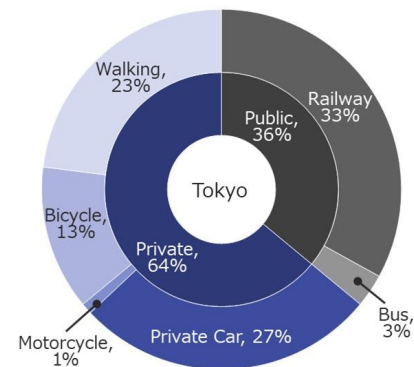
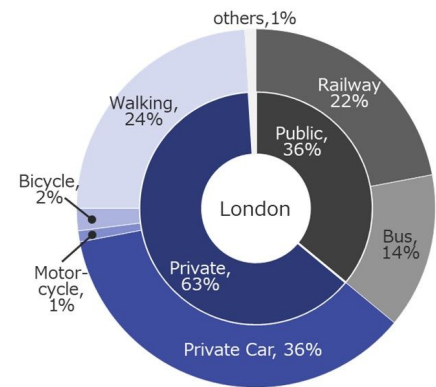
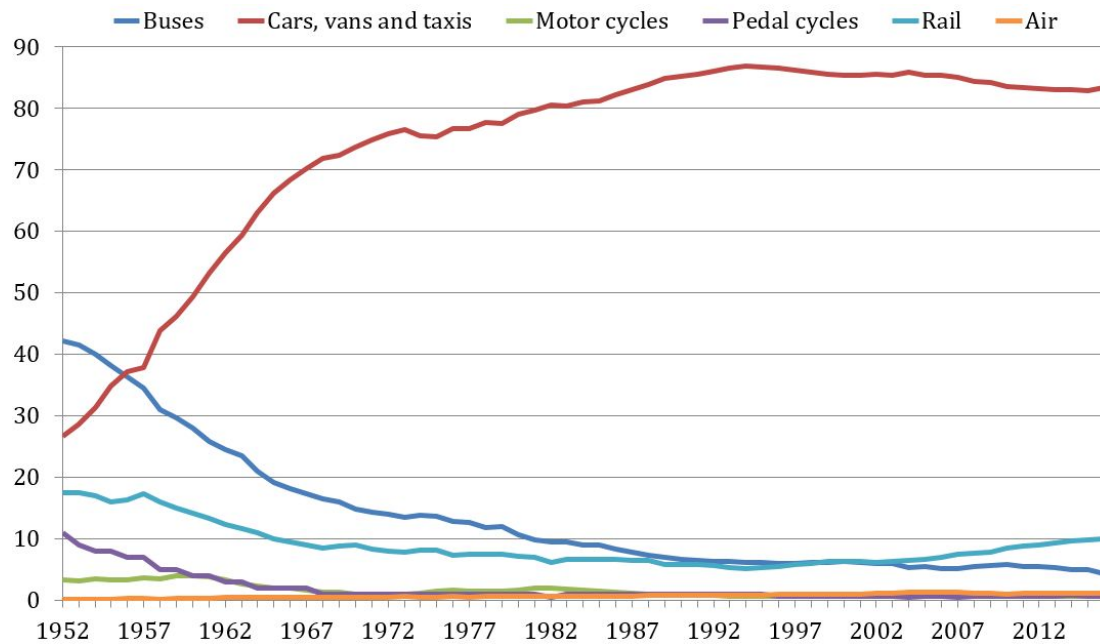


Key Terminology for Transit Analysis

Modal Share

The percentage of travelers using a particular type of transportation or number of trips using said type



Last Mile Connectivity

The gap from public transit to destination, for example the trip between a train station and a final location

