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## ANALYSIS OF COMMUNITY ASPIRATIONS AND AMBITIONS IN THE LIGHT OF SPATIAL CONNECTIONS IN SELECTED VILLAGES OF BORSOD-ABAÚJ-ZEMPLÉN COUNTY<sup>3</sup>

### Abstract

The primary research question of our study is how the residents and communities of villages with populations below 2,000 experience life on the periphery. Our study approaches this issue primarily through the classical concept of spatial connections, as our surveys essentially measure the significance of distance from central areas and explore what strategies and directions are possible for reducing segregated living conditions in these settlements. Therefore, in this study, alongside the geographical concept of spatial connections that cover everyday life, the dual value pair of centre and periphery (their coexistence) also provides an important conceptual framework. We highlight the world of social convergence supported by project funding and address the coping strategies characteristic of life on the periphery. Our study contributes to the measurement of an important variable in rural development, namely the population retention capacity and the capability-retaining population, as well as the measurement and social science analysis of social convergence, which has strengthened into a policy in the past decade.

**Keywords:** spatial connections, population retention capacity, capability-retaining population, Borsod-Abaúj-Zemplén County, geographical periphery, segregated living conditions.

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## Introduction

In our study, we aim to present the experiences, life situations, and opportunities of residents and communities in marginalized, peripheral villages of Borsod-Abaúj-Zemplén County. We approach this issue through the concept of spatial relationships, examining not only geographical characteristics but also social aspects. This is because behind favourable or unfavourable geographical locations lie community actions and coping strategies, whose understanding can inform local strategies and sectoral developments. These community connections are key determinants of the lifestyle characteristic of the periphery and the everyday survival strategies that communities in segregated areas employ to achieve their goals.

Furthermore, we focus on the centre-periphery dichotomy, as our research seeks to measure and demonstrate the significance and impact of distance from the centre – both in terms of space and time – on these marginalized settlements. This stands in contrast to more urbanized areas with better connections. External challenges, such as infrastructural deficiencies (whether in transportation or other services), can exacerbate existing problems when neglected: unemployment may rise, participation in the primary labour market may decrease in favour of public employment, and educational outcomes may remain poor, further entrenching poverty and deprivation within the peripheral society.

## Conceptualisation of rurality

What can be called a “rural area”? Experts agree that there is no definitive answer to this question. The main reason for this is that various sectors apply different approaches (economic, agricultural, geographical, sociological, etc.), and a key factor is the constant change of rural areas in both space and time (G. Fekete, 2013).

Although attempts have been made to define the concept of the countryside in other countries (such as in the United States and by the EU-OECD), interest in the topic in Hungary only increased after the regime change, including from a political perspective, which is when rural studies began to truly flourish.

The word “countryside” itself has multiple meanings and is used in everyday language in a relative sense. Geographically, it can refer to an “area that is homogeneous according to certain criteria” (G. Fekete, 2013: 6), but some people „simply” understand it to mean everything that is not the capital, Budapest.

The internationally widespread term “rural” also refers to the countryside in comparison to urban areas. However, according to European interpretations, not every village (which in the Hungarian translation is referred to as “countryside”) falls under the concept of a rural micro-region. *The European Charter of Rural Areas* (1996) defines a rural area as one where agricultural,

forestry, and nature conservation activities are significant. Additionally, the so-called population density indicator plays a role in defining rural areas, with a maximum of 100 inhabitants per km<sup>2</sup> in the EU, 150 inhabitants per km<sup>2</sup> according to the OECD, and 120 inhabitants per km<sup>2</sup> in Hungary (G. Fekete, 2013).

Bálint Csatóri, a prominent researcher of rural studies in Hungary, defines rural areas as those where the population density of settlements is a maximum of 120 inhabitants per km<sup>2</sup> (Varga cit. Csatóri, 2021).

Another approach to defining the concept of the countryside is the centre-periphery relationship, which aligns best with the perspective of our research. According to this perspective, the countryside struggles with quality-of-life disadvantages and lacks self-determination, while also representing the agglomeration of regional, administrative, and functional centres (Farkas et al. cit. Glatz; Sarudi, 2015).

However, this approach can be considered relativistic from several angles: virtually anything can function as both a centre and a periphery, as the concept is measurable on multiple levels. For instance, county-level cities have their own central role in relation to the smaller surrounding settlements, but when compared to the capital, they are already on the periphery. The perception of centre-periphery relations also varies among different demographic and social groups (the wealthy versus the poor, active workers versus students, etc.).

This interpretation can be further nuanced by using development-related “synonyms” of the centre-periphery concept, which will play a significant role in the research part of our research and are therefore worth mentioning. Such “opposing pairs” include city–countryside; developed–underdeveloped; central zone–border peripheral zone (Farkas et al. cit. Csatóri –Kanalas; Kanalas – Kiss, 2015).

## **Geographical and Social Landscape of Borsod-Abaúj-Zemplén County**

The settlement structure of Hungary is highly diverse, with different regions characterized by varying types of settlements. The population is predominantly concentrated in cities, with seventy percent of the population living in urban areas or settlements with a similar or higher administrative status. Micro villages, which make up one-third of the country’s settlements and play a significant role in our research, are common in hilly and mountainous areas. However, only 3% of the population lives in these settlements, which have fewer than 500 inhabitants (KSH, 2015).

In Borsod-Abaúj-Zemplén County, the county capital, Miskolc is the only higher-level centre, with a population of 147,000 (KSH, 2022). Additionally, the county has two mid-level centres, Ózd and Kazincbarcika, which owe their status to being important industrial cities during the socialist era. Other urban settlements are mainly located around Miskolc, as well as in the western and

southern parts of the county. The region under study can be classified as one of the most under-urbanized areas of the country. Although several smaller settlements have received city status in the “Sárospatak–Encs–Edelény–Putnok region” north of this urbanization gap – including Szendrő, Gönc, Abaújszántó, and Pálháza (Osgyáni, 2008: 227) – they do not fully serve the traditional roles of cities. Their roles are more at a micro-level rather than fulfilling the functions of district or sub-regional centres. The number of villages and micro villages is high, with the latter particularly common in the northern regions and in the Cserehát area. This is also correlated with the fact that employment, income, and housing indicators in these areas are less favourable compared to the national average (KSH, 2015).

Two socio-spatial processes contribute to the differentiation of the region: while the middle class is strengthening, lower social strata are becoming more segregated within settlements. Additionally, the ethnic minority population is becoming more prominent, particularly in the eastern settlements of the agglomeration, which has led to the designation of this area as the “eastern slum belt” (Kókai – Kristóf, 2018).

