

# Services Accessibility in Rural Areas

Subjects: Social Issues | Others

Contributor: Milada Šťastná

The accessibility of services in rural areas can be considered to be one of the most important aspects of the creation of comparable living conditions in the whole territory of Europe. The inaccessibility of services can be considered an important factor of rural deprivation.

Keywords: basic rural services ; accessibility ; public transport ; South Moravia ; case study

---

## 1. Introduction

Rural sustainability or the sustainability of rural development, like the sustainability of any other territory, consists of three pillars—economic <sup>[1]</sup>, social <sup>[2]</sup> and environmental <sup>[3]</sup>. Some authors add institutional sustainability to this. In the Fordist period, rural sustainability was associated primarily with agricultural production <sup>[4]</sup>. Due to certain inertia, the development of agriculture, in particular, is still supported in rural development. There is also sometimes talk of energy sustainability in rural areas. However, in the post-Fordist period, the emphasis is more on the consumption of rural landscapes and rural settlements for housing <sup>[5]</sup>, business and tourism. In extreme cases, there is a risk of the depopulation of the countryside <sup>[6]</sup> and the extinction of some rural settlements as places of permanent housing. Sometimes, immigrants are seen as rescuers <sup>[7]</sup>. From the rural point of view, it is possible to consider the sustainability of the countryside as a rural space and the change of the countryside into a kind of urban–rural continuum under the pressure of urbanization processes. Rural identity is important in this sense <sup>[8]</sup>. Some authors prefer place-based approaches to rural sustainability <sup>[9]</sup>.

In a situation where the issue of rural sustainability is shifting from the Fordist to the post-Fordist conception, the key issue is the quality of life of local people, tourists and entrepreneurs. Technical and social infrastructure is essential for it. At the local level, it is about the availability of basic functions of public interest. These are, for example, primary schools, doctor's offices, post offices, or financial services and the like. This is not a serious problem for residents who have their own means of transport and commute to major settlements for work. Crucial is the availability of services for residents who depend on public transport, such as children, the elderly, the disabled, mothers with small children, or people who cannot afford their own car or more cars in the family <sup>[10]</sup>. Weaker social infrastructure is a feature of rural settlements, as shown by Mitrica et al. <sup>[11]</sup> in the example of Romania. However, the acceptable accessibility of these services by public transport in resorts and small towns should be ensured. The development of public transport in rural areas should decrease rural–urban migration.

The geography of services is based on Christaller's <sup>[12]</sup> central place theory, which was later developed by Lösch <sup>[13]</sup> and criticized by many authors from different viewpoints, such as Vionis and Papantoniou <sup>[14]</sup>. The theory of central places is based on an imagining of a regular settlement structure which is not disturbed by any natural or political barriers. It is also based on the assumption that people and service providers act rationally, which is not always fulfilled. Therefore, some authors believe that this is an excessive simplification of reality. Christaller's theory is often criticized as static. However, in a rural area, of which the settlement structure is relatively stable, it corresponds to reality better than it does in an urbanized post-industrial area, where there is a different interconnection of services and settlement structures. Of course, Christaller's theory did not envisage the construction of hypermarkets at highway junctions or the digitization of some services, which may also change the overall picture. However, the basic rules of the central place theory were valid within the productivist society. Only in recent times have the development of shopping centres outside of traditional cities <sup>[15]</sup>, the digitization of services <sup>[16]</sup> and the overcoming of micro-regionalization <sup>[17]</sup> started modifying the situation.

In Czechia, the central place theory was used in the period of the centrally planned economy in the form of the so-called Central Settlement System. The centres created a hierarchy: the capitol, centres of regional importance, centres of district importance and centres of local importance. The non-central settlements were divided into settlements with and without permanent importance. This measure was often criticized because of its top-down decision approach, ultimate character and the building ban in non-central settlements without permanent importance. However, the idea itself was logical, based on scientific knowledge and being supported by centrally planned public transport. This approach ensured more or less

optimum access to the services for all inhabitants of the countryside. The Centre Settlement System was abandoned in 1990.