THE LAST MILE PROBLEM

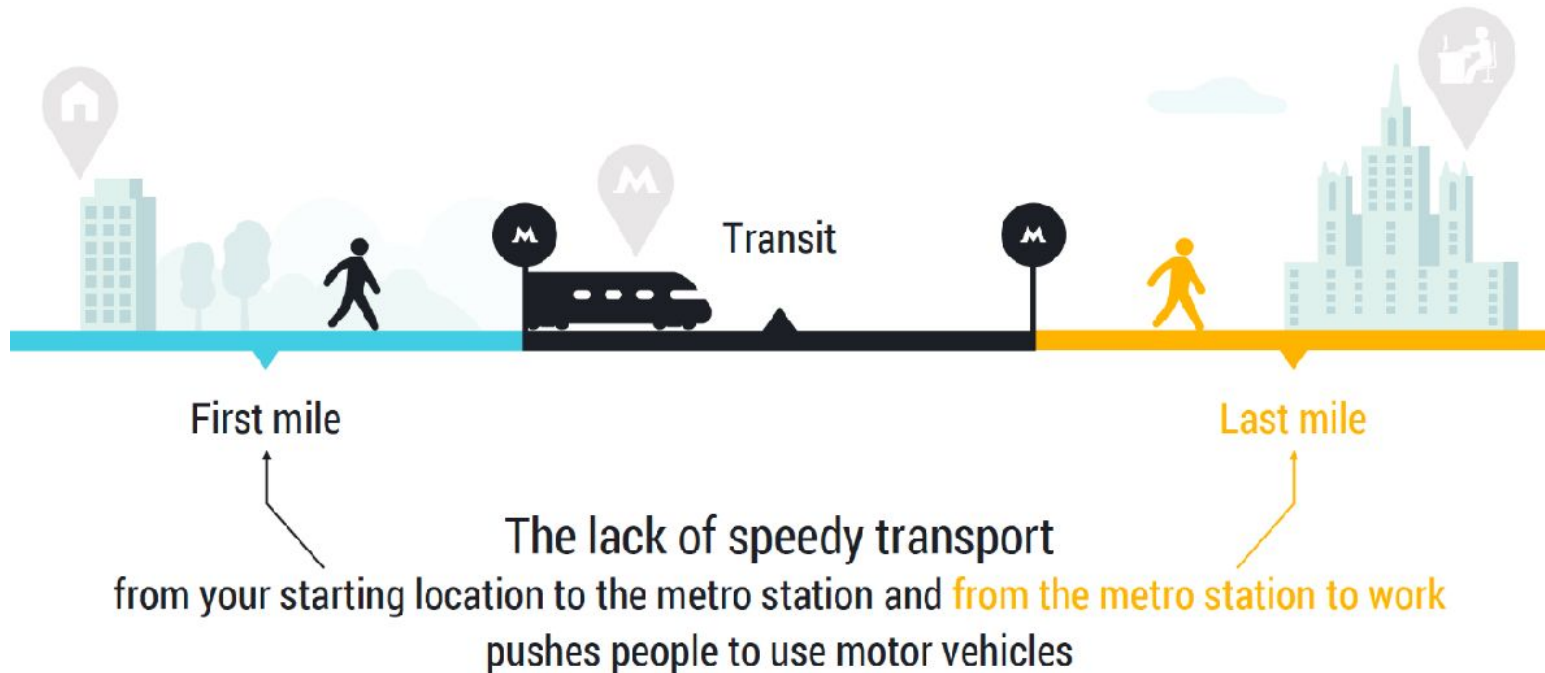
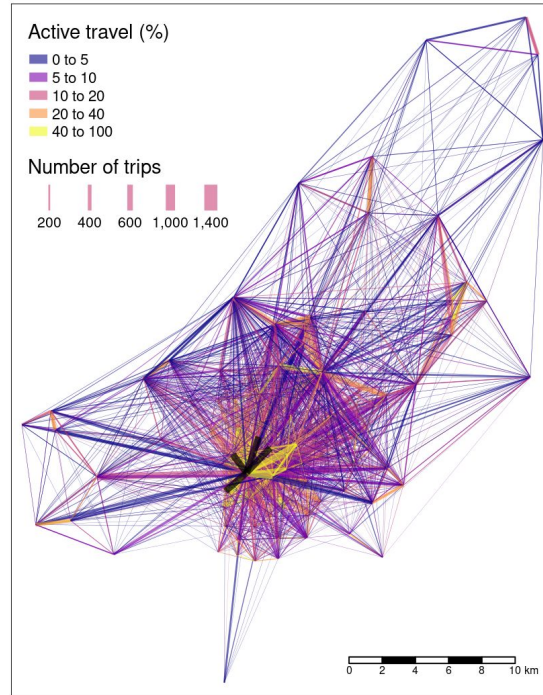


