

# Prague Squared

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**Abstract:**

Prague Squared is an author's project that intends to effectively visualize the statistical data of Prague using a combination of selected methods of thematic cartography. The aim is to bring an alternative and unconventional way of visually easy communication of statistical information about municipal parts. The data that are collected in the Czech Republic for administrative parts of cities often remain only tabular and do not receive more advanced visualization.

While creating a map visualization of statistical data about a city using thematic cartography techniques (with emphasis on user-friendliness and legibility), the frequently irregular geometry of the city structure, or the resulting problem of conflicts between thematic and geometry content or annotations, can cause difficulties. This project offers a possible approach to overcome such limitations of conventional maps in efficient data communication, and demonstrates an alternative way to visually represent data in a geographically simplified format.

The aim is to present statistical data of different nature (qualitative or quantitative) without visual distortion of the conveyed information due to the different sizes of the different municipal parts. The basis of visualisation is the schematic cartographic anamorphosis (equal-area/mosaic cartogram). To this purpose, the concept of squares (cells) representing municipal part units was introduced, benefitting their ability to contain and connect data. In addition to the square grid, whose cells were composed to preserve the contiguity of the municipal parts as much as possible, a significant element of the city is added to characterize the city. In the case of Prague, this involves the (generalized) Vltava River, a clearly recognizable geographic feature that provides the user with support for reading the map. The names of the city districts are abbreviated for the sake of efficiency, while still facilitating the reader's legibility and orientation.

Among the methods of thematic cartography used, the Prague Squared project generally implements a combination of the choropleth with proportional symbols techniques (line, bar or other types of graphs suitable for the nature of the data). This enables a significant amount of information to be covered for each unit: the phenomenon expressed by the choropleth is complemented and confronted with the data contained in the diagrams, thus providing the reader with comprehensive information on the topic.

Ultimately, this approach seeks to provide a more even and complex visualization of data in the context of a recognizable urban space. Map outputs provide insight into the relationships between data and can reveal connections, trends or correlations.