SUPPLEMENTARY MATERIAL

S.1 – Analysis of spatial autocorrelation

Figure S.1: Moran's I scatterplot - Lund

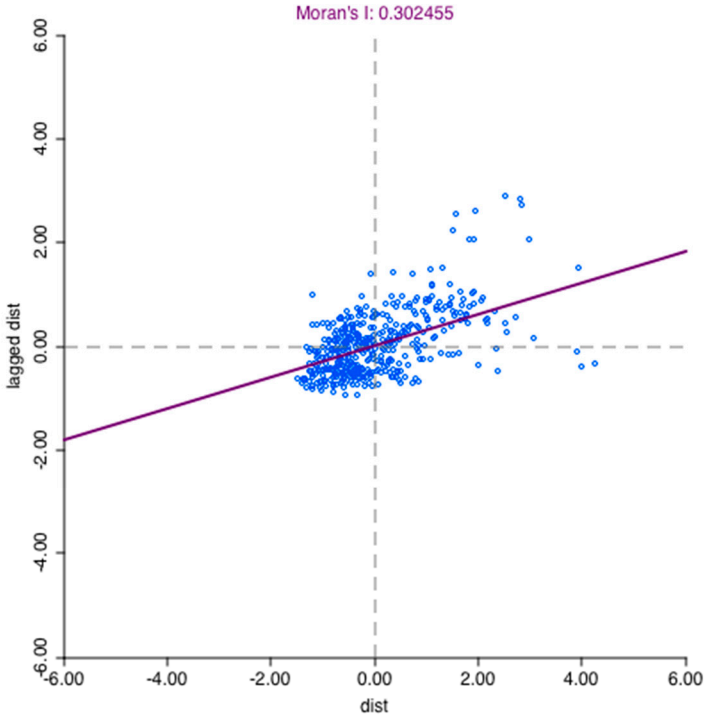
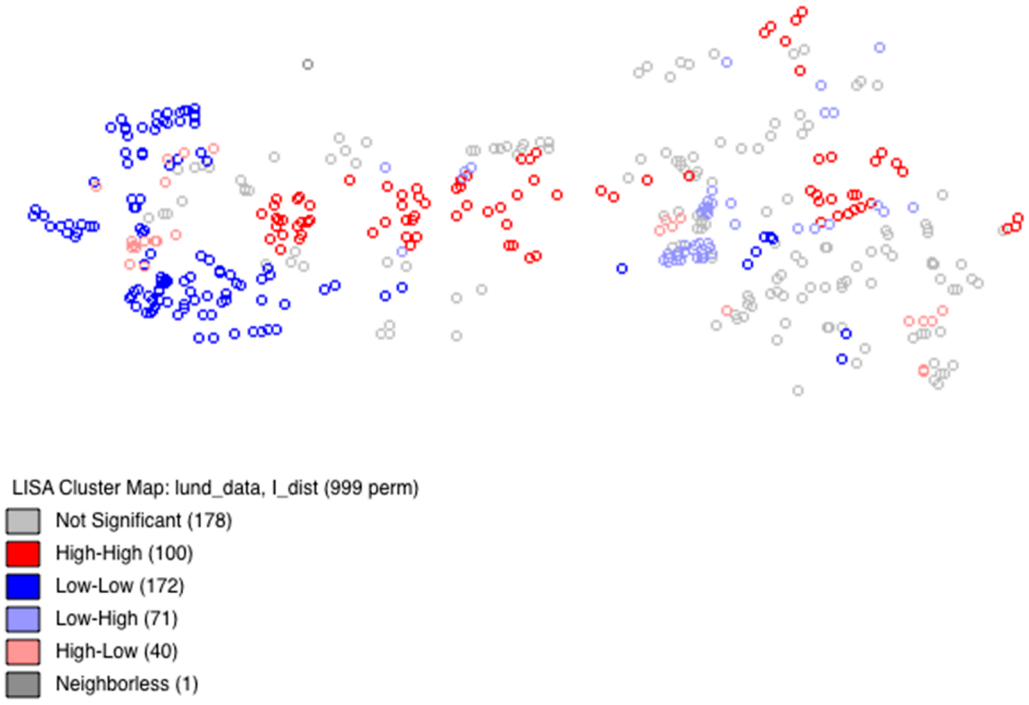


Figure S.2: Local Indicator of Spatial Association (LISA) cluster map - Lund



Note: LISA cluster map, signif. 5% (999 permutations). An high-high (low-low) cluster indicates a respondent with a high (low) distance value to bus stop surrounded by respondents with similar high (low) distances.

