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Issue Article

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FEATURES OF THE IMPLEMENTATION OF THE TRANSPORT STRATEGY FOR THE RUSSIAN ARCTIC. Message 2

Abstract: *in the article, the authors consider the features of the implementation of the transport strategy in the Russian Arctic. At the same time, the financing of the Transport Strategy is envisaged to be carried out at the expense of the federal budget, the budgets of the constituent entities of the Russian Federation and extra-budgetary sources. We recommend that funds from the federal budget be directed to the following purposes:*

maintaining in working condition and reproduction of transport infrastructure facilities that are state-owned;

reconstruction and construction of transport infrastructure facilities of great socio-economic importance, as well as ensuring the safe functioning of the transport system;

transport security;

the implementation and stimulation of measures to maintain the mobilization readiness of means, transport facilities and means of communication, as well as measures carried out in the interests of national security;

ensuring the functions of state regulation and management in the transport industry;

conducting fundamental scientific research and implementing innovative scientific and technical projects of national and industry-wide importance.

The implementation of the considered goals will provoke the successful implementation of the transport strategy, which the regions of the Russian Arctic need so much.

Key words: *financing, transport strategy, infrastructure, socio-economic development, security, life, profitability, profit, investments, subsidies, budget, efficient TEP.*

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Introduction

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Implementation mechanisms of the Transport Strategy include:

improvement of the legal framework and methods of state regulation of the development of the transport system, ensuring the achievement of the goals of the Transport Strategy;

creation of an effective system for managing the implementation of the Transport Strategy;

advancing innovative development of the scientific, technical and technological base of the transport complex on the basis of advanced world achievements and technologies;

development of providing the industry with labor resources;

federal and regional targeted programs.

Improving the regulatory framework and methods of state regulation of development transport system, ensuring the achievement of goalsTtransport strategy The main tasks in the field of improving the legal framework and methods of state regulation of the development of the transport system, ensuring the achievement of the objectives of the Transport Strategy, are:

increasing the investment attractiveness of the transport industry, including improving the regulatory framework and introducing state regulation methods aimed at increasing the investment attractiveness of the industry, as well as improving economic and financial mechanisms, including public-private partnerships, aimed at increasing the investment attractiveness of the industry;

formation of a regulatory framework for a competitive market for transport services, including the creation of a regulatory framework and methods for state regulation of the development of the transport services market, the development of a regulatory and legal mechanism that ensures the fulfillment of contractual obligations in terms of the volume and quality of transport services, the development and improvement of methods and mechanisms of state regulation and motivation for the development of transport activity structures in order to ensure the quality of transport services, including motivation for the creation and development of national and international transport companies capable of ensuring innovative development and improving the quality and competitiveness of transport services, creating a regulatory framework that regulates commercial access to transport activities in the region freight transport,as well as promoting the development of small and medium-sized businesses in the transport sector;

state regulation of the level of specific transport costs in the price of products, including the development and implementation of state regulation methods that stimulate the reduction of total specific transport costs, as well as the development and implementation of mechanisms for state monitoring of total specific transport costs in the price of final products;

domestic and international harmonization of the regulatory and legal support of the transport system;

formation of a legal framework and methods of state regulation aimed at ensuring:

a guaranteed level of accessibility and quality of transport services for the population, including the development and implementation of minimum social transport standards in relation to the possibility of moving the population across the country (communication model for all types of passenger transport, appropriate rolling stock, purchasing power, affordability, standard for the frequency of transport services for each settlement), as well as the development of a regulatory framework governing commercial admission to transport activities in the field of passenger transportation;

integration of Russia into the global transport space and the realization of the country's transit potential, including the development of methods of legal regulation that provide assistance in increasing the share of participation of Russian transport organizations in the export-import transportation of Russian goods, as well as in the transportation of goods between third countries, integration into the global system of regulatory ensuring transport activities, standards and technical regulations, as well as improving the regulatory framework aimed at expanding Russia's participation in the system of international agreements and conventions in the field of transport;

security and sustainability of the transport system, including the improvement of the regulatory framework aimed at ensuring security in the transport industry and the development of the transport system, taking into account the requirements for ensuring the military security of the Russian Federation, as well as improving the regulatory framework governing the harmful effects of transport on the environment and human health, including in terms of determining the conditions for the admission of companies to transport activities.

The state is one of the main participants in the transport services market, acting as a shareholder or owner of organizations operating in the industry. The systemic role of the state in matters of management and disposal of its property in the transport complex is to increase the efficiency of all aspects of state property management in the field of transport, as well as to create conditions that ensure the activities and legal relations of participants in the civil circulation of transport property, taking into account the goals and objectives of the Transport Strategy and state policy in the field of property relations.

The main directions for improving the management of state property in transport are:

improvement of the norms of the legislation of the Russian Federation regulating the issues of registration of ownership rights to state property of the transport industry, as well as issues of the use of land plots by organizations of the transport complex (including the improvement of legal regulation of the procedures for reserving and withdrawing land plots for federal needs);

improvement of the legislation of the Russian Federation regulating issues of shared ownership of the property of the transport industry;

improvement of the legislation of the Russian Federation regulating the issues of investment activities in transport;

improving the forms and methods of transferring state property for use by legal entities and individuals;

improving the norms of the legislation of the Russian Federation in order to prevent the insolvency of the backbone organizations of the transport industry;

carrying out the privatization of the property of the transport industry, taking into account the goals and objectives of the Transport Strategy;

introduction of modern information technologies to solve the problems of accounting for federal property and indicators of the effectiveness of its use;

improvement of the system of professional training and qualification of heads of state unitary enterprises and state institutions;

improvement of the procedure for interaction between authorities in the field of state property management.

State regulation of the development and functioning of the Russian transport system should ensure the achievement of the objectives of the Transport Strategy.

Subject to state regulation:

development and technical improvement of the federal and regional transport infrastructure;

institutional transformations in transport;

issues of technological, transport and environmental safety of transport infrastructure facilities and vehicles;

formation and functioning of the market of transport services;

ensuring the mobilization readiness of transport;

international activity of transport enterprises and structures;

social sphere and labor relations in transport.

State regulation of transport services should be aimed at creating and maintaining the competitive advantages of Russian transport organizations in the domestic and international markets, at providing consumers with high-quality competitive transport services, as well as at introducing direct action legislative norms and mechanisms that guarantee the implementation of quality indicators by transport enterprises.

