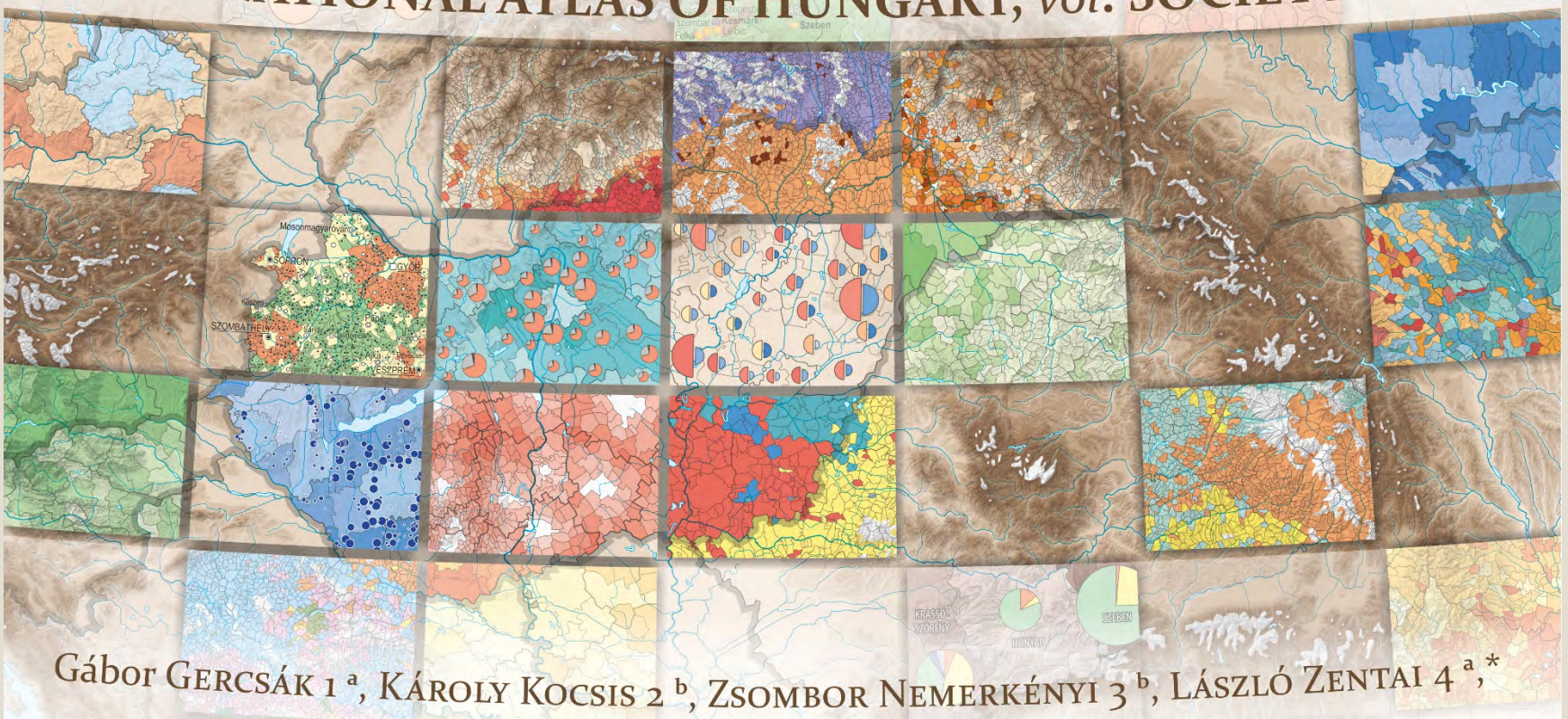
THE NEW NATIONAL ATLAS OF HUNGARY, *vol.* SOCIETY



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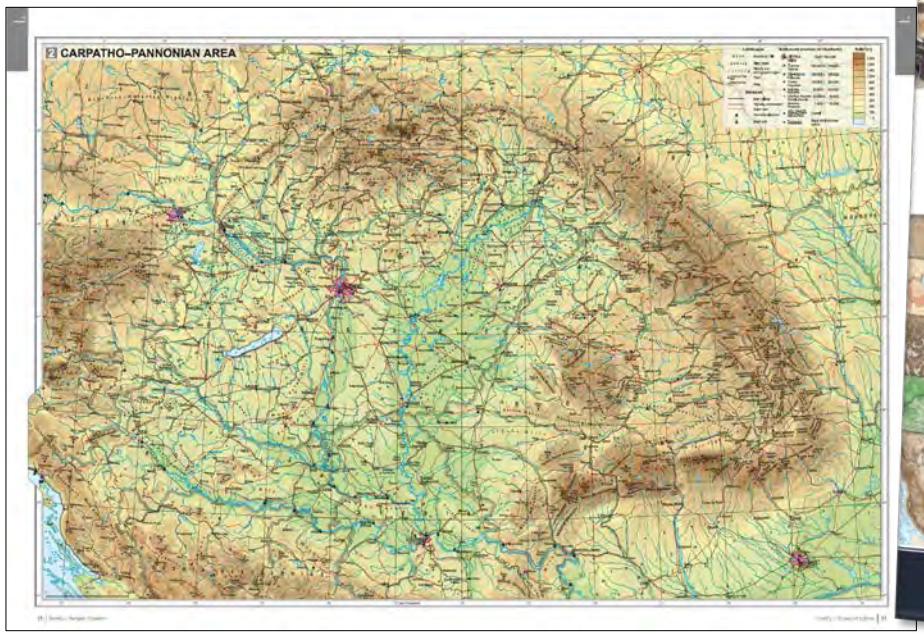

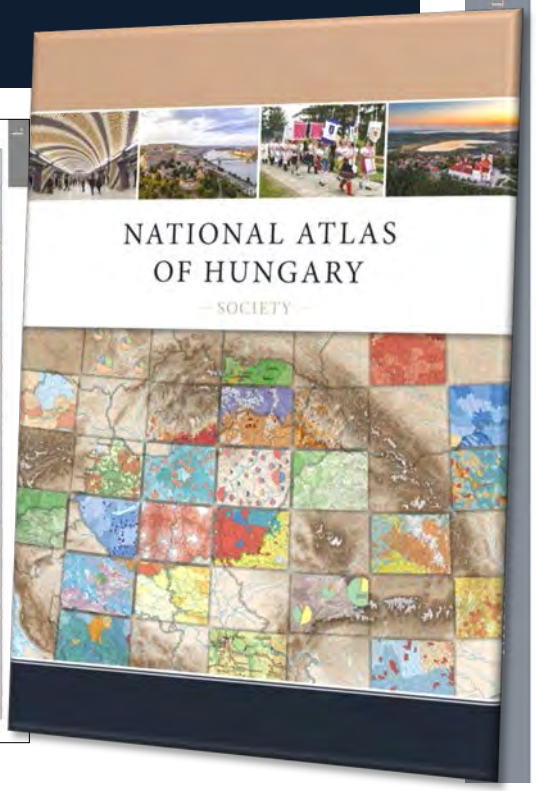

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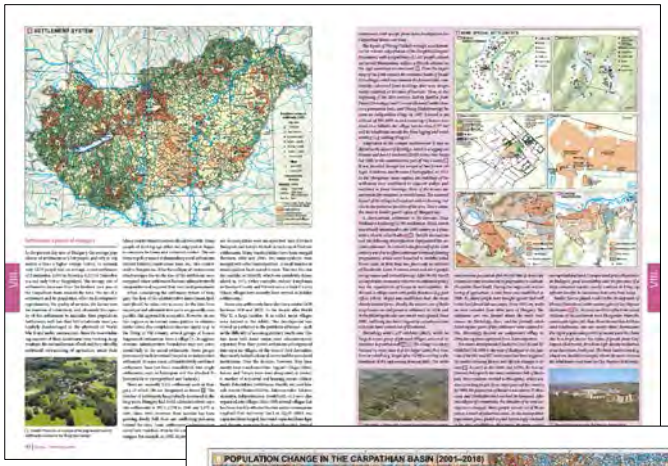

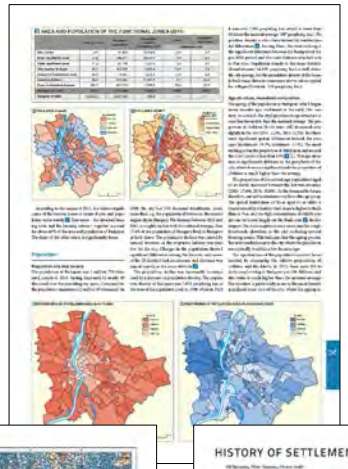

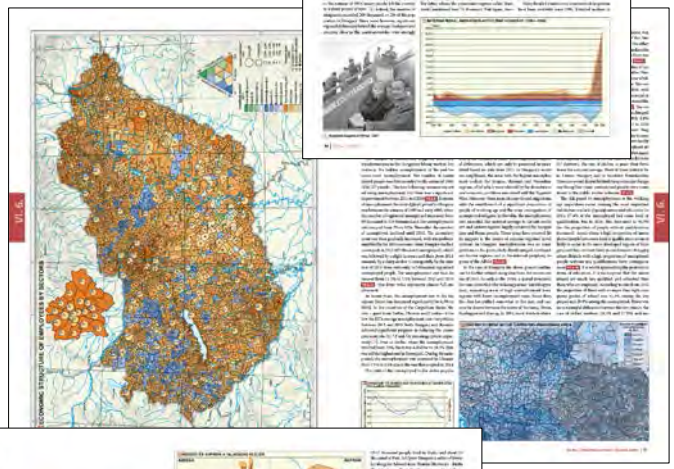

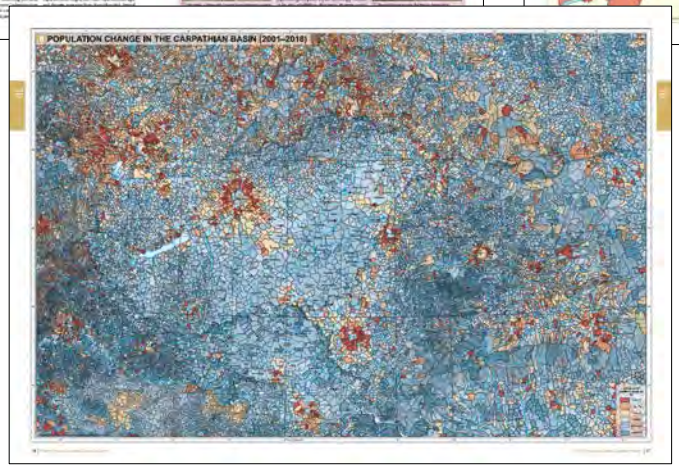

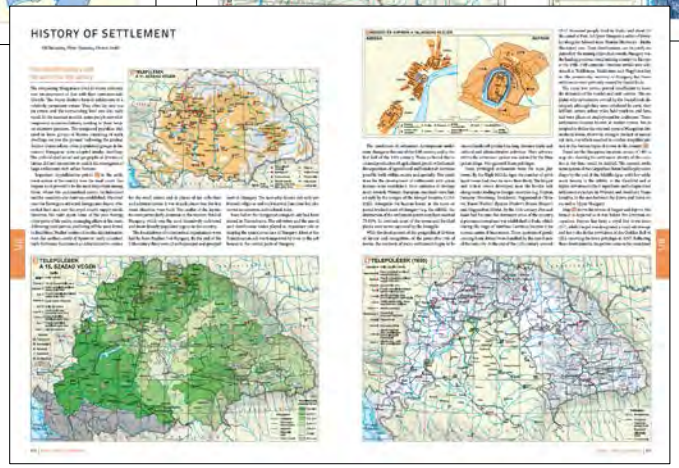

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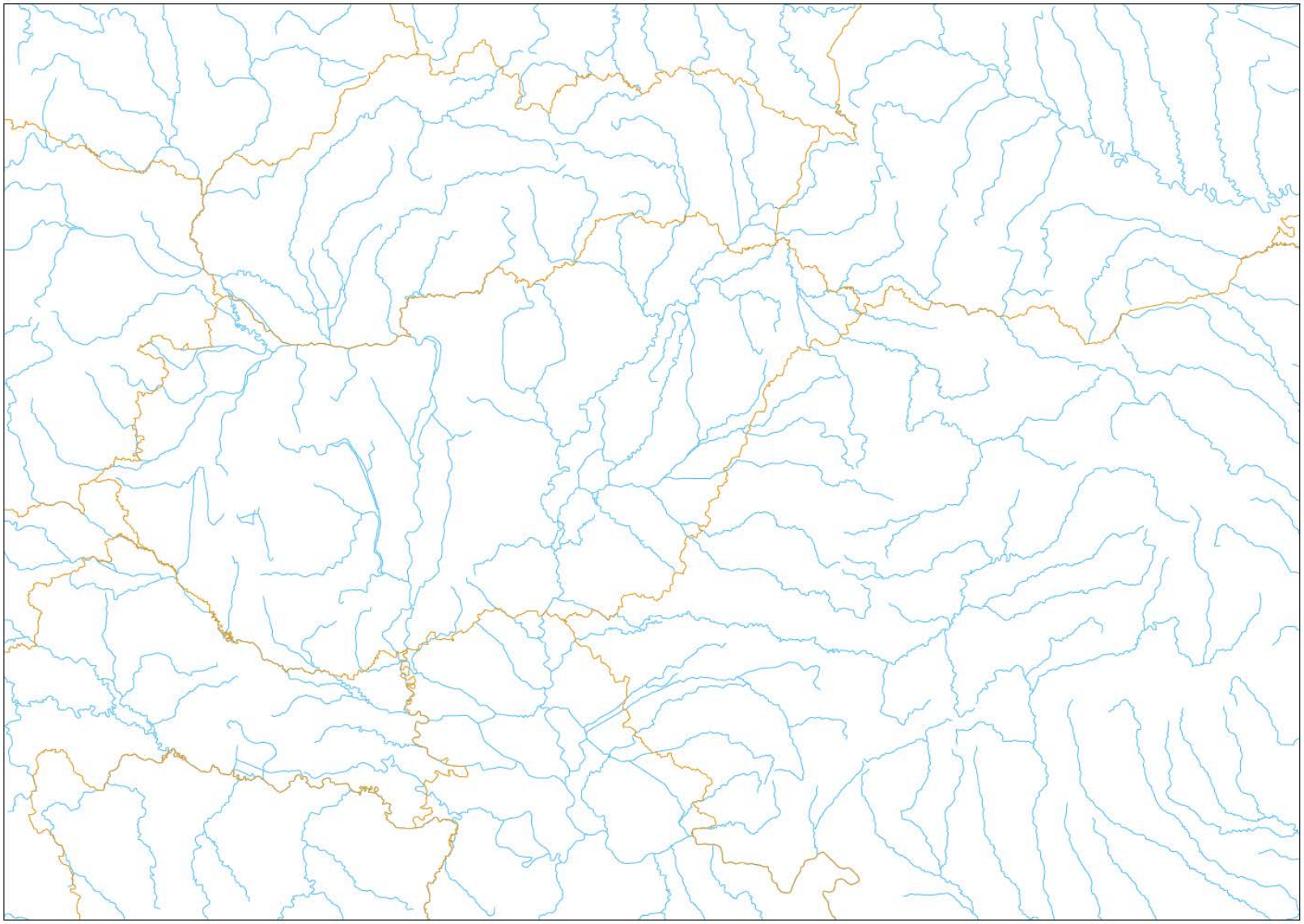