The most underdeveloped, impoverished, and deprived villages – those in greatest need of assistance – are typically located in areas farther from the county capital. The continuous outmigration from these areas significantly contributes to their decline, as many moved to the industrial areas of Miskolc, Ózd, and Kazincbarcika during the socialist era in search of better livelihoods. The depopulation of these regions is thus closely tied to their economic, infrastructural, and social conditions. The region’s infrastructural underdevelopment is illustrated by the fact that drinking water supplies were only developed in the 1990s; in 1990, 98% of the settlements in the Inner-Cserehát region did not have access to healthy drinking water. There are also severe deficiencies in commercial, educational, and healthcare services. Social conditions have deteriorated, with a significantly aging population. Even settlements with a lower average age cannot “breathe a sigh of relief”, as the outmigration is further exacerbated by the phenomenon of “brain drain,” whereby the intellectual elite migrate to more developed cities offering better livelihoods. Overall, the region is drifting further from the centre and sliding deeper into underdevelopment and poverty (G. Fekete, 2005). It is both a cause and a consequence that employment rates are low, educational attainment is limited, and unemployment rates are high in disadvantaged and isolated regions. This raises both economic and social issues: as mentioned, the migration of individuals with higher education from these areas to the capital, other major educational centres, or even abroad (Boros, 2011) may hinder the development of the intellectual employment sector, while also generating labour shortages in critical sectors such as healthcare and education. The latter has a direct impact on the educational attainment of the population, as teacher shortages (along with other important factors) mean that few settlements are able to maintain secondary schools. Consequently, the population changes:

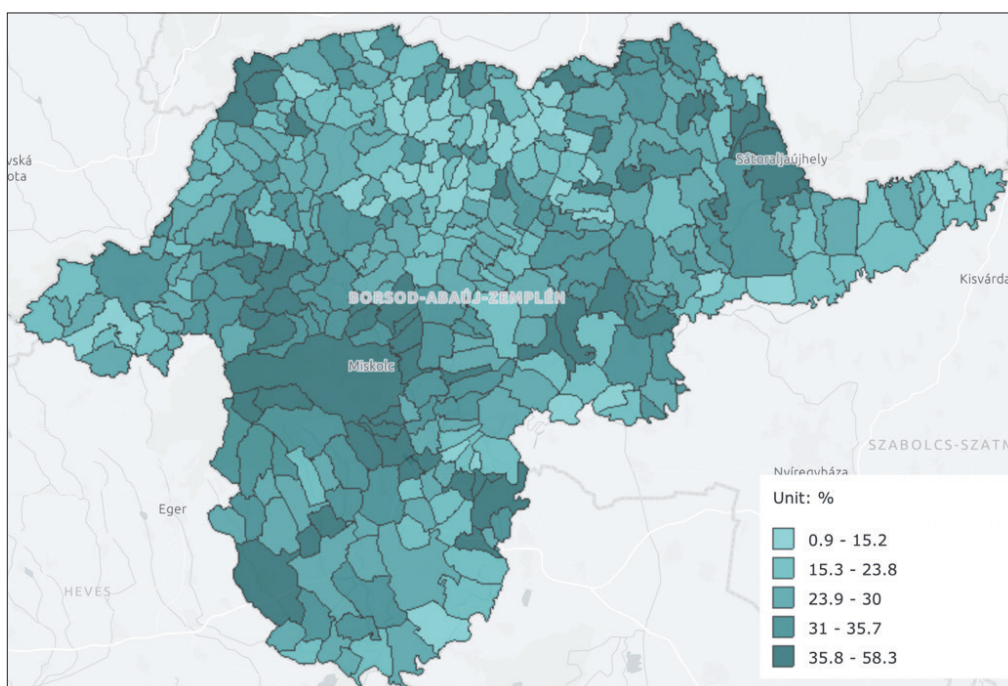
higher-educated individuals are replaced by families with poorer social backgrounds, often of Roma descent, and generally lower socioeconomic status (Boros, 2011).

### Educational overview

Education is a key arena for upward or downward social mobility, serving as a secondary socialization space where individuals can observe and either reinforce or reject their strategies for emulating classes that are vertically above (or perceived as horizontally equal to) their starting social class. A critical factor in this process is whether individuals become familiar with the “language” and communication of the school as a social institution, and whether they learn the patterns necessary for social mobility.

In her study, Judit Lannert (2014) refers to a report analysing the differences in results from the 2006 competence tests between eighth-grade Roma and non-Roma students in Hungary. The economists conducting the study emphasize that school performance is primarily influenced by social factors rather than ethnic categories. According to the research, the academic lag of Roma youth can almost entirely be attributed to poverty, the lack of education of their parents, their exclusion from the labour market, and the disadvantages arising from these conditions (Kézdi – Kertesi, 2011). In the region we examined (Borsod-Abaúj-Zemplén County), the proportion of Roma residents is high, and, based on the 2022 census data from the Hungarian Central Statistical Office, there is a clear difference in educational attainment between rural and urban areas in the county.

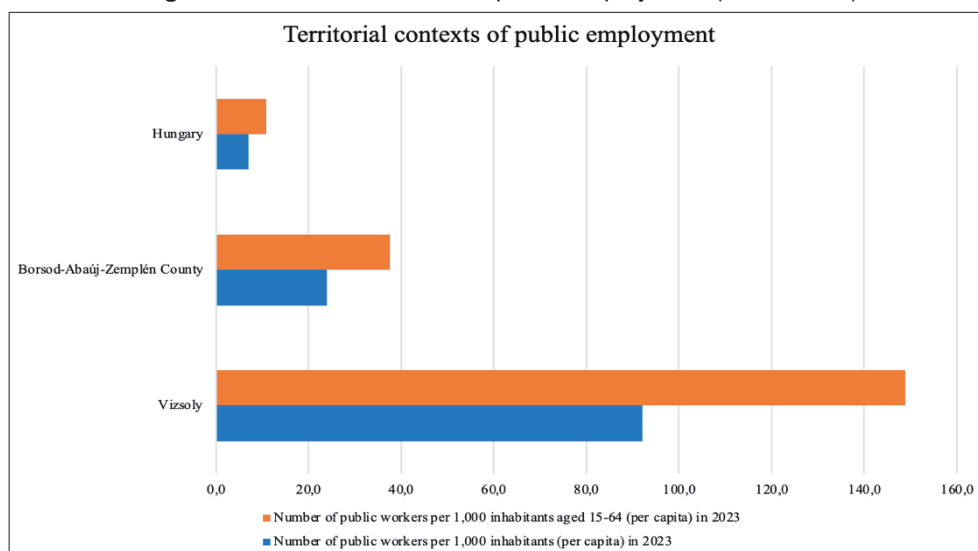
**Figure 1:** Proportion of persons completed secondary level with final examination in population aged 18–X, 2022 (%), (KSH, 2022)



## Employment and labour market overview

Alongside education – and perhaps as a consequence of it – the labour market conditions are a crucial indicator of individuals’ social position and connections. Examining this is of paramount importance, as employment and labour market participation not only influence the economic and social standing of people and the country but also serve an integrative function. Employment plays a role in socialization and norm formation while providing the material goods necessary for subsistence (Császár, 2021). This is particularly significant in regions where, prior to 1990, heavy industrial development and mining provided employment for nearly everyone. Poor labour market conditions contribute to deprivation and marginalization, with unemployment disproportionately affecting peripheral, micro village, and rural areas.

