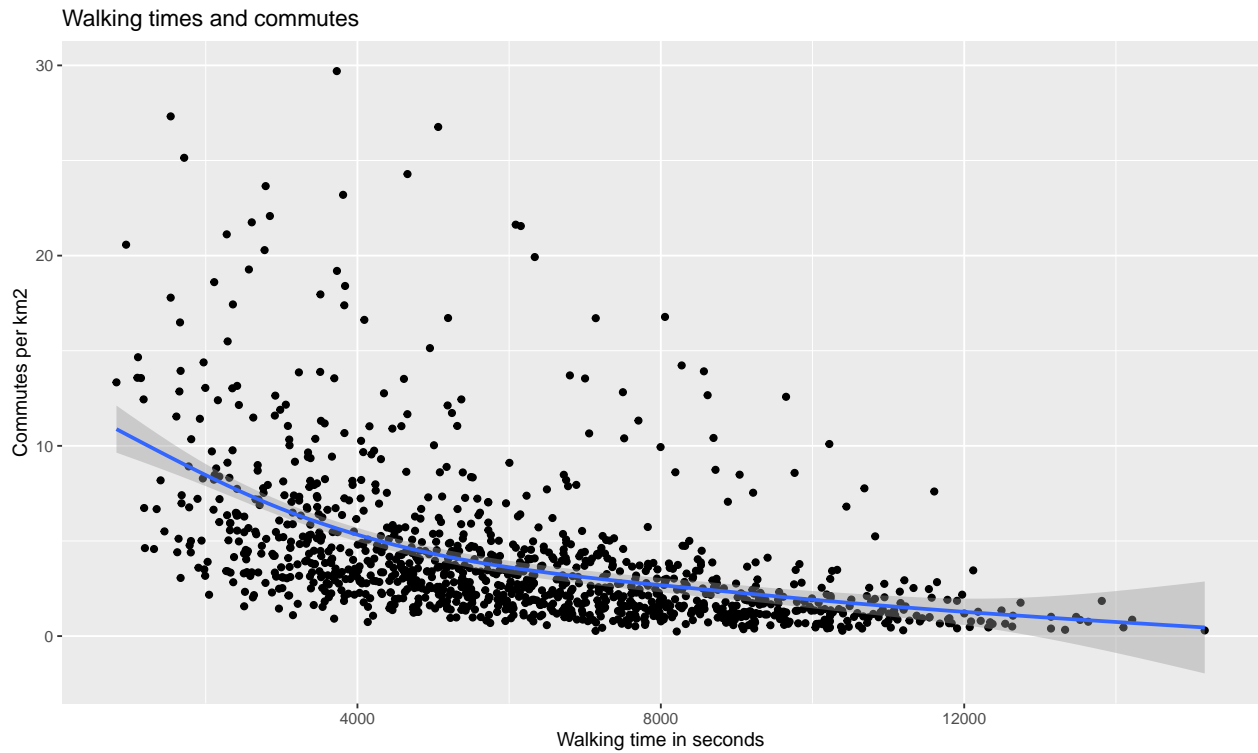Figure 15: Diagnostic plots for the model of transformed driving time