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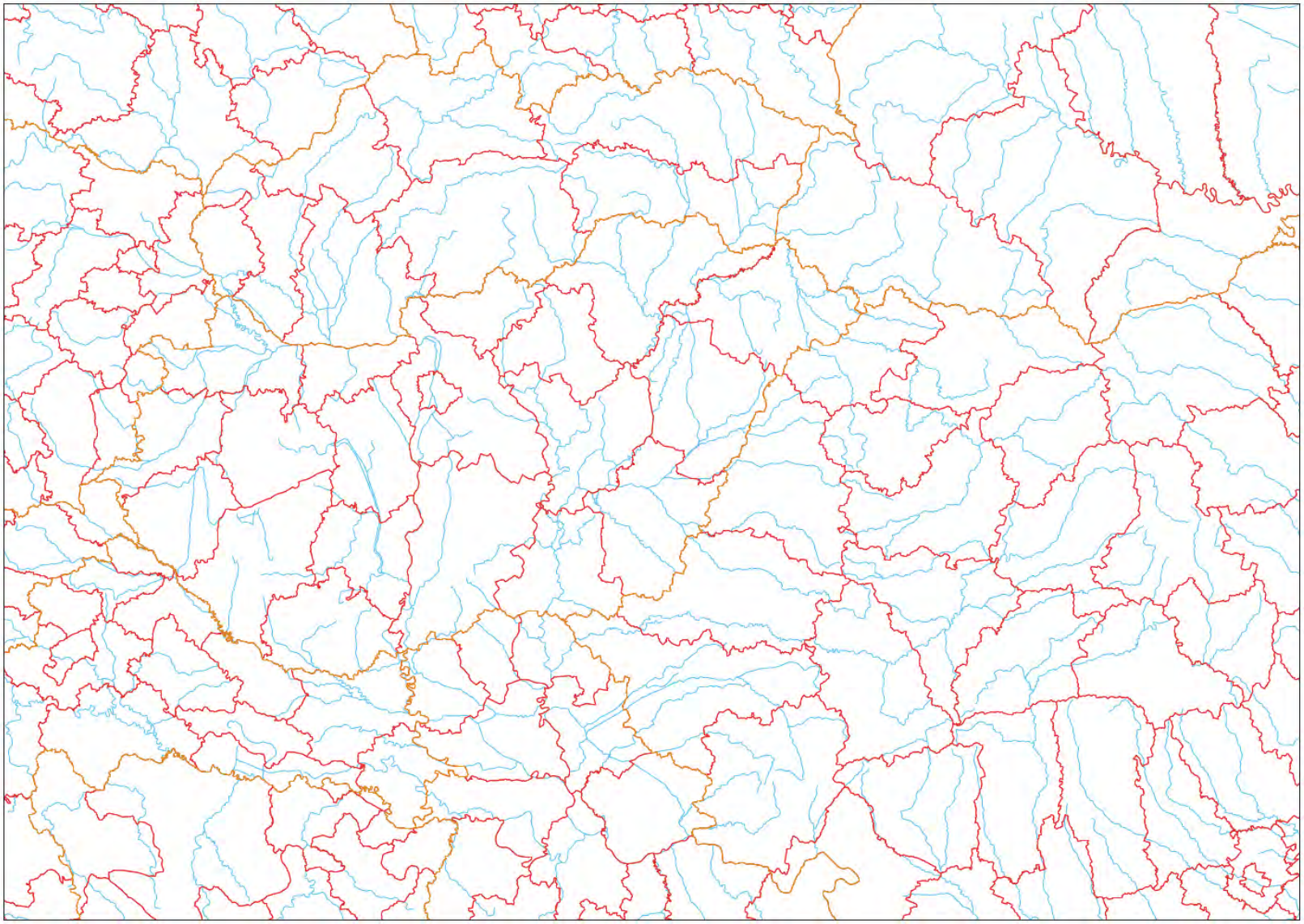

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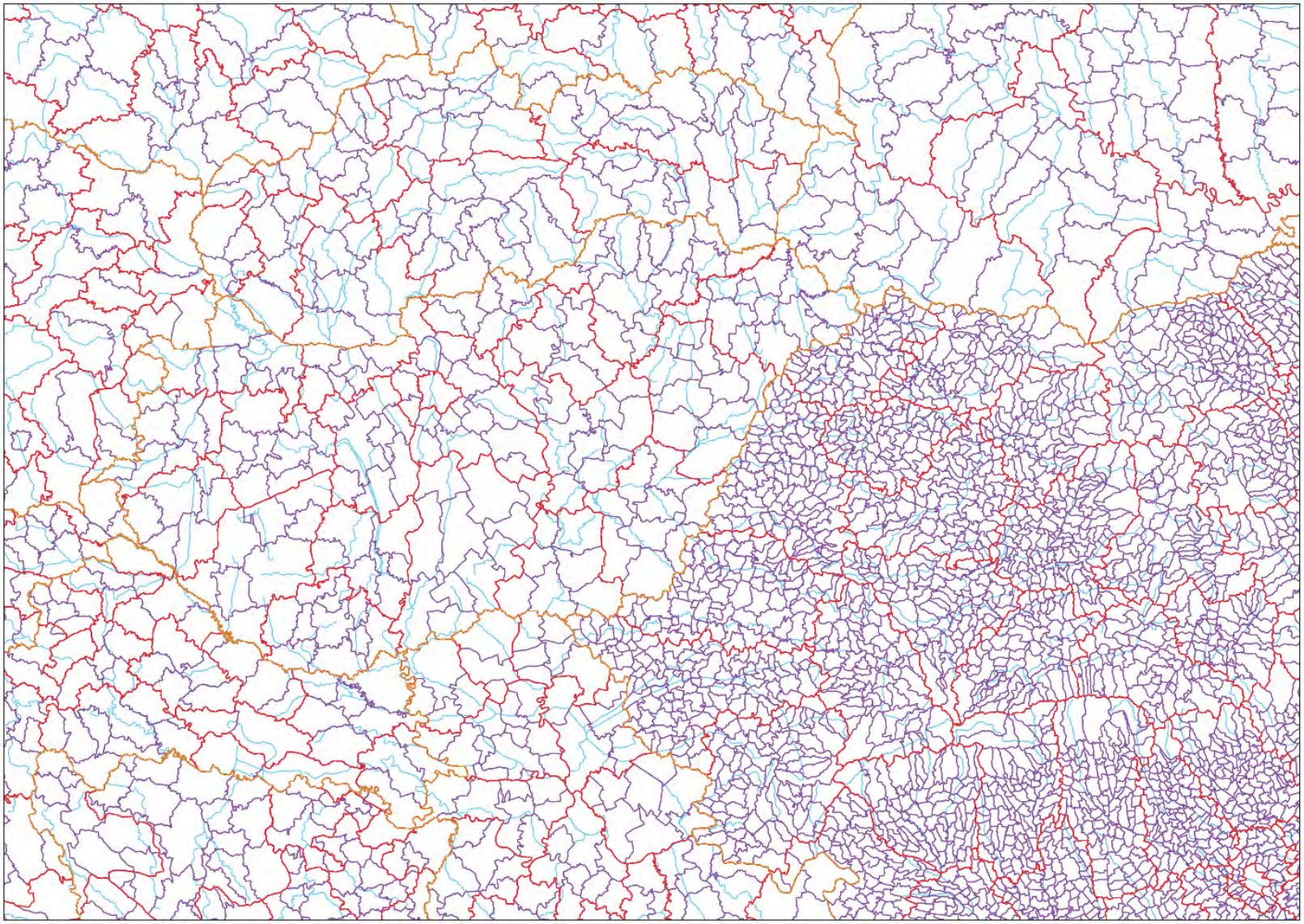

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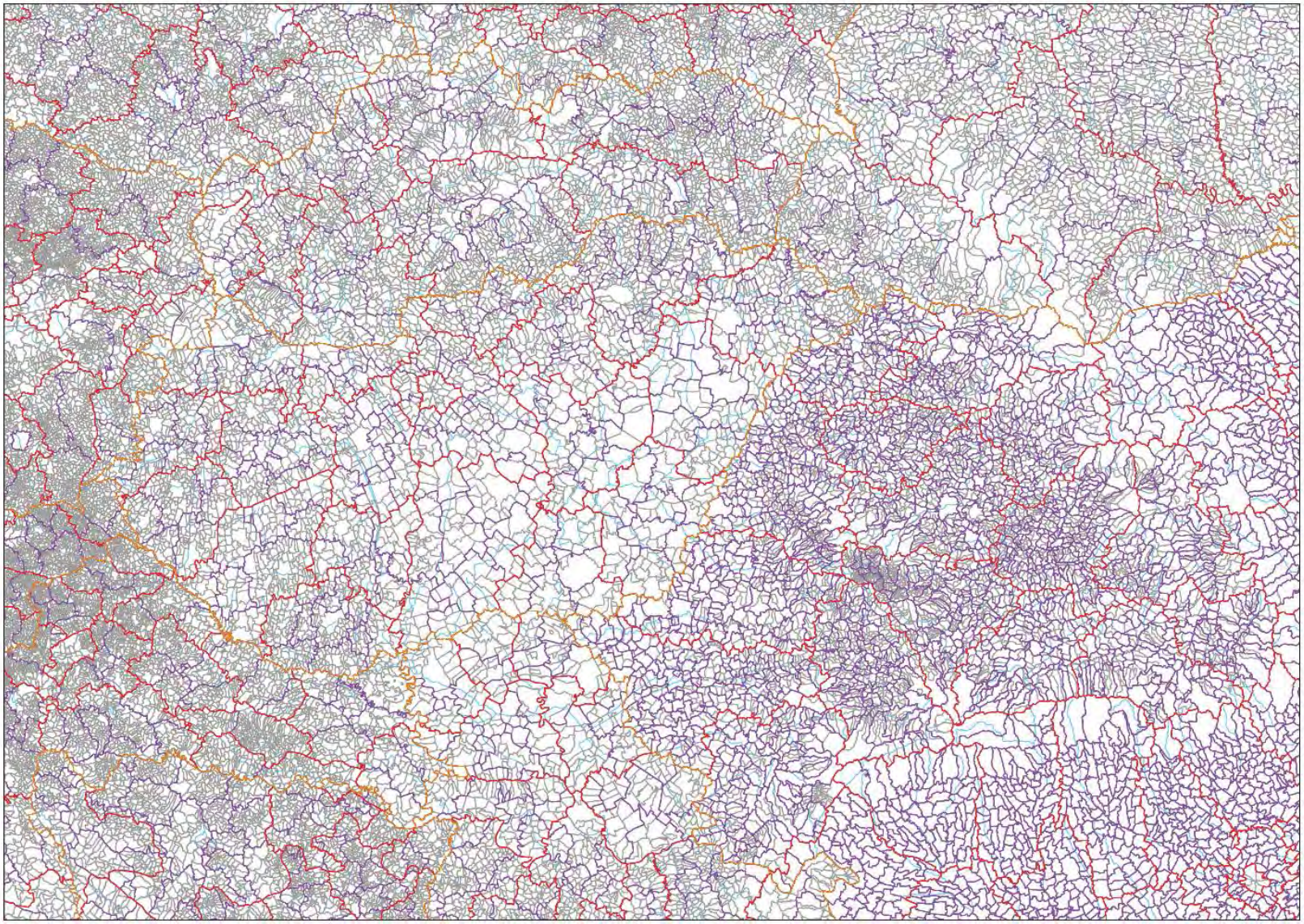

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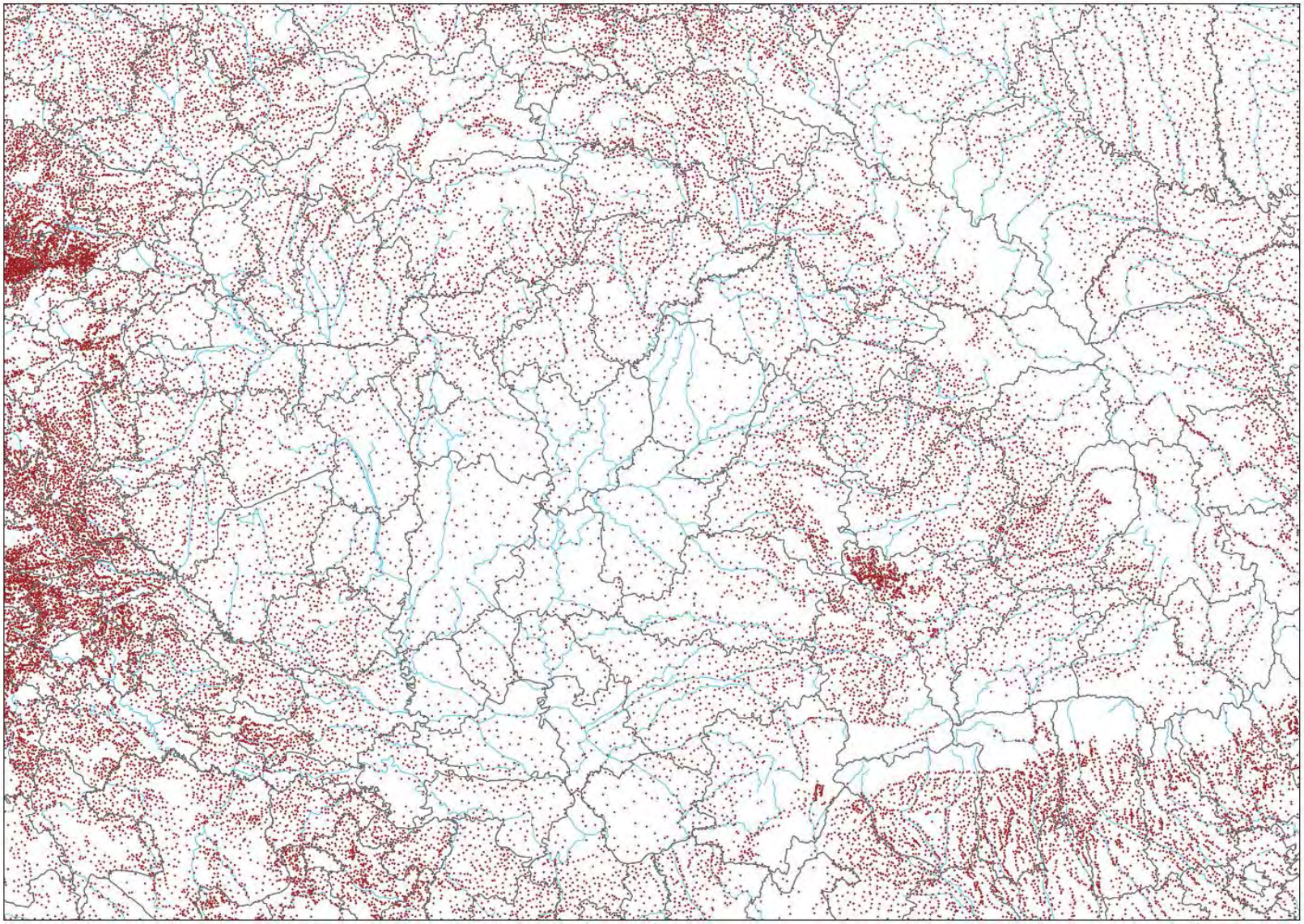

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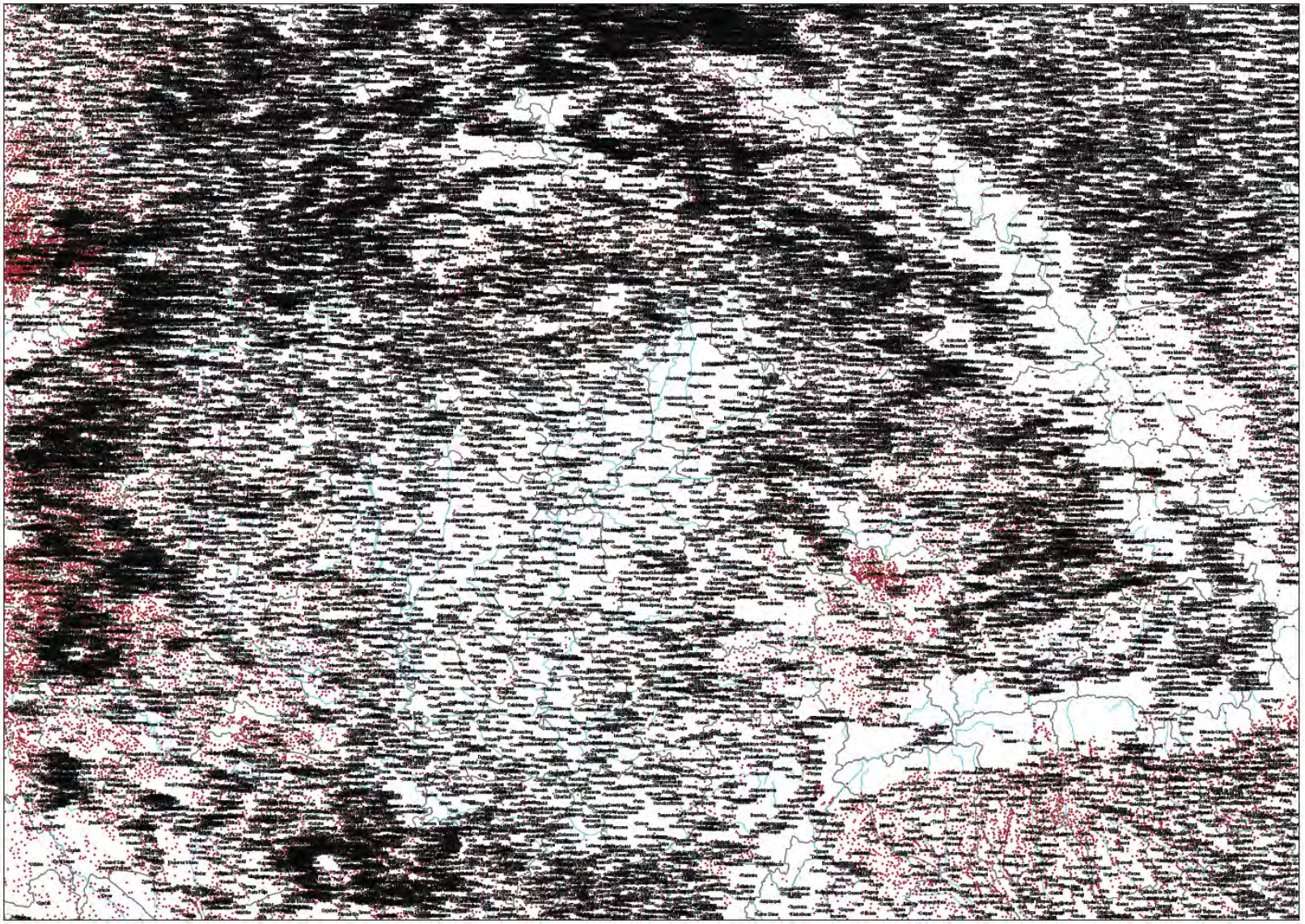