In the field of railway transport, for the implementation of the Transport Strategy, it is envisaged:

development of long-term target programs with the timing andsources of financing measures for the development of railway transport;

implementation of the mechanism of state participation in the development of railway infrastructure in the Russian Federation until 2035;

improvement of the system of state regulation of the railway industry and prices (tariffs) for regulated types of products and services, deregulation of competitive sectors, taking into account the degree of development of competition in order to protect the interests of consumers of transport services, increase the efficiency of the industry and create conditions for advanced investment development of railway transport;

implementation of the Railway Structural Reform Program and the target model of the railway transport services market at the third stage of the structural reform, including the creation of conditions for the development of competition in the field of railway transport services and the growth of private investment in the railway industry;

ensuring legal, informational and technical interaction between the railway systems of the Russian Federation and other states, taking into account the prospects for Russia's accession to the World Trade Organization, the need to integrate the railway transport of the Russian Federation into the international transportation system and make the most efficient use of its transit potential for these purposes;

determination of the body (bodies) of state power, the competence of which (which) includes the functions of managing mobilization preparation and civil defense in railway transport, imposing duties on the implementation of certain railway transportation and the use of rolling stock on specific owners of infrastructures, carriers and operators in cases of threats to socio-economic stability, defense capability, security of the state and in other cases provided for by the legislation of the Russian Federation;

removal of restrictions on the civil law turnover of railway transport property not involved in ensuring defense capability and mobilization preparation and expected to be involved in turnover in competitive market segments;

development of a set of measures aimed at ensuring the required level of safety of Russian railway transport facilities;

development of a mechanism for the implementation of socially significant, military and special transportation in peacetime and special periods, the implementation of mobilization plans, the maintenance of a mobilization reserve, the implementation of measures for mobilization training in railway transport and increasing the responsibility of participants in the market of railway transport services for failure to meet the requirements of mobilization and defense tasks;

development of corporate strategies for the development of railway transport organizations in accordance with the Transport Strategy.

Main part

As part of the implementation of the Transport Strategy, a possible change in macroeconomic indicators of the socio-economic development of the Russian Federation should be envisaged.

In order to form clear priorities for the construction of railway lines and eliminate inefficient decisions in the preparation of specific investment programs and projects, it is necessary to ensure financial, economic and social analysis.

A specific mechanism for attracting funds from the federal budget and the budgets of the constituent entities of the Russian Federation should be implemented in accordance with the legislation of the Russian Federation.

Based on the results of monitoring the pace of socio-economic development of the country, individual regions, industries and industrial zones, it is envisaged to amend the list of new railways of the Russian Federation with the provision of their financing in accordance with the indicated principles.

In the field of road management, a phased introduction of the principle of paying for the use of roads is envisaged, including:

the introduction of a toll on federal roads for trucks with a total mass of more than 12 tons in order to compensate for the damage caused to roads by heavy vehicles, taking into account the harmonization of requirements for the characteristics of heavy vehicles with similar requirements in the states of the European Union;

improvement of mechanisms for compensating for damage caused to roads by vehicles during the transportation of heavy and dangerous goods;

setting tariffs and fees, as well as fees for connecting road service facilities to highways.

The collected funds are expected to be directed to the maintenance and development of road infrastructure.

Large-scale attraction of extra-budgetary investments in the road sector is envisaged through:

development of the mechanism of concessions in the construction of toll roads;

issuance of bonded loans for the purpose of construction and reconstruction of roads, as well as the use of the mechanism of public-private partnership;

development of mechanisms for attracting the resources of organizations interested in the development of territories adjacent to highways for the construction of roads;

income from the commercial use of roadside lanes and the right of way of motor roads by specialized state structures.

The main principles of the formation of state policy in the field of regulation of the development of road transport are:

development of a system of supervision in relation to road transport;

transition from the spontaneous functioning of the motor transport services market to regulation in accordance with social and economic interests, which should be reduced to ensuring a balanced admission to professional (including commercial) activities on a contractual application basis, creating equal conditions for competition in the transport services market, monitoring compliance with established requirements and rules, including within the framework of transferring part of the powers to self-regulatory organizations, taking measures to reduce the negative consequences of the functioning of the transport services market, including through the development of an insurance system, as well as to ensure anti-terrorist security.

The main mechanisms for implementing the Transport Strategy in the field of road transport are:

a mechanism for admission to the market of motor transport services (including quotas for the use of motor vehicles on the territory of the Russian Federation);

the mechanism of admission to the profession and other types of motor transport activities;

a mechanism that stimulates the modernization and renewal of the fleet of vehicles, as well as the improvement of its structure;

a mechanism for creating conditions for the development of efficient modern transport and logistics technologies and transportation systems, encouraging an increase in the capitalization of the road transport business, the development of terminal complexes and information support for cargo transportation;

a mechanism that stimulates the acceleration of decommissioning and recycling of old cars with an excess service life;

a mechanism for paying for the use of road infrastructure, which makes it possible to compensate for the damage associated with the implementation of road transport.

For the modernization and renewal of the fleet of vehicles for all sectors of the Russian economy, it is necessary:

development of a state policy aimed at creating a rational structure of the truck fleet;

improvement of the depreciation policy aimed at ensuring the formation of own sources of financing for the renewal of vehicles;

development of a mechanism for generating the amount of net profit necessary to ensure a given coefficient of renewal of vehicles;

development of proposals for the use of alternative types of energy sources for vehicles;

expanding the practice of acquiring vehicles through loans and leasing.

In addition, it is necessary to form mechanisms for the implementation by Russian car manufacturers of the requirements of the Agreement on the introduction of global technical regulations for wheeled vehicles, items of equipment and parts that can be installed and (or) used on wheeled vehicles (Geneva, 1998), and Agreements on the adoption of uniform conditions for the period of technical inspections of wheeled vehicles and on the mutual recognition of such inspections (Vienna, 1997).

In 2025 - 2035, the main areas of state regulation in the field of air transport will be:

completion of institutional reforms, formation of a regulatory and legal framework for the functioning of air transport, harmonized with international rules;

the creation of a supporting transport infrastructure for air transport, as well as the implementation of a flexible customs policy in terms of the justified removal of protective duties on foreign-made aviation equipment and spare parts for it;

provision by the state of the availability of transport services for the population on the basis of organizing support for socially significant air transportation in local and main routes from the budgets of all levels;

launching a mechanism for self-development of the industry based on providing the prerequisites for achieving investment attractiveness for urgently needed capital-intensive structural transformations related to the aircraft fleet and airfield network.