For the countryside, centres of local importance (small towns and large villages as a rule) were important. According to the central place theory, services are concentrated in central places to ensure a necessary number of customers from the central place and the sphere of its influence. In the Moravian conditions, small towns (up to 15 thousand inhabitants) play a decisive role <sup>[18]</sup>. According to Kašparová and Půček <sup>[19]</sup>, about 1000 micro-regional centres offering basic social services of about 6250 municipalities can be found in Czechia.

In the period of the post-industrial transition, services are predestined to be the main drivers of rural development <sup>[20]</sup>. In the rural space, services can be divided into those which serve mainly the local people and those which serve other people—tourists, as a rule. The second type, which could have a seasonal character, is frequent, especially in tourist areas. Services (sometimes called the third sector) have a strictly hierarchical character which partly copies the administrative division, with many exceptions and deviations.

The issue of the availability of basic services has been addressed in British geography since the 1970s and 1980s <sup>[21][22]</sup>. These works point to the vicious circle of public transport. This topic is extremely important in sparsely populated areas <sup>[23]</sup>. In addition to the problem of availability of services in sparsely populated areas and developing countries, the problem of the disappearance of services from the countryside as a result of the increasing motorization of people or the construction of suburbs in which services were not envisaged at all became more important. For understandable reasons, the greatest attention is paid to the availability of medical services, e.g., Shah et al., <sup>[24]</sup>, and less frequently the accessibility of schools <sup>[25]</sup>. Some works focus on specific topics, such as the accessibility of police stations <sup>[26]</sup>.

The vicious circle of rural public transport stems from the fact that as the motorization of the rural population increases, the demand for public transport decreases, making its operation economically inefficient. This leads to the vicious circle <sup>[27]</sup>, meaning the disruption of lines and connections so that the local population is even more dependent on individual transport and public transport. However, there is still a group of people, e.g., seniors <sup>[28]</sup>, who cannot use individual cars; this group is at risk of social exclusion and their quality of life is declining. In addition, this trend has environmental consequences. The mass use of individual transport leads to the traffic congestion of destinations and associated exhalations, noise, parking problems and the risk of accidents.

The previous works have mostly stated the above problem on the basis of the sociological knowledge and feelings of the rural population <sup>[29]</sup>, without examining the specific availability of public transport services on the basis of real times and conditions. In addition, many works focus on a specific service. Solutions are sometimes sought in alternative forms, such as flexible transport services <sup>[30]</sup>, shared transport and, more recently, the development of digital services, which only partially solves the problem. Sometimes combined transport is proposed, such as bicycle–train <sup>[31]</sup>, which, however, requires additional infrastructure. There are also considerations about optimizing public transport lines with the help of smart technologies <sup>[32]</sup>, which does not solve the problem of marginal territories and marginalized groups of the population. So-called flexible integrated transport services are another variant of a solution <sup>[33]</sup>. Other experts reverse the problem: they study how transport systems affect the distribution of services, speaking more about the integrated land-use <sup>[34]</sup>.

Although the idea of integrated transport systems is by no means new, the availability of rural services is not the focus either. It is most often about the accessibility of large cities or agglomerations from their rural hinterland, often in oversized cities in the developing world, e.g., <sup>[35]</sup>. Unlike most other contributions, our article focuses on the accessibility of basic services of general interest in rural areas (i.e., not on their accessibility for rural people in large cities); it is based on the analysis of exact data (not on the subjective feelings of rural people) and works with integrated transport systems, which only make it possible to achieve the real availability of services in the current period.