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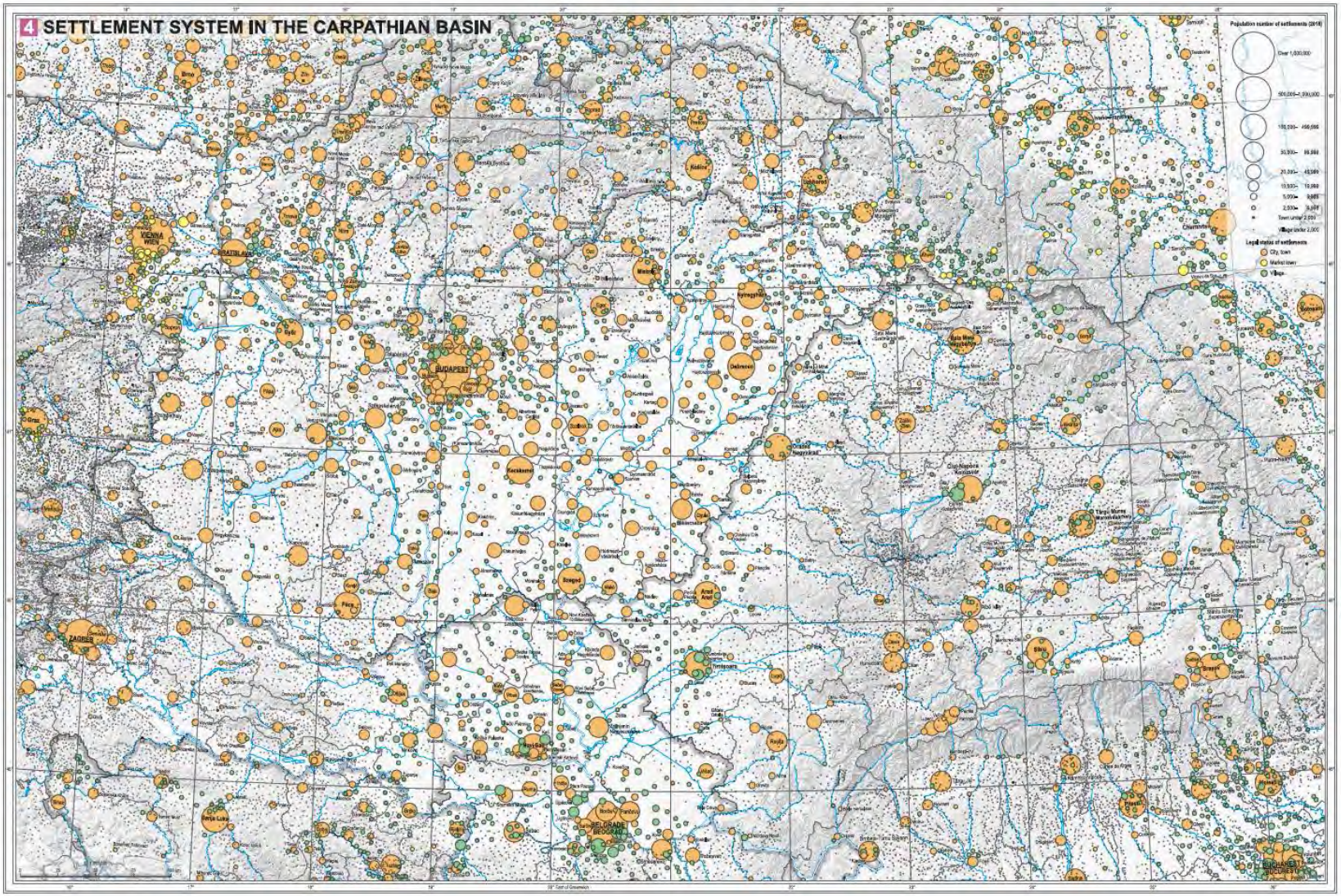


VIII.

VIII.

I. HUNGARY AT A GLANCE

HUNGARY AT A GLANCE

Károly Kocsis

Location: Hungary is located in the Carpathian Basin, in the southeastern part of Central Europe between 16°05' and 22°58' of eastern longitude, and 45°48' and 48°35' of northern latitude, almost equidistant between the equator and the North Pole. Hungary is a landlocked country. From Budapest the nearest seaport is Rijeka on the Adriatic Sea (420 km by air). Due to its central location the country's territory is a genuine arena of oceanic, continental and Mediterranean air masses.

Territory: The Hungarian state territory (93,024 km²) spans 528 km from the west to the east, and 268 km from the north to the south. Geographical extremes are the village of Garbolc in the east, where the sun rises 27 minutes earlier than over Felsőszölnök in the west; the Nagy-Milic mountain peak in the north and parts of the village territory of Beremend in the south. As regards the territory of the country, Hungary with its 108th position ranks in the middle of the countries of the world, and its size is comparable to that of South Korea and Portugal.

Borders: The present borders of the Hungarian state practically were born after the collapse of the Austro-Hungarian Monarchy, when the dictated Peace of Trianon (Versailles, 4 June 1920) cut the territory of historical Hungary into pieces. The total length of the Hungarian national borders amounts 2,246 km, shared by the following countries: Slovakia – 679, Ukraine – 137, Romania – 453, Serbia – 164, Croatia – 355, Slovenia – 102 and Austria – 356.

Administrative divisions: Since 1950 Hungary's territory is subdivided into 19 counties ('megye' in Hungarian) and the capital (Budapest), which have been grouped together since 2018 into 8 regions for statistical and development purposes 1. The counties and the capital are subdivided into districts: 174 ('járás') in the counties and 23 ('kerület') in Budapest. Among the local municipalities (3,154) there are 345 urban settlements, out of which 23 are called 'towns with county rights' ('megyei jogú város'). The system of Hungarian counties, as substantial administrative units of the country, looks back upon nearly a millennium's history. Following the partitioning of the country in 1920 the number of counties steadily decreased (1918: 71, 1930: 25, 1950: 19).

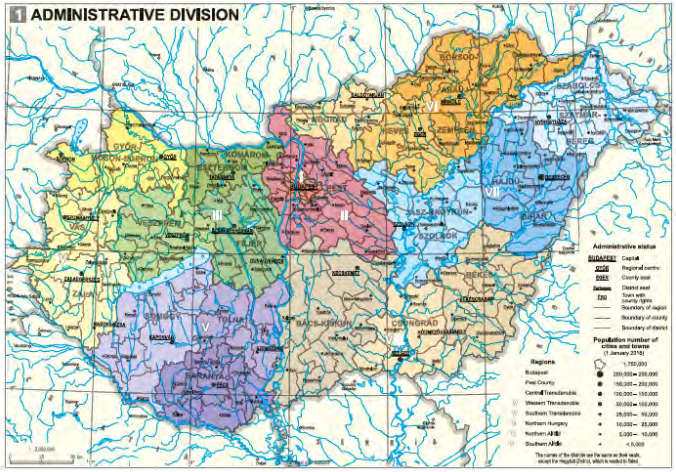
Population: On the present territory of the country, 9,778,000 inhabitants lived on 1 January 2018, which meant 105 people/km² population density. This number of inhabitants (which is comparable to that of Sweden, Azerbaijan, Belarus and Portugal) places Hungary as an average country (91st position in the international rank of the countries of the world).

Settlements: The most populous city is Budapest (1.75 million inhabitants), followed by these towns (thousand people): Debrecen (203), Szeged (162), Miskolc (156), Pécs (144), Győr (130), Nyíregyháza (117) and Kecskemét (111). There are 59 medium-sized towns (25,000–100,000 inhabitants) and 32 small towns (10,000–25,000 inhabitants). The number of settlements with less than 1,000 people is 1,791.

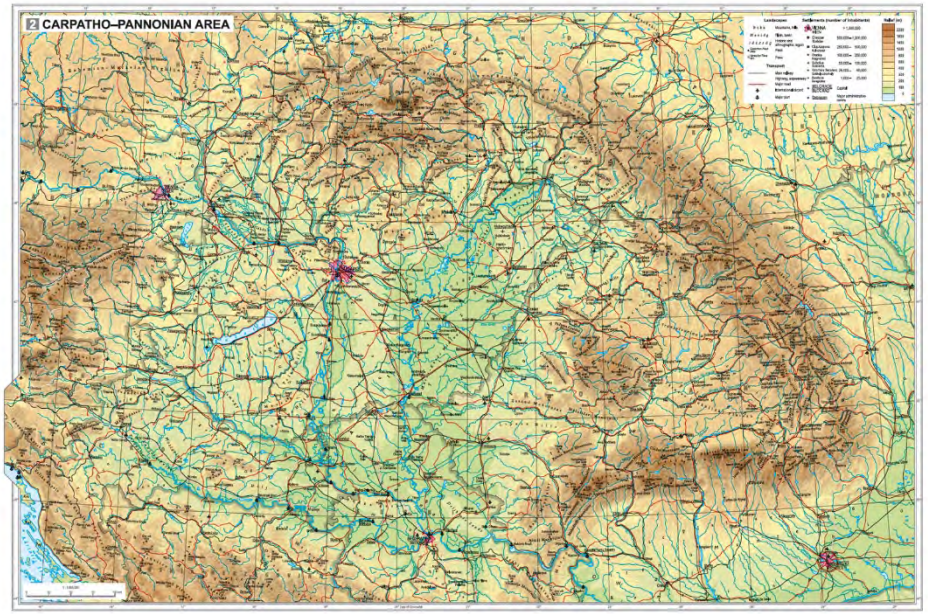
Natural environment: Hungary is predominantly considered a lowland country, since 82.4% of the territory does not reach the 200-metre elevation above the mean sea level, and only 0.6% of the territory rises over 500 metres 2. The highest point of the country (Mt. Kékes) is 1,014 metres; the lowest point (near Szeged) is at 78 metres a.s.l. The country lies in the drainage area of the Danube. The longest river reaches in its territory are as follows: Tisza (597 km), Danube (417 km) and Rába (188 km). The largest lakes of Hungary (in km²) are Lake Balaton (596), Lake Fertő/Neusiedl (87, total area: 335) and Lake Velence (26).

Land use: 79.7% of the territory is cropland (out which plough-land 46.6%, forest 20.8%, grassland 8.4%). One fifth of the territory is regarded as lands taken out of cultivation (e.g. residential, industrial, transport areas, lands unsuitable for cultivation or barren lands).

1 ADMINISTRATIVE DIVISION



2 CARPATHO–PANNONIAN AREA



II. HISTORY OF POPULATION

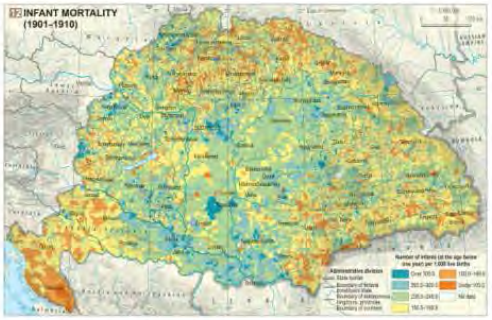
The difference between the crude birth and death rates is the *natural increase* (or decrease) 12. In addition to the increasingly widespread decrease in mortality, differences in fertility and the birth rates are the main causes of spatial differences in natural increase. Thus, the lowest values and even natural decrease (with the number of deaths already exceeding the number of live births) are typical for the traditional areas of early birth control mentioned above 8. All these suggest that as a result of the demographic transition, Hungary gradually moved from an old mortality-controlled demographic system to a modern fertility-controlled one, as families consciously began to regulate the number of children and the timing of their birth.

In addition to natural increase, actual population changes are influenced by *migratory movements*. The net migration rate per one thousand people designates the target and source areas of internal and international migration 14. In areas with low carrying capacity in terms of the agricultural population but inhabited by people with significant natural increase (e.g. regions in the barren Dinarides inhabited by Serbs and Croats, and in the northern border region in the Carpathians with Slovaks and Rusyns) the local excess population sought prosperity elsewhere, thus causing considerable local migration losses. To a lesser degree, similar emigration zones arose in areas with German and Hungarian populations in Transdanubia and the southern regions. At the same time, *Budapest and its expanding agglomeration, other major cities and the newly booming industrial areas were the primary targets of internal migration*, accommodating large numbers of newcomers. Extensive rural areas with previously sparse populations were also among the winners of internal migration at the turn of the 20th century. During this period, the *mass outflow of the agricultural population to the outlying fragmented farmsteads ('tanyas')* near towns in the Alföld (mainly in the Danube–Tisza Midland) intensified. *Slavonia* also saw outstanding migration gains because after the dissolution of the Military Border (1871–1881), enterprising farmers and landless labourers (Hungarians but also ethnic Germans, Czechs, Slovaks and Rusyns) migrated (mostly) from Transdanubia and Bácska in large numbers to the extensive and cheap Slavonian lands that had become available for sale.

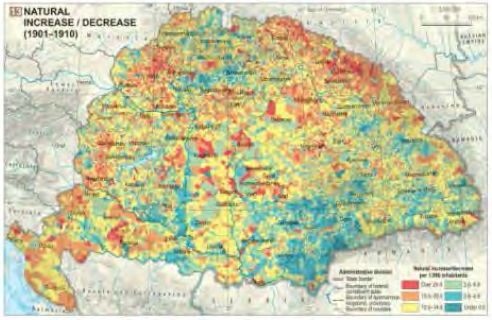
During the 19th century, as the modern migration and colonisation campaigns were gradually discontinued, the number of *Hungarians* living in the centrally located areas with the most favourable agricultural production conditions in the Carpathian Basin, which therefore had a higher carrying capacity, tripled compared to that of the nationalities. Thus, the ratio of Hungarians in the total population increased from 35% to 48% between 1787 and 1910 (and to 54.5% if we exclude the Kingdom of Croatia-Slavonia). Ethnic processes favourable for Hungarians included a higher rate of natural increase, the scattering of the nationalities from the mountainous peripheries with unfavourable agricultural conditions in the central Hungarian ethnic areas, natural assimilation in what was a Hungarian language milieu, particularly affecting the urban citizens and a lower rate of emigration for Hungarians compared to that of the nationalities 15.

In the first half of the 19th century, the most striking change in the *religious structure* was the increasing conversion of people with Orthodox religion (especially Romanians in northern Transylvania) to the Greek Catholic faith. In the liberal era that followed the Austro-Hungarian Compromise (1867), the *emancipation of non-Roman Catholic religious groups* intensified. A liberal attitude towards *Jews* in the Kingdom of Hungary resulted in a significant Galician immigration from the end of the 18th century. In the final third of the 19th century, however, this significant migration gain was reversed for Jews at national level, as they settled increasingly in Austria, particularly in its more developed areas adjacent to Hungary (thus mainly in Vienna). Large numbers of people also emigrated to America, which offered a much more promising future than Hungary.

