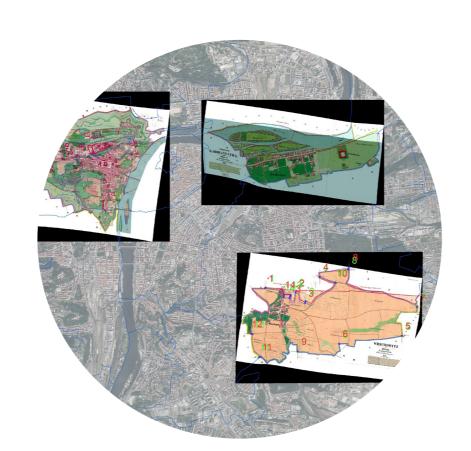
HISTORICAL MAP MATERIALS AND THEIR PROCESSING



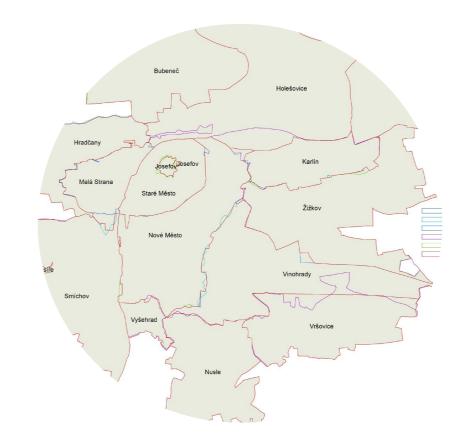
CREATION OF A DATABASE OF CADASTRAL TERRITORIES 1840–1910

An integral part of the project was the cartographic visualisation of historical data. For this purpose, several digital spatial layers were created, capturing various stages of the administrative division of Prague and its hinterland over the last 150 years. The publicly available database consists of spatial layers depicting the cadastral territories of Prague and selected suburbs from 1840, 1869, 1880, 1890, 1900 and 1910. For the needs of the Historical Population Atlas of Prague, spatial layers of census districts or municipalities in the hinterland of Prague were also created. Spatial data from 1921 to 2011 were taken from the previous NAKI project.

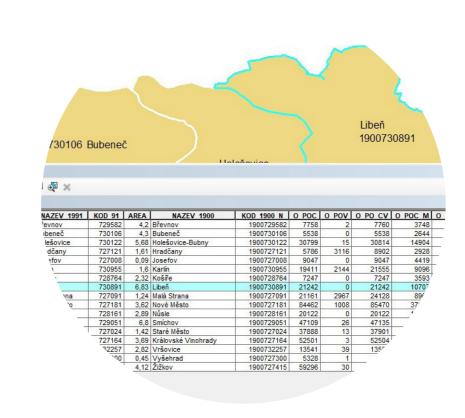
The first step was the search for base maps that show the boundaries of administrative territories in Prague and its selected suburbs. As there are usually no base maps directly for the census years, the search focused on maps as close to the census years as possible. Thanks to the extensive digitiation of map collections, it was not necessary to scan printed maps. Conversely, in some cases it was possible to connect the digitized maps to the ArcGIS environment via the WMS service.



All base maps in electronic form needed to be georeferenced. Using control points that were identified on the current map or orthophoto as well as on the base map, the maps were transformed into the S-JTSK coordinate system. Depending on the quality and scope of the map, there were either lower or higher dozens of control points used. The ideal control points have been up to now standing buildings, bridges, churches, chapels, or even points on the current borders of cadastral areas.



The next step in creating map layers was to vectorise the boundaries in the GIS environment to the shp format. The original maps of the Stable Cadastre from 1836–1843 serve as the basic reference layer and thus also the base map. The obtained vectorised boundaries of the Stable Cadastre were modified using later-issued maps and plans depicting the demanded administrative boundaries. As a rule, maps with a scale larger than 1: 100,000 were used. Newer borders have been taken from the digital database of CUZK (State Administration of Land Surveying and Cadastre).

