THE VIEW Smart Transportation Infrastructures Of The Future



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Mapping transport disadvantage in Europe



ransport accessibility is recognised today as one of the most important issues to be solved within the next decade, both in the sense of social and/or mobility needs. The accessibility challenge impacts on a number of transport users' segments (unemployed persons, those with disabilities, vulnerable persons, migrants, children, elderly, low income, etc.), particularly in areas with significant social, demographic and economic differences.

Difficulties associated with access to transport are commonly referred to as 'transport disadvantage'. In urban areas, this concept is the result of a range of intersecting factors including i) poor public transport infrastructure, ii) a higher proportion of low-income households and iii) the need to travel further distances – often mainly by car – in order to get to places of employment, services and activities.

Transport disadvantage cuts across several countries, regardless of their economic welfare because, unfortunately, in most cases public transport is not planned to match with the travel patterns and needs of specific social groups. Even when dealing with on-demand services, the services are not sufficiently customised on users' characteristics, not sufficiently innovative to guarantee a certain level of social inclusion and equity, and often not sustainable from a financial point of view.

A 'new wave' of transport services is being planned for certain groups of users and only across a part of the urban areas, 'deprived' areas being typically excluded. New solutions also raise new questions: can disabled persons easily access car-sharing or new public transport services?; are there business models that could allow for an extensive use of public transport in areas with few inhabitants and poor socio-economic conditions?; what actions can be carried out to improve accessibility, inclusive mobility and equity?; and how can technological innovation and the extended use of ICT support the spreading of public transport to prioritised areas?

In the EU, big differences exist between cities, towns and suburbs and rural areas regarding the risk of poverty or social exclusion (Eurostat, 2014) that are slightly higher in rural areas than in cities and slightly lower in towns and suburbs. In individual countries, the differences are notable.

Lucas (2012) highlighted a relationship between transport and social disadvantage and social exclusion, reviewing the dynamic cycle between transport and poverty. For

instance, job seekers find getting to interviews very hard if they do not have access to a car and rely on public transport (Campaign for Better Transport, 2011; Bourn, 2013). Evidence from the United States also shows that improved public transport significantly augments both the probability of being employed and the probability of working 30 hours or more per week.

At the same time, the presence of children in house-holds has a strong influence on the mobility pattern of the parents, increasing their constraints. Depending on the age of the children, users' needs change and not all transport modes are perceived useful, a phenomenon inducing the use of private car instead of public transport.

The issue is particularly relevant when it comes to disabled and non-conventional mobility users. In developed areas, such as Europe, Japan and North America, the population is ageing. Within the next 20 years, half the adult population from the developed world will be aged 50 or over, with a dramatic growth in the 80+ age group. Even if there is an efficient transport network with different transport services, the information about these services is not easily accessible to elderly people. The intensive use of smartphone apps to get access to public transport information, or to use services like car sharing, need a good knowledge of, and aptitude towards, these technologies, and this is not usually the case for the elderly.

Access to transportation by low-income individuals and families has become limited as the majority of low-income households reside in rural areas and the centre of cities, while basic amenities are increasingly located in the suburbs. With new jobs emerging further and further away from city centres, many low-income workers often have difficulty accessing jobs, training and other services such as childcare because of inadequate transport. In addition, many minimum wage jobs require working evening or weekend hours, but traditional transport systems often do not serve their routes during these times.

All the above leads me to believe that the time has come to develop an EU-wide mapping of the existing socio-economic and mobility conditions in EU regions, in order to be able to support decision-makers towards effective and tailored solutions, responding to local needs and being able to adapt themselves to local environments at neighbourhood level.

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