Figure 16: Time spent walking plotted against the number of commutes standardized by area. A smoother line is overlayed in blue.
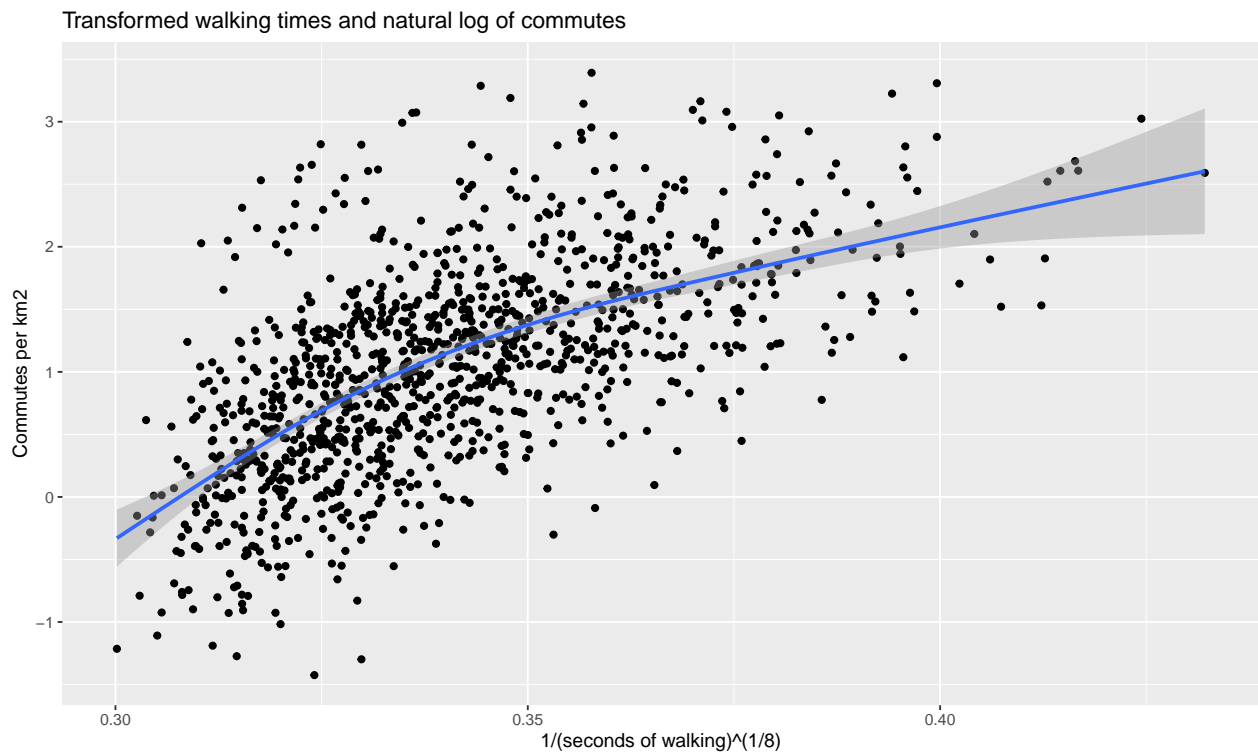