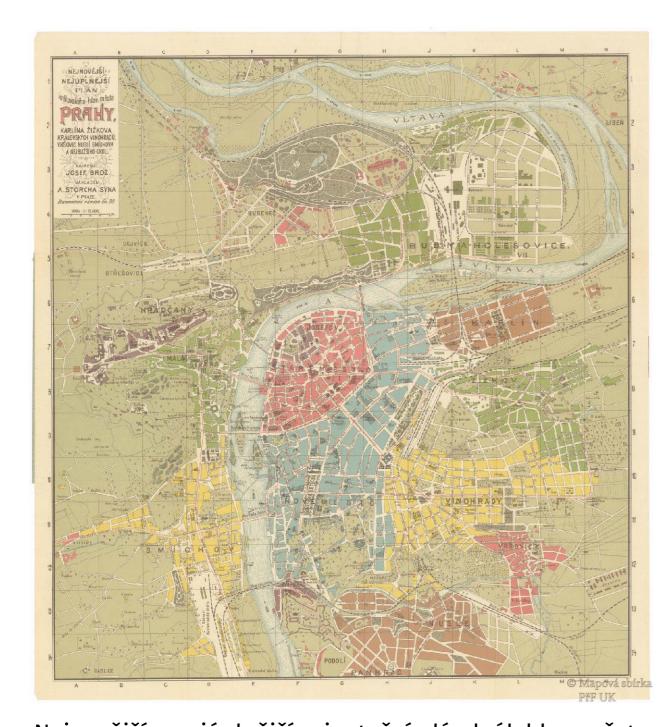


The vectorised administrative units were provided with a unique code in the attribute table. This code corresponded to the given territory in the created database of statistical data.

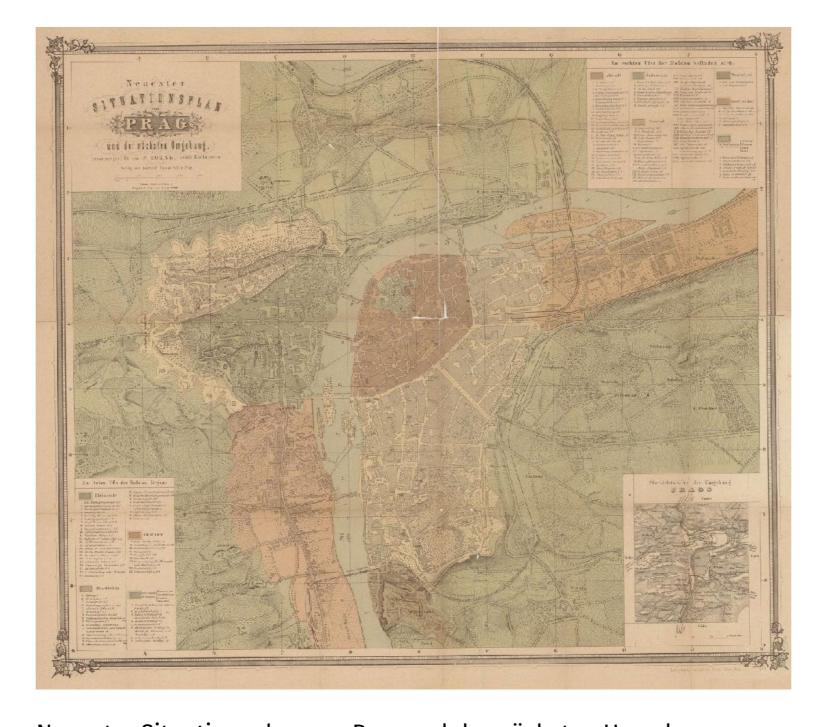
The geodatabase of the historical boundaries of the cadastral areas of Prague is available in shp format here:



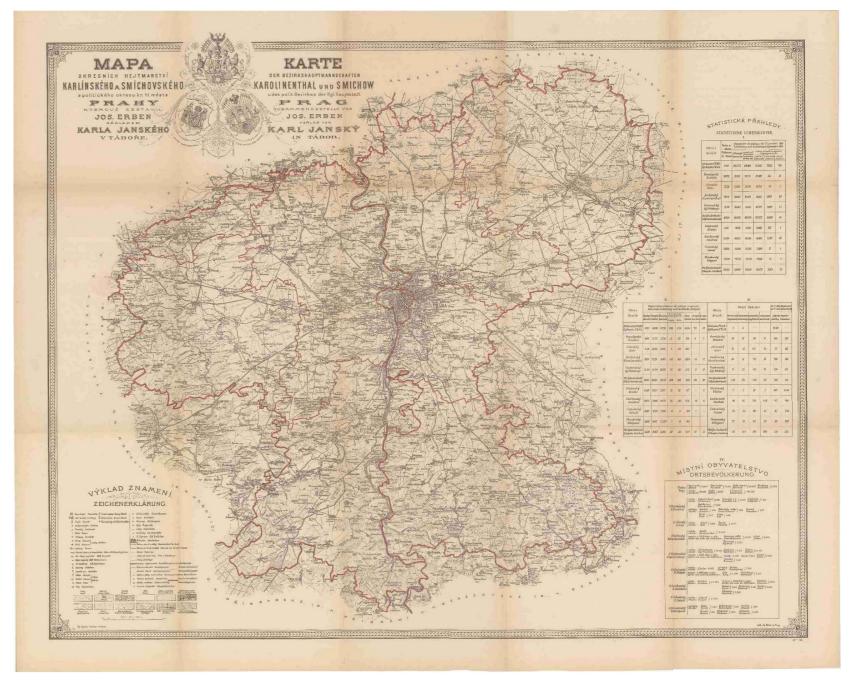
BASE MAPS



Nejnovější a nejúplnější orientační plán král. hlav. města Prahy s předměstími, Josef Brož, 1899