Figure 1. The last mile problem

Desire Line

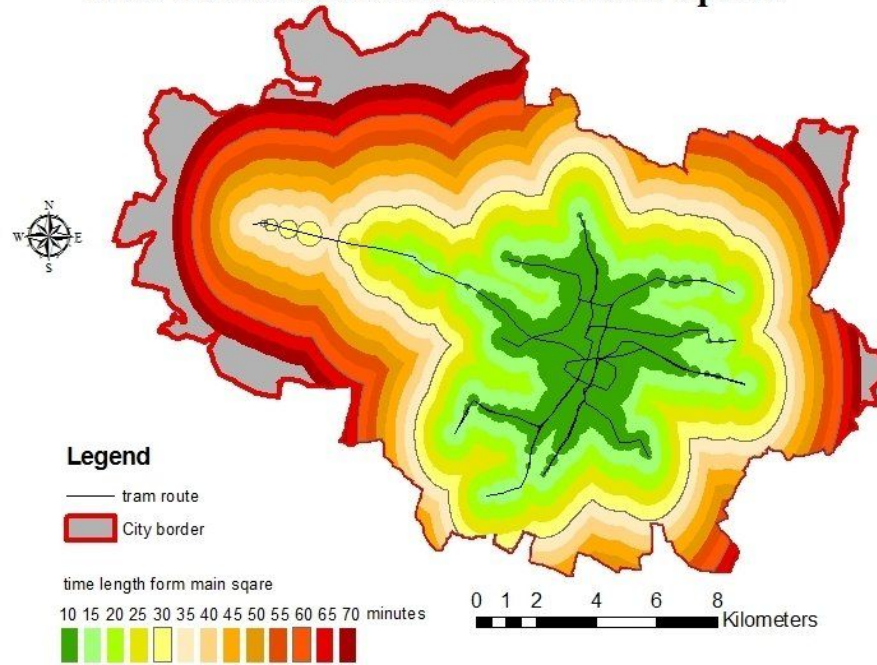
The preferred route a person will take in order to travel from A-to-B, represented as a straight line



Isochrone

Areas on a map where something occurs or arrives at the same time, for distances traveled in the same time

Real tram isochrones from the main square



Types of Geospatial Data

Geospatial data has two formats: vector (represented by coordinates) and raster data (represented as a grid)

