MOBILITY POVERTY

MOBILITY POVERTY OVERVIEW IN CENTRAL AND EASTERN EUROPE

HUNGARY

Project: Mobility poverty in CEE countries

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RESEARCH BACKGROUND

Mobility poverty (MP) in some countries has been relatively unexamined and no clear definitions are available at EU or national levels. However, it is a problem that is becoming more pressing as fuel prices are rising and some countries face high car dependency thus commuting to work or for daily errands can become very expensive. The most important factor that causes MP is the household's income. But then the mobility expenses are lower if the family members have good access to public transport and can go on foot/by bicycle to do their daily errands. It seems that the low-income households in peripheral and (by public transport) less accessible areas might be the most affected and vulnerable groups.

Against this backdrop, project Mobility poverty in Central and Eastern Europe aims at reviewing the policies and assessing the state of mobility poverty in Bulgaria, Croatia, Hungary, Romania, Slovakia, and Slovenia. It also aims to raise awareness of policy- and decision- makers about the mobility poverty issue. The overview in selected countries will result in a 4-pager policy brief for each country. The policy briefs will be disseminated to 20-30 stakeholders in each country. These reports will be based on an accessible EU database and quality insight (e.g. interviews). These policy briefs will be a good basis for further project activities, especially stakeholder awareness and communication.

The project is financed by the European Climate Foundation.

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1/ MOBILITY POVERTY DEFINITION AND INDICATORS

Mobility poverty definition

The concept of mobility poverty, often used interchangeably with transport poverty, is a relatively new idea that is often discussed in conjunction with energy poverty. Academics define transport poverty as all kinds of inequalities related to transport and access, which can be understood more broadly, or specifically as the affordability of transport costs (Mattioli et al., 2017). Transport energy poverty is a subset of transport poverty that refers specifically to vulnerability to fuel price increases (Robinson and Mattioli, 2020). Some discussions suggest that costs and affordability in the transport, housing, and domestic energy sectors should be considered together (Stojilovska et al., 2020). However, a definition of transport or mobility poverty has not yet been established.

In policy, the **EU** proposes "transport poverty" to refer to the lack of adequate transport services necessary to access general services and work, or to the inability to pay for these transport services (European Parliament, 2022). This approach recognizes the following aspects of transport poverty: 1) no **transport availability**, which is the lack of transport options or mobility poverty; 2) no **access to transport**, such as for disabled persons; 3) **low transport affordability**, defined as the inability to meet the cost of transport; 4) too much **time** spent traveling, or time poverty; and 5) **inadequate transport conditions**, such as transport options being dangerous or unsafe (European Parliament, 2022).

In Hungary, there is **no official definition of mobility poverty**. Instead, the term "transport mobility" is more commonly used to describe the limited access or unaffordability of transport services. While the word "mobility" in Hungary is more often used to refer to social or occupational mobility rather than transport, discussions about transport poverty are typically framed within broader conversations around housing (energy) poverty, rural poverty, and social exclusion. Transport poverty and housing poverty are closely linked, as disadvantaged settlements often have more restricted access to basic services (Habitat for Humanity Hungary, n.d.). The lack of adequate access to transport can enhance social exclusion (Bertolini et al., 2008). The ability to afford transport costs is one of the preconditions to being an active job seeker (Egyensúly Intézet, 2021).

Indicators of mobility poverty

Given that mobility poverty has not yet been established as a definition, there are currently **no widely used indicators** for measuring it. However, based on the available discussions around transport (mobility) poverty, some relevant indicators for measuring transport (mobility) poverty have been identified and presented in Table 1. Table 1 includes a set of indicators collected by Eurostat on an annual or periodical basis that measure the access, availability, or affordability of transport. Interestingly, the Hungarian Statistical Office collects data on fixed expenditures of households meeting basic needs, which include expenditures on food and non-alcoholic beverages, housing and household energy, and transport. This indicates that transport is already statistically considered a basic need alongside food and energy. In addition to these indicators, composite indicators (indices) are also available that can calculate the combination of affordability and/or access aspects of transport poverty.

