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IMPROVING THE QUALITY OF RAILWAY PASSENGER TRANSPORTATION IN THE MOSCOW REGION

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Abstract

The article is focused on a significant regional problem - improving the quality of rail passenger transportation in Moscow region. The approval by citizens of political institutions is an important component in the formation of a stable social and political environment in the region. Confidence in the regional authorities is largely composed of the effective functioning of the railway network. Problems of passenger flows should be analyzed in a complex, including assuming their feedback and opinions. Some research aspects in the context of solving the problems of improving the regional railway complex are discussed in the article. The main tasks of a social and political nature, which are potentially possible to some extent be solved by improving the regional railway complex, are shown. Some decisions are given for the development of the railway sector to improve urban and suburban passenger traffic. The analysis carried out can contribute to filling the gaps in domestic political science and the development of a number of approaches to solving problems associated with the development of the railway complex of Moscow region, as well as suggesting methods and methods for the development of the railway complex in the social and political dimension obtained during the study.

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1. Introduction

The demand for research on the development of the railway complex of the constituent entities of the Russian Federation is determined by the importance of improving transport infrastructure in the context of solving a number of socio-political problems. The growth in the stability of the functioning of railway transport in the region is one of the criteria for improving its territorial arrangement. Transport communications affect the livelihoods of people and affect the vitality and sustainability of the regions. Improving the country's railway complex arouses research interest among historians, political scientists and legal experts.

2. Problem Statement

At present, it is necessary to improve transport communication (railway transport) between the districts of Moscow region, receiving social and political, humanitarian, economic, etc. effects (for example, unloading Moscow). Moreover, the social group should win to a greater extent - people of working age who work outside the place of residence, in neighboring areas, etc. To do this, it is necessary to solve a number of tasks of a research nature: to study the development of the railway complex of Moscow region (passenger transportation) in the context of the social and political dimension; to study the development of the railway complex of Moscow region to obtain a social and political effect; to analyze the development prospects of the railway complex of Moscow region; suggest, based on the analysis, methods for the development of the railway complex of Moscow region of a social and political nature.

3. Research Questions

During the study, the following problems were considered: the specifics of existing studies on the social and political issues of railway transport; the development of the railway complex of Moscow region in the light of the existing social and political problems of the region's residents; comparative analysis of productive cases of reforming railway networks, potentially giving a positive result in the social and political sphere of the region.

4. Purpose of the Study

The aim is to study the social and political conditions for the functioning of the railway transport of Moscow region for the design of optimal channels of interaction between citizens and regional authorities in this matter.

5. Research Methods

The research methodology for improving the railway complex of Moscow region in the social and political context is based on a combination of methodological approaches: systemic, structural and functional, logical and philosophical, comparative and historical approaches to studying the problem, using factual data, as well as logical modeling. The potential source was scientific work of regional scientific experts: political scientists, historians, sociologists, legal experts, economists, geographers, cultural

scientists, engineers, as well as legal acts, information materials from the Russian media, political and strategic documents reflecting social and political aspects of the development of the railway complex of Moscow region and Russia.

Political and economic and political and administrative aspects of state and regional policies in the field of railway transport were considered in the works of Gorbunov (2008), Kulikov and Tyulenev (2019), Trubin (2019), Sulakshin (2012), Singh et al. (2019), the political and managerial nuances of this topic are reflected in the researches of Fedyakin and Fedyakin (2019) and Kharlamova (2009), geopolitical issues of transport are considered in the monographs of Starostenkov (2002) and Yakunin (2006). Unfortunately, researchers do not pay due attention to the social and political side of railway transport in the modern Moscow region, although it is Moscow region that is characterized by population density, active migration processes and various passenger flows. This difficult problem determines the relevance, novelty, purpose and objectives of the proposed project.

The Strategy for the Development of Railway Transport in the Russian Federation until 2030 focuses on the fact that “railway transportation is one of the foundations of the political, social, economic and cultural unity of Russia; railway transport is an important component in maintaining a high level of state defense and security; effectively functioning railway transport is an essential element of ensuring the country's competitiveness; an effective combination of state regulation and market self-regulatory mechanisms is ensured on railway transport; the rapid development and modernization of the railway network is the infrastructural basis of the social and economic growth of Russia; improving the safety of the functioning of railway transport is the most important state priority for the development and modernization of the industry, scientific research and ongoing operational work” (Decree of the Government of the Russian Federation, 2008).

We list the main elements of the tasks of a social and political nature, which, in our opinion, can be partially solved by improving the railway complex of Moscow region, taking into account what is developing as part of the railway system of Moscow region as a whole. Among them the following tasks can be named:

- harmonization of public relations, satisfaction of transport needs of certain groups of the population of Moscow region, stabilization of the social and political system of the region;
- the creation of conditions for motivating economic incentives for rail transportation in the region (Agafonov & Mozgovaya, 2015), ensuring the availability of this type of transport, creating the effectiveness of the social sphere of transport services (Gashkova, 2017);
- ensuring safety in passenger rail transport, including support for low-income and vulnerable groups of the population;
- the creation of new jobs in rail transport and companies associated with it in the region, along with the partial development of small business in Moscow region;
- ensuring the environmental safety of territories near the railway sector of the region.

The Ministry of Transport and Road Infrastructure of Moscow region functions in Moscow region. “The main tasks of the Ministry are to create conditions to ensure favorable living conditions for the population of the Moscow region; meeting the needs of the population in transport services that meet safety

requirements; ensuring the functioning of the transport services market; development of the transport infrastructure of Moscow region ... ”, etc. (Ministry of Transport and Road Infrastructure of Moscow Region, 2020).