Points



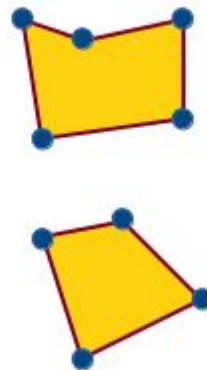
E.g. Stops

Lines



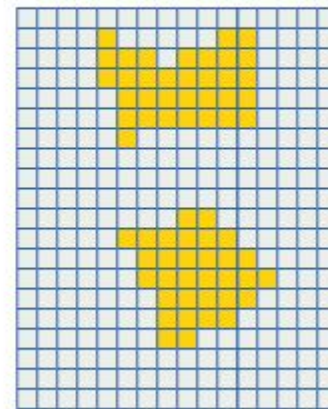
E.g. Routes

Polygons



E.g. Service areas

Raster

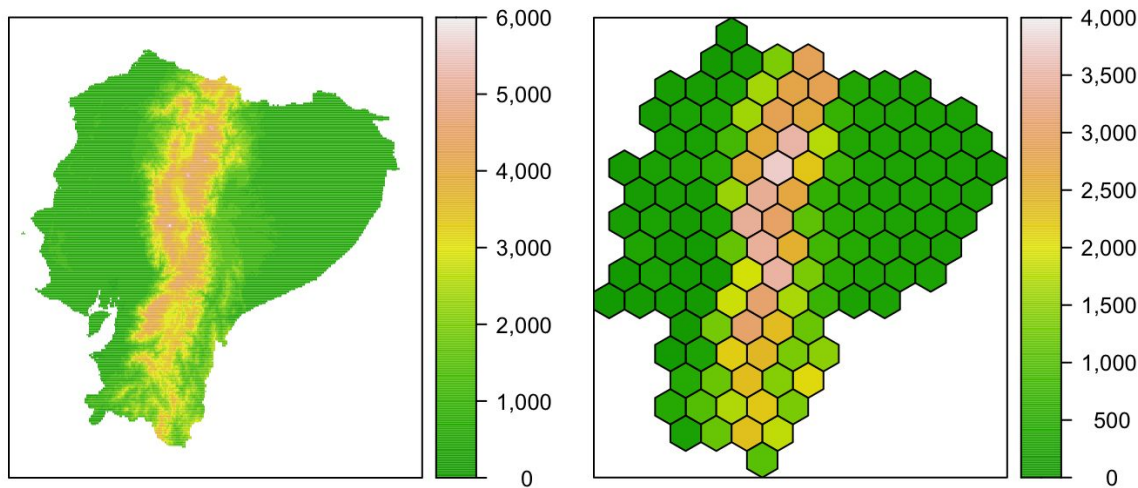


E.g. Population

Hexagonal Grid

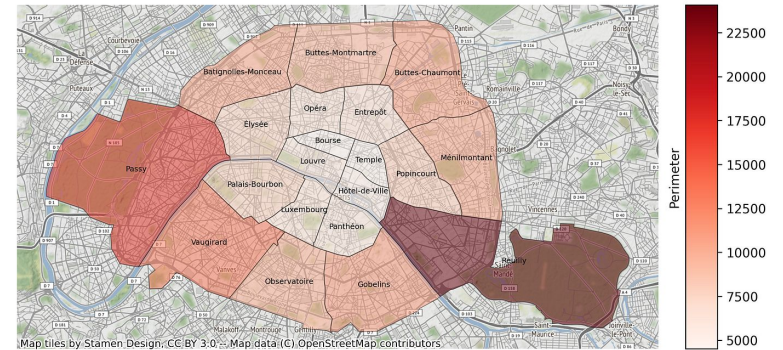
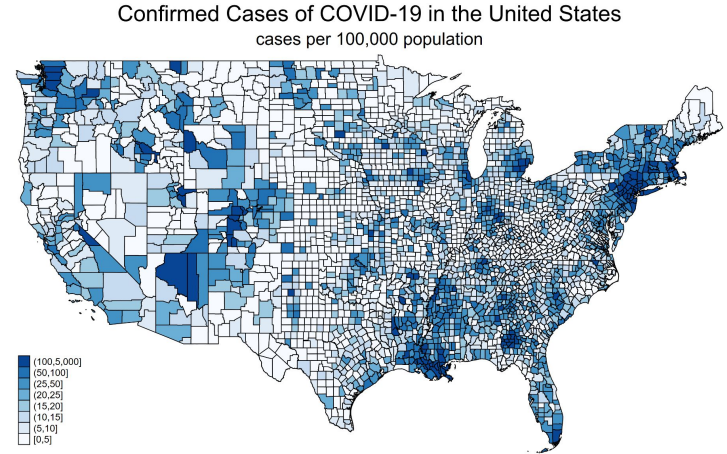
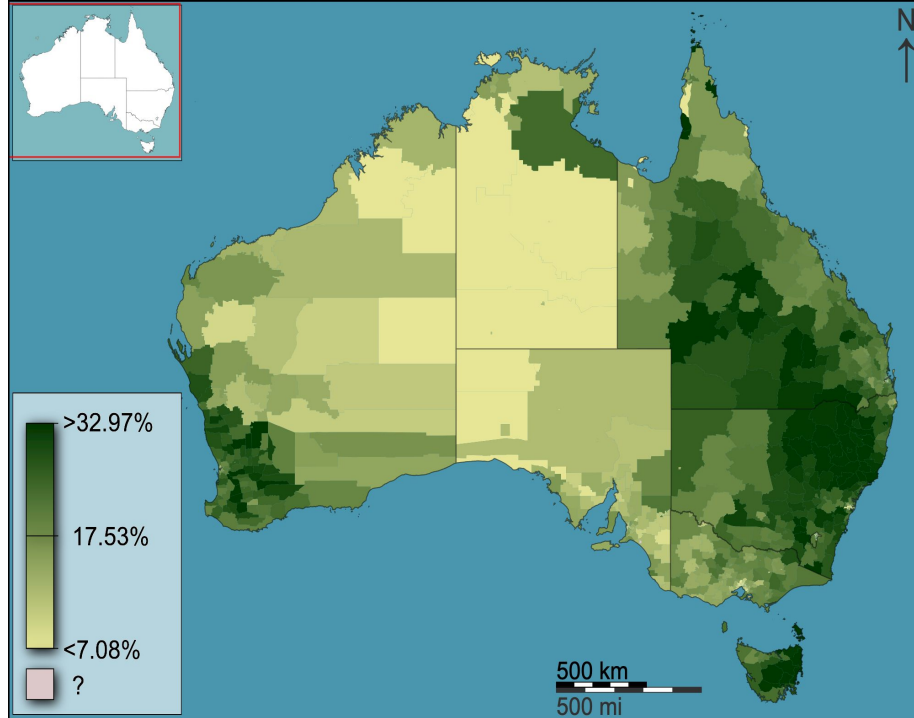
A method of breaking complicated maps into zones of equal sizes, useful for visual or statistical analysis

Ecuador SRTM Elevation (m)