The measures envisaged for implementation in these years are planned to be carried out within the framework of the federal target program "Development of the transport system of Russia (2025 - 2035)".

The state is actively involved in the structural transformation of civil aviation by subsidizing from the federal budget socially significant mainline passenger traffic and part of socially significant passenger traffic in local traffic, preventing cases of unfair competition and strengthening control over the activities of natural monopolies in the field of air transport, as well as by implementing:

subprogram "Civil Aviation" of the federal target program "Development of the transport system of Russia (2025 - 2035)", including stimulating the reconstruction and construction of important air transport infrastructure facilities, primarily facilities that ensure the safety of the operation of air transport, as well as the modernization and renewal of the fleet of transport funds;

the state program for ensuring the safety of flights of civil aviation aircraft;

federal target program "Modernization of the Unified Air Traffic Management System of the Russian Federation (2025 - 2035)";

federal target program "Improvement of the federal system of reconnaissance and control of the airspace of the Russian Federation (2025 - 2035)";

federal target program "Global navigation system".

In 2025 - 2035, state regulation measures will be aimed at ensuring the sustainable development of civil aviation, including:

completion of a radical renewal of the fleet of Russian airlines;

reconstruction of facilities and re-equipment of the basic airfield network;

introduction of new technologies of the transportation process;

creating favorable conditions for attracting non-state capital for the construction and operation of air transport facilities;

liberalization of the market and reduction of spheres of tariff and price regulation;

reduction in the number of ground infrastructure facilities that are in federal ownership by involving them in civil circulation;

ensuring funding for the maintenance and operation of state-owned facilities that ensure the safe operation of air transport;

maximum reduction of the negative impact of air transport on the environment.

Federal executive authorities in the field of transport will take part:

in determining priority aircraft sizes for the industry, as well as in the implementation of federal support for their development and production programs on a competitive basis;

in improving, on the basis of unified organizational and methodological principles, the system for monitoring the compliance of manufactured and operated aircraft and equipment with established requirements and in increasing the effectiveness of such control.

In the near future, the State Program for Ensuring the Safety of Civil Aviation Flights should be implemented, which, in accordance with the recommendations of the International Civil Aviation Organization on the introduction of a systematic approach to flight safety management, determines priority goals and activities in order to improve flight safety.

With state incentives for the technical re-equipment of the fleet of vehicles based on modern Russian technology, carriers should not experience any restrictions in acquiring foreign vehicles of those standard sizes that are not produced in Russia.

State regulation of the activities of maritime and inland water transport is aimed at protecting the interests of the state and society, provided that the economic independence of enterprises in the industry is maintained. In the process of regulation, government bodies solve the following tasks:

accelerating the economic development of maritime and inland water transport enterprises and increasing their competitiveness in the world market of transport services;

raising the technical and organizational level of maritime and inland water transport based on the latest achievements of scientific and technological progress;

improvement of working conditions for the crew of sea and river vessels and employees of coastal enterprises of the industry;

increasing the level of safety of sea and river transport activities, including the safety of navigation and navigation and environmental protection;

ensuring legal protection of Russian sea and river transport in the field of international shipping.

Accelerating the economic development of enterprises in the industry and increasing their competitiveness is achieved through both direct investment and various indirect measures.

An example of direct investment is the participation of the state in the development and implementation of federal targeted programs.

Indirect measures include a wide range of measures aimed at creating port special economic zones, organizing the effective operation of the Russian International Register of Ships, pursuing a balanced tax, customs, and credit policy, as well as securing part of the cargo base of maritime transport for Russian carriers.

The legal framework as the basis of state regulation of transport activities should ensure effective interaction between transport enterprises, state protection of the rights of consumers of transport services, safety of the transport process and environmental protection.

Normative legal acts regulating the activities of modes of transport are developed taking into account their harmonization with international legal documents.

Legal aspects of regulation of transport activities are relevant at the level of regional and municipal government. The constituent entities of the Russian Federation must regulate the development of the means of communication under their jurisdiction.

The regulatory framework should meet the new business conditions, ensure the coordination of the interests of transport enterprises with public interests, legal consolidation of the rights and obligations of transport enterprises, as well as the status of public transport enterprises (public carriers).

This work should be carried out by amending the regulatory legal acts, as well as by developing new acts that provide for uniform approaches to the regulation of similar relations in the operation of various modes of transport.

The specifics of the transport industry should also be properly reflected in documents of a general economic nature.

Increasing the investment attractiveness of the transport industry requires the development of a regulatory framework that regulates the use of various forms of public-private partnership at the state, interstate and regional levels, which defines issues related to the distribution of risks, the level of obligations of the public and private sectors, the duration of projects and the right ownership of the assets.

It is necessary to improve the legal framework governing the development of the transport system, taking into account the requirements for ensuring the military security of the Russian Federation, including the use, monitoring and development of the transport system of the Russian Federation, including dual-use facilities, mobilization training and military transport duties of transport enterprises, preparation and use in the interests of the country's defense of transport infrastructure facilities that are in forms of ownership other than federal, the creation of a new system for managing military and special transportation in railway transport, the introduction of changes in the procedure for the development and harmonization of standards, specifications and design estimates for dual-use facilities, reserving land for events,ensuring the operation of transport in emergency and other situations.

In order to ensure the safety of transport infrastructure facilities and vehicles, it is necessary to regulate the process of equipping or retrofitting them with modern engineering and technical means of ensuring transport security (security), including within the framework of technical regulation and transport security requirements.

Priority areas for improving legal regulation in railway transport should be aimed at implementing the target model of the rail transport services market.

The key direction for improving the state tariff regulation in the field of rail transportation is the creation of a differentiated system of state tariff regulation, adapted to various conditions for the functioning of the markets for rail transport services.

In addition, the state tariff policy in the field of rail transportation should be based on the principle of balancing the interests of natural monopoly entities and users of their services and ensure, on the one hand, reducing the negative impact of price increases (tariffs) on products (services) of natural monopolies on economic growth rates. (taking into account the target parameters of inflation), and on the other hand, the establishment of tariffs (prices) that ensure the efficient operation (rendering of services) of subjects of natural monopolies.