**Figure 2:** Territorial contexts of public employment (TEIR, 2023)



These regions are characterized by a greater reliance on the supported labour market and public employment programs than on the primary labour market. The diagram above illustrates this phenomenon at a regional level, showing that the proportion of public employment is higher in Borsod-Abaúj-Zemplén County, as well as in one of our sample municipalities, compared to the national average. Due to the previously mentioned socio-economic factors, it is common in peripheral areas that the low-skilled population has employment opportunities only within public employment.

## Segregation: A Unique Social and Spatial Phenomenon

Rudolf Andorka defines the concept of segregation as follows: “Segregation refers to the phenomenon whereby different social classes, ethnic groups, etc., are strongly separated from each

other within a settlement. Segregation is often accompanied by significant inequalities in income and the infrastructure of the settlement” (Andorka, 1997: 194).

According to Ferge’s approach, segregation is a phenomenon based on significant social differences, wherein groups with higher status limit the opportunities for free choice of those with lower status, thereby compromising their equality of opportunity, potentially leading them to full marginalization (Ferge, 1991).

If we want to define segregated areas statistically, we can rely on the Hungarian Central Statistical Office’s (KSH) segregation index, which delineates segregated areas based on multi-level data analysis. The criteria include that “the proportion of the working-age population with no more than primary education and the proportion of those without regular employment income must exceed 50% for both indicators,” and the settlement must have a population of at least 50 people (Methodological Handbook, 2020).

Residents living in segregated areas face fundamental issues related to their quality of life, often lacking access to basic services such as utilities or healthcare. The life situations of communities living in segregated areas are characterized by a state of deprivation (Szabó, 2009).

### **Spatial relations in the light of mobility poverty**

In this paper, we define the concept of spatial relations as a comprehensive term encompassing both the social and geographical connections of communities experiencing segregation (Szabó, 2008). When examining these geographical and socio-spatial relationships, it is essential to consider the interdependence and mutual influence of three dimensions: space, place, and time.

Rezső Mészáros, in his analysis, explains that researchers in the field placed relatively little emphasis on the time factor until the last third of the 20th century. Therefore, the introduction of time-geography and the dimension of time, a concept attributed to Swedish geographer Hägerstrand, marked a significant theoretical renewal. Hägerstrand’s theory focuses on exploring the role and interconnections of space and time through the lens of human activities and movements. In the work of several researchers from the Lund School, such as Carlstein, who studied the relationship between space and time using methods from human ecology, the concepts of constraints and limitations play a central role. These concepts reflect the idea that the finite nature of time influences people’s everyday decisions and opportunities for action, which are shaped by various constraints (Mészáros cit. Hägerstrand; Carlstein, 1989).

Hägerstrand categorizes these constraints into three types: *capability constraints*, which refer to individual limitations (physiological needs essential for life, the indivisibility of individuals – as people can only be in one place at a time – and material factors, such as access to a private car); *authority constraints*, which pertain to external rules and regulations; and *coupling constraints*,

which refer to the conditions that allow groups of people to coordinate and engage in activities together (Yu – Shaw, 2007).

Additionally, the time-consuming nature of mobility, along with the presence and dynamics of social rules and power relations, can also restrict individuals' range of movement, resulting in competitive situations (Mészáros, 1989). These constraints are even more pronounced in peripheral areas, where distances tend to be greater (due to the limited accessibility of employment and educational destinations), and infrastructure is in poorer condition and less equipped. In other words, the opportunities available are fewer compared to more developed, central regions. While continuous modernization of infrastructure and transport systems in urban areas has made mobility less time-consuming, peripheral, lagging regions do not experience the same level of development. Researchers, when considering modernization, have largely confined their understanding of spatial relations to urban areas and have hesitated to venture into regional analyses. This disparity further exacerbates social and economic inequalities, as even smaller distances in peripheral areas require more time, and the dependence of the population on one another or on external support can increase the temporal and financial costs of mobility.

In the following sections, we will present specific concepts and issues that particularly affect the peripheral regions – such as the county featured in our research – and may negatively impact people's spatial relations. In the *Results* section, we will provide deeper insights into these challenges through examples and experiences.

### **Transportation accessibility gap (infrastructural disadvantages)**

In this chapter we introduce two key conceptual frameworks: socio-transport geography and transportation segregation.

Transportation acts as a connecting link in people's lives, and thus, beyond mathematical and numerical analyses, it is also necessary to examine it from a human-centred perspective (Szabó, 2009).

According to Tiner's definition, one of the primary tasks of socio-transport geography is "the examination of the spatial movements (transportation) of different social groups, based on their differing interests, and the various spatially relevant impact mechanisms triggered by these movements" (Tiner, 1986: 219).

Socio-transport geography can essentially be studied anywhere; however, different aspects may come to the fore depending on the spaces or regions (e.g., rural/urban areas) and demographic characteristics (age, gender). At this point, it is worth introducing the concept of transportation poverty (or mobility poverty) and discussing those who live in disadvantaged transport areas or regions excluded from transportation services.

Transport exclusion can be most simply defined as “the inability of an individual to travel to a destination at the time others can do so without difficulty” (Lieszkovszky cit. Pyrialakou, 2018: 90-91).

Tiner, in his research in Borsod-Abaúj-Zemplén County, examines the destinations and reasons for which residents leave their homes, such as commuting for work, education-related travel, shopping, accessing residential services, and other types of trips (e.g., healthcare, recreational, or administrative purposes) (1983). How the residents we studied manage these trips nowadays and whether they encounter problems – that is, whether transport exclusion exists – will be discussed later in the results chapter.

What disadvantages are faced by those, who live in settlements with less favourable transport connections? Schoolchildren who are forced to commute may suffer academically due to long travel times, as they must wake up earlier and may be sleep-deprived. In many cases, their participation in after-school extracurricular activities is also hindered if they have difficulty or are unable to return home (Lieszkovszky, 2018). Their challenges could be mitigated by the support of relatives, friends, or acquaintances, through carpooling. However, as Lieszkovszky (2018) notes, this is not a long-term, sustainable solution, as it is inconvenient and leads to dependency.