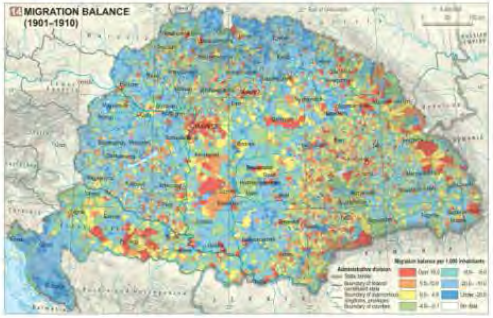
12 INFANT MORTALITY (1901–1910)



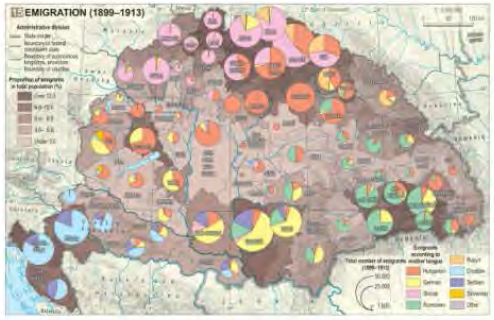
13 NATURAL INCREASE / DECREASE (1901–1910)



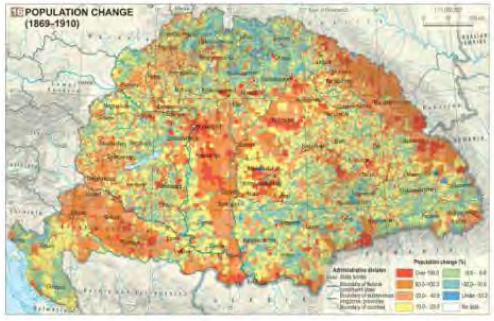
14 MIGRATION BALANCE (1901–1910)



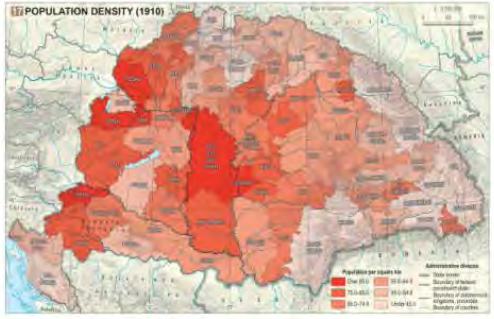
15 EMIGRATION (1899–1913)



16 POPULATION CHANGE (1869–1910)



17 POPULATION DENSITY (1910)

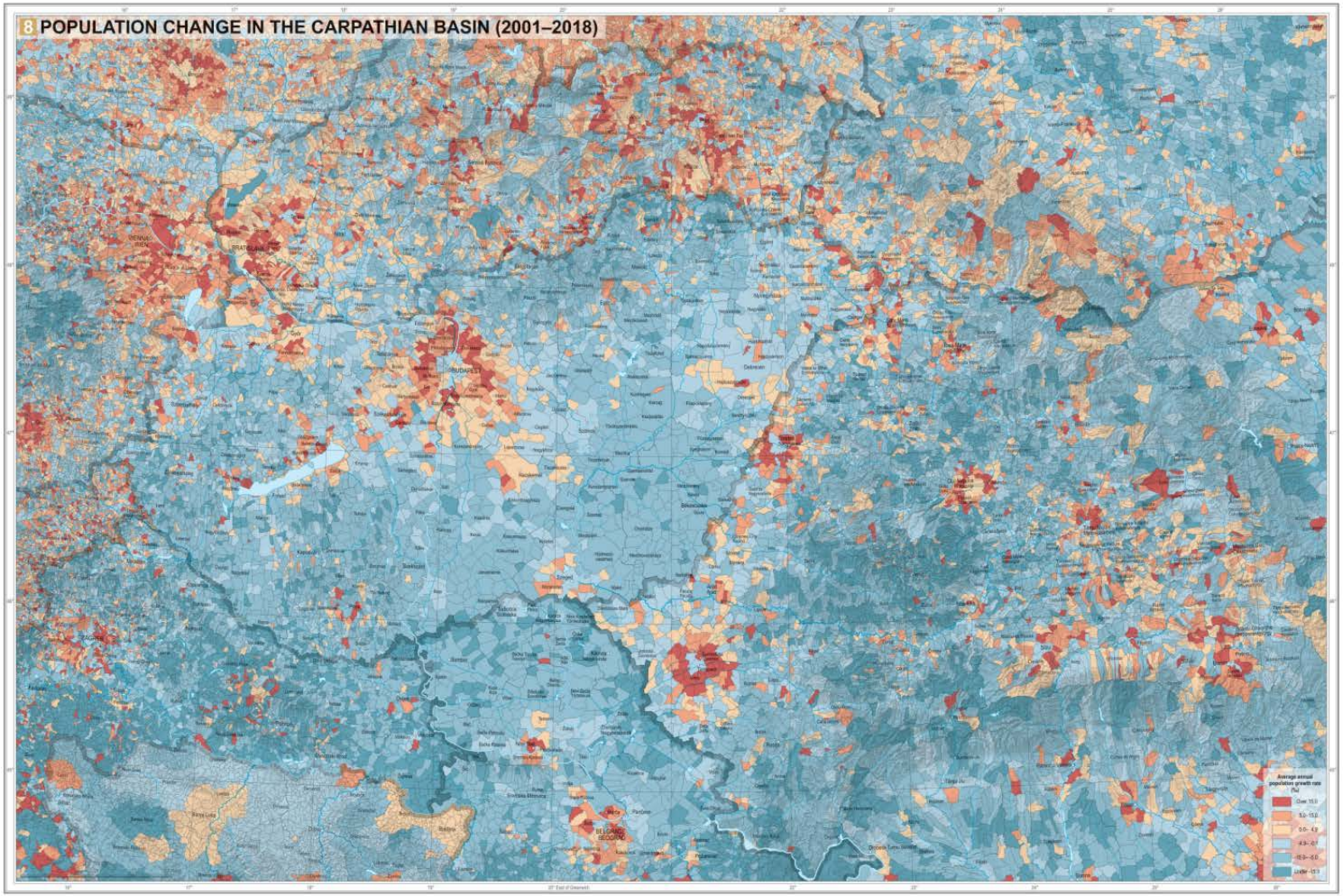


The map on emigration from Hungary (1899–1913) 15 clearly illustrates the regions and ethnic groups most affected by *emigration*. The main drivers of diffuse emigration at that time were harsh natural conditions for agricultural production, the associated poverty, and the informal channels of information that led people to emigrate. Contact with Poles, Rusyns and Jews living in Galicia, who were the first to experience the benefits of emigration to America, gave rise to the largest emigration core area in Hungary in the northeast, mainly inhabited by Slovaks, Rusyns and Hungarians. For similar reasons, the propensity to emigrate increased in the Croatian and Serbian areas of the barren Dinarides due to contact with Croatians on the coast of Dalmatia. Largely due to the desire to accumulate capital and reasons related to inheritance (the heir to the estate was the firstborn), a particularly high proportion of ethnic Germans (not only from Transdanubia, but also from the highly fertile southern regions) tried their luck overseas. Romanians from the Banat and from southern Transylvania, having been encouraged by the German example, emigrated to America in large numbers. The emigration statistics outlined here do not cover the vast majority of migrations to Austria (mostly to Vienna), as such movements were not subject to authorisation. Nor do they include those Székely emigrants who left illegally for Romania through the Carpathians. At the same time, there was also a significant rate of *return migration* during this period. This partly explains why, although 1.4 million people emigrated from the Lands of the Crown of St Stephen (the Kingdom of Hungary and the Kingdom of Croatia-Slavonia together) between 1899 and 1913, the number of Hungarian citizens living in America around 1910 was estimated at only 800,000.

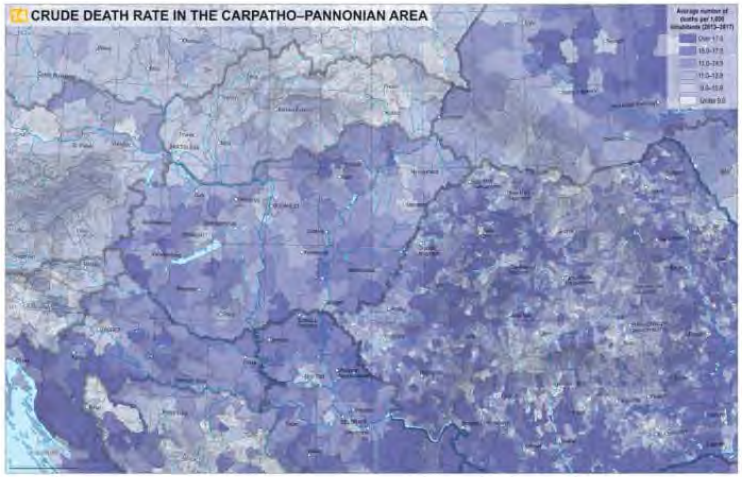
In the period between the first and last censuses of the Dual Monarchy (those of 1869 and 1910), the characteristic spatial differences in *population change* 16 were shaped in some places by natural trends in vital statistics and elsewhere by migration. The dynamic growth of the population was mostly due to natural increase in the Rusyn regions of the Northeastern Carpathians, in the Hungarian-inhabited Szabolcs region, in the Slovakian core area of the northwestern parts of Upper Hungary and in Zagorje in Croatia. However, particularly high population growth in Budapest, in the other major cities, in the booming industrial centres, in the tanya areas of the Danube–Tisza Midland and in Slavonia was mainly due to internal migration gains. As a demographic antipode of these regions, a significant population decrease was registered – due to a small natural increase/decrease – in the southern belt of the central parts of Upper Hungary and the southeastern part of Transdanubia and – due to migration losses – in the eastern third of Upper Hungary and the Dinarides. In the northern parts of the Banat, which were mostly inhabited by Swabians, and in some parts of Transylvania, where the Saxon population was dominant, both factors of vital statistics played a role in the significant decrease of the population.

In the period from the end of the 18th century until 1910, the *population density* in Hungary changed due to the above mentioned trends in vital statistics, whereby the western (Croatian, Transdanubian and Upper Hungarian) counties in the vicinity of the Austrian provinces maintained their high population density values – partly in consequence of the economic benefits associated with their proximity to Austria (benefits that dated back to the time of Turkish occupation). In contrast, the eastern third of Upper Hungary, which had been densely populated until the 19th century, constituted one of the more sparsely populated parts of Hungary in 1910 due to mass emigration 15. At the same time, the fertile Alföld, which had attracted the inhabitants of the mountainous periphery like a magnet, and the capital city (established in 1872 as Budapest), as well as its environs, had a high population density.

III. POPULATION NUMBER, POPULATION DENSITY



IV. NATURAL CHANGE OF POPULATION



areas most affected by war migration between 1991 and 1995, the Dinarides and Slavonia, the rural areas of Vojvodina, the Apuseni Mountains, the mountains of Banat and the villages of the Transylvanian Plain).

In mortality studies, *infant mortality* (i.e. deaths under one year of age) is always of particular importance. Indeed, the infant mortality rate is an important indicator of the overall development of each country, of the health and social care system, of prenatal and neonatal care. Infant mortality has a significant impact on life expectancy at birth.

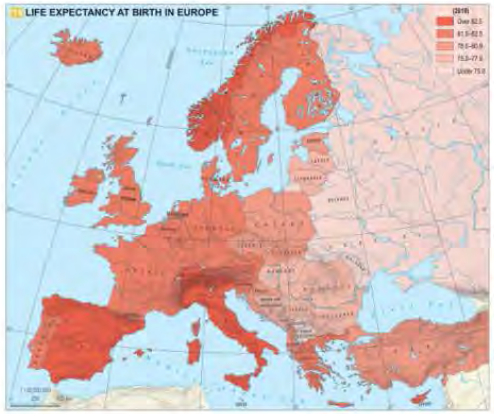
In Hungary only 0.22% of all deaths were accounted for by infant mortality in 2020 (compared with 30.8% in 1910). The infant mortality rate relative to 1,000 inhabitants has reached historic lows in recent years (3.4‰,), mainly due to the hospitalisation of newborns requiring treatment (including premature babies), advances in medical equipment and the preparedness of specialists.

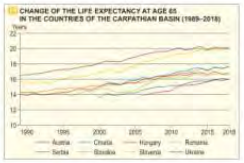
Infant mortality is closely related to the socio-economic conditions and health behaviour of the mother. There is a close relationship between a mother's level of education and the infant mortality of her children. As the level of education rises, the neonatal mortality rate decreases. For this reason, too, the social composition of the population and the level of economic development largely explain regional differences in infant mortality. The infant mortality map of the Carpathian Basin exhibits east-west oriented spatial divisions. In Hungary, areas with higher infant mortality – associated with the low social status of the local population – occur mostly in the northeastern and southwestern areas of the country and in Kiskunság. In Slovakia, however, a high rate of infant mortality is seen in the eastern areas, where Roma account for a high proportion of the population.

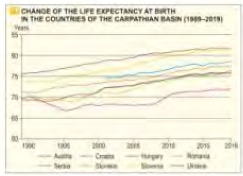
Mortality differences are most accurately manifested by *life expectancy*. Commonly used in demographic analyses, this indicator condenses the mortality conditions of a particular year into a single number, expressing the average amount of years that people of a certain age can still hope to live.

According to the data for 2019, the highest *life expectancy at birth* can be expected by inhabitants of the most developed European countries in the northwest and in the Mediterranean region (81–84 years,). Meanwhile, life expectancy in Central and Eastern Europe remains less favourable. The differences are mostly due to the health-related causes of death (smoking, excessive alcohol consumption, violent deaths), as well as deaths from diseases of the circulatory system and from cancer.

In recent decades, mortality decreased in all countries in the Carpathian Basin, with life expectancy reaching unprecedented levels . The timing of the improvement, which occurred several years after the collapse of communism, varied from country to country. In the early 1990s, the mortality crisis peaked in the majority of central and eastern European countries, with a decrease or stagnation in average life expectancy at birth. Only from the mid-1990s was an improvement registered in Hungary, with life expectancy at birth rising from 69.3 years to 75.5 years in the space of almost a quarter of a century . The trends of the countries in the region vary greatly. In Ukraine, as in the other Soviet successor states, the mortality rate reflected an extremely profound socio-economic shock: between 1990 and 1995, life expectancy at birth decreased by 3 years, and after a moderate increase, it remained stagnant until 2007. Only in the last ten







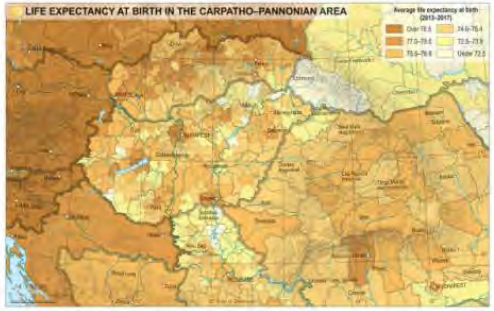
years has there been an improvement in mortality in that country. The timelines show similar trends in two other groups of countries. Austria and Slovenia (the latter is rapidly catching up with the former) are among the frontliners, with life expectancy for the population as a whole being 81.7 and 81.2 years, respectively. The third and more populous group includes slightly diverging countries (e.g. Romania, Serbia, Hungary, Slovakia), where life expectancy currently ranges from 76 to 78 years.

The major cities of the Carpathian Basin and its western and northwestern areas are characterised by relatively low mortality and high life expectancy. Towards the east, deteriorating mortality conditions, increasing life expectancy differences, and accentuated regional inequalities can be seen. The fundamental reason for this is that in countries with high standards of living and correspondingly high life expectancy, people's life prospects are closer to the biological limits of life expectancy. Above a certain income level, incremental increases in lifespan tend to be more modest, resulting in the regional convergence of such values. Spatial differences in life expectancy at birth are determined within each country by the composition of the local society (mainly by the education of the people living there and the labour market and income conditions). Accordingly, in addition to the major cities of Hungary, Transylvania, Slovakia and the Vojvodina region, people living in the agglomeration of Budapest, the Balaton region, the most developed northwestern third of Slovakia and certain areas of western Croatia can expect the longest lifespans .

As far as Hungary is concerned, the lowest life expectancy occurs in areas where the level of education is low, the ratio of poor people is high, and the employment conditions of the population are unfavourable (e.g. along the northeastern and southwestern border and in the Central Tisza Region). In these areas, social disadvantages are cumulative, and catching up requires the application of special programmes.

The evolution of *life prospects in old age* (manifested by life expectancy at the age of 65) is increasingly important for the pension system and the institutional system of health and social care for the elderly. Life prospects among the elderly population are similar in several respects to life expectancy at birth, which characterises general mortality. Yet, the differences between countries are smaller. In the post-communist countries, the trend generally started with stagnation and a minor halt in the early 1990s. Then – except for Romania – life expectancy in old age steadily improved everywhere . For the period as a whole, life expectancy at the age of 65 was highest in Austria (20.1 years in 2017), and the Slovenians are now only slightly behind (20.0 years). In terms of life expectancy at 65, Slovakia and Croatia (17.4 years) are followed by Hungary and Romania (both 16.4 years). In Hungary, therefore, the improvement has been somewhat ambiguous, as the gains in life expectancy have been greater in all other Visegrád countries. The Hungarian values are lowered primarily by a more modest improvement in the life expectancy of elderly men. The spatial pattern of life expectancy at the age of 65 in Hungary closely resembles that of life expectancy at birth (cf. and). At this age, people living in Budapest and along the northern shore of Lake Balaton have a life expectancy of at least 18 years, reflecting the significant proportion of high-status Hungarian and foreign elderly people. In some of the elite Buda districts (I, II and XII), life expectancy at 65 is 20 years (i.e. today's Austrian level).

The collapse of communism occurred three decades ago. The subsequent period is long enough to ascertain spatial changes in lifespans and to evaluate how evenly or unevenly the improvements in expectancy have been and which areas were able to benefit from the improvement in mortality that has characterised society as a whole. In the period between 1985 and 1989, the maximum life expectancy at birth was 71.5 years at district level. Over the past three decades, this indicator improved in all districts, but the rate of improvement was not even . Spatial mortality inequalities among districts decreased moderately. There has been a modest improvement in the regions of Borsod, Gömör, Abaúj and the Central Tisza Region, where life prospects have improved by only 3–4 years. Similarly, this indicator has increased only modestly in the western Hungarian border area with traditionally high life expectancy and in most districts



V. MIGRATION

4 Congestion on the motorway near Budapest

5 Railways were used for mass commuting into the capital in the 1960s

economically more developed than Hungary (e.g. Germany: 60%; Austria: 54%; Netherlands: 50%) and is similar to the indicators for the neighbouring post-communist countries (e.g. Slovenia: 39%; Poland: 35%; Czechia: 30%). Even so, it is clearly higher than the percentage in less developed regions of the world. The relatively small size of Hungary, the rapidly evolving transport network, increasing motorisation and the increasing spatial mobility of the workforce play a role in this.