Figure 17: Time spent walking is transormed by raising it to the power of one-eighth and taking the inverse. Commute count is transformed with the natural log. The values are plotted against each other. A smoother line is overlayed in blue.
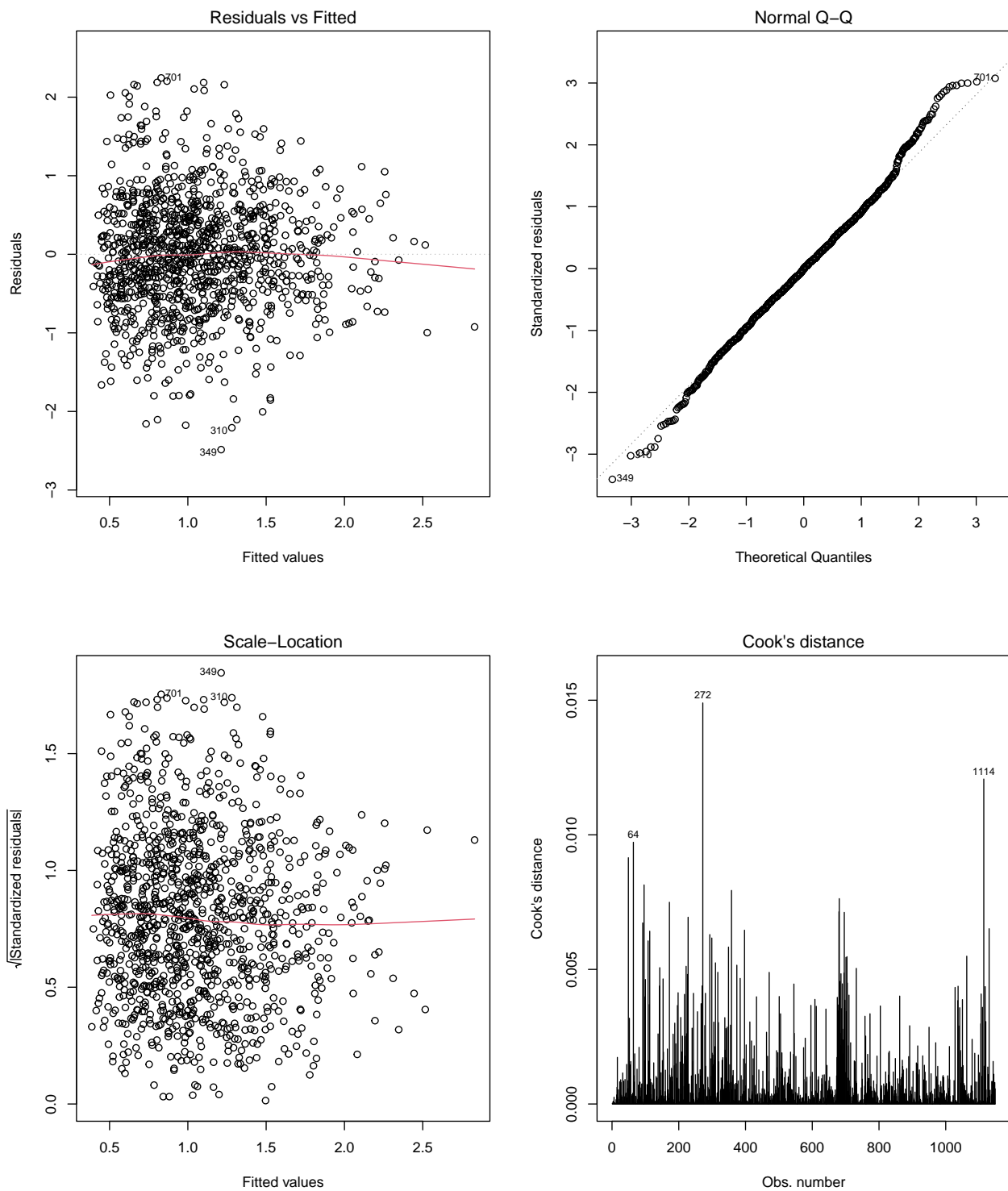
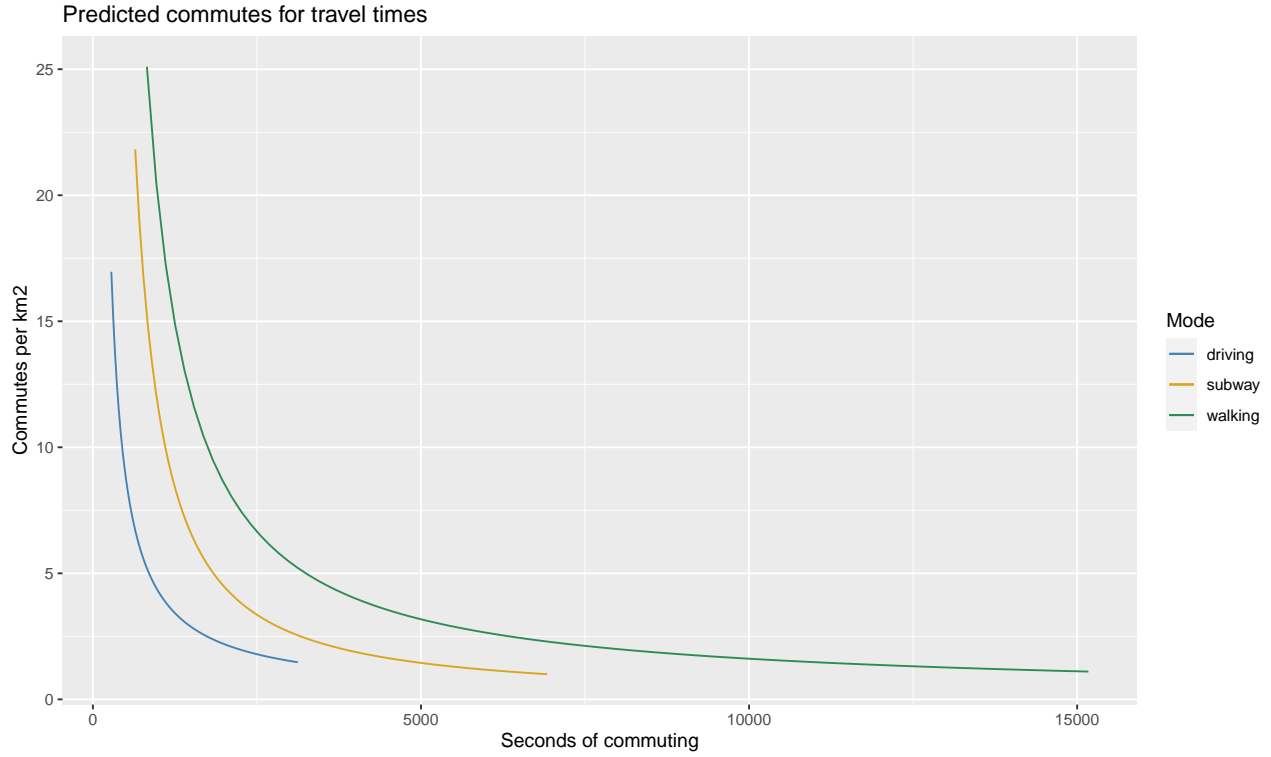Figure 18: Diagnostic plots for the model of transformed walking time