Figure S.3: Moran's I scatterplot - Helsingborg

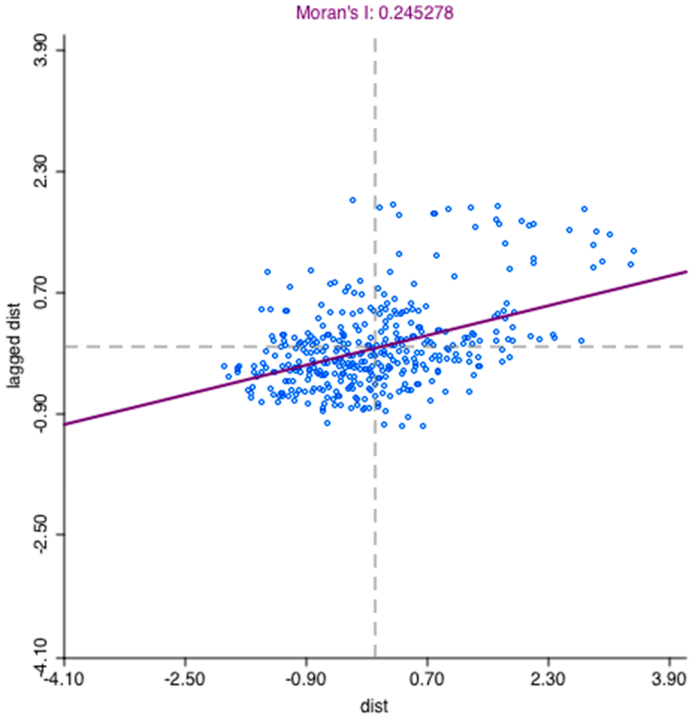
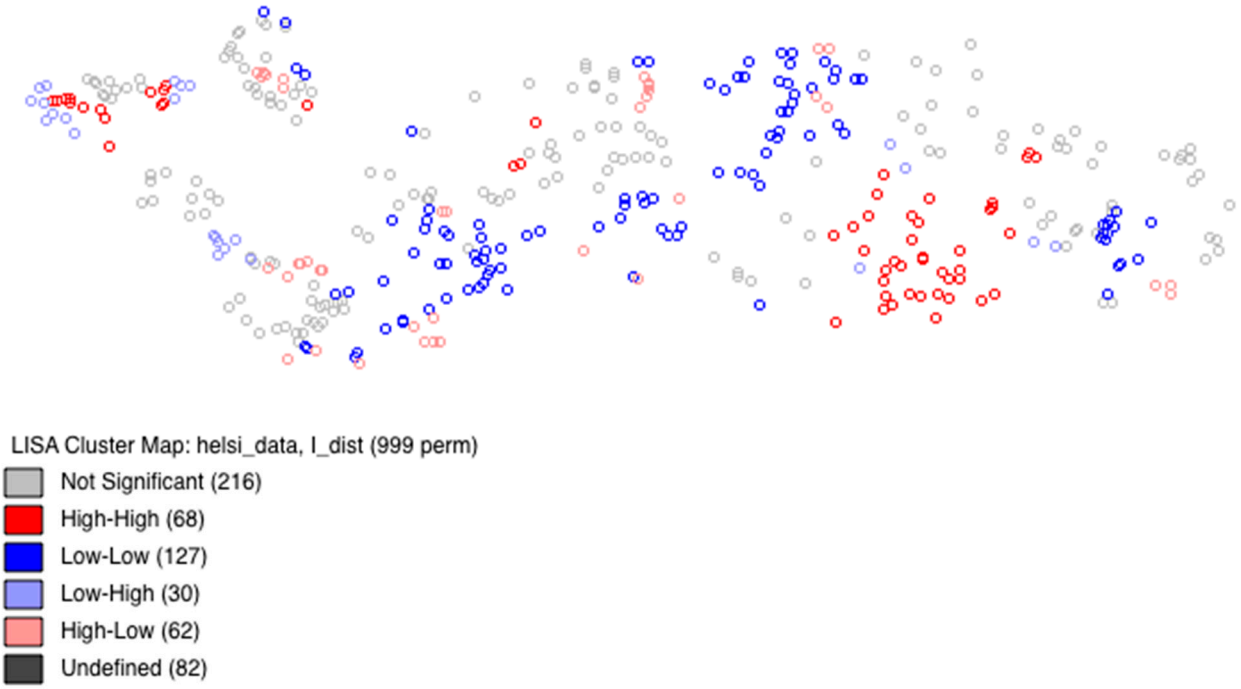