Table n°1: Available indicators for transport (mobility) poverty

Aspect of transport (mobility) poverty	Indicator or index	Frequency of monitoring	Source
Affordability (indicator)	Persons who cannot afford a regular use of public transport by age, sex, and income group	Irregular, last data from 2014	Eurostat
Affordability (indicator)	Persons who cannot afford a regular use of public transport by employment status and income quintile	Irregular, last data from 2014	Eurostat
Availability/ access (indicator)	Distribution of population by level of difficulty in accessing public transport, income quintile and degree of urbanization	Irregular, last data from 2012	Eurostat
Affordability (indicator)	Persons who cannot afford a personal car	Yearly basis	Eurostat
Affordability (indicator)	Final consumption expenditure of households by consumption purpose (COICOP 3 digit) - transport	Yearly basis	Eurostat

Affordability/ availability (indicator)	Modal split of inland passenger transport	Yearly basis	Eurostat
Affordability (indicator)	Fixed expenditures of households meeting basic needs made of expenditure on food and non-alcoholic beverages, housing and household energy, and transport	Yearly basis, last data from 2018	Hungarian Statistical Office
Affordability/ access (index)	Transport energy poverty index (composed of 1) energy expenditures, 2) affordability of public transport, and 3) access to public transport)	Study made in 2019	OpenEXP/ EPPI
Affordability (index)	Affordability of public transport for the poorest group (composed of 1) monthly public transport price, 2) average household size, and 3) income of the 25% poorest residents of the urban area)	Formula evaluable for the index to be calculated	European Commission

<u>Source:</u> (European_Commission n.d.; Eurostat n.d.; Hungarian_Central_Statistical_Office 2018; OpenEXP 2019)

2/ SITUATION IN THE FIELD OF MOBILITY POVERTY

The available data on transport poverty in Hungary is presented in Tables 2-5 and Graphs 1-4, which shows that Hungary is more affected by transport poverty and transport energy poverty within Europe. Transport poverty is primarily an issue of **affordability** and affects those who are already **income poor**. However, access to transport is not an issue in Hungary, and transport **accessibility** is better than the European average. **Retired individuals** have better transport affordability than other vulnerable groups in Hungary and are in a similar situation to retired individuals in the EU. Hungary has better environmental habits regarding transport modes than the European average, as it uses fewer cars and more public transport.

<u>Table n°2:</u> Persons who cannot afford a regular use of public transport by age, sex, and income group in 2014 in %.

Indicator	Hungary	EU 27 (from 2020)
Persons who cannot afford a regular use of public transport - total population income, age, and gender	5.1	2.4
Persons who cannot afford a regular use of public transport - total population income, age, females only	5	2.4
Persons who cannot afford a regular use of public transport - below 60% of median equivalized income, total age, and gender	21	5.8
Persons who cannot afford a regular use of public transport - below 60% of median equivalized income, total age, and females only	20.6	5.7
Persons who cannot afford a regular use of public transport - total population income and gender, age 16 to 24	5.4	2.2

Persons who cannot afford a regular use of public transport - below 60% of median equivalized income, total gender, age 16 to 24	15	4.2
Persons who cannot afford a regular use of public transport - below 60% of median equivalized income, females only, age 16 to 24	16	4.1
Persons who cannot afford a regular use of public transport - total population income and gender, 65 year or over	1.6	1.7

Source: (Eurostat n.d.)

<u>Table n°3:</u> Persons who cannot afford a regular use of public transport by employment status and income quintile in 2014 in %.

Indicator	Hungary	EU 27 (from 2020)
Persons who cannot afford a regular use of public transport by employment status and income quintile - all employment status options and all income quintiles	5.1	2.3
Persons who cannot afford a regular use of public transport by employment status and income quintile - unemployed persons and all income quintiles	23.6	6.6
Persons who cannot afford a regular use of public transport by employment status and income quintile - not employed persons and all income quintiles	6.8	2.9
Persons who cannot afford a regular use of public transport by employment status and income quintile - retired persons and all income quintiles	2.1	1.9

Persons who cannot afford a regular use of public transport by employment status and income quintile - all employment status options and first income quintile	17.3	5.4
Persons who cannot afford a regular use of public transport by employment status and income quintile - unemployed persons and first income quintile	30.2	9.7
Persons who cannot afford a regular use of public transport by employment status and income quintile - not employed persons and first income quintile	20.1	6

Source: (Eurostat n.d.)