Another frequent reason for leaving a settlement is shopping, as most micro villages do not have large grocery stores or shopping centres. Often, the problem is that these locations do not have direct bus connections, making it difficult for those without personal vehicles. This everyday activity becomes particularly burdensome for mothers who, in addition to working and raising children, must also manage household tasks, often by bus, as in single-car households, the vehicle is typically used by the partner during the day (Lieszkovszky, 2018). In Borsod-Abaúj-Zemplén County, there are 361.4 cars per 1,000 inhabitants, compared to the national average of 426.5 cars per 1,000 people (TEIR, 2022).

## Research Questions and Methodology

In this study, we investigated how transportation, and other infrastructures influence the social opportunities of settlements and the mobility of their residents. We sought to answer the following questions:

- Does the availability of public transportation in a settlement determine the choice of employment opportunities? If public transportation is accessible and aligns with daily commuting routines for work or school, the settlement is not considered isolated. The quality of public transportation defines the openness of communities. Does this openness also relate to the settlement’s ability to retain its population? The opinions of interviewees reflect specific individual/family settlement dynamics.

- The main impact of spatial decisions/developments appears in strengthening the “capability-retaining population” and the “population-retaining capability” at the settlement level. An individual’s orientation and activities within society are facilitated by their familiarity with their living environment, which they take for granted. Thus, these living environments also define small-scale, localized communities. Is someone who moves confidently within a broader living environment better equipped to connect with new information and visions?
- Is it so, that those who are willing to travel or commute are also more likely to find employment?
- Do large companies first transport workers from closer areas via company buses? If so, does this lead to accessibility inequalities between settlements? Are local governments addressing this through innovative solutions (e.g., organizing bus transportation, rural caretakers’ buses, etc.)?
- Among community-based solutions, “settlement carpooling” is built on trust. For residents with cars, this asset can represent significant capital. Is there an established institution of carpooling in the settlements, and if so, how widely is it utilized?

### **Overview of expert, focus group, and individual interviews**

The data comes from a research study focused on settlements involved in EFOP-1.6.2 and 2.4.1 programs aimed at promoting social inclusion and reducing segregated living conditions. These structured interviews, composed of closed-ended questions, were conducted nationwide in 2020. Of the 76 structured interviews conducted nationwide, 21 were carried out in Borsod-Abaúj-Zemplén County. In each settlement, one expert interview was conducted with the mayor. It is important to note that while these interviews were in a “questionnaire format” with structured, closed questions to ensure quantifiable answers, they cannot be strictly categorized as surveys since they also included open-ended questions. Additionally, the interviews were conducted by an interviewer, allowing for the emergence of important yet indirect topics that were not the primary focus of the study. The questions mainly focused on commuting to work and school and assessed the challenges and opportunities of public transportation, while also soliciting potential solutions.

The second part of the research consisted of focus group interviews and one individual interview. These are cross-sectional studies in terms of their temporal dimension, representing a “snapshot” of the given moment and were not repeated. The interviews were semi-structured, featuring guiding open questions, with interviewees often delving into detailed aspects on their own during the conversations. These discussions were conducted in three segregated settlements in Borsod-Abaúj-Zemplén County (Vizsoly, Szendrőlád, and Vilmány). We asked participants to reflect not only on their own experiences but also from the perspectives of their family members and friends, as our research aimed to address the daily challenges they face – issues that are frequently discussed within their social circles. In many cases, they share and attempt to overcome these difficulties together.

The interviews revolved around their personal situations and local perspectives, with particular emphasis on transportation issues.

## Results

The interviews, in line with the aims of the research, assessed the characteristics of geographical and social spatial relations, employment pathways, school attendance, and transportation conditions. In addition to these topics, during the individual and focus group interviews, we also addressed the complex issue of population retention capacity and the retention of skilled individuals, specifically, we explored how much the respondents enjoy living in their village, whether they would consider leaving, and whether they believe others, particularly those with higher qualifications, are leaving the settlement. The sample settlements implementing the complex segregation elimination program in Borsod-Abaúj-Zemplén County are micro villages and villages in terms of population size. The least populated is Felsőgagy, while the most populated is Szendrőlád. The average population size is 1,008 inhabitants.

In the settlements, the most important local employer is the municipality: in nearly all the villages included in the sample, it serves as the primary employer. The second most common employers are local small businesses. Approximately one-third of the working-age local residents are employed by the municipalities as their primary employer, typically through public employment programs.

In most cases, municipal work means unskilled labour, with workers participating in public employment programs. Factories, plants, local institutions, and small local businesses also employ both unskilled and skilled workers. While the focus group participants partially confirm the data obtained from expert interviews, they nonetheless express some “hope” and envision potential change.

*“More and more people are going to work at places like Bosch or Joyson, for example. So it’s becoming increasingly common that people don’t want to make a living from public employment, not from 54,000 HUF, but rather they are moving into the real labour market. Since the regime change happened (in the village, the term ‘regime change’ refers to changes in local power – authors), about six years ago, people have turned in the right direction and realized that there is work beyond public employment. Today, in every single family, I could point out someone who is not living off public employment but has entered the real labour market.”* (middle-aged man from Szendrőlád)

Although the level of education among young people is reportedly showing an improving trend according to our interviewees, they also noted that many still have low educational attainment. As a result, even if they wish to work, they are often excluded from the labour market.

*“These people can’t really enter the real labour market. What are they supposed to say to the HR lady? ‘I have three years of elementary school and four kids...’”* (middle-aged man from Szendrőlád)

*“There are several people in my family who went and tried... They tell what qualifications they have, what work they’ve done, and then say, ‘Well, I was in public employment for who knows how many years,’ and they’re told, ‘We’ll call you back...’”* (middle-aged woman from Szendrőlád)

Those who do not work locally, in the village, most frequently commute to Miskolc for work (52.4%). However, in the case of villages adjacent to a larger town, it often occurred that this neighbouring settlement was designated as the primary place of employment (commuter destination): from Hejőszalonta and Kesznyéten to Tiszaújváros, from Lácacséke to Sátoraljaújhely, and from Ároktő to Mezőcsát. However, there are also those who do not commute daily between a settlement within the county and their home, but work further away, for example, in Transdanubia or abroad. These individuals return home less frequently.

*“They work in a 10-4 rotation, meaning they work 10 days and spend 4 at home, or they work on a monthly basis, coming home once a month.”* (middle-aged man from Szendrőlád)

The most frequently used means of transportation between home and workplace are long-distance buses and employer-operated buses (the usage of these two is nearly equivalent), with many also commuting by private car. The latter was indicated by the mayors of 13 out of 21 settlements as a more common mode of transport used by the residents of their respective communities.

The only settlement where, according to expert interview data, people do not use their personal vehicles at all is Szendrőlád. However, during the focus group interview with residents of Szendrőlád, several participants mentioned knowing individuals who commute to work by car, though none of the participants themselves did so. The bus operated by the local government is only utilized for commuting to work in Fáj.