Thus, in the research plan,

process-oriented innovations in transport systems are essential, the inclusion of design parameters in planning, comparisons between maintenance based on risk assessment and as-is state is important, a demonstration of the use of the latest technologies plays a significant role. The study of cultural and behavioral changes, as well as new methods of knowledge management, new forms of maintenance and training, the need for radically new views on transport to manage potentially negative events is relevant. Three planning problems that arise when planning public rail transport should be analyzed: line planning, scheduling, and delay management to minimize passenger travel time, assuming that passenger choice of route is sometimes independent of their solution. Therefore, it is necessary to consider models that take into account that passengers will adapt their travel itinerary to an implemented planning solution. Thus, the planned solution and passenger routes are determined and evaluated simultaneously. The political and managerial task is also to attract researchers in the field of mathematics, computer science or operations research working in the field of public railway transport from the point of view of optimization. (Kurenkova & Grishin, 2020, p. 555)

6. Findings

In the long-term plan for further improvement and modernization in accordance with the adopted “General scheme for the development of the railway junction of JSC Russian Railways” and the “Program for the implementation of priority projects for the development of railway infrastructure to improve the conditions of urban and suburban passenger traffic in Moscow railway junction in 2012-2020” the company implements a set of measures for the construction of additional gauges on the railway lines most necessary for passengers (Ministry of Transport and Road Infrastructure of Moscow Region, 2020) (Table 01).

Table 01. The program for the implementation of priority projects for the development of railway infrastructure to improve the conditions of urban and suburban passenger transportation in Moscow railway junction in 2012-2020 of JSC Russian Railways (Ministry of Transport and Road Infrastructure of Moscow Region, 2020)

№	Direction in Moscow railway junction (construction is provided)	Unit of measure, km
1	Yaroslavskoye	28.6
2	Gorkovskoye	27.5
3	Kurskoye	45.8
4	Smolenskoye	39.1

Thus, in 2018, in Yaroslavskoye direction, construction (reconstruction) of Moscow-Passenger-Yaroslavskaya-Losinoostrovskaya-Mytishchi, Mytishchi-Pushkino, Mytishchi-Bolshevo branches was planned. “After the implementation of the projects, the size of suburban passenger traffic along Yaroslavskoye direction will increase by 34 pairs of trains and amount to 251 pairs of commuter trains per

day (including 58 pairs of accelerated commuter trains)”; Gorkovskiy - “Moscow-Passenger-Kursk - Railway” (2018), “Reutov-Balashikha” (2018). “After the implementation of the projects, the size of suburban passenger traffic along Gorkovskoye direction will increase by 45 pairs and amount to 178 pairs of suburban trains per day (including 47 pairs of accelerated suburban trains)”; Kurskoye (2020) - Lublino-Podolsk. “After the implementation of the projects, the size of suburban passenger traffic along Kurskoye direction will increase by 26 pairs and will amount to 110 pairs of suburban trains per day (including 22 pairs of accelerated suburban trains)”; Smolenskoye (2018) - Moscow-Passenger-Smolenskaya-Odintsovo (organization of accelerated train traffic). “After the implementation of the projects, the size of suburban passenger traffic in Smolenskoye direction will increase by 37 pairs and will reach 132 pairs of suburban trains per day (including 44 pairs of accelerated suburban trains)” (Ministry of Transport and Road Infrastructure of Moscow region, 2020).

A functioning Coordinating Council for the development of the transport system of Moscow and Moscow region was created to adopt agreed decisions in the field of optimizing transport problems existing in Moscow region as a whole. Its creation was determined by the problems of ensuring coordinated actions of federal, metropolitan and regional structures of the executive branch of government, aimed at developing the transport infrastructure of two constituent entities of the Federation (Coordinating Council for the Development of the Transport System of Moscow and Moscow region, 2020). Currently, the information portal "Transport of Russia" notes that in Moscow region there are 57 railway facilities at various stages of construction. The most important of them are located in the Yaroslavskoye direction (II main route on Podlipki – Fryazino line) and a reconstructed branch to residential quarters in Balashikha (Aviator district). Fulfillment of program plans for the further formation of the Central Transport Hub until 2024 will provide an opportunity to increase passenger flow by 100 million passengers, thereby increasing the number of passengers to 850 million. The tasks of the authorities and the government are aimed at creating comfort in a “seamless” urban discourse, increasing mobility population and harmoniously interacting structure with other types of passenger transport (Budumyan, 2019).

Thus, a strategic guideline is the improvement of transport communication (railway transport) between the districts of Moscow region, taking into account social and political, humanitarian, economic, environmental and other effects (for example, unloading Moscow, etc.) (Babiy et al., 2018; Volgin et al., 2019). Social group is people of working age who work out of place of residence in neighboring areas. As specific prospects for the implementation of the project, one can determine: the creation of a special mobile application that takes into account the social and political and economic issues of railway transport in Moscow region; the introduction of individual positive cases of communication between passengers and authorities on the example of crowd sourcing systems; the formation of an information database of data from the positive cases necessary for further research and modernization of the transport environment (Leonova & Asaulenko, 2016); experimental implementation of “Civil rating of transport services”.

7. Conclusion

Thus, the analysis of the elements of social and political problems that can potentially be partially solved by improving the railway complex of Moscow region in the near historical perspective can help fill the gaps in the domestic political science and social policy of the region, as well as the development of a

number of approaches to solving social political problems associated with the development of the railway complex of Moscow region. It is necessary to introduce new modeling tools for railway transport in Moscow region. It is important to study innovative algorithmic methods and methods for acquiring better, faster and cheaper data to make efficient transport decisions. The use of breakthrough technologies to increase the effectiveness of transportation is essential. It is of great importance to use “fresh” technologies to track the status of transport channels online.

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