

X International Scientific Siberian Transport Forum

# The role of transport in the meanings of economics of Russia and the survey of economic indicators of transport of the Russian Federation

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## Abstract

Transport is a tremendously diversified sphere which includes all types of transport and emerging links in the activities of theirs. Transport acts as a connecting detail for manufacturing enterprises and final costumers, a huge number of enterprises use logistics systems and transport. Efficient transport provides profits that lead to multiplier effects such as better access to markets, employment and additional investment. This article reveals the features of transport as a sphere of social production and a sector of the national economy that provides benefits to the country. Within the framework of the article, the main economic indicators of transport in Russia are considered, the problems and prospects for the development of the transport industry are identified.

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Peer-review under responsibility of the scientific committee of the X International Scientific Siberian Transport Forum

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## 1. Introduction

The difficulty in allocating the contribution of the transport system to the economic development of a country arises from the fact that in the process of development the transport system can be applied to it before or simultaneously with economic development. In this regard, consideration of the features of transport as a sphere of social production and the sphere of the national economy is a relevant and mesmerizing topic from a scientific point of view.

Vehicles represent a special branch of production and consumption as they are a producer of transportation and at the same time a consumer for vehicles, fuel, raw materials and other products of various sectors of the economy. Transport creates places for people to work and it uses the labor resources of society.

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Transportation is divided into intra-production (transportation of raw materials within the metallurgical plant) and external (from one city or village to another one). Transportation is a transport process, the cost of which is a significant part of the total cost of production. The transport process (in relation to freight traffic) can be divided into three phases: the initial one - the reception and storage of the goods, its loading into rolling stocks, etc.; actually, the phase of transportation of objects from point “A” to point “B”; final - unloading of the goods, its storage, delivery to the recipient, etc.

Analyzing the transport industry of the Russian Federation and determination of the directions of its development is the purpose of the given article.

Transport as a sphere of social production is a subject and the sphere of transport of the Russian Federation is the object.

## 2. Materials and Methods

The theoretical basis of the work was made on the process of considering and exploring the works of domestic and foreign authors considering the issues of the role and functioning of the transport sector:

Vakulenko S., Evreenova N., Prokofiev M., Golyzhnikova D., Zhuravleva N., Klieshtik T., Kobozeva E., Sizo A., Lazarev V., Lunev P., Makeev E., Machihina A., Malutina T., Nikolaeva V., Kisel A., Nochevkina T., Podhaluzina V., Dreizen M., Shuba N., Slugin A., Starostina U., Feinberg A., Titov A., Hamidullina A., Bochkareva B., Chepel A., Salii O., etc..

The reporting materials of the Ministry of Transport of the Russian Federation, the Federal State Statistics Service and data from the global Internet are The empirical basis of the given work.

## 3. Results

The role played by transport in the economy for development makes it a derivative demand because the given sector responds to the formation of forces in the sectors of production and consumption. In general, the model for transport and economic development can be summarized as follows:

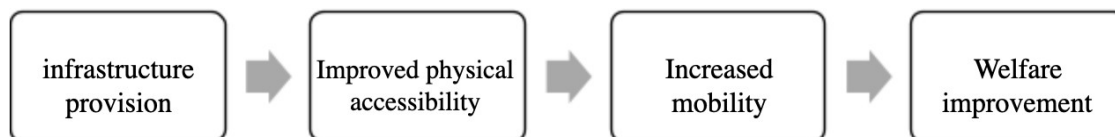


Fig. 1. This is the model of the relationship between transport and economic development of the country. Source: Zhuravleva et al, 2020.

In order to limit space, much attention is paid to some selected areas affected by transport: agriculture, industry and education.

Transport and agriculture: problems associated with transport services are major obstacles to the development of agriculture and rural areas. Agrarian communities are highly dependent on a reliable transportation system for inland transport, for connection of rural communities and market centers to sell their agricultural products and to buy manufactured goods. For example: when this role of transport is given, the importance of rural transport in transforming the rural economy can be appreciated because (this is still the example) fifty-six percent of Ghana's people live in rural communities. The created access will entail increased productivity and production as farmers will no longer have to face the pressures associated with subsistence farming, mainly to prevent food losses.

This means that surplus agricultural products will be transported to markets or even urban areas, creating useful places. In this way, the access will provide farmers with larger markets the opportunity to sell their products and therefore the opportunity to increase income. An increase in real incomes may cause forced spending on the part of farmers, who may even buy from other sectors.