According to Tables 2 and 3, a Hungarian person can afford about two times less public transport than an average European. The most vulnerable group are **persons below the poverty line** or **unemployed**, while their vulnerabilities are significantly increased if both poverty and unemployment are present. **Women** are slightly better off than men in affording public transport, while **young people** and especially young women face higher affordability challenges, especially compared to European averages. A **retired** Hungarian's affordability of public transport is high and similar to that of a European retiree.

<u>Table n°4:</u> Distribution of population by level of difficulty in accessing public transport, income quintile and degree of urbanization in 2012 in %.

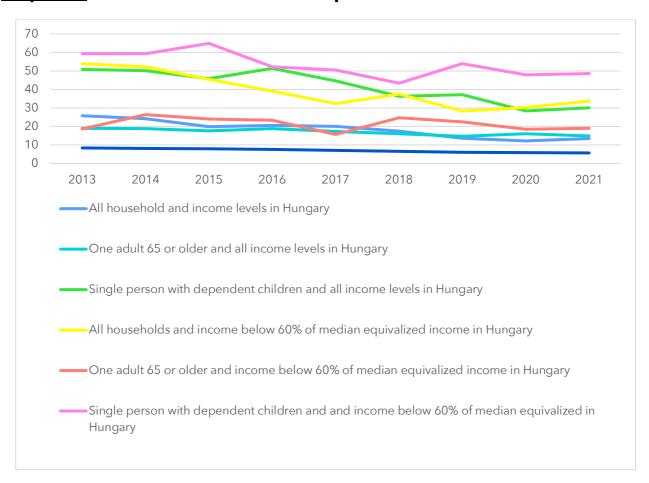
Indicator	Hungary	EU 27 (from 2020)
Distribution of population by level of difficulty in accessing public transport, income quintile and degree of urbanization – very high difficulty – all degrees of urbanization and all income quintiles	2.3	5.8
Distribution of population by level of difficulty in accessing public transport, income quintile and degree of urbanization – very high difficulty – rural areas and all income quintiles	2.3	11.4

Distribution of population by level of difficulty in accessing public transport, income quintile and degree of urbanization – very high difficulty – all degrees of urbanization and first income quintile	2.9	6.7
Distribution of population by level of difficulty in accessing public transport, income quintile and degree of urbanization – very high difficulty – rural areas and first income quintile	2	12

Source: (Eurostat n.d.)

According to Table 4, the **accessibility** of public transport is much better in Hungary than in the EU. Compared to the EU average, people in the first income quintile living in rural areas have significantly fewer difficulties accessing public transport in Hungary.

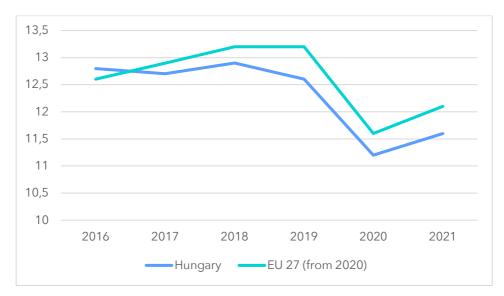
Graph n°1: Persons who cannot afford a personal car in 2013-2021 in %.



Source: (Eurostat n.d.)

The **affordability of personal cars** is lower in Hungary than in the EU but has decreased by 48% in the period 2013-2021 (Graph 1). Single persons with dependent children living in poverty are the least likely to own a car, but their situation has improved over the years. On the other hand, the elderly in Hungary are the most likely group to be able to afford a car, and their situation has been relatively stable and slightly improved over the past 8 years.

<u>Graph n°2:</u> Final consumption expenditure of households by consumption purpose - transport - % of total in 2016-2021.



Source: (Eurostat n.d.)