In general, the improvement of the state tariff policy should be carried out at the interdepartmental level, systematically and taking into account the ongoing macroeconomic policy, which is associated with the need to develop measures of state support for certain sectors of the economy and the infrastructure complex of railway transport.

One of the priority areas for improving legal regulation in the road sector is the adoption or reapproval by the Government of the Russian Federation of the following regulatory legal acts necessary for the state regulation of road activities in accordance with the Federal Law "On highways and road activities in the Russian Federation and on amendments into separate legislative acts of the Russian Federation":

a list of public roads of federal significance;

the procedure for the formation of the register of roads and the provision of information from the register;

list of roads of defense significance;

a number of regulatory legal acts in relation to roads of defense significance;

norms of land acquisition for the placement of roads and (or) road service facilities;

normative legal acts on the payment for connecting road service facilities to public roads of federal significance, on the procedure for establishing and using right-of-ways of federal roads, on the procedure for establishing and using roadside lanes on federal roads;

the minimum requirements for the provision of public roads with road service facilities, as well as the requirements for the list of minimum necessary services provided at such road service facilities;

the procedure for carrying out weight and dimensional control, including the procedure for organizing weight and dimensional control points;

the procedure for establishing a permanent route of a vehicle carrying dangerous, heavy and (or) bulky goods;

the procedure for establishing a temporary restriction or termination of the movement of vehicles on roads;

the procedure for compensation for damage caused by vehicles carrying heavy loads, and the procedure for determining the amount of such damage;

rules for the provision of services for organizing the passage of vehicles on toll roads of general use of federal significance;

the method of calculation and the maximum amount of the fare for the vehicle;

the procedure for classifying roads and assigning them to categories of roads (categories 1, 2, 3, 4, 5) depending on the transport performance and consumer properties of roads;

the composition of the sections of the design documentation of highways and the requirements for their content;

the procedure for assessing the technical condition of roads.

In addition, the priority areas for improving legal regulation in the road sector are:

preparation of new documents of technical regulation - technical regulations, national standards, standards of organizations and acts of a recommendatory nature (industry road methodological documents). The unified system of technical regulation of the safety and quality of materials, products, structures and services in the road sector that is being created should comply with the practice of countries with developed market economies in this area. It is planned to harmonize Russian standards in the field of road infrastructure with advanced international standards;

development and prompt implementation of new methodological documents that consolidate at the federal level the massive use of Russian technologies for road works, effective road construction materials and modern road equipment;

improvement of the regulatory and technical base of the road sector in the field of design and survey work, including the development of new norms and rules for the design of roads and artificial structures for the widespread use of progressive designs of road pavements and structures, new materials and technologies.

Priority areas for improving legal regulation in road transport include:

amendments to the Federal Law "On Licensing Certain Types of Activities" in the part relating to the rules for the admission of carriers to the profession and the market of motor transport services;

amendments to the Code of Administrative Offenses of the Russian Federation in terms of establishing and, if necessary, tightening administrative responsibility for violations in the field of road transport;

development and adoption of technical regulations;

approval at the appropriate level of documents regulating the carriage of goods by road, the carriage of passengers and luggage by road and urban ground electric transport;

development of a regulatory framework in the field of vehicle recycling.

Priority areas for improving the legal regulation in air transport include:

amendments to the Federal Law "On Technical Regulation", taking into account international requirements in the field of civil aviation;

amendments to the Air Code of the Russian Federation in terms of the use of airspace by business and small aviation, as well as the improvement of airport activities;

development of administrative regulations for the execution of state functions by the federal executive body for the mandatory certification of civil aviation facilities and for the procedures for issuing certificates to aviation personnel;

harmonization of federal aviation regulations with international standards in terms of the production and operation of aircraft and simulators, the performance of flights and their support, as well as maintaining the airworthiness of aircraft;

development of new rules or amendments to federal aviation rules that determine the regulation of air transport activities in relation to flight safety;

development of federal aviation rules for the certification of types of ground-based radio engineering (radar, radio navigation, radio communications) facilities and complexes, as well as individual subsystems (components) of automated and non-automated air traffic control systems designed to ensure aircraft flights;

improvement of the regulatory and legal framework in the field of flight safety, tougher

liability for forgery and falsification of passports and forms of aviation products, certificates of aviation personnel whose activities are related to ensuring flight safety;

development of a normative act establishing the responsibility and procedure for interaction between authorized bodies and interested parties in the field of ensuring and maintaining the airworthiness of civil aviation equipment;

preparation of proposals for improving the airworthiness standards of aircraft and helicopters;

preparation of proposals for the extension until 2035 of the Target Comprehensive Program to maintain the airworthiness of civil aviation aircraft until 2010;

development of an interdepartmental regulatory document that determines the procedure for interaction between the operator and the developer of aviation equipment in terms of organizing authorized maintenance and repair centers;

determination and consolidation in regulatory legal acts of the mechanism for implementing the norms of the Air Code of the Russian Federation in terms of establishing the classification of airspace and the notification procedure for its use;

harmonization of the civil, tax and currency legislation of the Russian Federation in terms of air traffic management;

legislative establishment of criteria for airlines that can be classified as socially significant and transportation, which are carried out using state support funds, as well as fixing the basic mechanisms of the system of state support for socially significant air transportation;

improvement of legislative norms regulating the issues of registration of property rights to state property, as well as issues of land use by organizations of the air transport complex (including the improvement of legal regulation of the procedures for reserving and withdrawing land plots for federal needs);

development of forms of state regulation and control adequate to the purpose and conditions for the operation of general aviation (non-commercial).

Improving the regulatory framework that establishes the legal and organizational foundations for the operation of airports in the Russian Federation includes:

the procedure for establishing an economically acceptable level of rent for land plots that are state and (or) municipal property and occupied by airfields (airports);

classification of airfields and airports;

the procedure for activities at aerodromes and airports of legal entities and individuals, providing for the possibility of transferring the property of airports (airfields) to the ownership of the constituent entities of the Russian Federation and vesting the constituent entities of the Russian Federation with the appropriate powers to maintain and develop it;

a system of standards that an aerodrome, its activities and facilities must comply with, as well as the procedure for the phased introduction of relevant standards, taking into account international experience;

a system of conducting activities for the provision of refueling services at the airport, focused on generating the main income of refueling complexes at airports by providing services to airlines, and not by reselling fuel;

development of mechanisms for the creation of alternative refueling complexes at major airports;

the procedure for the formation, approval, publication and publication of the aircraft schedule, as well as the mechanism for coordinating slots.