Figure S.4: Local Indicator of Spatial Association (LISA) cluster map - Helsingborg



Note: LISA cluster map, signif. 5% (999 permutations). An high-high (low-low) cluster indicates a respondent with a high (low) distance value to bus stop surrounded by respondents with similar high (low) distances.

Figure S.5: Moran's I scatterplot - Goeteborg

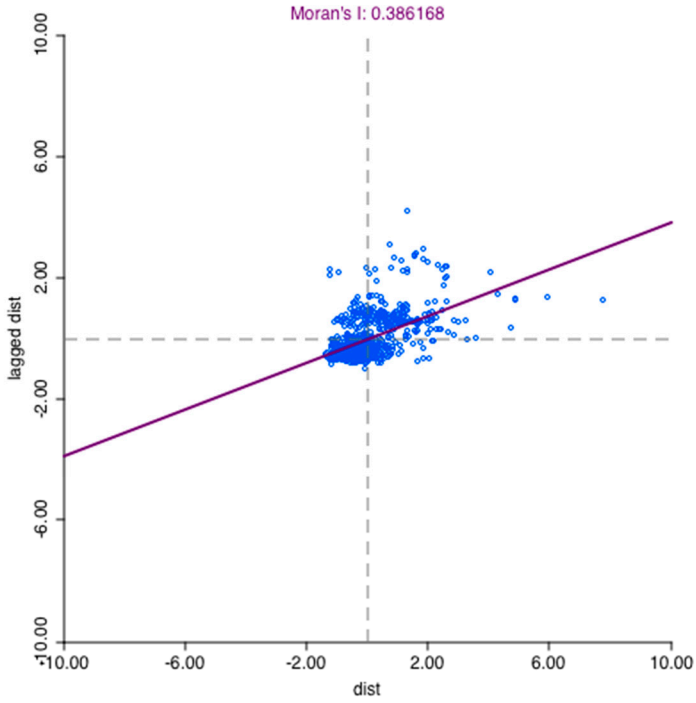
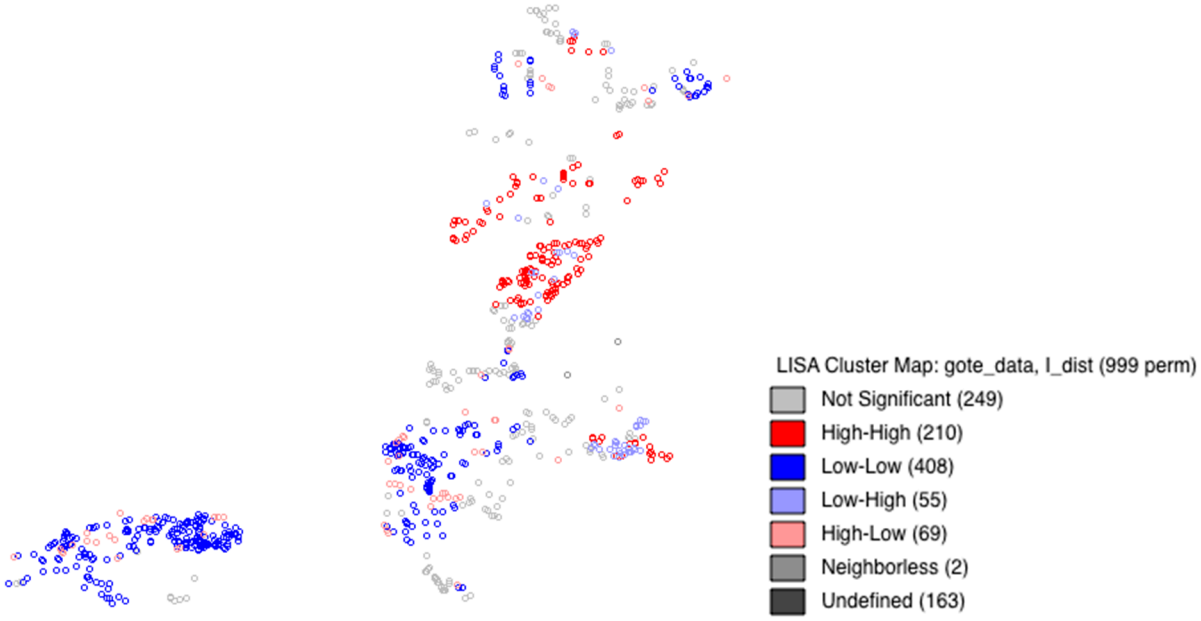