For example, in studies from 1953 about the industrialization of gold prices in Ghana the results clearly show that the purchasing power of the farmer has a direct impact on industrial development. According to the study, the high disposable income derived from agriculture stimulates the industry.

Moreover, providing access roads also allows farmers to connect with agricultural extension services, which will teach them (farmers) modern farming techniques to maximize profits and reduce losses. Adapting to this modern farming practices will boost productivity and production again, leading to higher real incomes which can not only stimulate industry, but also encourage savings and thus positively impact the economy.

**Transportation and industry:** Transportation helps enterprises in the large-scale production of their products by delivering anything and everything very conveniently and without interruption.

This allows the business to manufacture and sell its products at a lower cost and face stiff and fierce competition in the market. In this way, the business can serve a large number of customers and generally increase their income.

Generally, when firms make site selections, two purposes of transportation are usually taken into account:

- low transport costs;
- satisfactory transportation services.

Companies that consider transportation costs to be vital tend to be located where the cost of supplying raw materials is minimal. Having an efficient transportation system is also important for firms as it helps to facilitate production by increasing accessibility and mobility.

When these two transportation objectives are available in the regions, this causes a high attractiveness for investors as they guarantee lower distribution costs and improved access for both employees and customers. In this way, investment in transport leads to the growth of the number of companies and the expansion of existing ones and the growth of companies implies an increase in the number of jobs.

Expansion of existing companies will cause a result of greater profitability / increased market share and still as a outcome, employment and income will increase as firms grow. In addition, the expansion of existing enterprises with the newly created ones will require more raw materials and components from their suppliers. Retail and wholesale businesses can expand as employees spend more through additional income.

**Transport and education:** Distance is one of the main problems of education in most developing countries. A 1994 survey in Morocco found a relationship between transport and school attendance. Due to the lack of a paved road, only 21 percent of girls and 58 percent of boys have ever attended school. On the other hand where a paved road has existed, school enrollment rises to 48 percent for girls and 76 percent for boys.

The access to education can be provided through the creation of transport infrastructure. In areas where communities do not deserve certain educational facilities due to threshold reasons, an efficient transportation plan will make it easier for residents of these small communities to move to larger communities to access schools.

**Transport and business:** Even the economy of our country depends on transport and it is under its direct influence. This led to the political, social, economic and cultural development of the country. Transportation services have expanded the number of their customers because they can do business nationally which would be limited to local areas in the absence of transportation otherwise.

The economies of the countries could not develop effectively because of this. It helps to effectively meet the needs of the enterprise's customers through mass production which is possible due to the timely supply of raw materials and the correct distribution of finished products.

This is one of the most important functions of transport, ensuring the delivery of all the necessary raw materials for the business and the proper delivery of all the company's products to consumers.

This helps to increase the sales of the business (if the goods are delivered properly and on time to those who need them, they will be satisfied and demand more and more). Therefore, it creates utility both in time and place by carrying and delivering products to widely dispersed consumers.

Transportation has made it easy to move labor from one place to another according to the requirements and to use them at maximum productivity. It helps to meet the need for manpower very easily.

For example, with the help of transportation a large amount of cheap and efficient labor in one place can be moved to the right place and used with maximum productivity.

Price growth control is one of the important functions of transportation which helps to eliminate all fluctuations in product prices. It ensures coordination between the more well-supplied regions and the under-supplied areas of the country, moving goods from one place to another conveniently and easily.

Transportation helps to increase business profits by supplying cheap raw materials from different locations and delivering finished products to remote customers. In the remote corners of the country there are cheap and sufficient raw materials which are actually delivered by transport to the production area and which are turned into finished products.

#### **4. Discussion**

The state supporting its own economy and the economy of its own producers develops its own transport policy, structure, principles, methods and transport management systems. Russia constantly pays close attention to transport at all stages of its development. During the middle ages Russia had norms for the construction and maintenance of bridges. The Regulations of Vladimir Monomakh stipulated the amount of taxes for these purposes. The collection of laws of 1589 already had road building codes. In a special of those times lawbook, adopted by the Zemsky Cathedral of Russia in 1649, the first separate chapter appeared with the norms of transport legislation. The first centralized transport department in Russia was the “Yamskoi” order (1516-1711). When Alexander-I, the Committee of Ministers, the State Council and ministries were created, including the Office of Water and Land Communications with the right of legislative initiative. 10 districts were created, the Board of Management and the Corps of Engineers were approved. There were three expeditions - water, land communications and trading ports under the Office. In 1810 the Administration was renamed into the Ministry of Railways.