Transport geography most often deals with accessibility at the regional level. As shown by Rosik et al. <sup>[36]</sup>, the poorer availability of higher-order services affects the overall economic development of the region, measured, for example, by GDP per capita. However, our analysis deals with the local level. The accessibility of services depends on transport systems. The Spatial Interaction Model <sup>[37]</sup> is used to model traffic flows. However, our work is not about traffic flows, but about the availability of services. The frequency of connections is determined by the rules of the Integrated Transport System of the South Moravian Region. Whereas in the case of individual transport the time distance is usually the most important factor, in the case of public transport the frequency plays a role besides time comfort <sup>[38]</sup>. Insufficient public transport can lead to the social exclusion of the threatened population who depend on the accessibility of rural services.

## 2. Accessibility of Services in Rural Areas: Southern Moravia Case Study

The answer to the main question is: In the rural areas of the South Moravian Region, there are places where access to basic services reaches 30 min or more. This is true of 2.5% of the rural settlements in the region, in which 0.21% of the region's population live. Their only concentration is located in the southwest of the region, on the borders between the regions of South Moravia, South Bohemia, Vysočina and Austria. It is a typical periphery, far from the regional centres of all regions as well as of the neighbouring country.

Another question asked whether an efficient public transport system capable of ensuring access to basic services of general interest can be organized, which can also be answered in the affirmative. However, this system cannot be built as an economically profitable, but rather as a social service. The invested public funds of regions and municipalities will be returned at a satisfactory level of rural development and at significantly lower costs of solving problems resulting from the risk of depopulation, unemployment and social exclusion.

It can be assumed that the good accessibility of services is one of the factors influencing the fact that the Moravian countryside as a whole is not threatened by depopulation <sup>[39]</sup>. All of the size categories of rural settlements in Moravia are currently experiencing migratory increases (usually at the expense of medium-sized cities). In the South Moravian Region, only the most remote villages in the far southwest are endangered by depopulation. Additionally, the unemployment rate in all Moravian towns exceeding 20,000 inhabitants, without any exception, is higher than the unemployment rate in their rural hinterlands.

The accessibility of services depends primarily on the characteristics of the settlement system (the size of the settlements and the distances between them) and the physical conditions of the transport (density of roads and railways, slope and direction conditions). Consequently, people who prefer living in small villages in peripheral mountain areas have to take into account the difficulties connected with the accessibility of basic services. It is one of the problems of the counterurbanization and naturbanization processes.

Concerning the suburbanized villages, the closeness to the city does not manifest any advantage in the accessibility of basic services because the time distance between the fringe of the city and its inner parts is extended, not to mention traffic jams. That is why, in suburbia, the presence of local basic services is extremely important.

The best accessibility of basic rural services is seen in the lowland regions with large villages which mostly have basic services or offer such services in neighbouring settlements, or even cooperate in the field of services. Additionally, the physical conditions for the transport are usually better, enabling fast and uncomplicated transport. Although the situation in the accessibility of basic services of public interest seems to be favourable, further termination of local services could be problematic. These cases should be confronted with a worsening of the accessibility of services in the settlement and the surrounding settlements, which can be threatened with a terminating of services. Even if the transport system operates efficiently, its additional loading is not advisable.

---

### References

1. Morkunas, M.; Labukas, P. The Evaluation of Negative Factors of Direct Payments under Common Agricultural Policy from a Viewpoint of Sustainability of Rural Regions of the New EU Member States: Evidence from Lithuania. *Agriculture* 2020, 10, 228.
2. Kluvankova, T.; Nijnik, M.; Spacek, M.; Sarkki, S.; Perlik, M.; Lukesch, R.; Melnykovich, M.; Valero, D.; Brnkalakova, S. Social Innovation for Sustainability Transformation and its Diverging Development Paths in Marginalised Rural Areas. *Sociol. Rural.* 2021, 61, 344–371.
3. Coderoni, S.; Pagliacci, F. The territorial dimension of environmental sustainability in Italy along the urban–rural continuum. *J. Environ. Plan. Manag.* 2017, 61, 1318–1339.
4. D'Souza, G.E.; Gebremedhin, T.G. *Sustainability in Agricultural and Rural Development*; Routledge: London, UK, 2019.
5. Gallent, N.; Scott, M. Housing and sustainable rural development. In *The Routledge Companion of Rural Planning (Not Paged)*; Scott, M., Gallent, N., Gkartzios, M., Eds.; Routledge: London, UK, 2018.
6. Abramsson, M.; Hagberg, J.-E. What about community sustainability?—Dilemmas of ageing in shrinking semi-rural areas in Sweden. *Scott. Geogr. J.* 2018, 134, 103–121.
7. Morén-Alegret, R.; Fatorić, S.; Wladyka, D.; Mas-Palacios, A.; Fonseca, M.L. Challenges in achieving sustainability in Iberian rural areas and small towns: Exploring immigrant stakeholders' perceptions in Alentejo, Portugal, and Empordà,