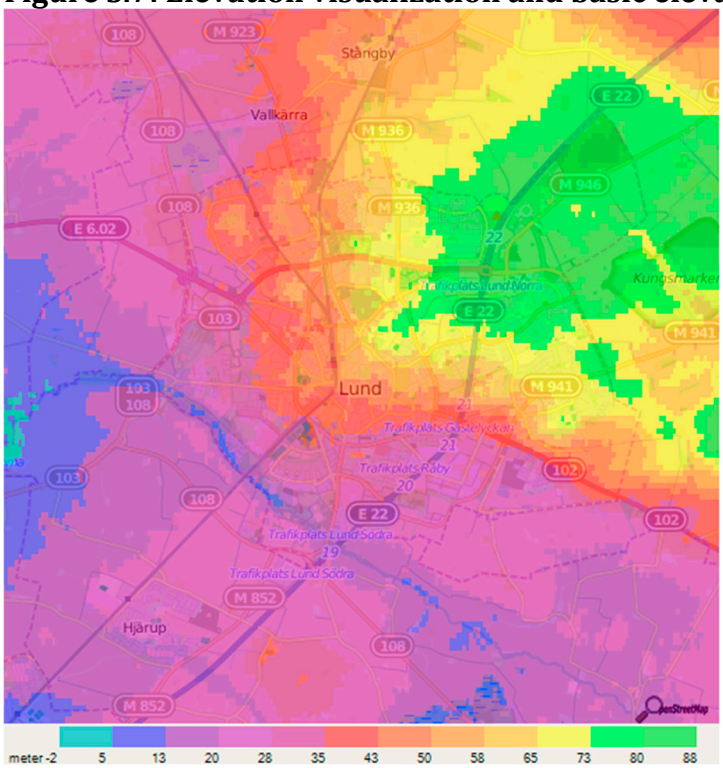
Figure S.6: Local Indicator of Spatial Association (LISA) cluster map - Goeteborg



Note: LISA cluster map, signif. 5% (999 permutations). An high-high (low-low) cluster indicates a respondent with a high (low) distance value to bus stop surrounded by respondents with similar high (low) distances.