Figure 19: Models for transporation modes. Each model is only plotted from their minimum to maximum observed travel time.
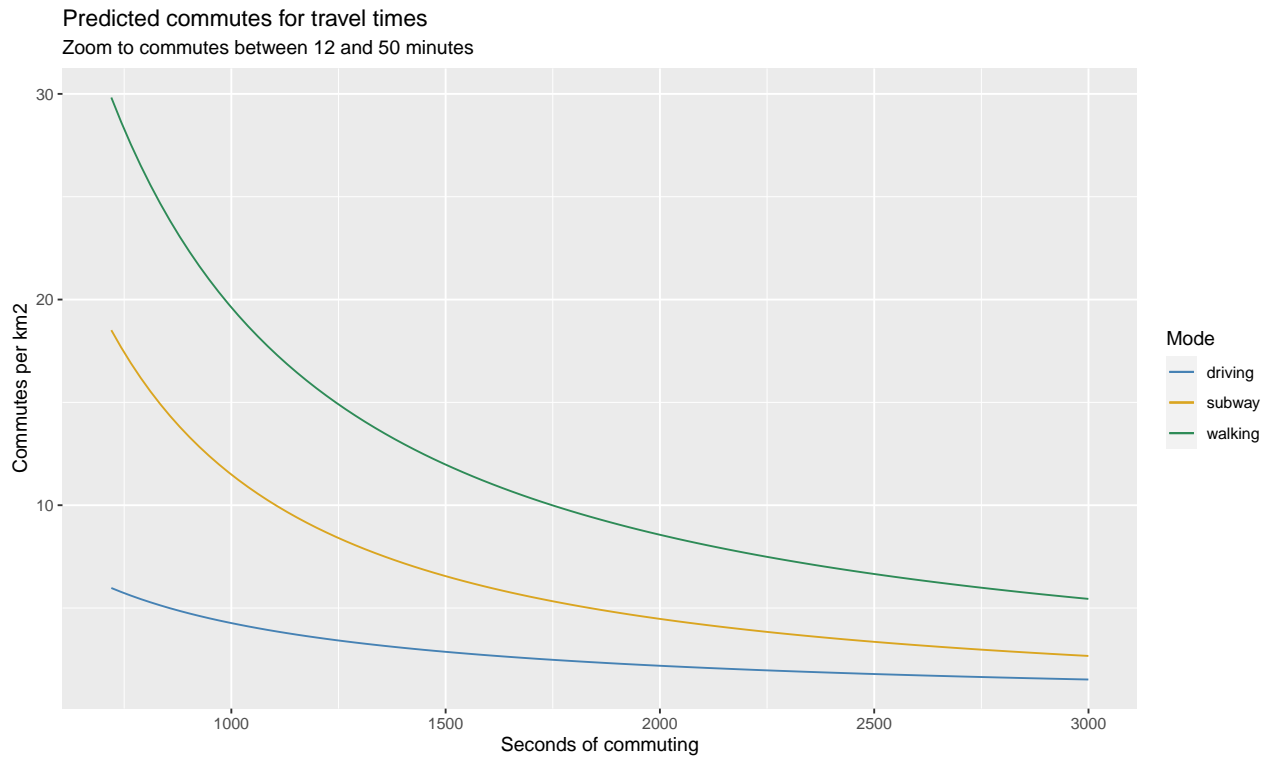

Figure 20: Models of transportation modes, zoomed on the range of 12min to 50mins. This range is seen in the travel time values for each transportation mode.

