

Summary

ÖROK SERIES NO 216 - ÖROK ACCESSIBILITY ANALYSIS 2024

In 1989, 1997, 2005 and 2018, ÖROK used accessibility models to determine accessibility indicators for motorised individual transport (MIT) and public transport (PT) in order to quantitatively determine the quality of supply of the population with central facilities. In 2024, the accessibility model of the Federal Ministry for Climate Action, Environment, Energy, Mobility, Innovation and Technology (BMK) was used to calculate accessibility data based on the 2023 data, which ÖIR used to create a new accessibility analysis.

The quality of coverage with central facilities was determined by the proportion of the population that can reach the nearest regional and supra-regional centres and educational institutions within a reasonable period of time by motorised individual transport and public transport. In this context, 30 minutes were assumed to be reasonable for regional centres and 50 minutes for supra-regional centres. This percentage value represents the degree of accessibility.

The calculations were made on the basis of a 100 x 100 metre population grid, which represents the distribution of the population with 587,000 permanently inhabited cells. The targets are 198 regional and 44 supra-regional centres. Furthermore, 3,090 educational institutions of different categories were used for the focus on education. Accessibility by private motorised transport was calculated using the road network of the Graph Integration Platform (GIP). For public transport, the timetables of "Mobilitätsverbände Österreich" were used, whereby the footpaths to and from the stops were routed via the GIP network.

By motorised individual transport, 89 percent of the population is able to reach a supra-regional centre within 50 minutes, with the figures for the federal provinces ranging from 69 percent in Salzburg to 100 percent in Vienna. Regionally, low values are mainly found in inner-Alpine districts (Lienz, Tamsweg and Murau) or Waidhofen an der Thaya in Waldviertel and Jennersdorf in southern Burgenland. In public transport, this level of accessibility is significantly lower at an average of 66 percent, with some federal states having even lower values, such as Burgenland with 44 percent and Styria with 47 percent. In 13 districts, it is not possible to reach a supra-regional centre within

the time limit. These are located in inner-Alpine regions as well as in other peripheral regions such as Waldviertel, southern Burgenland and Außerfern. All values mentioned apply to a school-free working day.

The overall picture is much better when it comes to providing the population with regional facilities. 98 percent of the population is able to reach a regional centre within 30 minutes by motorised individual transport. Tyrol has the lowest value at 91 percent. At district level, the lowest values are found in Lienz (73 percent), Schwaz (73 percent) and Spittal an der Drau (81 percent). In 31 districts there is an accessibility rate of 100 percent. The accessibility of regional centres by public transport is also lower, with an Austrian average of 72 percent. In this case, the value (excluding Vienna) ranges from 59 percent in Lower Austria to 77 percent in Vorarlberg. Regionally, the lowest values are found in peripheral, dispersed districts such as Rohrbach with 20 percent, south-eastern Styria and Deutschlandsberg with 29 percent each.

A central element of determining accessibility by public transport is the accessibility of the population, i.e. whether a stop can be reached within a reasonable distance. 9 percent of the population are not able to reach a stop with a connection to a regional centre within 1,250 metres. If Vienna is not taken into account, the percentage is 12 percent. The lowest level of public transport accessibility is found in Styria with 19 percent of the population without a stop, the best (excluding Vienna) in Vorarlberg, where only 3 percent are not accessible. Districts with poor accessibility are Jennersdorf, Deutschlandsberg, south-east Styria and Leibnitz. In these districts, accessibility is causally linked to the settlement structure and is made more difficult by a highly dispersed settlement structure. In Vorarlberg, on the other hand, development is favoured by a high concentration of population in the Rhine Valley and Walgau.

The differences in the average travel time to the nearest centre between motorised individual transport and public transport are considerable. On average, the travel time to the nearest regional centre is 58 percent longer by public transport and 42 percent longer to the nearest supra-regional centre, although there are considerable regional

differences here. In Burgenland, for example, the average travel time to the nearest regional centre by public transport is 90 percent longer, while it is 20 percent longer in Vienna. The size of the travel time difference and thus the attractiveness of public transport depend heavily on the availability of an efficient rail connection. Accordingly, the least favourable regional values are found in the districts of Rohrbach, Urfahr Umgebung and Hermagor.

The accessibility of educational institutions differs significantly depending on the type of institution. A share of 90 percent of pupils at secondary schools and lower secondary schools can reach their nearest school by public transport within 30 minutes, while this is only the case for 82 percent of pupils at upper secondary schools or similar. Only 66 percent of students at universities and universities of applied sciences are able to reach their educational institution within 50 minutes. Despite the improved availability of new universities of applied sciences, there are still gaps in accessibility to tertiary education. From 13 political districts, no university or university of applied sciences can be reached by public transport within the time limit. The accessibility of secondary schools is also low in some peripheral districts. In 13 districts, more than half of 15 to 19-year-olds are unable to reach a secondary school within 30 minutes by public transport.

The analysis of commuting data has shown that of the approximately 4.345 million people in em-

ployment in Austria in 2021, 8.8 percent or 383,000 people work at their place of residence and a further 37.2 percent or 1.61 million people work in their municipality of residence. More than half (54 percent) or 2.35 million people commute to work from their place of residence, which usually involves a longer commute. Around 39 percent of commuters are able to reach their place of work in less than 15 minutes by car. By public transport or on foot, however, only 13 percent of commuters can do this within 15 minutes.

The business locations with the largest number of commuters are Vienna, the provincial capitals as well as Wels, Schwechat, Wiener Neustadt, Villach, Steyr and Dornbirn. In absolute figures, Vienna is the largest commuter centre in Austria with 284,800 commuters, followed by Linz with 109,200 commuters and Graz with 95,100 commuters. A total of 1.88 million employees work in the top 10 commuter centres of Vienna, Linz, Graz, Salzburg, Innsbruck, Sankt Pölten, Klagenfurt, Wels, Schwechat and Wiener Neustadt. A total of 2.05 million people work in all 18 Austrian supra-regional centres.

A comparison of the current accessibility analysis with the accessibility indicators from 2018, which could show the effect of changes to the transport system, was also carried out. However, the results of this comparison are only of limited significance due to changes in the accessibility model and the different number and location of the centres.