S.2 – Descriptive elevation maps

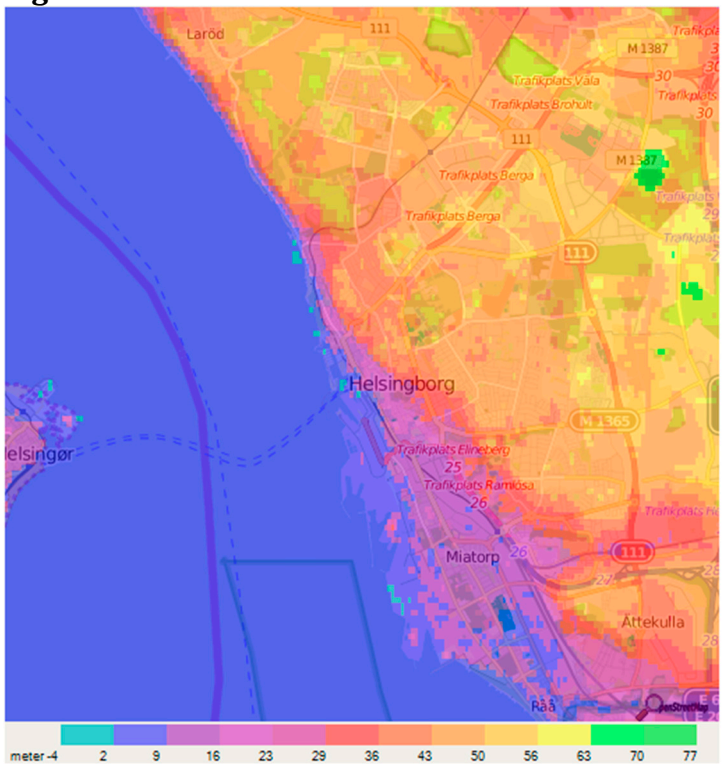
Figure S.7: Elevation visualization and basic elevation data - Lund



Minimum elevation: 9 m; Maximum elevation: 90 m; Average elevation: 43 m

(Source: FloodMap.net, OpenStreetMap contributors)

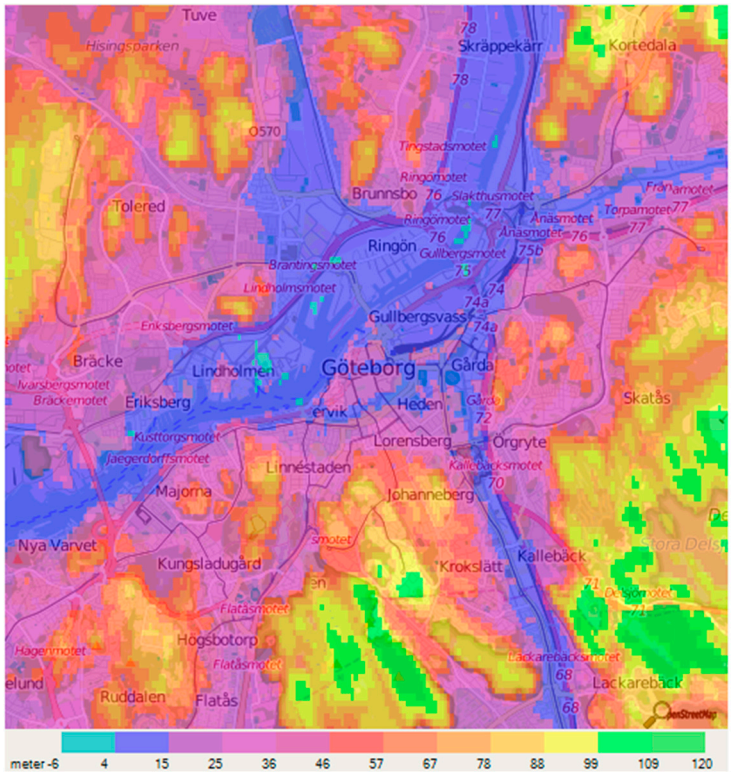
Figure S.8: Elevation visualization and basic elevation data - Helsingborg



Minimum elevation: -1 m; Maximum elevation: 108 m; Average elevation: 23 m

(Source: FloodMap.net, OpenStreetMap contributors)