State regulation in the field of transport in Russia is carried out by the Ministry of Transport of the Russian Federation which includes the agencies of railway, road, air, sea and river transport. The Ministry of Transport of the Russian Federation does not manage the property of transport enterprises and does not plan their economic activities, however, all transport agencies manage the property of state transport enterprises in terms of their development and efficient use.

The vertical structure of transport management includes: federal, regional, municipal, local government bodies and sectoral (by type of transport) organizations.

State regulation uses the following methods:

- taxes - regulation of income through direct and indirect taxes in the form of customs duties, various fees, etc.;
- budget - regulation of expenditures in the form of capital investments, subsidies and loans;
- monetary policy - regulation of the provision of loans, discount interest and monetary circulation.

The direct impact of state regulation, including on transport is carried throughout targeted financing of priority areas of development.

The indirect impact is realized in forms of subsidies, subsidies (general or targeted) and strict regulation of the activities of natural monopolies.

Foreign trade relations are regulated by the state with the help of:

- quotas - restriction of the object of import-export of certain products;
- embargo - the imposition of a ban on the import and export of certain goods;
- customs duties - the regulator of prices and sales of specific goods and services.

The strategic goal of the development of transport at the present stage is the formation of a freight-carrying and passenger-serving innovative transportation system. It should be noted that the foreign concept of improving the structure of transport management is aimed at concentrating production and centralizing management.

The development of the Russian economy makes the economic direction of improving the methods and system of transport management a priority. The creation of Russian Railways made it possible to separate the state and economic functions of railway transport management. The Federal Agency for Railway Transport of the Ministry of Transport of the Russian Federation received the functions of state regulation, and JSC "Russian Railways" - economic regulation of the activities of railways. The logistics system for transporting material flows from the primary source to the consumer and forwarding services to the clientele assumes a single responsibility for the timely delivery and safety of goods from the sender to the recipient, the execution of commodity-transport, customs

documents in direct multimodal transportation, settlements with involved modes of transport by a transport expedition as an independent legal entity.

In this way, state regulation in the field of transport in Russia is carried out by the Ministry of Transport of the Russian Federation which includes the agencies of railway, road, air, sea and river transport, as well as “Rosavtodor” and the service that oversees the activities of these types of transport.

When analyzing the main economic indicators of the transport sector, official data from the Federal State Statistics Service were used. As part of the article the main indicators for the freight and passenger transportation markets were disclosed.

Over the period of 2020 transport freight turnover in the Russian Federation decreased by 4.9% compared to 2019 and amounted to 5,397.2 billion tkm. The largest share of freight turnover was in railway transport - 2545.3 billion tkm, given that it decreased by 2.2% compared to 2019. It is important to note the growth dynamics of railway transport in the structure of the freight turnover of the transport country up to 47.2%. Indicators of automobile, pipeline, air, inland water also decreased. Growth is observed in maritime transport where cargo turnover increased by 16.2%.