Neuester Situationsplan von Prag und der nächsten Umgebung, F. Hozak, 1869



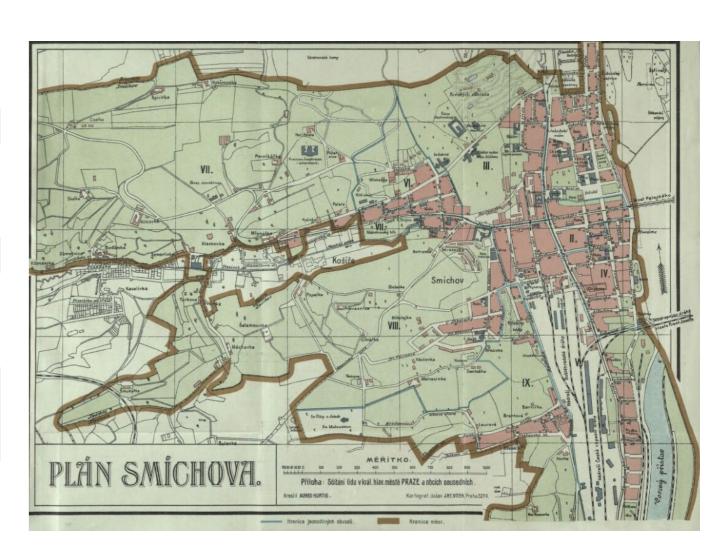
Mapa okresních hejtmanství karlínského a smíchovského politického okresu kr. hl. města Prahy, Josef Erben, 1883

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Císařské otisky stabilního katastru, 1836–1843

Tim sec	ie tion	Year of map publication	Base map name	Scale
	1840	1836–1843	Originální mapy stabilního katastru	1:2880
	1869	1869	Neuester Situationsplan von Prag und der nächsten Umgebung	1:100000
		1869	Mapa okresu Smíchovského a Karlínského v Pražském kraji	1:100000
	1880	1880	Prag und nächsten Umgebung	1:10000
	1890	1887	Mapa zastupitelských a soudních okresů Kr. Vinohradského a Jílovského	1:100000
		1891	Polohopisný plán královského hlavního města Prahy	1:4000
	1900	1899	Nejnovější a nejúplnější plán královského hlav. města Prahy, Karlína, Žižkova, Královských Vinohradů, Vršovic, Nuslí, Smíchova a nejbližšího okolí	1:12 000
	1910	1909-1914	Orientační plán Prahy a obcí sousedních	1:5000

Table of base maps for database 1840–1910



Plán Smíchova, Alfred Hurtig, 1906

COLORPLAN CREATION

The colorplans were based on the traditional 'Schwarzplan' urban concept and capture the most significant changes in the volume, dynamics, type and structure of the individual districts with the help of three to four time periods (shown in different colors = colorplan). In total, colorplans were developed for 21 selected districts (current or historic suburbs) in Prague and the surrounding area. The time periods were chosen for each territory separately, but are based on the basic stages of development in Austria-Hungary, interwar construction, socialist building and post-revolutionary development.

The basis for determining the age of buildings was a search for suitable detailed base maps of individual buildings or blocks. The most common sources were the State Map sheets in the scale 1:5 000, historical orthophotos, plans of Prague and plans of urban complexes. Older maps were often not dated and their time classification was made on the basis of the (non) existence of buildings, such as city gates, public transport network, railway lines, bridges, schools, etc.



The resulting shapefile was built on a modification of the current layer of building ground plans from the Open-StreetMap database. After the transformation into the S-JTSK coordinate system, the building ground plans were trimmed with a layer of the current cadastral territories.

The buildings were gradually assigned to periods of construction. Buildings that occurred only in older data were newly vectorised and subsequently marked as demolished. The resulting classification was checked using the latest orthophotos and Google Street View tools. This made it possible not only to add the missing polygons from the original layer of building ground plans, but also to reveal newly built buildings on similar ground plans of old buildings.