Figure S.9: Elevation visualization and basic elevation data - Goeteborg

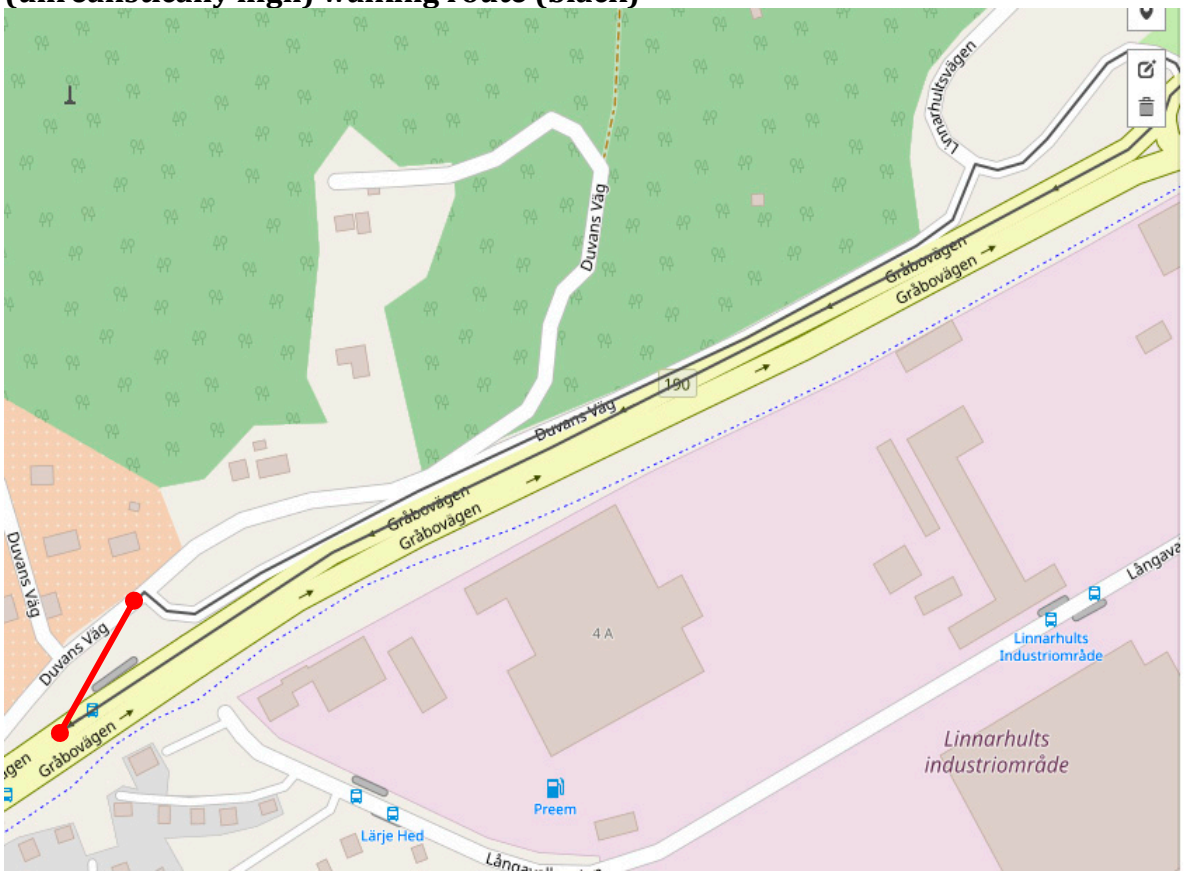


Minimum elevation: -2 m; Maximum elevation: 162 m; Average elevation: 46 m

(Source: FloodMap.net, OpenStreetMap contributors)