It is planned to improve the regulatory framework in terms of:

development and harmonization of the Russian system of regulatory environmental requirements with the international system;

improving methods for assessing the level of harmful effects of air transport on the population and the environment near airports and during en-route flights;

establishment of balanced environmental requirements governing the activities of air transport on the territory of the Russian Federation, development of a concept and program for their gradual tightening;

development and improvement of mechanisms for state regulation of improving the environmental safety of air transport, including those providing for the possibility of imposing restrictions on flights of aircraft that do not meet environmental requirements, and charging operators for excessive environmental impact of aircraft, establishing criteria and standards for introducing operational restrictions for flights of aircraft that do not meet environmental requirements, as well as determining the tariffs for additional airport charges for servicing such aircraft, the rules for their collection and further spending.

In order to improve the legislative support for the accelerated development of maritime and inland water transport and overcome negative trends, it is advisable to adopt regulatory legal acts that ensure:

assigning part of the cargo base of maritime transport to national carriers;

reducing the tax burden on the infrastructure and transport fleet of maritime and inland water transport;

finalization and adoption of the federal law "On direct mixed (combined) transportation of goods";

amendments to the Law of the Russian Federation "On the organization of insurance business in the Russian Federation" in terms of possible risk insurance on the territory of the Russian Federation;

improving the safety of navigation and navigation;

protection of the environment from pollution from ships, including through procedures

state port control and administrative measures, including the tightening of requirements for safety and environmental protection from entry into the ports of the Russian Federation of old and environmentally unsafe foreign sea vessels.

Improving legal regulation in maritime transport includes:

development and adoption of regulatory legal acts in the field of transport use of the Northern Sea Route;

further harmonization of the provisions of Russian legislation withprovisions of international maritime treaties and conventions in which the Russian Federation participates.

The strategic direction for the development of international transportation in inland waterway transport will be the integration of inland waterways of the Russian Federation into the system of international transport communications. The most important task in this area is to create a regulatory framework for organizing transportation along international transport corridors in the context of opening the country's inland waterways for ships flying foreign flags.

The main directions for improving the regulatory framework of industrial railway transport are:

creation of equal conditions for land use and taxation for organizations of railway transport of general and non-public use;

improvement of the system of state regulation of tariffs for works and services provided by organizations of industrial railway transport;

formation of a regulatory framework that defines the requirements in the field of technical and environmental safety and labor protection in industrial transport;

determination of the legal status of industrial transport entities and the procedure for the use of vehicles and equipment by them;

ensuring equal access of all interested persons to industrial transport services;

application of economic measures that stimulate investment in rolling stock, modernization and development of industrial transport infrastructure;

taking into account the peculiarities of the functioning of industrial transport in the development of tariffs for public railway transport organizations and technical regulations;

creation of conditions that prevent discrimination and violations of the antimonopoly legislation of the Russian Federation in relation to counterparties technologically connected with industrial transport railways;

stimulating the creation of voluntary certification systems for industrial transport;

improvement of the legal and economic foundations for the interaction of industrial transport organizations with serviced industries;

coordination of programs and projects for the technical modernization of public railway transport and industrial transport;

coordination of efforts of federal executive authorities and executive authorities of the constituent entities of the Russian Federation, representatives of business and public organizations in solving the problems of developing industrial railway transport;

restoration of the system of statistical monitoring of the work of industrial transport.

The main directions for improving the legislative and regulatory framework governing the functioning of the transport system of the Russian Federation in terms of the development of dual-use facilities are:

introduction of changes in the procedure for the development and implementation of federal target programs and interstate target programs in which the Russian Federation participates, and in federal target programs on issues of ensuring security, defense and other special functions assigned to the state;

amendments to the Federal Laws "On Defense" and "On Mobilization Training and Mobilization in the Russian Federation" related to the reduction in the share of the public sector in the field of transport;

development of proposals for the preparation of regulatory legal acts that allow in practice to implement the provisions of federal laws regulating the procedure for the operational equipment of the territory for defense purposes, except for the objects of the Unified Air Traffic Management System of the Russian Federation, the procedure for solving mobilization tasks and tasks of military transport duty, as well as the procedure for planning, designing , design, construction, operation and use of dual-use facilities;

development of standards and regulations for the operation and (or) use of dual-use facilities at all stages of the life cycle of facilities, in order to make decisions on the transfer of dual-use facilities that are under the jurisdiction of the Ministry of Transport of the Russian Federation or the Ministry of Defense of the Russian Federation for concession, long-term lease and (or) to the jurisdiction of other authorities, and (or) to privatization;

development of proposals for the Ministry of Economic Development of the Russian Federation to include measures related to the technical cover of the transport network of the Russian Federation in the mobilization plan for the economy of the Russian Federation.

The main tasks in the field of creating an effective system for managing the implementation of the Transport Strategy are:

mutual coordination of the strategies of the constituent entities of the Russian Federation with the Transport Strategy;

linking the Transport Strategy with resource-providing industries;

development and adoption of an effective organizational model for the implementation of the Transport Strategy;

development of a system of control and supervision in transport;

development of a system of statistical accounting in transport;

creation of a monitoring system for the implementation of federal targeted programs and strategies;

creation and development of an information and analytical system for managing the implementation of the Transport Strategy;

creation of a strategic planning system based on the transport and economic balance;

creation and development of an automated information and analytical system for managing the transport complex.

An important tool for managing the implementation of the Transport Strategy is its linkage with the constituent entities of the Russian Federation. The main mechanism for implementing the Transport Strategy is federal target programs for the development of transport, regional programs for socio-economic development, as well as regional and municipal programs for the development of transport. Efficient management of the implementation of the Transport Strategy implies mutual coordination of these programs at the stage of their formation. The result should be a general strategic plan for the development of the transport system, which provides for the implementation of activities of various programs within the framework of the Transport Strategy.

At the same time, it is important to link the implementation of program activities with the territorial planning schemes of regions, regions and cities.

The formation of a system of interrelated measures also implies the division of interests and responsibilities between the Russian Federation, regions and municipalities, as well as between the state and organizations.