Spain. *J. Rural Stud.* 2018, 64, 253–266.

8. Basile, G.; Cavallo, A. Rural Identity, Authenticity, and Sustainability in Italian Inner Areas. *Sustainability* 2020, 12, 1272.
9. Vasta, A.; Figueiredo, E.; Valente, S.; Vihinen, H.; Romero, M.N. Place-Based Policies for Sustainability and Rural Development: The Case of a Portuguese Village “Spun” in Traditional Linen. *Soc. Sci.* 2019, 8, 289.
10. McDaniels, B.W.; Harley, D.A.; Beach, D.T. Transportation, Accessibility, and Accommodation in Rural Communities. In *Disability and Vocational Rehabilitation in Rural Settings*; Springer Science and Business Media LLC: Berlin/Heidelberg, Germany, 2017; pp. 43–57.
11. Mitrică, B.; Șerban, P.; Mocanu, I.; Grigorescu, I.; Damian, N.; Dumitrașcu, M. Social Development and Regional Disparities in the Rural Areas of Romania: Focus on the Social Disadvantaged Areas. *Soc. Indic. Res.* 2020, 152, 67–89.
12. Christaller, W. *Die Zentralen Orte in Süddeutschland*; Gustav Fischer: Jena, Germany, 1933.
13. Spengler, J.J.; Lösch, A. Die raumliche Ordnung der Wirtschaft. *South. Econ. J.* 1941, 7, 578.
14. Vionis, A.K.; Papantoniou, G. Central Place Theory Reloaded and Revised: Political Economy and Landscape Dynamics in the Longue Durée. *Land* 2019, 8, 36.
15. Heffner, K.; Twardzik, M. The Impact Of Shopping Centers In Rural Areas And Small Towns In The Outer Metropolitan Zone (The Example Of The Silesian Voivodeship). *Eur. Countrys.* 2015, 7, 87–100.
16. Hodge, H.; Carson, D.; Carson, D.; Newman, L.; Garrett, J. Using Internet technologies in rural communities to access services: The views of older people and service providers. *J. Rural Stud.* 2017, 54, 469–478.
17. Vaishar, A.; Šťastná, M.; Stonawská, K. Small Towns—Engines of Rural Development in the South-Moravian Region (Czechia): An Analysis of the Demographic Development. *Acta Univ. Agric. Silvic. Mendel. Brun.* 2015, 63, 1395–1405.
18. Vaishar, A.; Zapletalová, J. Small towns as centres of rural micro-regions. *Eur. Countrys.* 2009, 1, 70–81.
19. Kašparová, L.; Půček, M. *Cohesion Policy: Settlement in the Czech Republic*; Ministry of Regional Development of the Czech Republic: Praha, Czech Republic, 2009.
20. Glasmeier, A.; Howland, M. Service-Led Rural Development: Definitions, Theories, and Empirical Evidence. *Int. Reg. Sci. Rev.* 1993, 16, 197–229.
21. Moseley, M.J. *Accessibility: The Rural Challenge*; Methuen and Company Ltd.: London, UK, 1979.
22. Joseph, A.E.; Bantock, P.R. Measuring potential physical accessibility to general practitioners in rural areas: A method and case study. *Soc. Sci. Med.* 1982, 16, 85–90.
23. McGrail, M.R.; Humphreys, J.S. Measuring spatial accessibility to primary care in rural areas: Improving the effectiveness of the two-step floating catchment area method. *Appl. Geogr.* 2009, 29, 533–541.
24. Shah, T.I.; Milosavljevic, S.; Bath, B. Measuring geographical accessibility to rural and remote health care services: Challenges and considerations. *Spat. Spatio Temporal Epidemiol.* 2017, 21, 87–96.
25. Marques, J.L.; Wolf, J.; Feitosa, F. Accessibility to primary schools in Portugal: A case of spatial inequity? *Reg. Sci. Policy Pract.* 2021, 13, 693–707.
26. Stassen, R.; Ceccato, V. Police Accessibility in Sweden: An Analysis of the Spatial Arrangement of Police Services. *Polic. J. Policy Pract.* 2019, 068.
27. Augustyn, D. The Influence of Public Transport Acts in 2019 in Poland on Conflicts Concerning the Shape of the Public Transport Network. *Logist. Transp.* 2020, 45–46, 59–69.
28. Peacock, A.; Pemberton, S. The paradox of mobility for older people in the rural-urban fringe. *J. Rural Stud.* 2019, 70, 9–18.
29. Papangelis, K.; Velaga, N.R.; Ashmore, F.; Sripada, S.; Nelson, J.; Beecroft, M. Exploring the rural passenger experience, information needs and decision making during public transport disruption. *Res. Transp. Bus. Manag.* 2016, 18, 57–69.
30. Nagendra, R.V.; Nelson, J.; Steve, D.W.; John, H.F. The Potential Role of Flexible Transport Services in Enhancing Rural Public Transport Provision. *J. Public Transp.* 2012, 15, 111–131.
31. Geurs, K.T.; La Paix, L.; Van Weperen, S. A multi-modal network approach to model public transport accessibility impacts of bicycle-train integration policies. *Eur. Transp. Res. Rev.* 2016, 8, 25.
32. Porru, S.; Missoa, F.E.; Pani, F.E.; Repetto, C. Smart mobility and public transport: Opportunities and challenges in rural and urban areas. *J. Traffic Transp. Eng. Engl. Ed.* 2020, 7, 88–97.