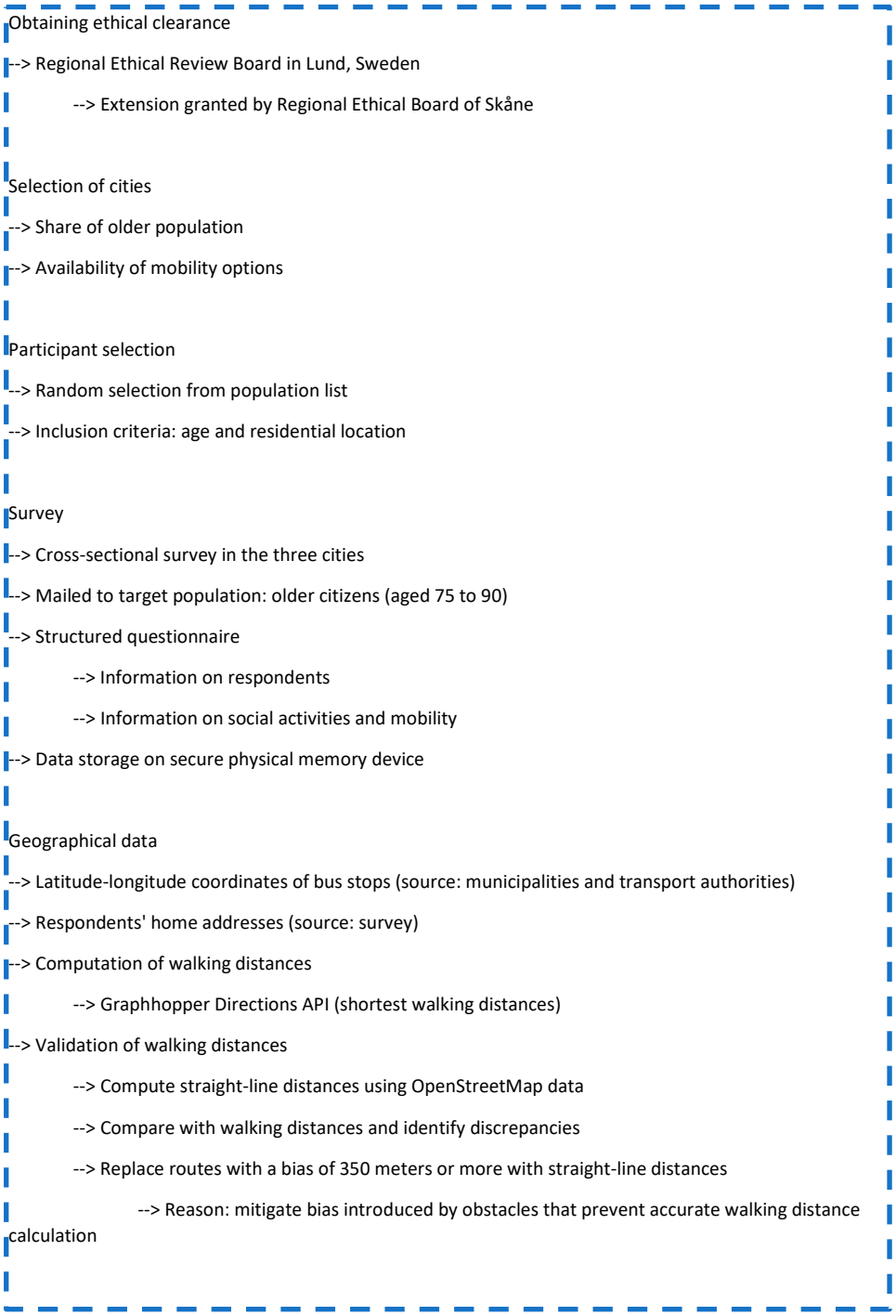
S.3 – Routing example

Figure S.10: Approximate straight line between home and bus stop (red) vs biased (unrealistically high) walking route (black)



Note: residential point is fictional for privacy

S.4 – Scheme of methods used in the article



Defining dependent variable

--> Based on perception of distance to closest bus stop:

--> "Underestimated" (lived farther than estimated)

--> "Correctly estimated"

--> "Overestimated" (lived closer than reported)

Statistical analysis

--> Preliminary data cleaning and harmonization

--> Inspection for outliers and distribution

--> Construct and recode distance variables

--> Analysis of relationship between perception and explanatory variables (bivariate tests)

--> Investigate factors associated with underestimated or overestimated perceptions

--> Multinomial logistic regression model

Spatial analyses

--> Mapping of respondents' distribution and bus stop locations

--> Kernel density estimations (KDE) of respondents' distribution

--> Test for spatial auto-correlation

--> Moran's I measures of spatial autocorrelation

--> Local Indicators of Spatial Association (LISA)