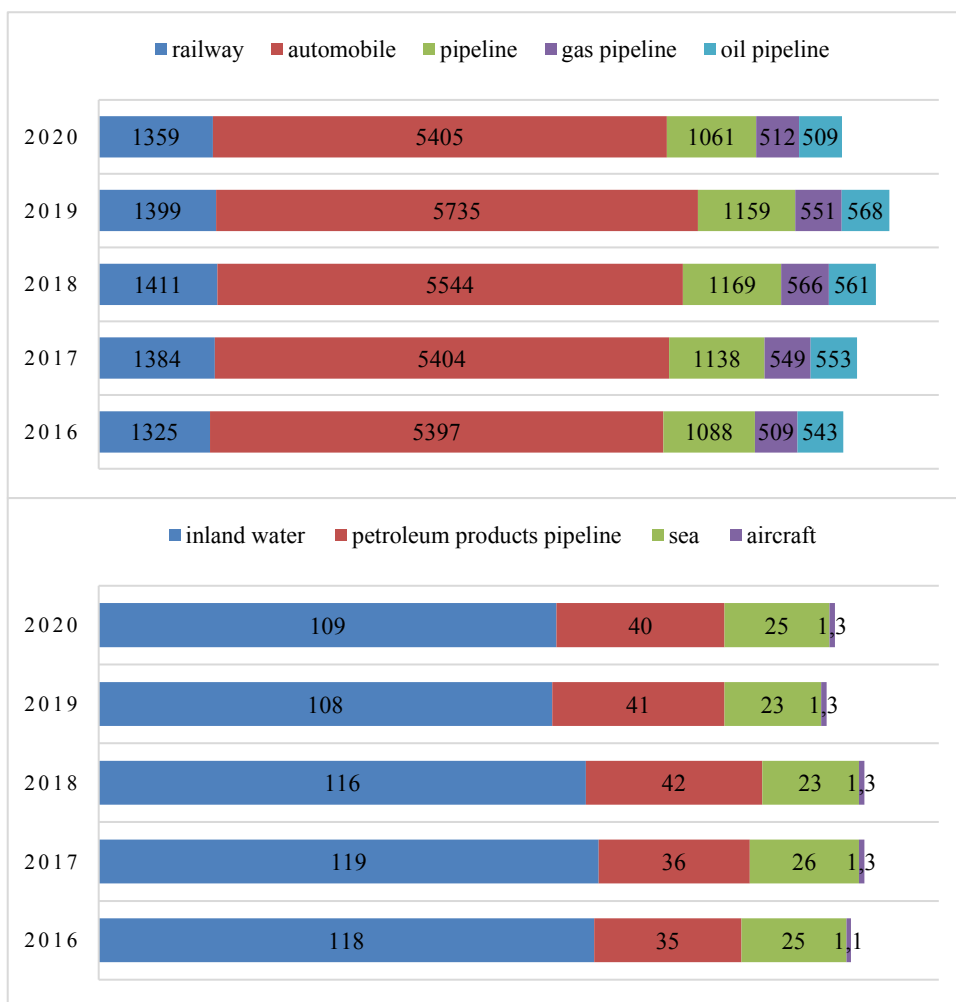


Fig. 2. Indicators of goods turnover by types of transport in 2016-2020 (Hepel et al, 2018).

The situation in the passenger transportation market is also not stable. Due to the spread of coronavirus infection (CoVid-19), the volume of passenger traffic decreased by 45.2% compared to 2019, and amounted to

312.7 billion passenger-km. The cessation of regular and charter flights due to closed borders caused by the epidemiological situation has had a significant impact on the air transport market. As a result, the largest drop in passenger traffic is observed in air transport (by 52.5%). It is also important to note the drop in passenger traffic in rail transport by 41.2%.

Figure 3 shows the main indicators for passenger traffic by mode of transport. In this way, the largest share in passenger traffic is occupied by air transport - 153.5 billion pass.-km., followed by rail transport - 78.6 billion pass.-km.



Fig. 3. Passenger turnover by type of transport in 2016-2020 (Hepel et al, 2018).

Summing up, a general conclusion based on the analysis of the main economic indicators of freight and passenger traffic can be drawn: for all modes of transport, there is a decrease in freight and passenger traffic.

The situation on the market is not stable and requires from the Government of the country supporting measures for development.

**5. Conclusions**

As a result of the analysis of the main economic indicators of transport in Russia we came to the conclusion that due to the coronavirus pandemic, freight and passenger traffic in all modes of transport has practically decreased.

Types of transport as independent economies and components of the transport system as a branch of the economy have their own integrated theory of development and management, which is based on the following factors:

- commonality of the main goals and objectives - meeting the needs of production and consumption in the transportation of goods and passengers;
- close relationship with other sectors of the economy;
- mutual, objective influence of modes of transport on each other in development and use;
- the similarity of the stages of development of modes of transport in technical, technological, energy, information and other aspects;
- the main idea of the development of transport in Russia is based on the integrity of the road network and the unity of transport management.

The level of development of transport must outpace the needs for the transportation of goods and passengers. If the transport process begins to lag behind the production or consumption process, failures begin in the economy. In this regard, transport reserves are objectively considered to be one of the expedient types of economic reserves. Transport activates and develops the overall progress, unites all sectors of the economy into a single whole.

The modern development of the world economy is characterized by the following trends:

- globalization (unification) and integration (penetration) of states into international communities;
- the desire to move production to places of consumption in order to reduce the transport component of products and smooth out socio-political interstate relations;
- organization of batch production without warehousing for storage of raw materials and finished products.

Under these conditions, transport becomes a technological part of the organization of production and must work according to the principles 'from the sender's door to the recipient's door', 'in any volume and any terms of transportation' and 'just in time'.

By 2024, the Russian Government has announced a large-scale development of the national economy, for which it is planned to allocate 25.7 trillion rubles. Of the 12 strategic directions, national projects have been formed (the infrastructure plan is considered the 13th national project). The cost of the project 'Comprehensive Plan for the Modernization and Expansion of the Main Infrastructure' is 6.35 trillion rubles. excluding the budget of the energy part of the plan: 3 trillion rubles will provide the federal budget, 58.7 billion rubles - regions, and the remaining 3.3 trillion rubles attracted from extrabudgetary sources. The Ministry of Transport has developed strategies for the development of rail, sea and other transport, which will avoid structural constraints on the socio-economic development of the country.