History of commuting

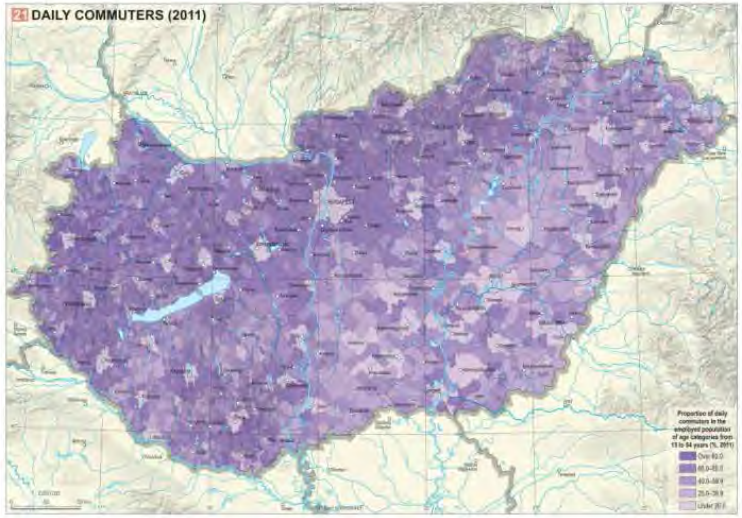
A spatial division between place of residence and the workplace emerged in the early 20th century, giving rise to commuting in its wake. It was only in the communist era, however, that commuting became a large-scale phenomenon. Opportunities for regular commuting arose in the region of Budapest with the development of a suburban transport system (tram and HEV lines) and the rapid development of the manufacturing industry. The newly established industrial plants not only attracted labour from the surrounding villages to the capital. Even before World War I, they were increasingly located in the suburban zone at the time (e.g. Kispest, Csepel and Újpest), triggering the commuting of workers. A noticeable increase in commuting occurred only in the environs of Budapest between the two world wars: in 1930, 33 thousand, in 1939 already 40 thousand people went to work in the capital from surrounding settlements which were incorporated into Budapest in 1950. The number of commuters in Hungary in the years before World War II was less than 100 to 150 thousand people. By 1960, however, when a discrepancy between place of residence and place of work was registered for the first time in the Hungarian census, 612 thousand people, or 12.5% of employees at the time, were not working in their place of residence, so they commuted [1]. Communist industrialisation and the restructuring of agriculture, the growth of large-scale farms and mechanisation have all contributed to this. From areas with a typically agricultural profile (Alföld, Southern Transdanubia), the workforce began to commute long distances to jobs in the industrial axis (North Hungarian Range, northern Transdanubia) and Budapest regions.

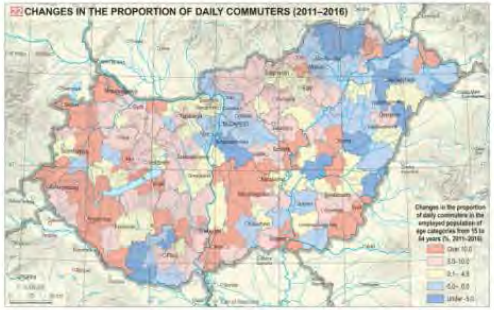
23 NUMBER AND PROPORTION OF COMMUTERS (1960–2016)

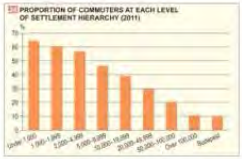
	Employees	Commuters	Commuters
	Number (thousand people)		Proportion (%)
1960	4891	612	12.5
1970	4973	993	20.0
1980	5065	1217	24.0
1990	4525	1144	25.3
2001	3690	1102	29.9
2011	3943	1341	34.0
2016	4503	1585	35.2

Commuting changed the rhythm of life in rural areas and the lifestyle of families: male commuters travelled home only weekly, or every two weeks, while women worked in the local productive cooperative, or became so-called household workers and cultivated their family smallholdings [1]. The number and ratio of commuters continued to increase until 1980, when more than 1.2 million people (i.e. nearly a quarter of all employees) commuted in Hungary. This was the peak of communist-style commuting, mainly from villages to the urban industrial plants.

After 1990, economic restructuring and the declining number and status of industrial jobs caused a fall in the number of commuters. After the turn of the millennium, however, the decline went into reverse. Long-distance commuting was gradually replaced by daily commuting over smaller distances. Despite the fluctuations in the number of commuters, the overall ratio of commuters in Hungary has steadily increased in recent decades, and this trend is expected to continue in the future.







of jobs increased by 196 thousand and the number of commuters increased by more than 260 thousand people. Due to suburbanisation in the meantime, commuting was increasingly concentrated in the major urban areas (Budapest, Debrecen, Szeged, Pécs and Győr). A new form of commuting also appeared, with workers going from large cities to jobs in the suburbs.

The spatial structure of commuting in 2011 shows, on the one hand, the differences in the structure of the settlement network: the giant villages and the market towns of the Alföld are much more 'self-employed', while people living in the more fragmented settlements of Transdanubia and Northern Hungary are more reliant on commuting [2]. On the other hand, economic success is also reflected on the map, as indicated by the far more intensive commuting in Budapest and the prospering region of northern Transdanubia, in contrast to Southern Transdanubia or Northern Hungary. However, regardless of the geographical situation, there is a commuter area of variable size around each of the major cities, which can be explained by suburbanisation after 1990. East-west differences deepened in the period after 2011 [3]. By the time of the micro-census in 2016, the ratio of commuters had increased by more than 5% in most districts of Transdanubia, while in many districts east of the Danube stagnation and decrease were typical. The commuting map at the level of districts at the time of the micro-census indicates a further strengthening of the spatial structure described for 2011 [4].

The distribution of commuting within the settlement network shows marked and regular differences. The smaller a settlement is, the bigger the role played by commuting will be in its life. This is natural, as the number of jobs in villages and small towns falls short of the labour supply, whereby most people of active age are forced to commute [5]. An analysis of the changes over time reveals that after 1990 the ratio of out-commuting people increased in all categories of municipalities, but the process was much faster in cities with a population of more than 50 thousand [6]. The increasing rate of commuting among the metropolitan labour force is a new phenomenon and can be associated with the increasing incidence of high-paying jobs in the suburbs.

Spatial structure of commuting

Industrial plants with outdated technology and employing predominantly low-skilled manual workers were closed down after the collapse of communism. Many of the dismissed workers obtained jobs in the service sector in nearby major cities or in new manufacturing jobs created by foreign working capital in northern Transdanubia and Central Hungary. Automotive and electronics plants in northern Transdanubia mostly employed, instead of local labour, less skilled workers from nearby villages and small towns, who, for lack of a better job, began to commute. As a result, the proportion of commuter jobs increased to the largest extent in Fejér, Győr-Moson-Sopron and Vas counties, as well as in Budapest between 1990 and 2001. During this period, the rate of commuting, which had previously been very significant, decreased in traditional industrial areas (Baranya, Borsod-Abaúj-Zemplén and Nógrád counties) due to the loss of industrial jobs.

Significant changes occurred in the regional structure of employment and commuting between 2001 and 2011 compared to the previous decade. The number

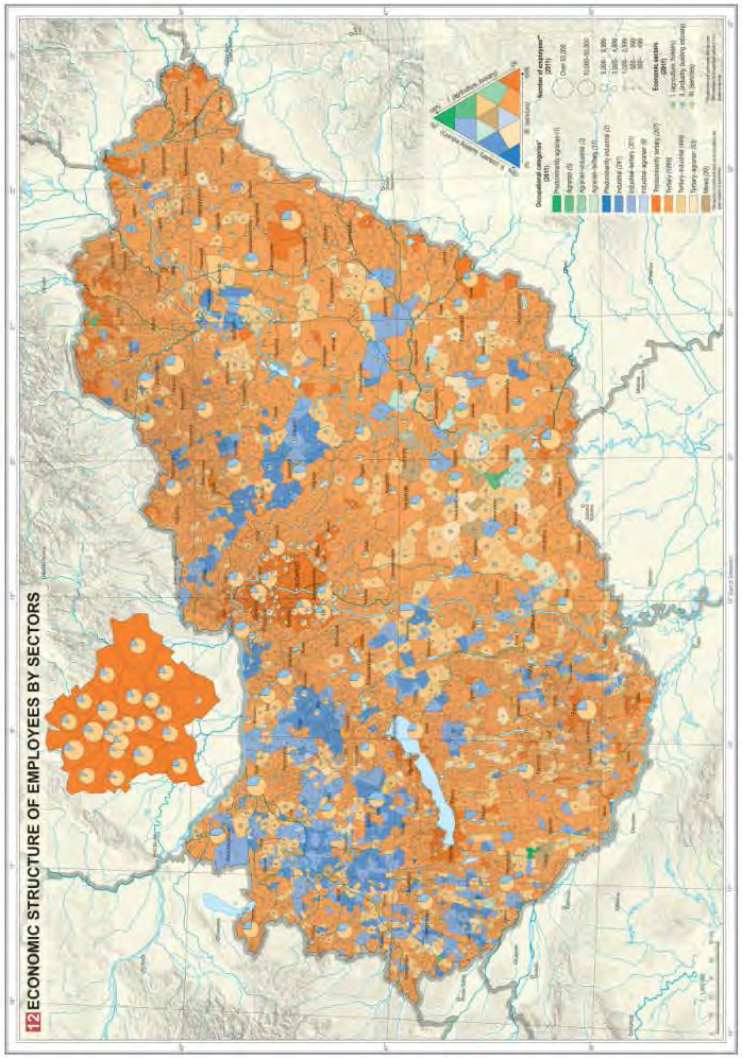
Crisis areas with low rates of commuting and high rates of unemployment

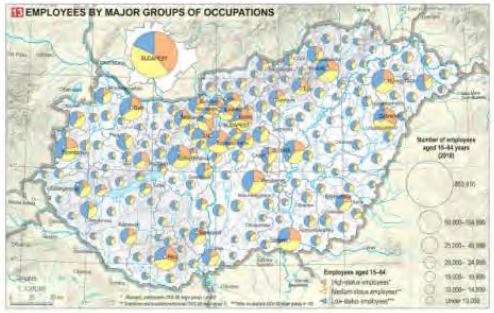
After the collapse of communism, the number of jobs in Hungary fell sharply, but the changes were uneven in spatial terms. In some disadvantaged areas, commuting has declined due to job losses (the decline is thus associated with relatively high unemployment). In these areas, the working-age population has been unable to respond to the lack of jobs by undertaking spatial movement and commuting.

28 NUMBER AND PROPORTION OF OUT-COMMUTERS AT EACH LEVEL OF THE SETTLEMENT HIERARCHY (1990–2011)

Settlement category (people)	Number of out-commuters			Proportion of out-commuters (%)		
	1990	2001	2011	1990	2001	2011
Under 1,000	217,330	147,132	168,454	67.7	65.2	64.5
1,000–1,999	221,775	173,932	199,185	56.6	59.3	60.7
2,000–4,999	297,883	280,760	297,092	48.6	53.3	56.9
5,000–9,999	142,796	133,012	165,009	37.7	42.7	46.5
10,000–19,999	137,347	130,842	175,710	28.3	32.5	39.1
20,000–49,999	93,554	106,023	148,705	16.0	23.9	29.8
50,000–100,000	23,477	51,733	56,839	6.5	16.0	20.5
Over 100,000	25,169	38,806	51,158	4.7	8.5	10.8
Budapest	31,714	66,673	78,681	3.5	8.9	10.1
In total	1,191,035	1,100,913	1,340,831	28.1	30.0	34.0

VI. POPULATION STRUCTURES





The *collapse of communism* triggered profound transformations in the Hungarian labour market. For instance, the hidden unemployment of the past became overt unemployment. The number of unemployed people was first recorded in the census of 1990 (126,227 people). The two following censuses reported rising unemployment, but there was a significant improvement between 2011 and 2016 VI. 6. 6. In terms of unemployment the *most difficult period in Hungary* was between the autumn of *1990* and early *1993*, when the number of registered unemployed increased from 50 thousand to 519 thousand and the unemployment rate jumped from 1% to 12%. Thereafter the number of unemployed declined until 2002. The unemployment rate then gradually increased, with the problem amplified by the 2008 economic crisis. Hungary reached a new peak in 2012 (472 thousand unemployed), which was followed by a slight increase and then, *from 2014 onwards, by a sharp decline*. Consequently, by the summer of 2019 there were only 163 thousand registered unemployed people. The unemployment rate thus decreased from 11.1% to 3.5% between 2012 and 2019 VI. 6. 14. This latter value represents almost full employment.

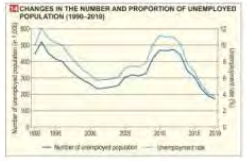
In recent years, the *unemployment rate* in the European Union has decreased significantly (to 6.3% in 2019). In the countries of the *Carpathian Basin*, the rate – apart from Serbia, Ukraine and Croatia– is below the EU's average unemployment rate everywhere. Between 2011 and 2019, both Hungary and Slovakia achieved significant progress in reducing the unemployment rate (by 7.5 and 7.8 percentage points respectively) 1. Even in Serbia, where the unemployment rate had been 23%, there was a decline to 10.5% (this was still the highest rate in the region). During the same period, the unemployment rate increased in Ukraine from 7.9% to 8.9% due to the war that erupted in 2014.

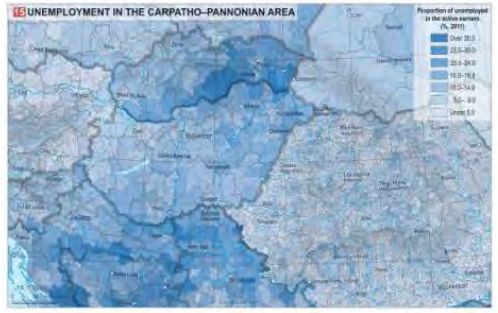
The ratio of the unemployed to the active population in the Carpathian Basin shows significant regional differences, which can only be presented in more detail based on data from 2011. In Hungary's southern neighbours, the areas with the highest unemployment include the Krajina, Slavonia and Vojvodina regions, all of which were affected by the devastation and economic problems associated with the Yugoslav Wars. Moreover these areas also saw forced migrations, with the resettlement of a significant proportion of people of working age and the mass immigration of unemployed refugees. In Slovakia, the unemployment rate exceeded the national average in certain southern and eastern regions largely inhabited by Hungarians and Roma people. These areas have received little support in the course of national regional development. In Hungary, unemployment was an acute problem in the particularly disadvantaged northeastern border regions and in the internal periphery regions of the Alföld VI. 6. 15.

In the case of Hungary, the above general outline can be further refined using data from the micro-census of 2016. As early as the 1990s, a spatial structural line was identified (the Balassagyarmat–Mezőhegyes line), separating areas of high unemployment from regions with lower unemployment rates. Since then, this line has shifted somewhat to the east, and can now be drawn between the towns of Szécsény, Heves, Kunhegyes and Karcag. In 2016, most districts where more than 3.5% of the working-age population was unemployed could be found to the east of this line (i.e. in the northeastern part of Hungary). The other pole is the contiguous area of northern Transdanubia and the agglomeration of Budapest, in which there was no single district with high unemployment VI. 6. 7.

A similar picture unfolds when the number of unemployed is compared with active earners rather than the working-age population. This can be done while determining and spatially analysing the rate. This unemployment rate was 5.3% nationally in 2016, with much higher rates (of at least 8%) being recorded in 17 districts. Their spatial distribution greatly resembles the pattern of the previous indicator VI. 6. 4. The unemployment rate remained substantially unchanged in the period between 2001 and 2011 (2001: 8.8%, 2011: 8.6%), but the half decade from 2011 to 2016 brought a significant decline in unemployment. Stagnant unemployment in the first period can also be seen on the map showing the changes, as there were hardly any shifts at district level VI. 6. 5. The *significant decline in unemployment between 2011 and 2016* manifests regional differences. In one third of the districts (57 districts), the rate of decline is more than three times the national average. Most of these districts lie in Eastern Hungary and in Southern Transdanubia. There are several factors behind the spectacular change, one being that many unemployed people were transferred to the public worker schemes VI. 6. 3.

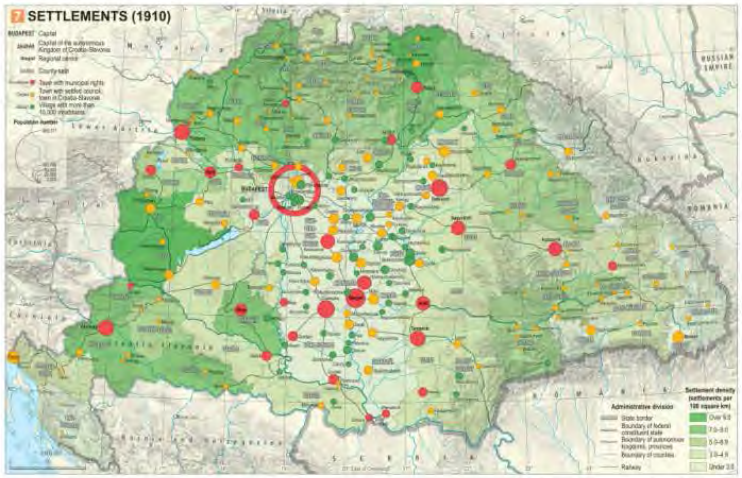
The risk posed by unemployment to the working-age population varies. Among the most important risk factors is a *lack of qualifications and education*. In 2011, 57.6% of the unemployed had some kind of qualification, but in 2016, this decreased to 54.3% (i.e. the proportion of people without qualifications increased). Areas where a high proportion of unemployed people have some kind of qualification are most likely to occur in the more developed regions of Hungary and they are least likely in northeastern Hungary, where districts with a high proportion of unemployed people without any qualifications form contiguous areas VI. 6. 16. It is worth approaching the problem in terms of education. It is no surprise that the unemployed are much less qualified and educated than those who are employed. According to data from 2016, the proportion of those with no more than eight completed grades of school was 11.4% among the employed and 29.9% among the unemployed. There was no meaningful difference between the two rates in the case of skilled workers (26.3% and 27.8%) and sec-





VII. HISTORY OF SETTLEMENT

7 SETTLEMENTS (1910)



8 URBAN HIERARCHY (1910)

tem in place, but also the economy received a boost from the resumption of (limited) national sovereignty. The 1850s saw the advent of a global economic boom, which also affected agriculture. Foreign loans were available for Hungary, and the state was committed to supporting economic and infrastructural developments, especially the expansion of Budapest into a world city. Following 1867, business opportunities (including business start-ups) were abundant in Hungary and companies were set up at a feverish pace. Between 1867 and 1873, 4,000 kilometres of railway tracks were laid in the country, and more than 500 new financial institutions and 170 industrial joint stock companies were founded. As a result of the technological revolution, urban settlements were modernised. Indeed, towards the end of the century, electric public lighting and trams appeared in the major provincial cities and Budapest, where even an underground line was completed in 1896, the first of its kind on the continent. A running water supply and sewerage became widespread. The advent of civil public administration led to the abolition of the royal free and market towns. In lieu of these, the more populous cities – a total of 25 – gained municipal rights, while 106 urban settlements became towns with settled council.