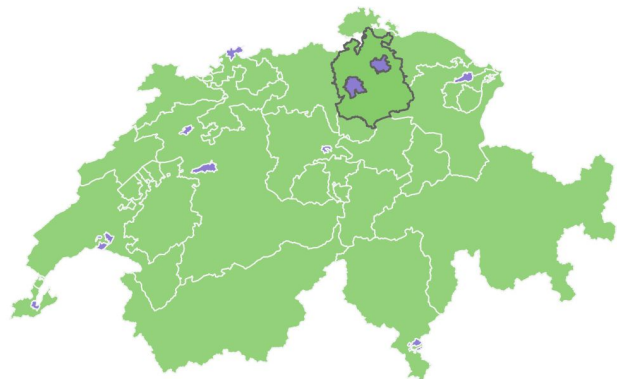
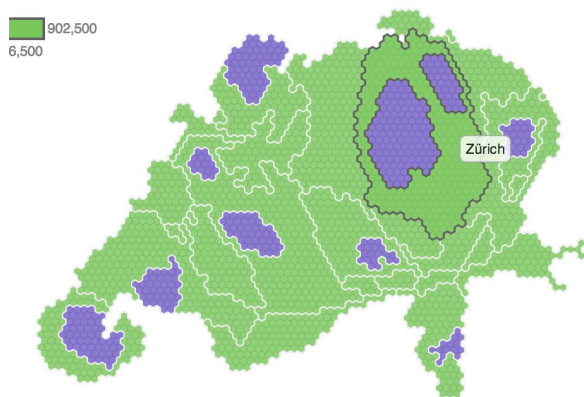
Choropleth

A map that shows divided geographical areas or regions as coloured in relation to a data variable

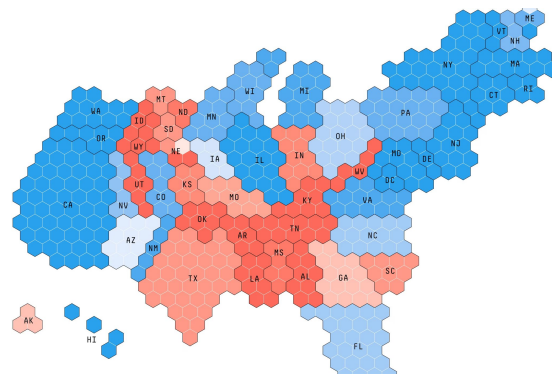
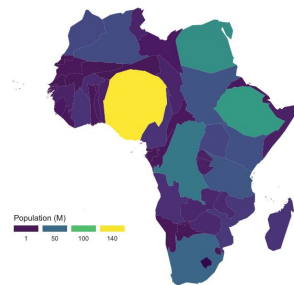


Cartogram

A map where the geometry of regions is distorted in order to convey the information of an alternate variable

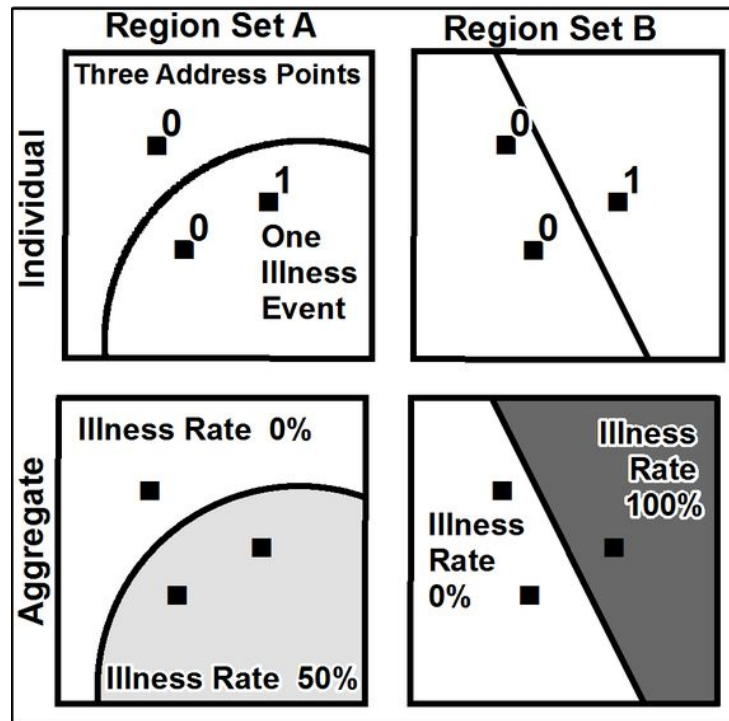


Cartogram



Modifiable Areal Unit Problem

When point-based measures of spatial phenomena are aggregated into spatial areas which affect averages



An example of the modifiable areal unit problem and the distortion of rate calculations