In order for all these goals and directions for the development of the transport system to be successfully implemented, it will be required:

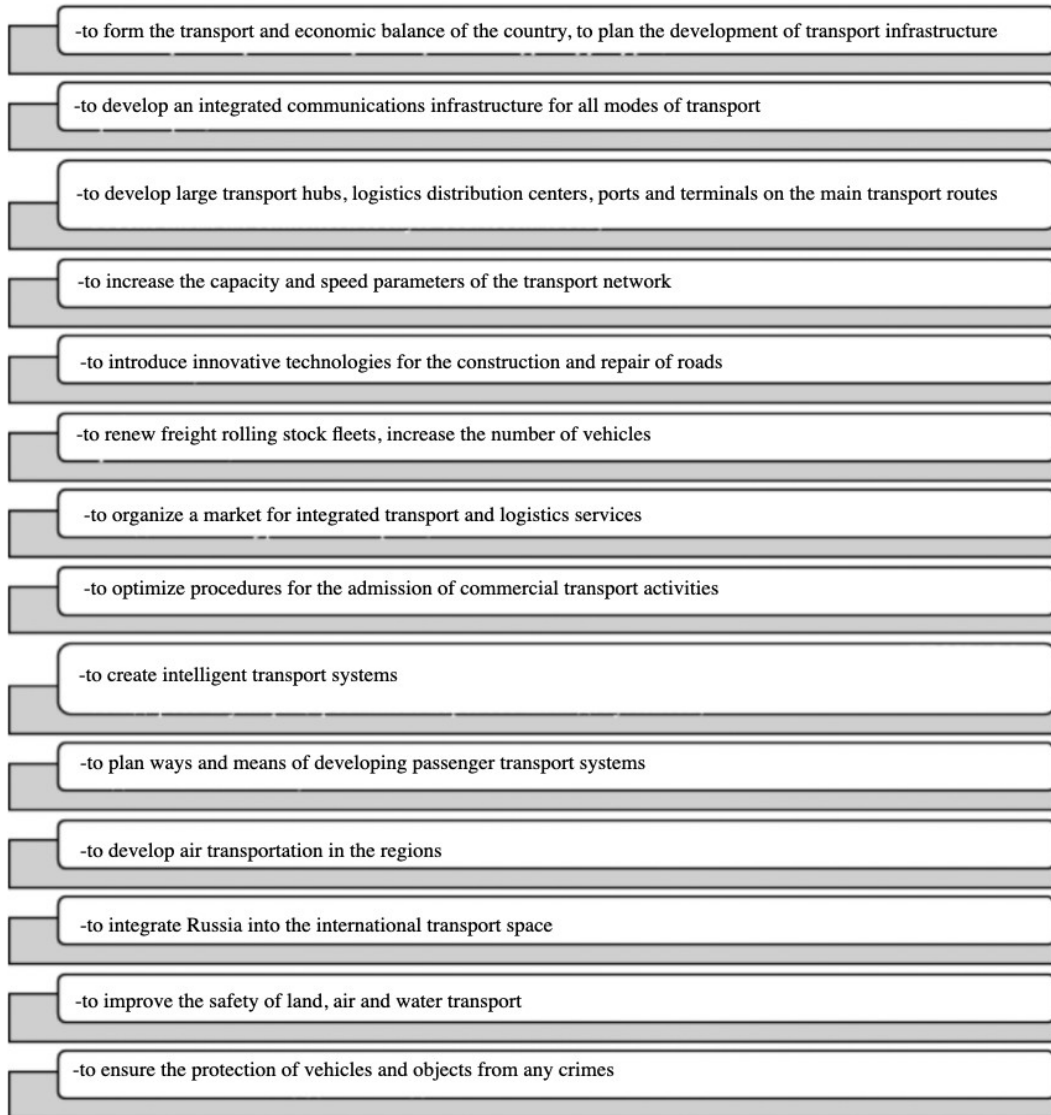


Fig. 4. Ways to improve the transport system of the Russian Federation.

In our opinion, the problem of the transport industry is largely not limited to the allocation of budgetary funds for its modernization. The implementation of infrastructure development programs is limited by the lack of ready-made projects. The problem is exacerbated by the crisis situation in the design and construction industries, the weak level of development of a number of regions and types of activities associated with projects and the lack of effective means of business access to such projects.

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