33. Mounce, R.; Wright, S.; Emele, C.D.; Zeng, C.; Nelson, J. A tool to aid redesign of flexible transport services to increase efficiency in rural transport service provision. *J. Intell. Transp. Syst.* 2018, 22, 175–185.
34. Geurs, K.T.; Van Wee, B.; Rietveld, P. Accessibility appraisal of integrated land-use—Transport strategies: Methodology and case study for the Netherlands Randstad area. *Environ. Plan. B Plan. Des.* 2006, 33, 639–660.
35. Guzman, L.A.; Oviedo, D.; Cardona, R. Accessibility Changes: Analysis of the Integrated Public Transport System of Bogotá. *Sustainability* 2018, 10, 3958.
36. Rosik, P.; Pomianowski, W.; Komornicki, T.; Goliszek, S.; Szejgiec-Kolenda, B.; Duma, P. Regional dispersion of potential accessibility quotient at the intra-European and intranational level. Core-periphery pattern, discontinuity belts and distance decay tornado effect. *J. Transp. Geogr.* 2020, 82, 102554.
37. Kerkman, K.; Martens, K.; Meurs, H. A multilevel spatial interaction model of transit flows incorporating spatial and network autocorrelation. *J. Transp. Geogr.* 2017, 60, 155–166.
38. Šťastná, M.; Vaishar, A. The relationship between public transport and the progressive development of rural areas. *Land Use Policy* 2017, 67, 107–114.
39. Vaishar, A.; Šťastná, M.; Zapletalová, J.; Nováková, E. Is the European countryside depopulating? Case study Moravia. *J. Rural Stud.* 2020, 80, 567–577.

---

Retrieved from <https://encyclopedia.pub/entry/history/show/31149>