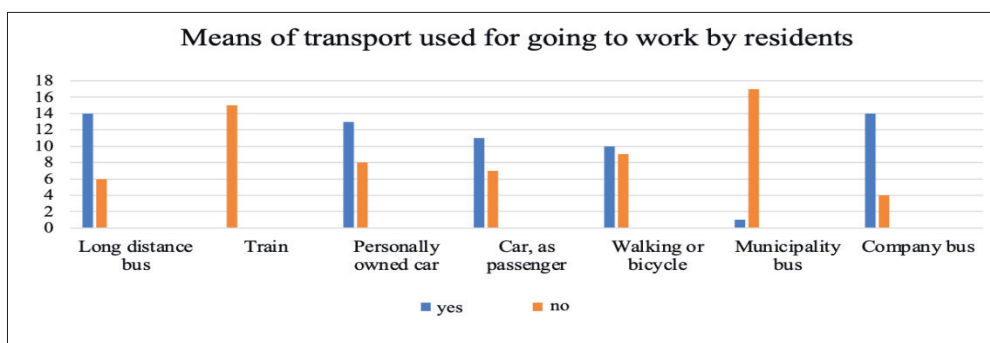
From the focus group and individual interviews (and earlier, from informal, unrecorded field conversations), we learned that company-operated buses, functioning as shuttle services, transport workers not only from nearby settlements. However, despite the availability of transport options, the conditions are often demanding, for example, workers commuting from more distant settlements via the shuttle service may spend hours traveling before and after working hours. We observed no solutions or attempts to address this issue from the local governments. As mentioned earlier, the use of the municipal bus for commuting to work is not common.

A potential solution could be a ‘settlement carpooling’, but opinions on this vary among respondents. The diagram shows that in several settlements, residents commute to work by car as passengers. This could also be viewed as a category of local trust, as a car is considered a significant resource in small communities. The use of this resource naturally provides convenience and independent transportation.

The graph below shows whether each mode of transport is used by the citizens of the municipality.<sup>4</sup>

<sup>4</sup> Not at all used, rather not used = no; rather used, fully used = yes

**Figure 3:** Means of transport used for going to work by residents

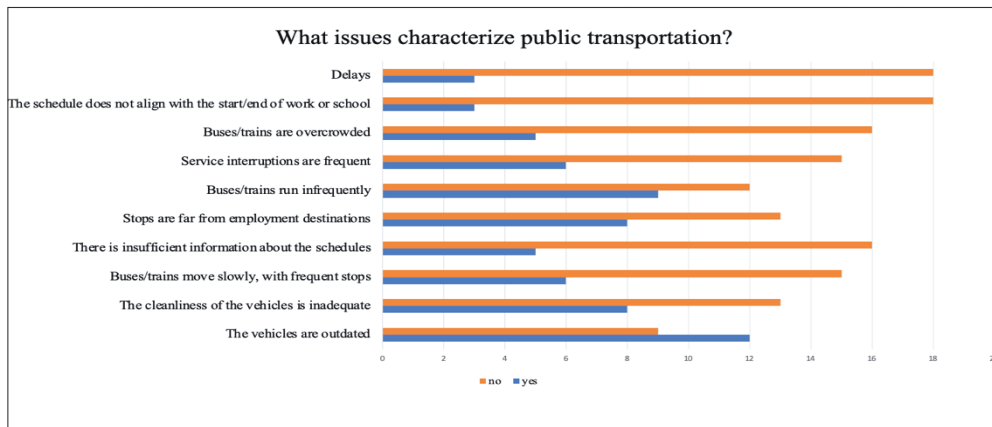


The most highlighted issues with public transportation are the outdated vehicles and the infrequent and irregular schedules of the services. However, the primary concern varies from settlement to settlement. This can depend on factors such as the distance of the village from the district or county seat and its accessibility. According to expert interviews, the residents of Kesznyéten and Farkaslyuk face the most issues, with eight out of the ten listed potential problems being present in both villages.

Although according to the mayor of Vilmány, there are no significant issues with public transportation (he only mentioned the outdated vehicles), participants in the focus group interview reported contrasting experiences. They listed problems that are otherwise uncommon among settlements, such as the schedule not aligning with work and school start times, and they also mentioned the infrequent bus services (with no train service at all in the village).

In the other two settlements where focus group and individual interviews were conducted, similar opinions were expressed: overall, people are satisfied with the public transportation options. However, it is interesting that while Szendrőlád is relatively close to the regional centre (Miskolc) and Vizsoly is more difficult and time-consuming to reach, yet the respondents in both places shared similar views. It is worth noting, however, that according to our interviewee from Vizsoly, buses from the district capital (Encs) run to the village every two hours, and the travel time is approximately 45 minutes (for a 17 km distance<sup>5</sup>).

<sup>5</sup> According to Google Maps

**Figure 4: What issues characterize public transportation?**

The accessibility of the municipality and of the main centres linked to the municipality (county capital, district capital) was also examined in the expert interviews. In most cases, the mayors of the villages rated the accessibility of their settlements as a two.<sup>6</sup>

Based on the responses, the most difficult to access are Felsőgagy, Lácacséke, and Fulókércs. The most problematic is access to the district capitals, despite these being the places to which residents of smaller villages most frequently travel, as essential services such as post offices, pharmacies, or larger grocery stores are typically located there. The mayor of Hejőszalonta specifically highlighted this: ‘Public transportation from the village to the county capital and Mezőcsát is acceptable, but this cannot be said for the district capital (Tiszaújváros), where more frequent services would be warranted.’

It is also notable that no one stated that the accessibility of their district capital was ‘very good.’ The accessibility of the county capital is the least problematic, with relatively frequent and regular bus and train services to these locations.

Many residents use bicycles for transportation within the settlement. Across all surveyed settlements, the most frequent response to the question, ‘How important is the role of bicycles in intra-settlement transportation?’ was ‘rather important.’ The only settlement where this form of transportation is not typical at all is Felsőgagy, which also received the lowest rating for the state of public transportation. In this context, it is not surprising that the personal car was highlighted as the primary means of commuting.