100
80
60
40
20
2012 2013 2014 2015 2016 2017 2018 2019 2020

— Trains in Hungary

— Trains in EU 27 (from 2020)

— Passenger cars in Hungary

Passenger cars in EU 27 (from 2020)

Motor coaches, buses and trolley buses in Hungary

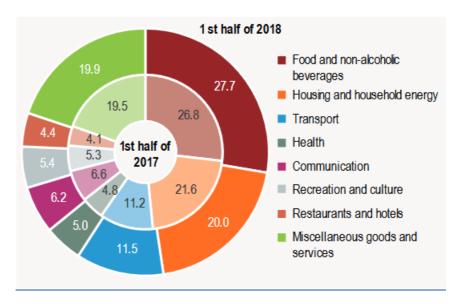
—Motor coaches, buses and trolley buses in EU 27 (from 2020)

Graph n°3: Modal split of inland passenger transport in 2012-2020 in %

Source: (Eurostat n.d.)

Based on Graphs 2 and 3, both the EU and Hungary follow a similar pattern of final consumption expenditure for transport, and modal split of transport over time. In Hungary transport expenditure is lower than the EU average and has decreased slightly in the period 2016-2021. The values for trains are almost the same in the EU and Hungary. Hungary has a slightly higher use of motor coaches, buses, and trolleys than the EU average and lower usage of passenger cars. However, the use of passenger cars is increasing in Hungary, while the use of motor coaches, buses, and trolleys is decreasing.

<u>Graph n°4:</u> Distribution of monthly per capita expenditures of households in 2017-2018 in %



Source: (Hungarian_Central_Statistical_Office 2018)

Graph 4 shows the distribution of monthly per capita expenditures of households. The highest share of basic expenditures in 2018 was spent on food and non-alcoholic beverages (27.7%), followed by housing and household energy (20%). Transport accounted for 11.5% of basic expenditures, which increased by 0.3% from 2017 to 2018.

ETEPI

80 - 90

70 - 80

50 - 70

35 - 50

< 5

Graph n°5: European Transport Energy Poverty Index (ETEPI) in 2018

Source: (OpenEXP 2019)

According to the **European Energy Poverty Index** study, the level of transport energy poverty is determined by a score, and the higher the score, the better the progress in alleviating transport energy poverty (Graph 5). Hungary scores the worst on this transport energy poverty index, while Luxembourg is the best (OpenEXP 2019). Hungary has the highest transport energy poverty in the EU due to the low affordability of transport energy expenditures, which especially affects citizens in the first income quintile (OpenEXP 2019), as can be seen in Graph 1, Tables 2 and 3.

3/ MOBILITY POVERTY POLICIES AND MEASURES

Despite the absence of explicit recognition of transport poverty in Hungary, there are policies aimed at improving transport services for the poor and initiatives to make the transport sector more environmentally friendly. **The National Transport Strategy** aims to promote social justice and fairness through the development of a socially beneficial transport structure (Oszter, 2017). **The National Energy and Climate Plan** aims to increase the share of renewable energy in the transport sector to 14% by 2030 and promote the use of electric cars, but it does not address issues related to accessing and affording transport services (Ministry of Innovation and Technology, 2022).

Various vulnerable groups in Hungary are eligible for **public transport discounts**. For example, the Budapest City Transport Service offers discounted tickets to disabled persons, parents with small children, pensioners, pupils, and students, while persons aged 65 or older enjoy free travel (BKK, 2023). Intercity domestic provider Volánbusz also provides discounts to students, and disabled persons, and seniors of at least 65 years of age can travel for free (Volanbusz 2023). In addition, employees who work in a different municipality than their residence may be eligible for a **commuter allowance** if certain conditions are met, or if public transport is not available for commuting (KCG Partners, 2023). This allowance has increased since January 2023 (KCG Partners, 2023). These measures suggest that transport poverty in Hungary is not only a matter of affordability of certain vulnerable groups but also a matter of time poverty as recognized by the EU. Notably, transport prices have remained relatively stable during the polycrisis, except for the airport bus, which has seen a significant price increase. The transport penalty fee has also increased since the pandemic.

The **fuel price cap**, which was imposed by the state to control rising prices, was recently lifted. The cap set at 480 forints (€1.17) per liter was implemented in November 2021 to curb the price rises (Euronews, 2022, IEA, 2022). However, the cap was removed in December 2022 due to a shortage of imports and fuel shortage because of panic buying (Reuters, 2022). The petrol stations faced the longest queues since the shortages in the 1970s (Euronews, 2022). This situation highlights the fossil fuel dependence of the transport sector, and the susceptibility of citizens to fuel price fluctuations.