Some outcomes of these processes are included in Maps 7 and 8. At first glance, the dense urban settlement system of the core of the country between the Danube and the Tisza and in the Tiszántúl region, is striking. In most counties of the Alföld, more than a quarter of the population lived in towns in a functional sense in 1910 8. These features is a legacy of the Ottoman period and the grain boom of the second half of the 19th century. However, in the areas surrounding this urbanised core (i.e. in Transdanubia, Upper Hungary and Transylvania), the proportion of town dwellers was less than 10%. The only exceptions were the counties of such major cities as Győr, Brassó (Brașov), Kolozsvár (Cluj-Napoca) and Kassa (Košice). The manufacturing sector contributed greatly to the urbanisation of Budapest and some other major cities, including Pozsony (Bratislava), Arad, Temesvár (Timișoara), Brassó (Brașov) and Fiume (Rijeka). Also shown on the map are the mining settlements that were rapidly becoming centres of manufacturing (Resicabánya/Reșița, Stájerlakanina/Anina, Salgótarján, Diósgyőr).

The urban hierarchy reflects the number of institutions and activities in each town, their hierarchical rank, and their range. Budapest was far ahead of other cities at the top of the Hungarian urban hierarchy at the beginning of the 20th century. The city was evidently the Hungarian bridgehead of business (and foreign) capital, technology and innovation, and social ideas and artistic trends. (e.g. in 1910, 87.9% of monetary assets were held in the accounts of financial institutions in Budapest, 61.9% of higher education students studied here, 41.5% of telephone calls were made in the capital, and 26.4% of telegrams were submitted here.) The capital was already surrounded by a ring of suburban towns from Újpest to Budafok. Together with their residents, Budapest crossed the threshold of one million inhabitants. The counter-poles of the Hungarian capital were also emerging: e.g. regional centres as Zagreb, the capital of Croatia-Slavonia; Pozsony (Pressburg, Bratislava), Kolozsvár (Cluj-Napoca), Temesvár (Timișoara), Kassa (Košice), Debrecen, Nagyvárad (Oradea) and Szeged. The county centres formed a rather heterogeneous group in terms of their economic base and population. At the beginning of the 20th century, there were 330-335 settlements that may be considered as towns in Hungary – excluding Croatia-Slavonia – regardless of their legal status.

In terms of origin, structure, architectural character and layout, an extremely wide range of settlements has developed in the Carpathian Basin over the centuries 9.

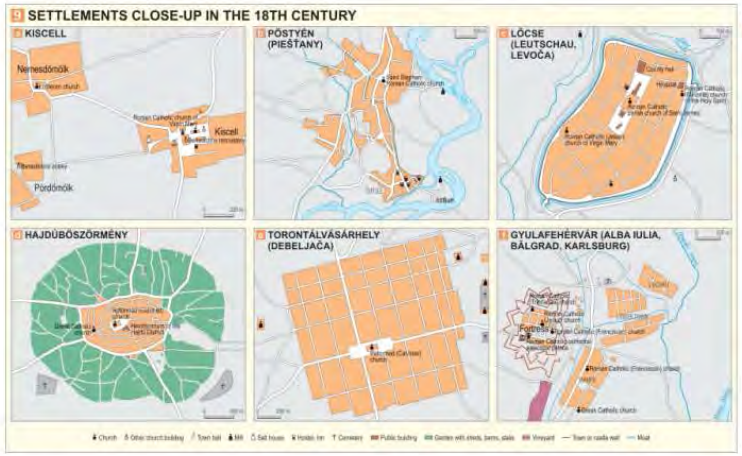
Kiscell (today's Celldömölk) is a Transdanubian settlement of special origin: it was built as a place with urban features from the beginning. The Benedictine abbey church and monastery, as a famous place of pilgrimage, forms the core of the settlement. This core attracted 'facilities' for pilgrims, merchants, traders, inns, a salt house. The original core of the settlement developed into a regular village and then into a marketplace and railway junction.

Written sources mention medieval bathing customs in Hungary, but bathing only became a popular pastime with the advent of the bourgeois lifestyle in the second half of the 19th century. The *Pöstény* (Piešťany) spa, built on one of the islands of Vág (Váh), became the country's principal spa in the final years of the Dual Monarchy. The map depicts the early guest service institutions in the island and in Teplice.

Lőcse (Levoča) in Upper Hungary (Szepes/Spiš County) is an example of a medieval western-style town. The German (Saxon) founders designed the rectangular main square in accordance with the urban planning traditions that they had brought with them, including the free-standing, arcaded town hall (built in 1551) and the masterpiece of Gothic ecclesiastical architecture, the Church of Saint James. The city core (as in Bártfa/Bardejov, Sopron, Buda, and Segesvár/Sighișoara) is surrounded by medieval walls.

The map of *Hajdúböszörmény*, the seat of the privileged Hajdú District in the 17th–19th centuries, has always been a popular topic in monographs on Hungary in view of the peculiar double-plot composition of the settlement, an invention of the market towns where the inhabitants kept large numbers of livestock. Each household had a residential plot, the centre of the settlement and, in another part of the settlement, a much larger garden plot (a hutch garden) for livestock and fodder. The latter in addition to animal husbandry, also functioned as a vegetable garden.

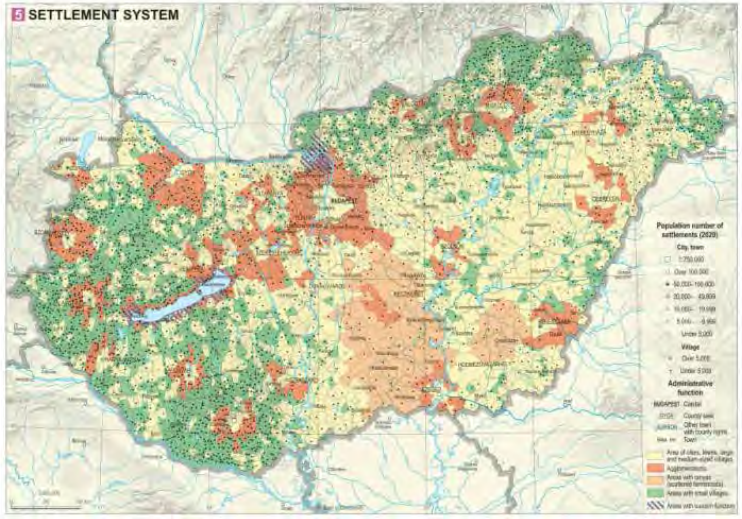
9 SETTLEMENTS CLOSE-UP IN THE 18TH CENTURY



Torontálvásárhely (Debeljača), inhabited by Reformed (Calvinist) Hungarians, is a village in the Banat that was desolated during the Ottoman occupation and in the 18th century re-established (with a chessboard layout) according to the plans of engineers. Similar settlements are common in the present-day territory of Hungary and in the Romanian part of Banat.

With its ancient roots, *Gyulafehérvár* (Alba Iulia) is one of the traditional centres in Transylvania (e.g. episcopal seat of the Diocese of Transylvania since the beginning of the 11th century, seat of the Principality of Transylvania during the 16–17th century). The core of the city comprises the fortress, which was constructed in the first half of the 18th century on the pattern of a star-shaped, classical Renaissance fortification. The complex of buildings within the castle walls includes the Roman Catholic cathedral and episcopal palace.

VIII. SETTLEMENT SYSTEM



Settlement system of Hungary

In the present-day area of Hungary, the average population of settlements is 3,100 people, and only in Vojvodina is there a higher average (4,016). In contrast, only 2,076 people live, on average, in one settlement in Zakarpattia, 1,590 in Slovakia, 1,273 in Transylvania and only 920 in Burgenland. The average size of settlements decreases from the lowland core area of the Carpathian Basin towards the rims. The size of a settlement and its population affect its development opportunities, the quality of services, the labour market situation of inhabitants, and ultimately the capacity of the settlements to maintain their population. Settlements with less than 500 inhabitants were particularly disadvantaged in the aftermath of World War II and under communism. Since the overwhelming majority of their inhabitants were working in agriculture, the nationalisation of land and the politically motivated restructuring of agriculture made their labour market situation extremely unfavourable. Many people of working age either out-migrated or began to commute to towns and industrial centres. The settlement policy aimed at diminishing rural settlements (school districts, construction bans, etc.) also contributed to this process. After the collapse of communism, disadvantages due to the size of the settlement were mitigated. Most settlements became administratively independent and acquired their own local government.

When considering the settlement system of Hungary, the data of the administrative units (municipalities) should be taken into account. As the data from municipal and administrative units are generally comparable, this approach is acceptable. However, in certain regions or in certain municipalities or administrative units, this compliance does not apply. (e.g. in the Őrség in Vas County, several groups of houses, fragmented settlements, form a village 2. In agglomerations, administrative boundaries may not correspond fully to the actual settlements. Some geographers accept each farmstead (tanya) as an independent settlement. In some cases, administratively combined settlements have not been consolidated into single settlements, such as Esztergom and the attached Pilisszentlélek or Szentgotthárd and Farkasfa.)

There are currently 3,155 settlement units in Hungary, of which 346 are designated as towns 3. The number of settlements has gradually decreased in the long term; Hungary had 3,412 administratively separate settlements in 1933, 3,339 in 1949 and 3,070 in 1990. Since 1990, however, their number has been growing slowly. Still, there are conflicting processes behind the data. Some settlements (administrative units) have vanished, often in the course of settlement mergers. For example, in 1950, 24 previously independent municipalities were incorporated into (Greater) Budapest; and today's Miskolc is made up of 8 former settlements. Many municipalities have been merged (between 1900 and 2000, 544 municipalities were merged with other municipalities). A small number of municipalities have ceased to exist. This was the case, for example, in Gyürüfű, which was completely depopulated in 1972. Other examples include Kisújbánya in Baranya County and Vértesszőlős in Fejér County. (These villages have recently been revived as holiday settlements.)

Some new settlements have also been created (428 between 1900 and 2018). In the decade after World War II, a large number of so-called tanya villages were formed in the Alföld. This development was viewed as a solution to the problems of tanyas – such as the difficulty of accessing primary health care. Certain areas with dense tanyas were administratively separated from their parent settlement and organised into separate villages. At the time of their formation, they mostly lacked a classical centre and the associated institutions. Over the decades, however, they have mostly been transformed into 'regular' villages (Mórahalom and Tompa were even designated as towns). A number of industrial and housing estates (Almásfüzitő, Tokodaltáró, Petőfibánya, Martfű, etc.) and lakeside resorts (Balatonföldvár, Balatonrendes, Balatonakarattya, Balatonfenyves, Berekfürdő, etc.) were also organised into villages. After 1990, several villages that had been forcibly attached to cities under communism regained their autonomy (such as Algyő, which was separated from Szeged, Szarvaskő separated from Eger, and Berente separated from Kazincbarcika). Several settlements have been formed out of localities that have become independent municipalities (villages) in

2 Szalafő-Pityerszer, an example of the fragmented ('szeres') settlements common in the Őrség (Vas County)

Settlements with specific forms have developed in the Carpathian Basin over time.

The layout of ***Várjag (Székelyvarság)****, a settlement on the volcanic edge plateau of the Hargitha (Hargita) Mountains, with a population of 1,621 people, almost exclusively Hungarians, reflects a lifestyle adapted to the high mountain environment 4. From the beginning of the 19th century the extensive lands of Deaku (Oroszhegy), which rose towards the forested hills, were initially cultivated from buildings that were temporarily inhabited at the time of harvests. Then, at the beginning of the 20th century, Székely families from Deaku (Oroszhegy) and Corund (Korond) settled here on a permanent basis, and Várjag (Székelyvarság) became an independent village in 1907. Located at an altitude of 900-1000 m and consisting of houses scattered on a hillside, the village has an area of 77 km² and its inhabitants mainly live from logging and woodworking (e.g. making shingles).*

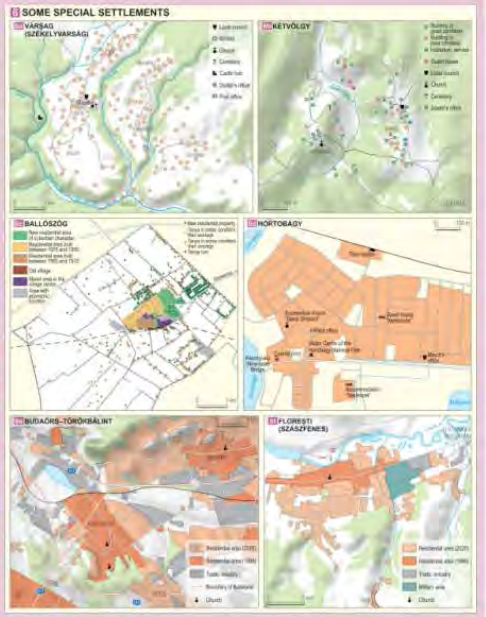
Adaptation to the natural environment is also reflected in the layout of ***Kétvölgy****, which is a logging settlement and has 83 residents (2020) in the Vasi-Hegyhát Hills in the southwestern part of Vas County 5. It was founded through the merger of two former villages, Ritkaháza and Permise (Vashegyulja), in 1951. As the Hungarian name implies, the buildings of the settlement were established in adjacent valleys and scattered in forest clearings. Most of the houses are surrounded by meadows or wooded areas. The scattered layout of the village is linked not only to farming, but also to the protective function of the area. This is where the western border guard region of Hungary lay.*

A characteristic settlement in the Danube–Tisza Midland is ***Ballószög*** *(3,780 residents in 2020), which was already mentioned in the 14th century as a place with a church called Ballósig 6. Turkish destruction and the following desertification depopulated the ancient settlement. Its revival in the first half of the 19th century was due to afforestation and vineyard planting programmes, which were launched to stabilise wind-blown sand. At first, land was given only to residents of Kecskemét. Later, however, more and more people set up tanyas and started farming. After World War II, an important communist objective in settlement policy was the organisation of tanyas in municipalities. To this end, a village centre with public functions (e.g. post office, school, shops) was established near the more densely located farms. Finally, the ancient core of Ballószög became an independent settlement in 1954, and in the following decades new streets were opened. Since 1990, Ballószög has been shaped by suburbanisation, as people have moved out of Kecskemét.*

Hortobágy *with 1,297 residents (2020), which belongs to a rare group of planned villages, also owes its existence to political will 7. The village is a rarity because in most cases it is the larger cities that were born or rebuilt (e.g. Szeged after 1879) according to the standards of the engineering drawing table. The settlement became populated after World War II, when the communist state announced its programme to cultivate the puszta (bare land). During the large-scale restructuring of agriculture, a state farm was established in 1950–51. Many people were brought against their will to the local forced labour camps. From 1953 on, workers were recruited from other parts of Hungary. The settlement core was formed where the main road crosses the Hortobágy River, and the formally established regular parts of the settlement were adapted to this. Hortobágy became an independent village in 1966, having been separated from Balmazújváros.*

The recent development of ***Budaörs*** *(29,119) and* ***Törökbálint*** *(14,189) to the west of Budapest at the junction of the M1 and M7 motorways has been triggered by market economy factors and lifestyle changes in society 8. As early as the 1960s and 1970s, the two settlements belonged to the inner commuter belt of Budapest. Most residents worked in the capital, which was also attracting people from other parts of the country. By 1990, the population of Budaörs was almost 20 thousand, and Törökbálint had reached 10 thousand. After the collapse of communism, the direction of in- and out-migration changed. Many people moved out of Budapest as a result of suburbanisation. As the metropolitan population grew, global capital increasingly invested in the area, establishing office parks, shopping centres, depots and warehouses, largely at the expense of former agricultural land. Cheaper land prices than those in Budapest, good accessibility and the presence of a large consumer market nearby continue to bring significant benefits to businesses that settle here today.*

