

Name of the indicator	<b>9.4 Index of multimodal accessibility of transport</b>
Sustainable Development Goal	Goal 9. Industry, Innovation and Infrastructure
Target	-
Definition	The indicator is a synthetic qualitative measure of mutual, potential time accessibility between the main national settlement centres and transport nodes (internal and external), taking into account all essential means of transport (in proportion to their share in the transport performance) and weighted by the level of socio-economic development.
Unit	-
Available dimensions	total
Methodological explanations	<p>WMDT is a measure of potential accessibility in terms of multimodality, taking into account significance/ attractiveness of territorial units as well as travelling time between these units via different modes of transport (i.e. road, railway, air and inland waterway transport).</p> <p>There are two versions of the index; the first one (WMDT I) was used in the surveys in 2008 and 2010, whereas the second one, introduced in 2013 (WMDT II), is fully adjusted to the purpose of constant monitoring of the potential accessibility in terms of its dynamics. Since 2013, WMDT has been calculated as WMDT II. In each case, the indicator relies on the model of the potential, which is referred to as 'potential accessibility' in Polish.</p> <p>For WMDT I, 12 socio-economic variables were used to describe masses of destinations in 2008 and 2010 (it was assumed that the seats of powiats or powiat groups in metropolitan systems were the destinations):</p> <ul style="list-style-type: none"> <li>- population size,</li> <li>- number of registrations for permanent stay,</li> <li>- number of inhabitants with higher education,</li> <li>- number of persons employed in the service sector,</li> <li>- number of persons employed in the industry and construction sectors,</li> <li>- number of persons employed in the industry and construction sectors in companies employing more than 9 persons,</li> <li>- number of agricultural holdings involved in the market production,</li> <li>- number of economic entities employing 250 persons or more,</li> <li>- sold production of industry,</li> <li>- total number of tourists accommodated in tourist establishments,</li> <li>- number of students and administrative rank.</li> </ul> <p>Those variables were weighted by assigning to them weights according to their role in generating the transport performance in passenger and goods transport. The weighing system also applies to WMDT II, and it assumes the 50% share of each transport mode.</p> <p>The method of the potential accessibility does not define what actual mass of destination should be. The choice between the masses depends mainly on the trip motivation. For persons travelling for their weekly shopping, the mass should be shopping malls, for persons travelling to work - the workplace, for persons travelling to hospitals - e.g. number of hospital beds. Designing the WMDT I, however, the subjective criterion was applied that the twelve variables, weighted in different proportion, accounted for the attractiveness of a given destination (powiat or group of powiats). While designing WMDT II, the method was simplified by taking into account only two variables essential for constant monitoring: population size and GDP.</p> <p>WMDT I defined attractiveness of specific powiats and destinations, including four modes of transport: road, railway, inland waterway and air transport. In WMDT II, powiat has been replaced with gmina as a major unit to be monitored by WMDT, maintaining the four transport modes from WMDT I. WMDT has no unit of measure (it is a characteristic of the potential accessibility). However, the higher WMDT values, the greater potential accessibility of the territorial unit (WMDT I values range from 0 to 1, whereas WMDT II can take all positive values).</p> <p>Detailed methodology for estimating WMDT is described in the report <i>Zweryfikowana metodologia</i></p>



	szacowania Wskaźnika Międzygałęziowej Dostępności Transportowej ( <i>Revised methodology for estimating the Index of Multimodal Accessibility of Transport</i> ) available in Polish on the website of the Ministry of Investment and Economic Development at <a href="https://www.ewaluacja.gov.pl/">https://www.ewaluacja.gov.pl/</a> .
Source of data	The Polish Academy of Sciences / the Ministry of Investment and Economic Development
Data availability	Data available at irregular intervals depending on the conduction of the survey.
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