14

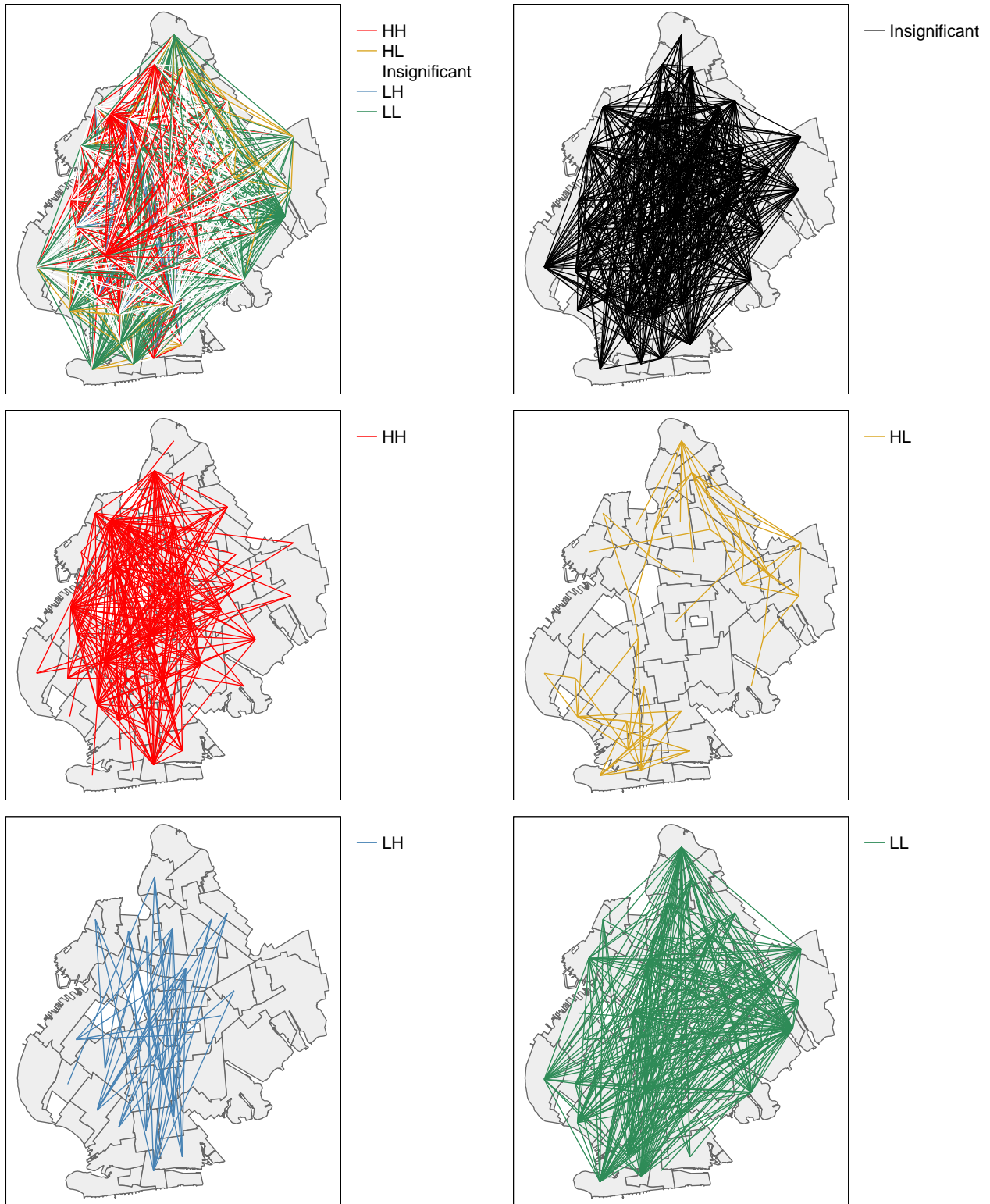Figure 21: Global auto-correlation of commute network

Figure 22: Local autocorrelation for commute network. Top left map shows all confidence types on one map. Top right shows Insignificant clusters. Middle left shows High High clusters. Middle right shows High Low clusters. Bottom left shows Low High clusters. Bottom right shows Low Low clusters

Figure 23: Graph of the top 5% most popular commutes through brooklyn and their interactions with each other. The color of the node reflects its membership in one of three clusters

Figure 24: Geospatial distribution of the top 5% most popular commutes through brooklyn. Left diagram is the confidence type of the commute. Right diagram is commute's membership in the network cluster