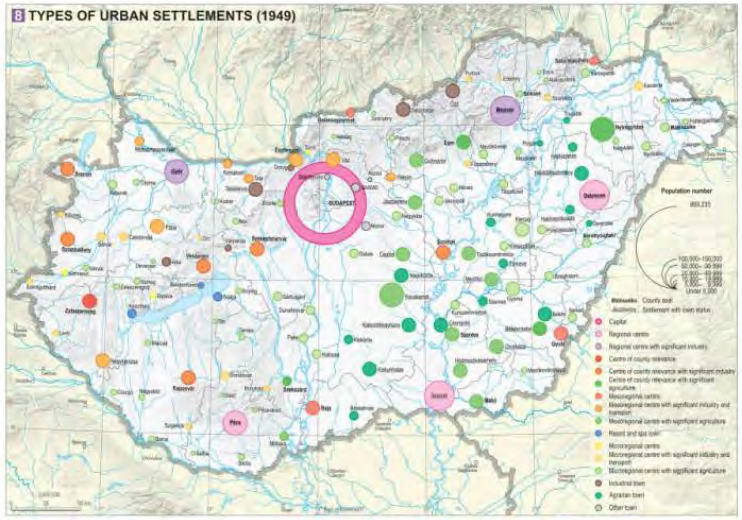
Similar factors played a role in the development of ***Floreşti*** *(Szászfenes) at the western gate of Cluj-Napoca (Kolozsvár) 9. Around one-third of the 6 thousand residents of the settlement were Hungarian when the communist regime fell. Now the settlement has 45 thousand inhabitants, who are mostly ethnic Romanians. The rapid population growth of recent years has been due to a single factor: the influx of people from Cluj-Napoca (Kolozsvár), for whom high-density residential areas have been developed. The basic institutions (e.g. education, health) are largely absent for most services, the inhabitants must travel to Cluj-Napoca (Kolozsvár).*

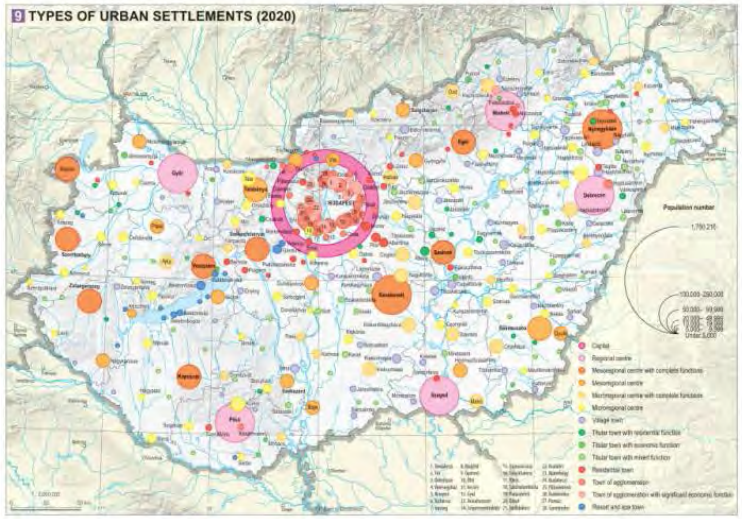


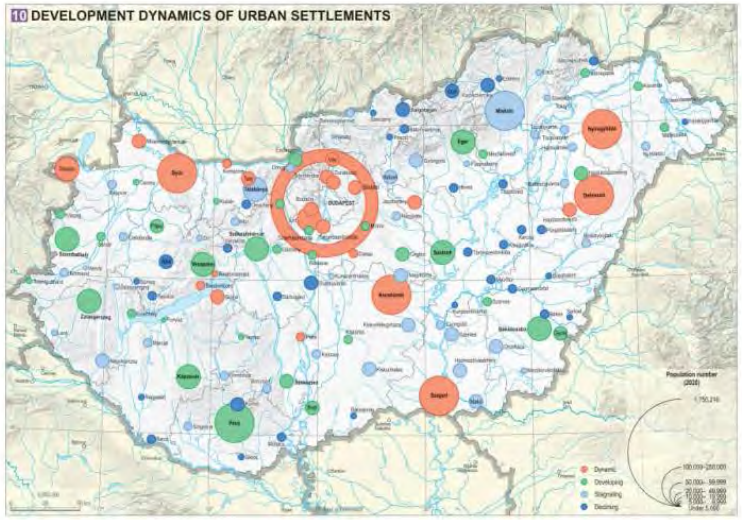
3 Hortobágy, a village with a regular layout designed by engineers

4 Floreşti (Szászfenes) near Cluj-Napoca (Kolozsvár) is an example of unbridled suburban development

IX. CITIES







gional and microregional centres had tertiary and agricultural roles.

Towns where at least 50% of earners were working in agriculture, were classified as agricultural towns. Half of the settlements with urban functions (66 of them) were included in this type. Among them we find traditional market towns and several ordinary urban centres, including Hódmezővásárhely, Jászberény, Nagykőrös, Makó, Szarvas, and Kiskunfélegyháza as well as Sárospatak, Dunaföldvár, Pásztó, Kapuvár and Marcali.

In contrast, only a small number of municipalities (10) proved to be industrial towns performing mining and industrial functions (the proportion of industrial earners was 82% in Tatabánya, 77% in Ózd and 76% in Ajka). Most of them had set out on the path of urban development as mining–industrial groupings. A few of them were traditional towns that were subsequently industrialised (Mosonmagyaróvár, Kőszeg, Sárvár, etc.).

In a few Hungarian towns, tourism also played a role among the various functions. Tourism subsequently became a new function in Keszthely and Balatonfüred. Siófok is the only town that owes its existence to tourism in the settlement system. (In 1949, Siófok had only 5 thousand inhabitants.)

Finally, towns forming parts of agglomerations were completely absent at this time (as they were merged into Greater Budapest at the beginning of 1950).

Types of cities today

In the intervening years, the economic, social and settlement system role of Hungarian cities and their classification by type have changed significantly. Urbanisation nowadays is characterised, on the one hand, by the dominance of tertiary – service – functions (in nearly half of the settlements with town status, the proportion of tertiary earners working locally exceeds two-thirds). In other words, the urban system exhibits certain uniformity (at least in terms of the occupational structure of the active population). On the other hand, municipal boundaries are being loosened, the most spectacular sign of which is the growing number of commuters (those who travel to a place of work outside the administrative border of their place of residence). This means that the occupational structure of the town-dwellers does not provide a firm base for the classification of a settlement. Since the dominant role of cities is to supply their own inhabitants and the population of their hinterland (i.e. their catchment area) with urban-type goods and services, any urban typology must include the position in the settlement hierarchy, the tasks and type of the city and its relative significance within the settlement system. Thus, the first eight urban types in our map are related to settlement hierarchy. Concerning the various types, the mesoregional centres supply county-sized or half-county-sized areas, while the microregional centres have district-level functions. 'Village towns' constitute a transitional group between the rural and urban levels, while 'titular towns' have few or no urban functions. In some instances, the main role of a town is not to provide the populace with urban goods; such settlements were classified in types established without regard to their hierarchical rank. The most common are the residential towns that form part of agglomerations. Relatively few towns were included in the industrial function group, but in recent decades the number of lakeside and other resorts with town status, mostly with low hierarchy levels and strong tourism roles, has grown.

3 Diósgyőr, with its medieval castle and ironworks, became part of Miskolc in 1945

Development dynamics of cities

The role and hierarchical rank of cities do not necessarily reflect the quality of life of the local population. Their dynamics tell us much more about their recent socio-economic development and their social renewable capacity. To determine the development dynamism of cities in Hungary, indicators were considered that reflect their demographic conditions (e.g. changes in population size, the proportion of elderly, the balance of migration), the social situation (e.g. the proportion of higher education graduates, the sum of income tax revenues), the local level of economic activity (the employment and unemployment rates, the density of businesses) and real estate market values (the average price of second-hand dwellings) in the period after the collapse of communism. Using the ranking

1 The inner parts of Budapest have ageing populations and are popular with tourists

dex is uniformly above 208, but there are districts where the number of elderly people is five times higher than that of children 7. Evidently, there are also neighbourhoods where children outnumber elderly people, but such areas are increasingly rare.

The ageing of the population of Budapest became more acute between 2001 and 2011. This is clearly indicated by the fact that there were 138 elderly people per 100 children in 2001, but ten years later there were 208. Changes in the ageing index varied within the city. A higher than average increase could be observed in the peripheral areas of Pest and in several smaller neighbourhoods in other parts of the city 8. At the same time, in a few areas the index decreased. Neighbourhoods with more youthful populations in 2011 could be found in two belts: one lay along the axis of Békásmegyer - Pestszentimre and the other in the central part of Buda near the Danube.

7 AGEING INDEX

8 CHANGE OF THE AGEING INDEX

The age structure of the population of Budapest can also be analysed according to the housing conditions and living environments. In the age composition of the City Centre, which has fewer than 80 thousand inhabitants, the very small proportion of children (6.9%) and the higher than average proportion of elderly people (21.1%) are particularly striking 9. The age structure of the inner residential zone is more favourable, as shown by the high proportion of young people aged 15–39 (42.3%). The age structure of the villa quarter of Buda is quite specific: a higher than average proportion of children (14.4%) is coupled with a high proportion of elderly people (24.2%). As a result, however, the proportion of people of working age is relatively low. The number of people living in the outer apartment zone is practically the same as in the City Centre, but the age structure of the population is more favourable here, given the higher proportion of children (12.1%) and the lower proportion of elderly people (19.1%). The most youthful age structure could be observed in the rust belt. More than 13% of the nearly 120 thousand inhabitants were children in 2011, at which time the proportion of elderly people was just 12.5%, by far the lowest of all zones. Uniquely among the zones of Budapest, the ageing index here is below 100. A large part of the residents of the city live in the housing estates (30.3%), where the age distribution is closest to the average in Budapest. This indicates that the housing estates, once youthful in age structure, are also experiencing ageing populations. Based on population share, the zone of detached houses is not far behind the housing estates (28.6%). Its age structure, however, is somewhat more favourable, mainly due to the higher proportion of children (14.4%) 3.

10 PROPORTION OF SINGLE-PERSON HOUSEHOLDS

The extremely high proportion of *single-person households* in Budapest is astonishing: 41% in 2011, compared to only 29% on average in other urban areas in Hungary. In 2011, 61.5% of single-person households were women, while 44% of single-person households were people over the age of 60. However, if the established trend continues, the proportion of young adults living alone (singles) will continue to increase in the future. The proportion of single-person households exhibited a general decrease from the inner areas towards the urban periphery 10.

An overview of household size in the various zones reveals that the proportion of single-person households was highest in the inner residential zone and the City Centre and lowest in the zone of detached houses 11. The proportion of households with four or more people exhibits a reverse spatial distribution. Thus, the proportion of this type of household is lowest in the inner residential zone and in the City Centre and highest in the zone of detached houses.

Ethnicity, religion

There are significant obstacles to studying ethnicity and religious affiliation. The first difficulty is that the available data stem from censuses carried out only every ten years. A greater problem is that ethnic and religious ties constitute sensitive personal information that citizens are not obliged to declare. Consequently, there were a significant number of no responses in the census in 2011.

In 2011, more than 20 thousand people in Budapest, or 1.2% of the city population, self-identified as *Roma*. There is good reason to assume that the actual number of Roma is much greater, but in terms of their spatial distribution, only the census data could be relied upon. Based on such data, the majority of Roma people live on the Pest side, while on the Buda side their number and share is small. On the left bank of the Danube (the Pest side), they are overrepresented in neighbourhoods lying in the inner residential area beyond the Nagykörút, especially in the impoverished districts of Terézváros, Józsefváros and Ferencváros. The Roma population share is also higher in Csepel in the city's rust belt and in certain areas of Kőbánya, Angyalföld and Újpest 12.

3 The time-honoured Wekerletelep estate still preserves its status (District XIX)

9 AGE STRUCTURE OF THE POPULATION BY ZONES (2011)

	Age 0–14	Age 15–39	Age 40–64	Age 65–74	Age 75–x	Total	Age 0–14	Age 15–39	Age 40–64	Age 65–74	Age 75–x	Total
	Number						Proportion %					
City Centre	5,610	33,558	24,795	7,991	9,048	81,002	6.9	41.4	30.6	9.9	11.2	100.0
Inner residential zone	24,789	112,690	78,743	24,210	25,978	266,411	9.3	42.3	29.5	9.1	9.8	100.0
Outer apartment zone	9,856	32,819	23,466	7,781	7,877	81,799	12.1	40.1	28.7	9.5	9.6	100.0
Villa quarter in Buda	23,383	50,566	49,033	21,581	17,682	162,225	14.4	31.2	30.2	13.3	10.9	100.0
Industrial transitional zone	15,561	53,183	35,386	8,137	6,814	119,081	13.1	44.7	29.7	6.8	5.7	100.0
Housing estates	60,240	194,960	170,146	55,944	41,763	523,053	11.5	37.3	32.5	10.7	8.0	100.0
Zone of detached houses	71,218	163,142	169,895	52,971	36,493	493,719	14.4	33.1	34.4	10.7	7.4	100.0
Budapest in total	*210,637*	*640,321*	*551,464*	*178,915*	*145,453*	*1,727,290*	*12.2*	*37.1*	*31.9*	*10.4*	*8.4*	*100.0*
Hungary in total	1,447,659	3,403,983	3,408,866	946,815	730,305	9,937,628	14.6	34.3	34.3	9.5	7.3	100.0

X.

11 STRUCTURE OF HOUSEHOLDS BY ZONES (2011)

	All households	Single-person households	Households with four or more people	Number of households where the head of the household is employed	Single-person households	Households with four or more people	Number of households where the head of the household is employed
	Number				Proportion %		
City Centre	45,531	22,773	2,674	25,087	50.0	5.9	55.1
Inner residential zone	145,275	75,430	11,109	82,356	51.9	7.6	56.7
Outer apartment zone	40,354	18,912	3,806	23,353	46.9	9.4	57.9
Villa quarter in Buda	74,875	29,777	10,453	42,218	39.8	14.0	56.4
Industrial transitional zone	55,338	25,135	6,460	34,806	45.4	11.7	62.9
Housing estates	253,088	102,728	29,376	140,731	40.6	11.6	55.6
Zone of detached houses	205,247	64,360	41,343	114,617	31.4	20.1	55.8
Budapest in total	818,708	338,115	105,221	462,168	41.4	12.8	56.5
Hungary in total	4,105,708	1,317,138	105,221	2,102,512	32.1	19.4	51.2

In total, less than 750 thousand of the approximately 1.73 million inhabitants of Budapest can be considered *religious* because they declared ties to a specific religious denomination. Although there are differences in the spatial distribution, these are not large. Indeed, the difference between the smallest and the highest values is not even double 13. Pest and Buda differ in this field too: the proportion of the religious population is noticeably higher in the latter.

Level of education, employment

The level of education of the population in Budapest has been improving for a long time, but the real breakthrough occurred in the group of *higher education graduates*. In 1960, only 6.8% of people aged 25 years or older had a higher education degree. The share was 19% in 1990 and 34.1% in 2011. In terms of the spatial differences in the proportion of those with higher education degrees, the difference between the Pest and the Buda sides is the most striking: the proportion of the population with a higher education degree is much greater than the average in broad areas of Buda, while this category is limited to small areas in Pest 14.

The proportion of people with a higher education degree increased from 23.8% to 34.1% between 2001 and 2011. This spectacular improvement, however, did not result in a noticeable change in the spatial distribution, although the proportion of people with a higher education degree increased more in districts on the Pest side 15. However, this did not affect major contiguous areas, but rather appeared in a mosaic pattern, associated mostly with newly built residential areas (e.g. residential parks).

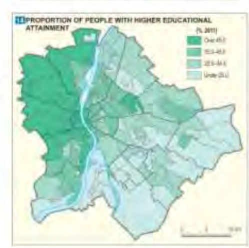
The level of education of the population can be expressed by the *number of school grades successfully completed*. This is an important indicator, especially for the working-age population, as it indicates the 'utility' of this population in the labour market. Budapest is above the national average in this respect as well: the indicator was 12.2 in 2001 and 13.3 in 2011. This means nothing less than that the average working-age person in Budapest had completed the grades necessary for the school-leaving examination. However, there are significant spatial differences behind the impressive overall average in the city, with differences of up to two or three grades between the villa quarter in Buda and some districts in South Pest 16. Since the value of the education indicator in question is most influenced by the proportion of people with a higher education degree, the spatial distribution of the two indicators is quite similar.

There are also significant differences in the *education level of the population* among the seven zones of Budapest 17. The highest proportion of those completing no more than eight grades of school is 17.4%, with the higher values being mainly in the housing estates and in the rust belt. The opposite extreme is represented by the villa quarter in Buda, where the corresponding proportion is only 8%. As many as 70% of residents over the age of 18 in Budapest have a school-leaving certificate. In this respect, the share in the villa quarter in Buda is particularly high (88.4%), while the other extreme was represented by the city's outer zones (industrial transition zone, housing estates, areas with detached houses). In terms of the proportion of people with a higher education degree, the villa quarter in Buda was again at the front, where more than 60% of the population aged 25 years or older had a higher education qualification. Even the City Centre (42.4%) fell far short of the above value, not to mention the peripheral areas.