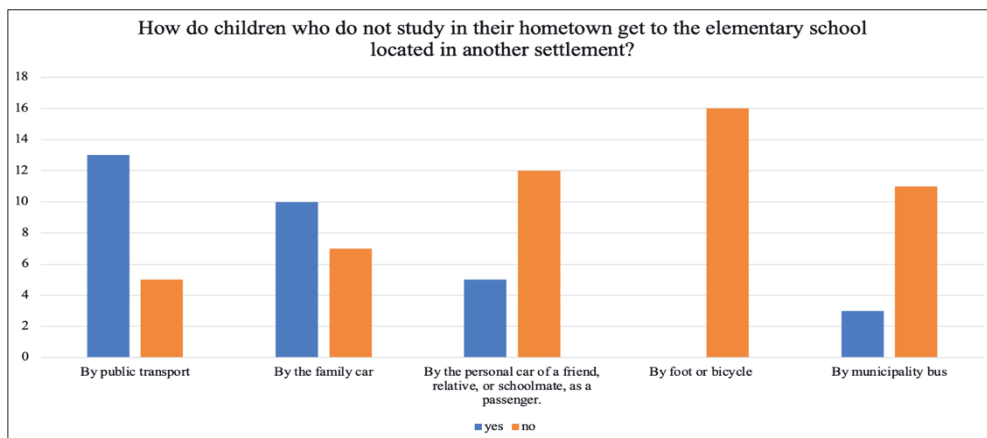
However, cycling is present in other villages. While this mode of transport is popular within settlements, it is less common for inter-settlement travel. Although nearly three-quarters of respondents in the surveyed settlements stated that bicycles play an important role within the village, for travel between settlements, this figure drops to just under half of the sample. This is still a relatively high value, considering that only two settlements (Kázsmárk and Járdánháza) responded ‘rather yes’ to the question about the availability of dedicated bicycle roads.

<sup>6</sup> 1 – very bad, 2 – rather bad, 3 – rather good, 4 – very good

Out of the twenty-one settlements in the sample, fourteen have an elementary school, two have only lower grades (first to fourth grade), and five settlements do not have any educational institution. In those settlements where there is a local elementary school, the vast majority of local children attend the institution. The lowest enrolment rate was found in Szendrőlád, while the highest was in Fulókercs, where all children attend the local elementary school – though in this case, it only includes the lower grades. In settlements where there is no school or only lower grades are available, we asked which settlement the children commute to and how they get there.

Students primarily use public transportation to get to school, or their families drive them in their own cars. Interestingly, although not every family owns a personal vehicle, it is uncommon for acquaintances, relatives, or classmates to carpool and jointly transport children to school. This was not only indicated by the survey results but also confirmed by my interviewees. A mother from Vilmány, who has several school-aged children, added that there is indeed a demand for such an arrangement. Only in one settlement, Járdánháza, was it mentioned that a school bus transports the children to school.

**Figure 5:** How do children who do not study in their hometown get to the elementary school located in another settlement?



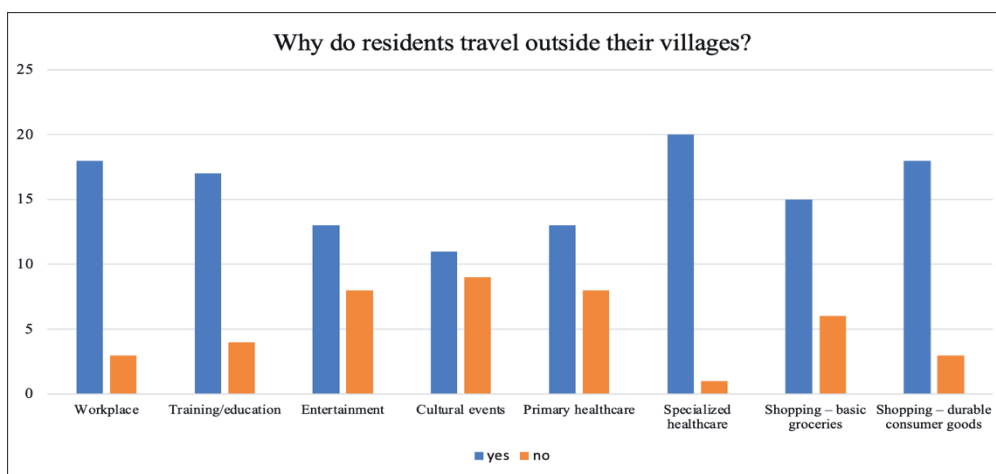
Beyond work and education, which are perhaps the most important aspects, we were also curious about other reasons residents leave their village. This question combines two perspectives: what is unavailable in the village, requiring travel to another settlement, and what are the most common reasons for which people do travel? The biggest contrast is seen in the case of specialized healthcare: only one mayor reported that residents do not leave the village to receive specialized medical care, and that settlement is Fáj.

The reason for this is not that the service is available locally; rather, the cause likely lies in the residents' motivation and financial situation. Earlier, we discussed leaving the settlement for work or education, and the responses to the latter question further confirm the frequency of these reasons.

One of the most common activities carried out in other settlements is the purchase of durable consumer goods. While basic groceries can generally be obtained locally, larger shopping trips are typically made in the district capital or another larger town.

It also becomes clear that residents are least likely to travel for entertainment or cultural events. Returning to the concept of ‘settlement carpooling,’ it can be noted that the interviewees are aware of its existence and approximately how much is charged for the service, but it is important to highlight that these fees are not ‘set in stone,’ which can make individuals vulnerable in such situations. Perhaps for this reason, carpooling is not commonly utilized.

**Figure 6:** Why do residents travel outside their villages?



The focus group discussions and individual interviews revealed that people enjoy living in their villages. They described human relationships as supportive and cohesive, which they considered a major advantage compared to other villages. A man from Szendrőlád shared the following about his village:

*“In Szendrőlád, people are not typically withdrawn. Every day, we gather in groups of 5 or 10, we chat, visit each other, everyone gets along because everyone is either family or friends. [...] When I visit other villages, I notice that people aren’t as close as they are here. Here, when two acquaintances talk, they don’t talk like acquaintances, but like family members. Even those who don’t regularly keep in touch still share secrets with each other that wouldn’t be shared in other villages. This helpfulness is deeply rooted here. In other villages, you don’t see that. There, people are envious of each other. I’ll give you an example: a neighbor comes over and asks to borrow a drill. In other villages, they might not lend it to you, fearing it might break, or you’ll take it and not return it. Here, they lend it without hesitation.”* (middle-aged man from Szendrőlád)

In Vilmány, similarly, trust and personal connections were highlighted as strengths of the village. Of course, alongside strengths, weaknesses were also mentioned: the lack of employment

opportunities left a mark on the focus group discussion in Vilmány, coming up as a negative point in several instances. And what would make things better? It is difficult to give a precise answer to this question, but below we list a few things the respondents said they would appreciate. A pharmacy was mentioned first, as there isn't one in the villages; there was also a desire for a playground, a gym, and recreational opportunities for children. Due to distance learning, it would also be important for every family – especially those with children – to have internet access.

We also asked whether people would be happy to stay in the village. The answers were divided; perhaps even the respondents themselves were not entirely sure. The strongest influence on the desire to stay (or return) is exerted by family and community. However, those who have the means tend to leave, though the residents of Szendrőlád are hopeful that, over time – and with the right knowledge – people will return.

