



10th International Scientific Conference Transbaltica 2017:  
Transportation Science and Technology

## Accessibility to Riga Public Transport Services for Transit Passengers

Irina Yatskiv (Jackiva)<sup>a,\*</sup>, Evelina Budilovich (Budiloviča)<sup>a</sup>, Vaira Gromule<sup>b</sup>

<sup>a</sup>Transport and Telecommunication Institute, Riga, Latvia

<sup>b</sup>JSC Riga International Coach Terminal, Latvia

---

### Abstract

The research suggests the concept of more public transport-oriented cities that accessible for transit passengers and considers the role of Riga public transport system in determining the level of accessibility for different spatial aspects, which in turn facilitates the creation of economies of scale, agglomeration effects and networking advantages. Authors consider long distance travels and assess accessibility and connections between the Riga city and the key destinations in the Latvian regions and Baltic states. It involves the entire urban transport system, regional and international network and, also, long distance terminal in chain of movements.

© 2017 The Authors. Published by Elsevier Ltd. This is an open access article under the CC BY-NC-ND license (<http://creativecommons.org/licenses/by-nc-nd/4.0/>).

Peer-review under responsibility of the organizing committee of the 10th International Scientific Conference Transbaltica 2017

*Keywords:* passenger transportation, long distance travel, accessibility, intracity, intracity, travel time, integration

---

### 1. Introduction

The European Commission foresees a European Union in 2050 integrated in the globalised economy [1]. This requires strong relationships and links internally in Europe and with other continents and the potential of the transportation systems should to enhance economic productivity and social justice.

---

\* Corresponding author.

*E-mail address:* [Jackiva.I@tsi.lv](mailto:Jackiva.I@tsi.lv)

European accessibility will have to satisfy a demand for transport of goods and people from European regions and cities on 3 geographical scales: within European countries, between European countries and regions, between the EU and other regions or countries in the World. Long-distance travel is one of the factors at play in the on-going spatial integration process in Europe and elsewhere.

The research is focused on analysis accessibility taking into account the wider geographical area to assess accessibility and connections between the Riga city and the key destinations in the Latvian regions and Baltic states. Thus, we will do this analysis on base the concept of long-distance travel. One most popular definition “long-distance travel” – long-distance differ from daily travel by distance and the most commonly used distance is around 100 kilometres (one-way straight line) [2].

Accessibility generally refers to physical access to goods, services and destinations, which is what people usually mean by transportation. In the fields of geography and urban economics, accessibility refers to the relative ease of reaching a particular location or area. In social planning, accessibility refers to people’s ability to use services and opportunities [9]. Accessibility is the main ‘product’ of a transport system and it determines the locational advantage of an area (i.e. a region, a city or a corridor) relative to all areas [3]. Of course, the configuration of the transportation system of a city can also have an influence on mode use in long-distance travel and development the concept “door to door mobility” is important for public transport attractiveness in all stages on long-distance travel and development of accessibility services in order to provide social quality.

The research by Yatskiv and Budilovich [4] presents the accessibility analysis of the Riga public transport system in the current moment, before reconstruction that is planned in the frame of the Rail Baltica project. The results of the accessibility analyses highlights the zones with the high level of travelling time that needs to be improved. Goal in current research is to analyse the accessibility of long-distance multimodal trip between the Riga city and the key destinations in the Latvian regions/Baltic states.

The key aspect of Mobility as a Service is easy access to the most appropriate transport mode or service will be included in a bundle of flexible travel service options for end users [5]. Often researchers in the field of transit network design do not appear to have explicitly incorporated issues of equity and access, predominantly focusing on the minimization of user and operator costs [8]. But for attractive of public transport in long-distance travel and providing the door-to-door movement comfortable, it is significant – the time, price, information and infrastructure.

In [6] analysed the infomobility issues in Latvia and concluded that the information services in Latvia remain very fragmented both in the geographical scope and the coverage of the modes of transport; they rarely provide cross-border travel information and door-to-door coverage. At present, the public transport authorities in Latvia focus their attention on ticketing and real-time information. Real-time information on public transport (e.g. bus and rail) already exists, but the existing services do not offer travellers real-time information across all the stages of a multimodal trip. The same highlighted on EU level [7]: the review of 123 existing multimodal travel information and planning services demonstrated that the end user in Europe is not provided with complete and reliable information due to insufficient geographical and modal coverage of the current offer. Only 38% of journey planners are cross-border and from them only 30% (out of 46) cover both long distance transport and the first and last mile by including walking, cycling and public urban transport.

In terms of infrastructure another critical aspect of multimodal long distance travel attractiveness is sustainable transport interchange. Interchanges are crucial in bringing forth the shift from the traditional use of individual private car to wide scale collective public transport.

Access to services and the accessibility of urban public transport (UPT) have always been focal service issues [8] and [9] classified accessibility measures with respect to UPT into three categories: access to transit stops, duration of public transit journeys and access to destinations. We will consider duration of public transit journeys in accessibility analysis.

The paper is organized as follows. The next session provides methodology of accessibility analysis for transit passengers in Baltic States. Then the results of the analysis are presented and discussed. Finally, concluding remarks and are offered.

Download English Version:

<https://daneshyari.com/en/article/5027857>

Download Persian Version:

<https://daneshyari.com/article/5027857>

[Daneshyari.com](https://daneshyari.com)