The *activity rate* indicates the combined share of employed and unemployed people aged 15–74, the working-age population in the wider sense. The rate was 59% in 2001 and 63% in 2011. Spatial differences in the activity rate are mostly related to the age composition of the population. Its value is high in districts where the proportion of working-age people is also relatively high 18. Such areas are found mainly on the Pest side, where there are housing estates with a higher number of people of active age and renewed residential neighbourhoods belonging to the inner residential zone. The increase in the activity rate between 2001 and 2011 was differentiated spatially. The rate increased in almost all districts. In some cases, however, activity decreased, mainly due to the ageing of the population.

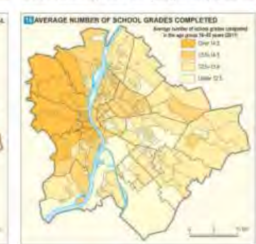
12 PROPORTION OF PEOPLE WITH A ROMA (GYPSY) ETHNIC AFFILIATION

13 PROPORTION OF PEOPLE WITH RELIGIOUS AFFILIATION



14 PROPORTION OF PEOPLE WITH HIGHER EDUCATIONAL ATTAINMENT

15 CHANGES IN THE PROPORTION OF PEOPLE WITH HIGHER EDUCATIONAL ATTAINMENT



16 AVERAGE NUMBER OF SCHOOL GRADES COMPLETED

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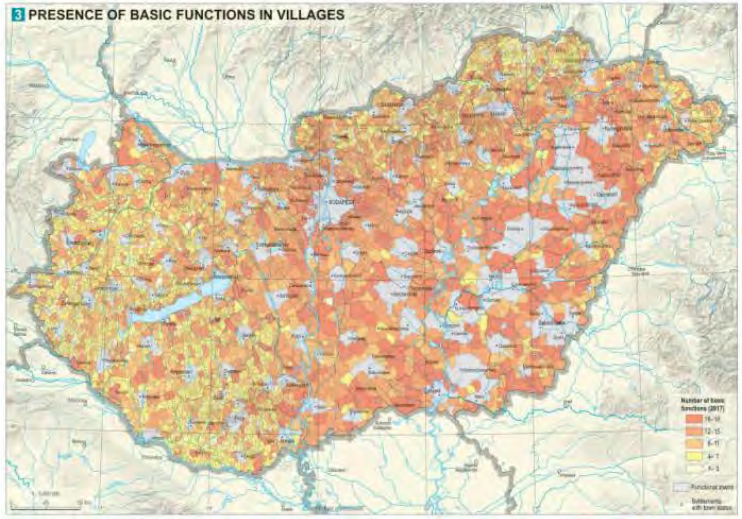
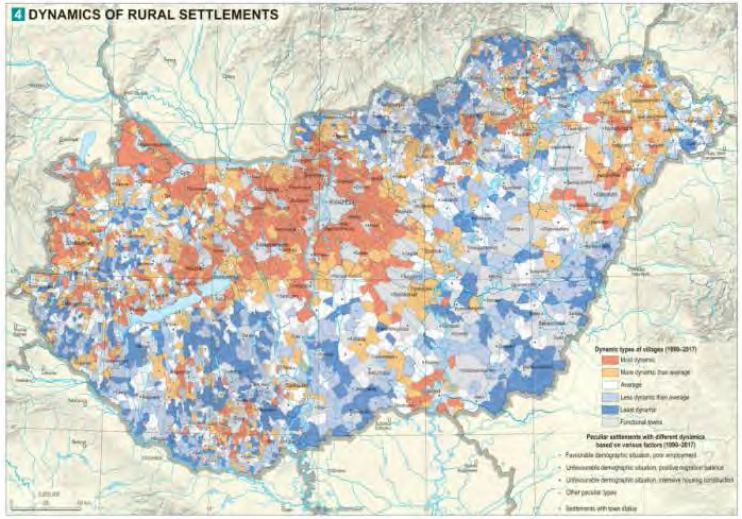
X.

XI. RURAL AREAS

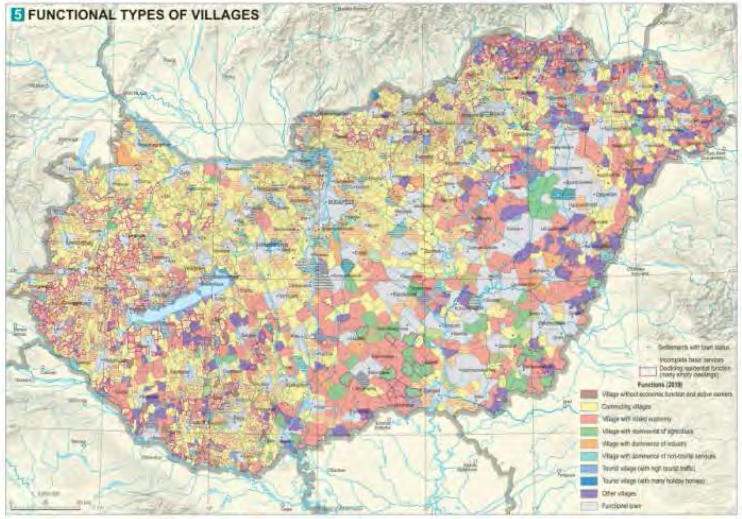
3 PRESENCE OF BASIC FUNCTIONS IN VILLAGES



4 DYNAMICS OF RURAL SETTLEMENTS



5 FUNCTIONAL TYPES OF VILLAGES



villages are still dwellings. However, many of the houses in some villages serve a holiday function. There are about 180 such villages in Hungary, and in most cases holiday homes were built for this purpose. Most such villages lie in tourist areas (Lake Balaton, Lake Velence, the spa resorts, the Danube Bend, Dunapataj, Kunfehértó, Lakitelek, Orfű and Várgesztes). In other cases, buildings that were originally designed as dwellings in depopulated villages (numerous tiny villages in the Balaton Uplands) have changed their function. The residential function appears to be partially lost in other villages as well, but in such cases many dwellings have been left empty, often to decay. In around 500 villages the proportion of empty houses is very high, mostly in areas with tiny villages (in Northern Hungary, in Western and Southern Transdanubia). About 90% of settlements with a large number of empty dwellings are tiny villages, as well as tourist places (e.g. Gyenesdiás, Csopak, Zamárdi, Cserkeszőlő, Erdőbénye) and settlements with tanyas in the Alföld (e.g. Balástya, Zákányszék, Ruzsa, Petőfiszállás).

The greatest changes have occurred in the economic functions of villages in recent decades. In three-quarters of the villages in Hungary, most people of working age work in other settlements. These villages can be considered commuting villages. This is now the most characteristic type everywhere except in the Alföld and some peripheral areas in northeastern Hungary. In around half of the villages, commuting appears only on its own; in others it is mixed with another function. Today, only 45% of villages have significant economic activity, in many cases mixed with a high degree of commuting. Agriculture, the most traditional village economic function, is characteristic in only about 140 villages (less than 5% of all villages), but it is the exclusive function in only 60 of them, mostly in the Alföld and Southern Transdanubia. The number of industrial villages is 150; in such villages there is a large factory or plant that defines the local labour market. Villages where a large number of industrial workers live but do not work locally cannot be regarded as industrial. The industrial function is exclusive in only about a third of industrial villages, while in the others it is mixed. The industrial villages form a diverse group, including traditional heavy industrial or mining settlements (Sajóbábony, Bükkábrány, Visonta, Almásfüzitő, Pétfürdő, Nagylengyel), food industrial settlements (Érsekhalma, Alsómocsolád, Bócs), some villages that became sites of industry after the collapse of communism (Mosonszolnok, Lövő, Lukácsháza) and settlements with great wineries (Villány).

There are only 60 villages where non-tourist services are decisive. Border crossing points (Záhony, Tiszabecs, Nagylak), commercial - logistical centres (Vecsés, Biatorbágy, Törökbalint, Alsónémedi), small settlements with healthcare facilities (Helesfa, Zsira, Mosdós) are included in this group. The number of villages with major tourism functions is about 125. However, in only 25 of them is tourism the sole economic function. The largest concentration of villages with enhanced tourism functions is found in the vicinity of Lake Balaton, but many of them are settlements with spas, small villages in the mountains and hills [1], and even villages with no significant local attractions where the tourism function is limited to the provision of accommodation (Irota, Patca, Bikács and Gosztola).

About 700 villages, most of them in the Alföld, provide a significant amount of local employment, but with none of the sectors standing out. Around half of them are characterised by out-commuting. In contrast, there are 175 villages, mostly in northeastern Hungary, where there is enough local labour but without significant out-commuting or a sufficient number of local jobs. Finally, there are almost 100, mostly tiny, villages with hardly any (non-public) employees and no jobs. These villages lost their economic functions in all areas; they have become almost entirely inactive. Such villages occur in greatest numbers in the counties of Borsod-Abaúj-Zemplén, Baranya and Somogy, with the highest concentrations in the Cserehát region. Except for some extremely ageing tiny villages, all these villages have a high proportion of Roma inhabitants.

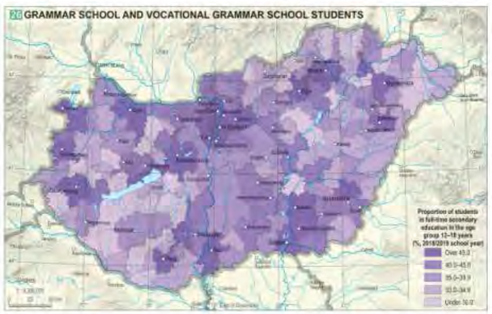
[1] *Many livelihoods depend on tourism in the small North Hungarian village of Hollókő, a World Heritage Site (Nógrád County)*

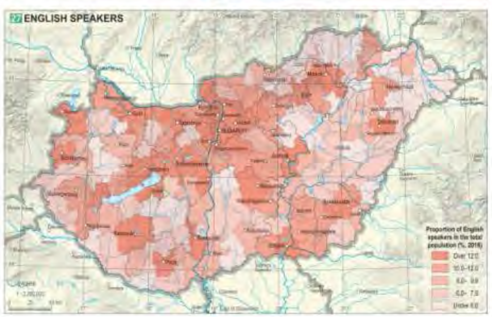
Service provision in areas with tiny villages – the districts of Lenti and Letenye

Two districts in Zala County near the border, the districts of Letenye and Lenti, are presented as examples of the presence – and absence! – of basic services and facilities in settlements in areas with tiny and small villages [2]. Lying at an elevation of 240–350 metres,

XII. LIVING CONDITIONS, QUALITY OF LIFE


25 CARS IN THE CARPATHO–PANNONIAN AREA


26 GRAMMAR SCHOOL AND VOCATIONAL GRAMMAR SCHOOL STUDENTS


27 ENGLISH SPEAKERS

also stands out. These areas are closely followed by the regional centres and the language teaching centres XII. 1. 25. The spatial structure of foreign language knowledge in Hungary is closely related to education, settlement size and access to educational infrastructure XII. 2. 2. 15.

Literacy is also linked to the barely definable concept of culture consumption, which can possibly be measured by examining and quantifying *participation in cultural events* XII. 1. 28. Settlements with the highest level of culture consumption tend to have small populations and to host major festivals (e.g. Kapolcs with the Valley of Arts, Tornabarakony with its folk art festival). Here, there is an ambivalent effect on local quality of life: on the one hand, the cultural events have a positive impact on the local economy; on the other hand, increasing attendance rates can have negative social and environmental impacts, which may impair quality of life.


5 *Book launch*

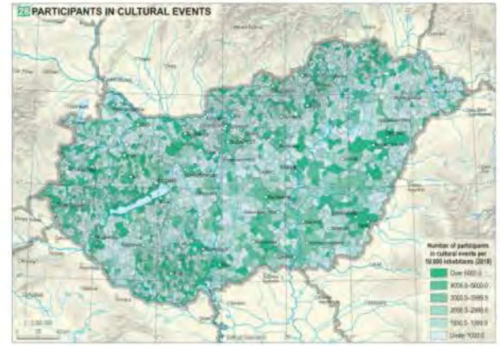
A consistently high level of culture consumption is most evident in Hungary's major cities 5. Here, such consumption may again be associated with the level of education, a higher proportion of people of high social status and a broader range of events. The well-known tourist destinations (e.g. Őriszentpéter, Bük and Hollókő), the centres of wine regions (e.g. Tokaj and Neszmély) and the shores of Lake Balaton likewise have outstanding values. Culture consumption is also a feature of those regions that have sizeable ethnic minority populations. This applies in particular to the ethnic German regions in the counties of Baranya and Tolna (e.g. Pécsvárad, Ófalu and Óbánya).

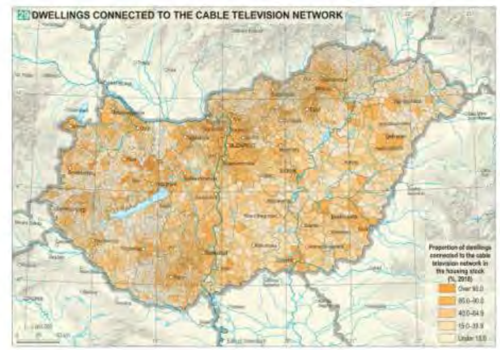
Our digital world – access, use and well-being

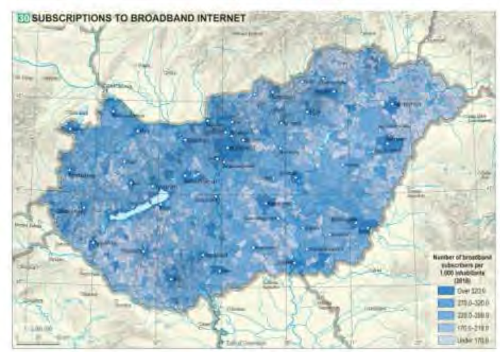
The digital world is of growing importance in the 21st century. Access to ICT networks and to the necessary devices is an increasingly important aspect of an individual's quality of life. Moreover, people need to be equipped to use such devices and pay for them (digital well-being). Many claim that humanity has entered the era of the 'information society', in which the most important resource is the ever broadening range of systematisable and analysable information 6.

Internet access of sufficient quality and the existence of services linked to it are becoming a basic need in the European Union. Nevertheless, service providers are not in a position to provide everyone with high-quality internet access, and this is true both in Hungary and in the rest of the European Union. Network coverage is not yet complete, and replacing older technologies is time consuming and capital intensive. However, a universal aim in the European Union is to ensure that everyone has access to a network connection guaranteeing download speeds of at least 30 megabits per second (Mbps) and to provide a network connection of at least 100 Mbps to at least 50% of subscribers. In Hungary, nearly 75% of subscribers had an internet connection guaranteeing download speeds of at least 30 Mbps in spring 2020. The average speed of the internet in Hungary is also high in a global comparison: this reflects the advantages enjoyed by 'late arrivals', whereby in Hungary modern technology could be used in the first place and there was no need to accommodate or eliminate an outdated network.

The existence of a network, however, does not necessarily mean usage, as this will depend on a number of social factors. According to surveys, people in their late 60s have fewer digital skills in Hungary: still, more than half of them can be considered regular internet users, but in the case of those in their 70s, this is less than 25-30%. Even in the most advanced and active societies, a small percentage of people – the so-called 'digital illiterates' – remain. Such people are unable or unwilling to use any information communication tools or channels. They leave no digital footprint (all the data generated by the online activities of users). Failing to acquire at least basic user skills at the right age VI. 5. 6. VI. 5. 8. is mainly related to the family background VI. 7. 17. and the impact of the school system. Furthermore, financial reasons VI. 7. 14. VI. 7. 16. may also mean that the acquired skills were not practiced because the right tools could not be purchased. Such people can only find employment in an ever-shrinking part of the labour market and get mostly low-prestige, low-paid jobs VI. 7. 18.


28 PARTICIPANTS IN CULTURAL EVENTS


29 DWELLINGS CONNECTED TO THE CABLE TELEVISION NETWORK


30 SUBSCRIPTIONS TO BROADBAND INTERNET


6 *Online education using mobile devices at a university*

At the beginning of the digital age (1990s), most users in Hungary were men, but by the first decade of the 2000s the differences between the two sexes in this field had disappeared. However, education remains a dividing line: those who are considered functionally illiterate (a fifth to a sixth of each age group) can only use digital tools at a basic level; this group takes advantage of only a few of the services available. The relationship between income level and digital activity is similar VI. 5. 7. XII. 1. 30.: only 70% of the lowest income decile (the poorest one million people) are considered digitally active, compared with at least 90% of the decile above.

Digital activity and provision in Budapest and its surroundings stands out in most indicators; it is 1.5 times the national average. Outside Budapest, differences between the country's various regions are moderate, especially compared to other social and economic indicators. Differences are greater in the settlement hierarchy, especially when a comparison is made between Budapest and small villages, with the differences being three- to fivefold in some cases. The relationship between knowledge of English and the level of digital activity is clear XII. 1. 27.

Broadly, the same spatial structure is shown by *the proportion of broadband subscribers* and *dwellings connected to the cable television network* XII. 1. 29. XII. 1. 30. Regional differences in the development of landline and mobile networks and in the use of devices have decreased considerably. This is important because reliable, fast internet access can make many tasks in life easier (e.g. purchases and the payment of bills and taxes). The Covid-19 pandemic in 2020 and 2021 has brought about significant changes in digital everyday life (e.g. working from home, online education, watching movies, listening to music and ordering food), and most of these changes may become a permanent part of our lives.

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