Efforts to promote alternative and green modes of transport, such as **bicycles**, **electric cars**, and **vehicle-sharing**, are visible in Hungary. For instance, there are several car-sharing options, bike-sharing options, as well as sharing electric rollers and electric mopeds options in Budapest (Best of Budapest, n.d.).

The rationale is to provide urban transport alternatives to persons who don't own a car (Best of Budapest, n.d.). The use of electric cars is increasing in Hungary, therefore more publicly available electric chargers have been installed (CEENERGY NEWS, 2022). However, is uncertain whether these green transport options are accessible to vulnerable groups, as they may be more accessible to those who are not poor.

There is a strong focus on **supporting green and alternative transport** in Hungary, especially in Budapest. A Green Bus Program was launched in 2019 to subsidize modern, sustainable, and environment-friendly public transport to rural settlements with over 25,000 inhabitants (CEENERGY NEWS, 2020). The Hungarian Cycling Club has developed a cycling map to show the best cycling lines (We love Budapest, 2020). The increased interest in cycling is explained as a result of the COVID-19 pandemic as more residents decided to cycle for recreational purposes or to commute to work (We love Budapest, 2020).

4/ KEY ACTORS IN THE MOBILITY POVERTY FIELD

Table 5 lists the key stakeholders in the area. These are bodies at the **national** and **local** levels. However, there have been **new grassroots actors** active in raising awareness about green transport. The list also involves **NGOs** exploring topics of relevance to transport poverty, as well as **private sector** entities engaged in car-sharing and other alternative transport initiatives.

Table n°5: Key actors in the transport sector

Stakeholder	Responsibility relevant to transport poverty
Government	Regulating fare and fee policies; consumer price subsidies
Regional authorities	Rate of fare subsidies and revenue support
Local authorities	Developing and maintaining local public roads and their accessories
Public transport companies	BKK Budapest for the city of Budapest; Volánbusz for intercity connections
Companies involved in green transport	Renting electric cars, involved in car-sharing
NGOs	Working on issues closely related to transport poverty, such as energy and housing poverty
Activists/ promoters of green lifestyle	Bringazz a munkaba and Green Guide Online promote green lifestyle and cycling

<u>Source:</u> author, European_Committee_of_the_Regions, n.d., Bringazz a munkaba, 2023. Green Guide Online, 2022).

5/ RESEARCH GAPS

Eurostat has stopped collecting data annually on some of the relevant indicators. The focus has mainly been on the affordability of transport, while the access aspect and the environmental friendliness of transport (public transport over private cars) as well as time poverty have not been integrated into the assessment of transport poverty. Furthermore, **social aspects** have not been integrated into the new transport greening policies. Overall, the lack of awareness about transport poverty has led to the development of parallel and uncoordinated tracks for transport greening and social transport policies.

6/ EXPERT EVALUATION

Hungary has one of the highest rates of transport poverty in the EU. However, the aspect of access has been overlooked, despite being better than the EU average. Public transport policies in Hungary provide support to a wide range of vulnerable categories, and seniors enjoy the highest affordability among vulnerable groups in Hungary, similar to the EU level. This can be attributed to travel discounts seniors are entitled to in Hungary. Moreover, measures to tackle time poverty exist, and transport costs are statistically considered part of the household costs for basic needs in the country. Car dependence is also lower than in the EU, and efforts to green the transport sector are underway. There is a strong correlation between income poverty and transport poverty in Hungary. Therefore, more support measures should be directed toward vulnerable groups, such as offering free public transport or making other alternative modes of transport more affordable for them.

Hungary is significantly affected by transport poverty, especially its poorest groups. Transport poverty is closely linked to income poverty and social exclusion (Sansonetti and Davern, 2021). To effectively tackle transport poverty, it should be considered a basic domestic service and addressed alongside energy poverty. Since transport services rely heavily on carbon fuels, addressing transport poverty requires low-carbon policy efforts. Despite existing policies to mitigate transport poverty, it has not been recognized as an issue in policies or strategies. Recognizing transport poverty officially could lead to greater cohesion in social and green policies in the transport sector and the development of measures to reduce the carbon lock-in of transport and increase transport affordability.

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