*“Those who are better off, smarter, or want more and have the means to do so will definitely leave Szendrőlád. Maybe with a heavy heart and returning now and then. And they will bring help with them!”* (middle-aged woman from Szendrőlád)

## Conclusion

Our goal was not to conduct a representative survey, but rather to gain insights into the field and the perspectives of its inhabitants, as well as to present the characteristics of segregated living conditions and settlements. This topic essentially added a new dimension to the examination of spatial and social inequalities, as we analysed all of this through the complex spatial relations of settlements in Borsod-Abaúj-Zemplén County that contain segregated areas.

The region studied in this research can be characterized as an area of urban deprivation, with both external and internal peripheral traits, where individuals' social and economic status is fundamentally defined by various factors of deprivation. Although the topic has often been explored from both geographical and sociological perspectives, we believe that approaching it through the lens of complex spatial relations introduced a narrative that, on the one hand, aids settlement integration programs and the creation of equal opportunities, and on the other, contributes to the larger developmental issue of rural development, particularly regarding the retention of skilled populations and the ability of settlements to retain their populations.

The interviews conducted with experts, who are well-versed both in the field and the subject matter, provided a framework for our research. With their assistance, we also obtained (albeit non-representative) data from the settlements participating in EU equal opportunity programs. The focus group and individual interviews offered a sociographic “background” to complement the expert opinions.

Based on these findings, the answers to the most important research questions can be summarized as follows:

1. Transport disadvantages often pose a barrier to embedding the outcomes of equal opportunity development processes (such as acquiring new knowledge/skills, participating in the primary labour market, or accessing healthcare) into everyday life.
2. Good accessibility does not directly indicate a settlement's capacity to retain its population. In the case of Szendrőlád, the inclusive work of the BHIM RAO Association and the municipality may suggest that people prefer to live in a village with a positive and improving outlook, even if they have other options. Of course, this requires a welcoming municipal policy and a geographical location adjacent to the district centre.
3. Strong community bonds can be considered a strength of the settlements studied. In Szendrőlád, respondents indicated that they are aware of and pay attention to each other's joys and difficulties, which reflects strong settlement identity and cohesion. This offers reliable support, serving as a model and providing guidance even in difficult life situations.
4. The world of socio-geographical peripheries (characterized by a slowly changing spatial structure) indicates that rural equal opportunity processes must be supported both from above (by ensuring access to funding) and from below (through community development and access to local human services). This dual approach is essential to achieve a state in the settlements where added value is created, contributing to the sustainability of equal opportunities.

### **Modernization Scenarios**

This chapter serves to map out scenarios following a narrower summary. It emphasizes the importance of fostering an active, more organic community.

Why do we consider this important?

Because the regime changes in Hungary (and more broadly in Central and Eastern Europe) that occurred nearly three decades ago, driven by top-down modernization pressures, did not – or could not – consider the society, economy, and shared development directions of peripheral regions. One of the significant shortcomings of the past decades has been the failure to take into account and support community-driven needs based on planning and diagnosis. The “From farm to table – Lessons from the 300 Least Developed Settlements of Hungary” (FETE) program, which is connected to the complex activities of the Hungarian Charity Service of the Order of Malta and has since evolved into a government program, seeks to address this issue at the level of strategic, community planning and implementation (Németh, 2023).

This program, focused on a group of settlements characterized by poverty and extreme poverty, affects 84 settlements in Borsod-Abaúj-Zemplén County (accounting for nearly one-third of the settlements included in the program). Community-building and the provision of professional assistance and support (ranging from care to social work requiring university-level competencies)

are crucial development activities, as they simultaneously support families and communities, thereby creating opportunities for the development of the whole settlement.

This work essentially reduces isolation and the feeling of being cut off. The responses and coping strategies of residents stemming from isolation and the geographical location of these settlements as cul-de-sacs are neither effective nor sustainable when individuals are left to face daily struggles on their own. This includes flexible access, linked to lifestyle, to institutions that support social mobility, employment opportunities in the primary labour market, and access to larger commercial and human services institutions.

While individual strategies may result in successful life paths, if the majority of the community in a settlement cannot participate in such progress, it ultimately reinforces marginalization, continued peripheral status, and territorial-social inequality. The social phenomenon we refer to as “transportation poverty” or “spatial connectivity poverty” can only be effectively addressed through complex regional development work, which goes beyond a focus on a single settlement (similarly to how social integration requires a multi-sectoral approach).<sup>7</sup>

Overall, these are the effects of domestic or EU-funded developments that transcend the narrowly defined project indicators. An important framework for understanding social integration is what Jenő Szűcs (1981) outlines in his epochal work, *An Outline of the Three Historical Regions of Europe*. It is evident that a complex, ecologically based model of social development is worth pursuing, but imbalances are likely to arise in its implementation. The reasons for this lie in the varying levels of readiness across sectors and regions (settlements), the availability of human resources, regional perspectives, as well as the lack of partnership and organic communities.

As a result, development may stall, slow down, or become disproportionate at various points. Instead of advancing toward the desired priorities, there is a risk of increasing socio-economic polarization, which in turn perpetuates traditional, inherited problems (Szarvák, 2022).

The solution lies in strengthening community activity and building a local middle class. The key to this complex effort is community reactivation and planning, regional thinking, and predictability.

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<sup>7</sup> At the national level, there are 506 cul-de-sac (dead-end) settlements recorded in the statistics. Of these, 43 are classified as FETE settlements. In Borsod-Abaúj-Zemplén County, there are 73 such settlements, 11 of which are categorized as FETE (Lechner Tudásközpont, 2017).