The transport industry forms a system order for a number of industries, which, on the one hand, receive an incentive for development, and on the other hand, become dependent on the rhythm of the implementation of the Transport Strategy. It is necessary to develop an agreed sequence of development of all industries involved in the implementation of the Transport Strategy.

It is necessary to develop a program for the development of the Russian production of materials, machinery and equipment for the transport system of the Russian Federation, which provides for measures for state support of their manufacturers through preferential leasing of the necessary equipment and allows for the creation of the production of new materials with the involvement of state investments.

An effective organizational model for managing the implementation of the Transport Strategy should be developed and adopted, which will include a set of administrative and economic methods for motivating the achievement of goals. The creation of this model will require complex systematic research and development.

As part of the organizational model for managing the implementation of the Transport Strategy, appropriate regulatory and methodological support should be formed.

It is advisable to improve the management system for the implementation of the Transport Strategy in the following areas:

attracting extra-budgetary funds along with state funding to solve problems related to the implementation of the Transport Strategy;

the use of modern financial instruments and greater flexibility in the choice of schemes for the implementation of investment projects;

introduction of long-term contracts;

creation of a feedback mechanism to assess the degree of satisfaction of user needs;

optimization of resource allocation by types of work performed;

improvement of competitive procedures and implementation of a flexible pricing policy;

use of mechanisms to stimulate the development of transport industry enterprises and the development of new materials and technologies;

attracting highly qualified specialists in the field of finance, management and staff motivation;

increasing the efficiency and efficiency of managerial decision-making.

It is necessary to form an effective system of economic management of objects and property remaining in the ownership of the state, and to resolve issues related to the improvement of the territorial link in the management of transport and transport activities, the creation of territorial governing bodies and the delimitation of powers between them and the federal transport authorities with the gradual transfer of a significant part of the management functions to the regional level.

The innovative nature of the Transport Strategy determines the need to include special mechanisms and means of managing innovative development in the organizational model for managing its implementation. These mechanisms will ensure the creation of technical, financial, regulatory and organizational conditions for innovative renewal of the industry in all areas of activity. One of such mechanisms is the creation of a network of innovation and implementation centers that would solve problems related to the collection and systematization of information on innovations in transport with their expertise, certification and implementation of the best

innovative solutions in the development of the transport system.

The development of the system of control and supervision in transport involves, in addition to the implementation of the functions of the relevant service, the solution of functional tasks related to the new goals and objectives of the Transport Strategy. These include the tasks of supervision and control over the quality of transport services, the quality of the implementation of the measures of the Transport Strategy, the efficiency of the functioning of the transport system, the operation of paid services systems, the safety and environmental friendliness of the transport system.

Of great importance are the mechanisms for strengthening state control and supervision in the field of road transport, taking into account the delineation of powers of various control and supervisory bodies to ensure that all subjects of the market for road transport services comply with the requirements of regulatory legal acts.

The creation of a developed system of statistical accounting in transport is a prerequisite for effective management of the implementation of the Transport Strategy. The coordinated development of all elements of the transport infrastructure requires a comprehensive analysis of statistics and forecasting the needs of sectors of the economy and the population in transport services. To do this, first of all, it is necessary to create a system of statistical accounting, which should include monitoring the parameters that are essential for assessing the indicators and indicators of the Transport Strategy. The creation of such a system will allow organizing effective feedback. The statistical accounting system should ensure the development and monitoring of the transport and economic balance, as well as forecasting changes in the cargo base and traffic flows. Based on this, assessments can be made necessary for making operational decisions on various options for the development of the transport system. The means of forming such estimates should become the basis for creating a strategic planning system based on the transport and economic balance and mathematical modeling.

The planning system should provide for the creation of a system of long-term contracts aimed at achieving the normative indicators of the transport and operational state of transport infrastructure facilities, as well as a system for long-term planning of road activities.

In the road sector, during the period of the Transport Strategy, the development of the main network of federal highways should be completed and a gradual transition to the priority development of regional and local roads, which make up the dominant part of the public highway network of the Russian Federation, should be carried out. Thus, one of the most important organizational tasks is the extension of long-term program-targeted planning to the regional and local levels of government. The system of targets and indicators of the transport and operational condition of roads and the development of the road network should be introduced at all levels of road management. Measures to improve the efficiency of road planning include 4 main blocks:

development of a system of long-term program-target planning focused on achieving target indicators of the transport and operational state of roads and indicators of the development of the road network;

introduction of an innovative planning method into the system of program-target planning of road activities, based on the variant design of the life cycle of a highway;

introduction of a system of long-term contracts aimed at achieving standard indicators of the transport and operational condition of roads;

improvement of monitoring of the technical and transport-operational state of the road network, primarily at the regional and local levels of government.

Creation of a system for monitoring the implementation of federal targeted programs and projects involves the introduction of principles and modern means of project management. It is necessary to create a vertically integrated system of scheduling, accounting, control and management of a system of projects and programs that ensure the implementation of the Transport Strategy, the ability of the upper level of management to control the integral indicators of the implementation of projects and programs in real time with details of specific objects.

The next step in improving management efficiency is the creation and development of an information and analytical system for managing the implementation of the Transport Strategy. This system should ensure the construction of analytical information in various forms on indicators and indicators, as well as transport development programs, both in territorial and time sections, broken down by objects, nodes, directions and corridors with their characteristics.

Information-analytical support of all these management functions should be provided by a single automated information-analytical system for managing the transport complex. In the context of the increasing complexity of the tasks facing the industry, increasing the efficiency of management requires the use of modern information and telecommunication technologies, and increasing the manageability and controllability of transport development requires a fundamental improvement in information support and raising the level of automation of management tasks, primarily at the level of transport complex management bodies. A unified automated information and analytical system for managing the transport complex should provide an increase in the completeness and quality of analysis of the

effectiveness of the development of transport infrastructure,

The transport strategy is innovative in nature. In this regard, its implementation requires advanced intensive innovative development of the scientific, technical and technological base based on advanced world achievements and breakthrough technologies.

The scientific support of the Transport Strategy should be aimed at the implementation of its main goals and objectives and cover all key areas of development of the transport complex. In this regard, the scientific support of the Transport Strategy is presented in the form of 3 blocks of scientific subprograms corresponding to 3 blocks of subprograms for the implementation of the Transport Strategy, specified in subsection 5 of section VI, and includes:

a block of scientific support for subprograms aimed at achieving general economic, general social and general transport main strategic targets of the Transport Strategy, including subprograms that are complex in nature and aimed at the implementation of several goals and mechanisms;

a block of scientific support for subprograms aimed at putting into operation the main mechanisms for the implementation of the Transport Strategy, including the development of scientific support for the transport complex;

a block of scientific support for subprograms aimed at achieving the strategic targets of the Transport Strategy for individual modes of transport.

