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The phenomenon of transport accessibility of hard-to-reach territories: on the question of epistemological criteria

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Abstract

This article examines the problem of epistemological criteria for transport accessibility as one of the most significant indicators of the development of territories, including hard-to-reach ones. The paper shows that the problem of transport accessibility must be solved through the instruments of state regulation. In particular, for this it is necessary to form a list of indicators in which it is necessary to determine the indicators of transport accessibility. A similar indicator was defined in the provisions of the Transport Strategy of the Russian Federation until 2030. However, this list does not define quantitative indicators in relation to individual territories, being limited only to the most general values, for example, such as indicators of the total number of civil aviation airports by a certain period of time. At the same time, according to the authors, it is necessary to structurally determine the location of the transport infrastructure. In particular, according to the experience of the EU, to determine transport accessibility, it is determined by such indicators as the time during which the most important social infrastructure facilities can be reached by residents through public transport. It is proposed to use a similar approach when developing indicators of transport accessibility of territories based on the only mode of transport for more than 70% of the territory of Russia - aviation.

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Keywords

Transport accessibility, hard-to-remote territories, civil aviation, indicators of transport accessibility, socio-economic development of territories.

Introduction

Transport accessibility is the main social characteristic of the transport system, since it includes both economic and social components. Increasing transport accessibility improves the quality of life of the population, transforms the structure of the use of the social infrastructure of society. And, as a result, significant attention is paid to the issues of increasing transport accessibility in the regulatory documents of developed countries, since they determine the general standards for ensuring transport accessibility, as well as its quantitative and qualitative criteria.

In Russian practice, the standard for ensuring transport accessibility of remote rural areas has not yet been developed, meanwhile, according to a number of studies, about 60% of the territory of the country's settlements is accessible only by using air transport. In most cases, this system is a "legacy" of the USSR, although at present the state of the airport network and civil aviation as a whole has undergone significant changes. The study of international practice in the field of transport accessibility and accessibility of civil aviation infrastructure is a significant area of sociological research.

Main content

In general, the problem of transport accessibility in the EU is not as acute as in Russia, however, when comparing approaches to the regulation of transport accessibility, one should focus more on institutional models determined by EU regulations. Ensuring transport accessibility is one of the goals of the Transport Strategy of Russia for the period up to 2030 [Transport Strategy..., 2008], while in other countries with similar climatic conditions (for example, the state of Alaska), similar goals are not set in regulatory documents.

The EU regulations define the transport accessibility methodology, which includes the following indicators:

– accessibility to the regional center. This indicator is calculated as the minimum time for which a resident of a rural area can reach a regional center by car or public transport. Studies show that regional centers are available in Poland in about 40-60 minutes, similar figures for the northern part of Italy, and for the east of the Mediterranean countries. The greatest amount of time is required to reach the regional centers in Finland, the Czech Republic, and the maximum time - more than 2 hours - in Lithuania, Latvia and Estonia;

– the number of jobs located in the area of residence. Quantitatively, this indicator is defined as the number of jobs that residents can reach in a maximum of 60 minutes by car or public transport;

– regional potential availability. It is defined as the minimum time to reach key social facilities - hospitals, sports facilities, etc.

Other sources determine transport accessibility to certain types of objects:

– access to healthcare facilities and I. It is determined by the time that must be spent before reaching polyclinics and hospitals. On average, according to EU standards, healthcare facilities are located in all cities larger than 50,000 inhabitants, which are often not regional centers. Therefore, the availability of such facilities is significantly higher (time is less) than the availability of regional centers, with the exception of the Baltic countries, the north-eastern regions of Poland and the northern regions of Finland, where the development of public transport is not enough to ensure transport accessibility;

– access to school education. Availability of the level of education and the amount of time that needs

to be spent to reach the objects of education. This indicator is determined by the number of schools that are available, as a result of a trip, in no more than 30 minutes.

The development of transport accessibility indicators is a significant scientific problem, developing which, it is necessary to take into account the experience of organizing the transport industry of the EU countries and ensure a possible balance of the system of transport accessibility indicators, by normalizing their minimum values with indicators of the accessibility of individual social infrastructure facilities - health care and education.

Currently, the growth rate of civil aviation in Russia is 2-3 times higher than international indicators, but this does not fundamentally solve the problem of transport accessibility for the population of remote regions. In most studies considering the development of civil aviation, it is indicated that the most significant trend is a change in the structure of the civil aviation route network: a reduction in regional aviation and an increase in the number of passengers on main routes. All this partially determines the change in the social structure of society - the reduction of the rural population and the increase in the urban population. However, the main reason for this change is the liberalization of the airlines' route network since 2007, when airlines were able to choose their own destinations.

The situation in the field of providing hard-to-reach territories with regional aviation directions has been constantly deteriorating since the early 1990s. According to the Federal Air Transport Agency, in 1992, 1302 airports were operating, at present their number is actually 5 times less. At the same time, these changes occurred at the expense of regional airports. This situation is aggravated due to the reduction of profits mainly on the main and some regional routes, and the number of existing subsidized transportation is very limited.

Conclusion

The provisions of the Strategy for the Development of Transport in Russia until 2030 indicate that the currently used system of regional aviation can lead to a significant deterioration in the socio-economic situation of the population. It is assumed that by 2030 the number of operating airports will actually double, but neither their possible location is indicated, nor is the need of the Russian population for such a number of airports determined. That is, the Strategy does not indicate that these changes should also form the necessary transport accessibility for the local population. Therefore, along with the development of infrastructure, it is necessary to create a system of indicators of transport accessibility as one of the key characteristics of the social development of the population.

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Феномен транспортной доступности труднодоступных территорий: к вопросу об эпистемологических критериях

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Аннотация

В данной статье исследуется проблема эпистемологических критериев транспортной доступности как одного из наиболее значимых показателей развития территорий, в том числе труднодоступных. В работе показано, что проблема транспортной доступности необходимо решить посредством инструментов государственного регулирования. В частности, для этого необходимо сформировать перечень показателей, в котором необходимо определить показатели транспортной доступности. Аналогичный показатель был определен в положениях Транспортной стратегии Российской Федерации до 2030 года. Однако данный перечень не определяет количественные показатели по отношению в отдельным территориям, ограничиваясь только самыми общими значениями, например такими, как показатели общего количества аэропортов гражданской авиации к определенному периоду времени. В то же время, по мнению авторов, необходимо структурное определение расположения транспортной инфраструктуры. В частности, согласно опыта ЕС для определения транспортной доступности определяется такими показателями как время, за которое могут быть достигнуты жителями важнейшие объекты социальной инфраструктуры посредством общественного транспорта. Предлагается использовать аналогичный подход при разработке показателей транспортной доступности территорий на основании единственного вида транспорта для более чем 70% территории России – авиационного.

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Ключевые слова

Транспортная доступность, трудно удаленные территории, гражданская авиация, индикаторы транспортной доступности, социально-экономическое развитие территорий.

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