## References

- Andorka, Rudolf (1997): *Bevezetés a szociológiába*, Osiris Kiadó, Budapest
- Boros, Julianna (2011): A települési szegregáció feltételezett okai és következményei, in: *Acta Sociologica*, Vol. 4, 2011/1, pp. 97-111., <https://doi.org/10.15170/AS.2011.4.1.9>
- Császár, Rózsa (2021): MA Szakdolgozat, Debreceni Egyetem Szociológia és Szociálpolitika Tanszék, Kézirat p. 68.
- Császár, Rózsa – Koska, Éva – Kovács, Gábor – Szarvák Tibor (eds.) (2020): Felzárkózási Együttműködések Támogatása Módszertani Kézikönyv
- Ferge, Zsuzsanna (1991): *Variációk a társadalmi integráció témájára* (Szociálpolitika és társadalom), T-Twins Kiadó, Budapest
- G. Fekete, Éva (2005): Cigányok a Cserehát–Hernád–Bódva vidéken – Tájegységi elemzés, in: Baranyi, B. (ed.): *Roma szegregációs folyamatok a Csereháti és Dél-Baranyai kistérségekben*, Gondolat – MTA Etnikai-nemzeti Kisebbségkutató Intézet, Budapest, pp. 53–83., <https://kisebbssegkutato.tk.hu/uploads/files/archive/395.pdf>
- G. Fekete, Éva (2013): Integrált vidékfejlesztés, Miskolc, <https://gtk.uni-miskolc.hu/files/5017/Integr%C3%A1lt%20vid%C3%A9kfejleszt%C3%A9s.pdf>
- Jeneyné Varga, Ágnes (2021): *Vidékföldrajz és vidékfejlesztés*, Budapesti Corvinus Egyetem, <http://web.uni-corvinus.hu/~vagnes2/videk2102.pdf>
- Kertesi, Gábor – Kézdi, Gábor (2011): The Roma/Non-Roma Test Score Gap in Hungary, In: *American Economic Review* 101(3) pp. 519–525. DOI: 10.1257/aer.101.3.519
- Kristóf, Andrea – Kókai, Sándor (2018): Agglomerálódás a Borsodi Iparvidéken egykor és ma, in: Péntes, J. (ed.): *Falu – város – periféria: határon innen és túl*, DIDAKT Kft. Debrecen, pp. 40-51.
- Kovács, András Donát – Farkas, Jenő Zsolt – Perger, Éva (2015): A vidék fogalma, lehatárolása és új tipológiai kísérlete, in: *Tér és Társadalom*, Vol, 29 2015(1). pp. 11-34.
- KSH (2015): *Magyarország településhálózata 2. Városok–falvak*, [https://www.ksh.hu/docs/hun/xftp/idoszaki/mo\\_telepuleshalozata/varosok\\_falvak.pdf](https://www.ksh.hu/docs/hun/xftp/idoszaki/mo_telepuleshalozata/varosok_falvak.pdf)
- KSH (2022): *Népszámlálás 2022 – Települések főbb adatai*, Miskolc, <https://nepszamlalas2022.ksh.hu/eredmenyek/vizualizaciok/a-telepulemek-legfontosabb-adatai/?ter=30456>
- KSH (2022): *Népszámlálás 2022, Proportion of persons completed secondary level with final examination in population aged 18–X, 2022 (%)*, TÍMEA, <https://map.ksh.hu/nepszamlalas/?locale=en>
- Lannert, Judit (2014): A korai iskolaelhagyás elleni stratégia és a kora gyermekkori nevelés, [http://oktataskepzes.tka.hu/documents/Projektek/2013/QALL/07\\_korai\\_neveles\\_lannert\\_final.pdf](http://oktataskepzes.tka.hu/documents/Projektek/2013/QALL/07_korai_neveles_lannert_final.pdf)
- Lechner Tudásközpont (2017): Zsáktelepülések kétarcúsága, <http://gis.lechnerkozpont.hu/foldgomb/>

- Lieszovszky, József Pál (2018): A közlekedési eredetű kirekesztettség által érintett társadalmi csoportok vizsgálata a hátrányos helyzetű vidéki térségekben, in: *Utazás a tudományban – Konferencia a 70 éves Pálfalvi József tiszteletére*, pp. 90-98., [http://unipub.lib.uni-corvinus.hu/3782/1/UaT2018\\_kotet\\_vegleges.pdf](http://unipub.lib.uni-corvinus.hu/3782/1/UaT2018_kotet_vegleges.pdf)
- Mészáros, Rezső (1989): A térkapcsolatok értelmezésének néhány összefüggése, in: *Tér és Társadalom*, Vol. 3, 1989(1). pp. 3-16.
- Németh, Nándor (2023): *A Felzárkózó Települések program cél- és keretrendszere*, [https://epa.oszk.hu/02900/02943/00091/pdf/EPA02943\\_kapocs\\_2023\\_1\\_017-026.pdf](https://epa.oszk.hu/02900/02943/00091/pdf/EPA02943_kapocs_2023_1_017-026.pdf)
- Osgyáni, Gábor (2008): *Mindentől távol – Falvak a Torna-vidéken*, in: Váradi, M. M. (szerk.): *Kistelepülések lépéskényszerben*, Új Mandátum Könyvkiadó, Budapest. pp. 196-231.
- Seiler, A. – Seiler, B. (1996): *European Charter of Rural Areas – Report*, <https://pace.coe.int/en/files/7441#trace-1>
- Szabó, Pál (2008): A térszerkezet fogalma, értelmezése, in: *Tér és Társadalom*, Vol. 22. 2008(4) pp. 63-80., [http://real.mtak.hu/116684/1/EPA02251\\_Ter\\_es\\_tarsadalom2395.pdf](http://real.mtak.hu/116684/1/EPA02251_Ter_es_tarsadalom2395.pdf)
- Szabó, Szabolcs (2009): *A szociál-közlekedésföldrajz vizsgálati lehetőségei Magyarországon*, Doktori értekezés, ELTE TTK Földtudományi Doktori Iskola p. 181, [https://edit.elte.hu/xmlui/bitstream/handle/10831/46098/Kd\\_11291.pdf?sequence=1&isAllowed=y](https://edit.elte.hu/xmlui/bitstream/handle/10831/46098/Kd_11291.pdf?sequence=1&isAllowed=y)
- Szarvák, Tibor (2022): Adalékok a társadalmi felzárkózás szociológiájának értelmezéséhez, in: *Szociológiai Tudástár 12.*, (szerk): Czibere, I., Debrecen University Press
- Szűcs, J. (1981): *Vázlat Európa három történelmi régiójáról*, in: *Történelmi Szemle*, 24(3)., [https://tti.abtk.hu/images/kiadvanyok/folyoiratok/tsz/tsz1981\\_3/szucs.pdf](https://tti.abtk.hu/images/kiadvanyok/folyoiratok/tsz/tsz1981_3/szucs.pdf)
- TEIR (2022): Data on Personal Vehicles per 1000 inhabitants
- TEIR (2023): Data on Public Employment
- Tiner, T. (1983): Borsod-Abaúj-Zemplén megye falvainak személyközlekedési helyzete és fejlesztési lehetőségei, *Földrajzi Értesítő*, 32(2). pp. 217-239., [http://real-j.mtak.hu/5013/1/FoldrajziErtesito\\_1983.pdf](http://real-j.mtak.hu/5013/1/FoldrajziErtesito_1983.pdf)
- Tiner, T. (1986): A szociál-közlekedésföldrajz kialakulása és vizsgálati módszerei, *Földrajzi Értesítő*, 35(3-4). pp. 219-230., [https://adt.arcanum.com/hu/view/FoldrajziErtesito\\_1986/?pg=228&layout=s](https://adt.arcanum.com/hu/view/FoldrajziErtesito_1986/?pg=228&layout=s)
- Yu, H. – Shaw, S. (2007): Revisiting Hägerstrand's Time-Geographic Framework for Individual Activities in the Age of Instant Access, DOI: 10.1007/1-4020-5427-0\_7.