Scientific support for the implementation of the Transport Strategy provides for research and development work on the development of the transport complex, the implementation of experimental pilot projects that ensure the development of methods, mechanisms for regulatory, technical, technological and information support for scientific work, as well as the performance of work on scientific support implemented results.

Each scientific subprogram included in the corresponding block is either aimed at achieving a specific strategic goal or a specific mechanism for implementing the Transport Strategy, or is complex, aimed at implementing a group of goals and mechanisms.

When implementing the subprograms, scientific, methodological and information technology support should be provided for the implementation of the measures of the Transport Strategy in accordance with Decree of the Government of the Russian Federation of December 25, 2007 N 931 "On some measures to ensure information interaction between state bodies and local governments in the provision of public services to citizens and organizations", by order of the Government of the Russian Federation dated May 6, 2008 N 632-r, which approved the Concept for the formation of e-government in the Russian Federation until 2010, other legislative and regulatory documents regulating interaction with public authorities and other departments, as well as with requirements for software, information, telecommunications, navigation and scientific and methodological support for the implementation of the Transport Strategy.

The block of scientific support for subprograms aimed at achieving the general economic, general social and general transport main strategic targets of the Transport Strategy, including subprograms that are complex in nature and aimed at the implementation of several goals and mechanisms, includes scientific developments for all 6 goals of the Transport Strategy.

Scientific support for the formation of a single transport space in Russia based on the balanced development of an efficient transport infrastructure will be carried out in the following areas:

development of technical, infrastructural and regulatory principles and models for integrating the country's transport communications based on the differentiated development of communication routes for all modes of transport and combining them into a single balanced system that provides the necessary capacity, volume and quality of transport services;

development of technological and regulatory principles and models for integrating the commodity transport technological infrastructure of all types of transport and cargo owners into a single system that provides the necessary volume and quality of transport services;

development of scientifically substantiated requirements for increasing the throughput capacity and speed parameters of the transport infrastructure to the level of the world's best indicators, as well as scientific justification for creating network bandwidth reserves in various directions;

development of projects for the integrated development of transport hubs, approaches to them and transport corridors in the main directions of transportation, the creation of an integrated system of logistics parks in the country as the basis for the formation of a modern commodity distribution network;

development of scientific foundations for building a unified transport system of the country in a market economy, including analysis and classification of technical, technological, economic and legal inconsistencies in interacting modes of transport, as well as losses at the junctions of interacting modes of transport and the reasons that cause them;

development of scientific foundations for the coordinated development of the infrastructure of interacting modes of transport, the construction of agreed technologies for interacting modes of transport (by types of interaction), as well as end-to-end management of cargo flows, in the passage and processing of which several modes of transport are involved;

development of a methodology for building a unified transport network;

development of principles and methodological approaches to harmonize state priorities and economic interests of private participants in order to build a harmonious transport process within a single transport system;

development of scientific foundations for the transport development of new territories (developing regions), including the creation of a theoretical model for building an effective transport network such as "arteries - veins - capillaries", adapting the theoretical model to the conditions of specific developing regions and developing methodological foundations for building an effective transport network in areas of industrial development;

carrying out simulation examination of investment projects for the development of transport infrastructure (especially projects for the development of large transport hubs), including the development of a methodology for conducting simulation examinations, the creation of simulation systems that allow modeling systems of various modes of transport, the development of detailed models of transport systems being designed, the development of dynamic simulation models of transport flows to assess the effectiveness of options for the development of transport infrastructure, a comprehensive study on the models of functioning of the designed transport facilities with the issuance of their real capacity, "bottlenecks" and performance indicators, as well as the development of proposals for adjusting projects based on simulation expertise;

development of navigation systems and systems for telemetric monitoring of traffic flows, traffic management systems and intelligent transport systems;

research, adaptation and development of innovative technologies for the construction and reconstruction of transport infrastructure;

development and creation of effective systems for monitoring the condition and managing the maintenance of transport infrastructure facilities;

development and creation of a unified information environment for the technological interaction of various types of transport and participants in the transport process.

Scientific support for the development of accessibility, volume and competitiveness of transport services according to quality criteria for cargo owners at the level of the needs of intensive and innovative development of the country's economy will be carried out in the following areas:

development, monitoring, analysis and development of a model of the transport services market for the needs of all sectors of the economy, including the parameters of the quality of transport services, the structure of quality standards for various categories of goods and sectors of the economy, requirements for the regulatory framework of the transport services market, economic characteristics of the market model, means quality control and technological models for ensuring the quality of transport services;

research, development and experimental testing of highly efficient commodity transport technologies that provide quality criteria for the entire range of transport services and increase the productivity of the transport system;

development of methodological foundations, regulations and automated information systems for statistical accounting in transport, including the creation of a statistical data bank that ensures the development and monitoring of the transport and economic balance;

development, scientific support and monitoring of the transport and economic balance;

development of methods and mechanisms to motivate the structural modernization of transport systems in order to ensure the quality of transport services and create competitive transport companies;

development of methods and tools for monitoring and controlling the quality of transport services provided, as well as methods and mechanisms for improving the quality of transport services, including selective statistical monitoring of the fulfillment of contractual obligations on the quality of transport services, as well as monitoring the effectiveness of sanctions for violations of contractual obligations;

development of methods and means for monitoring the time of movement of goods in transit, as well as the time of processing consignments of goods in the terminal network, including at seaports and checkpoints across the state border of the Russian Federation;

development of evidence-based methods and tools for monitoring the level of development of logistics technologies, providing them with a production and technical base and developing a system of related services;

development and improvement of container transportation technologies, as well as a comparative analysis of various technologies for regional and interregional transportation, transportation for small and medium-sized businesses and scientific justification for choosing the best technologies;

development of a fundamentally new, adaptive technology for the operation of transport, corresponding to the high dynamics of the market economy, including an analysis of the compliance of the existing technology with the new requirements of the market economy - ensuring dynamic economic ties with reliable and efficient transport links, the development of economic foundations, criteria and performance indicators for various modes of transport, corresponding new main task, the development of scientific foundations for flexible

forms of organizing the work of transport (for railway transport - a variant plan for the formation, a flexible train schedule, variant technological processes), as well as the development of a methodology for delivering goods to seaports, border crossings and large enterprises, consistent with the regime their work;

development of scientifically based methods and means of monitoring the existing structure of the fleet of freight rolling stock and the provision of needs for rolling stock in order to achieve the specified criteria for the volume and quality of transport services;

development and experimental development of effective information and telecommunication technologies and navigation services to meet the needs of the market for competitive transport services.

Scientific support for the development of accessibility and quality of transport services for the population will be carried out in the following main areas:

development and scientific substantiation of minimum social transport standards to ensure the possibility of movement of all segments of the population throughout the country, development and scientific support of the program for the implementation of minimum social transport standards on a progressive scale, taking into account the gradual improvement of the conditions for transport services to the population, including in the development of urban and suburban passenger transport, as well as regions of the Far North and equivalent territories;

development and scientific substantiation of market regulation parameters in terms of admission to commercial activities in the field of passenger transportation;

research and scientific substantiation of the structure of the ratio of public and private passenger transport in the model of the transport services market, which provides minimum social transport standards, the development of mechanisms for ensuring the implementation of these standards on the basis of social investment state contracts at the federal, regional and municipal levels;

research and development in the field of development of production and equipment of fleets of passenger rolling stock, comparable in terms of technical and economic parameters with the world level, determining the need for fleets, the possibility of producing the corresponding rolling stock and implementing minimum social transport standards on its basis;

research and development in the development of systems that provide high-speed and high-speed passenger transportation.

Scientific support for the development of Russia's integration into the global transport space and the implementation of the country's transit potential will be carried out in the following main areas:

development and scientific substantiation of regulatory and other state methods of regulation that provide assistance in increasing the share of participation of Russian transport organizations in the transportation of domestic export and import cargo, as well as cargo between third countries;

development and scientific substantiation of technological and regulatory models for integrating Russia into a single international transport space, developing participation in the system of international agreements and conventions in the field of transport, as well as expanding cooperation in international transport organizations and with Russia's trading partners;

development of methods and means for monitoring the technical and technological parameters of international transport corridors and the development and scientific justification for the development of these parameters that ensure the competitiveness of international transport corridors at the level of world analogues;

development and scientific substantiation of mechanisms for motivating the creation of national and international transport companies that are competitive with world companies, as well as expanding the participation of the Russian transport business in major international transport projects.

Scientific support for increasing the level of safety of the transport system will be carried out in the following main areas:

research and development in the field of development of means, technologies and systems for ensuring the safety of traffic, flights and navigation;

development of technological models for improving the efficiency of specialized emergency services in cooperation with the Ministry of the Russian Federation for Civil Defense, Emergencies and Disaster Relief in order to achieve a level that meets international and national requirements;

research and development in the field of ensuring transport security of transport infrastructure facilities and vehicles from acts of unlawful interference;

research and development in the field of increasing the mobilization readiness of the transport complex;

research and development in the field of improving the safety of transportation of goods requiring special conditions;

development and scientific substantiation of the parameters of the system for regulating professional admission to transport activities;

scientific and technical support for the development of means and systems of supervision in the field of transport;

development of methods and means of monitoring the level of professional training of specialists in the transport complex in terms of

ensuring the safety and sustainability of the transport system.

Scientific support for reducing the harmful effects of transport on the environment will be carried out in the following areas:

research and development in the field of reducing the harmful effects of transport on human health by reducing the volume of impacts, emissions and discharges, as well as the amount of waste in all modes of transport, including issues of professional training of personnel and rationalization of routes;

development and scientific substantiation of technological and regulatory models for motivating the transition of vehicles to environmentally friendly fuels;

selection and scientific substantiation of indicators and criteria for assessing the environmental friendliness of transport, taking into account the level of costs and development of recommendations for their optimization;

research and development in the field of reducing the energy intensity of transport and achieving the level of indicators of advanced countries.

Scientific support for the improvement of the legal framework and methods of state regulation of the development of the transport system, ensuring the achievement of the goals and indicators of the Transport Strategy, will be carried out in the following main areas:

development and scientific substantiation of the legal framework and methods of state regulation of the competitive market of transport services in the field of cargo transportation (including the substantiation of the parameters of admission to commercial transport activities);

research and development of methods and mechanisms for state monitoring of specific total transport costs in the cost of national goods and stimulation of their reduction;

development and scientific substantiation of the legal framework and methods of state regulation to ensure a guaranteed level of accessibility and quality of transport services for the population in accordance with minimum social standards (including the rationale for the parameters of admission to commercial transport activities in the field of passenger transportation);

research and development of the legal framework and methods of state regulation aimed at increasing the investment attractiveness of the transport industry, including improving the legal, economic and financial mechanisms of public-private partnership;

development and scientific substantiation of the legal framework and methods of state regulation to ensure the integration of Russia into the global transport space and the realization of the country's transit potential;

development and scientific substantiation of the legal framework and methods of state regulation to ensure the safety and sustainability of the transport system, including admission to professional activities;

development and scientific substantiation of the regulatory framework in the field of regulation of the harmful effects of transport on the environment and human health;

research and development in the field of Russian and international harmonization of the legal support of the transport system and the creation of a unified transport code.

Scientific support for the creation of an effective management system for the implementation of the strategy and the development of the transport complex will be carried out in the following main areas:

development and scientific support of the system of strategic planning for the development of the transport industry based on mathematical models and transport and economic balance;

development and scientific substantiation of an effective organizational model for managing the implementation of the strategy;

development of methodological bases and regulations for harmonization of the Transport Strategy with the constituent entities of the Russian Federation and its coordination with regional transport strategies and programs, with territorial planning schemes for regions, regions and cities;

development of methodological bases and regulations for the coordination of the Transport Strategy with resource-providing industries;

development, scientific support and development of an automated information and analytical system for managing the transport complex and other analytical and control systems of the transport complex, including the creation of classes of automated analytical systems for various types of transport and the transport complex as a whole, as well as the development of methodological foundations for the use of analytical systems in transport, development of a methodology for automated control of flows and processes in transport, the creation of new and adaptation to new tasks of transport of existing automated control systems (decision support systems) and the adaptation of technological processes of transport to the use of automated control systems;

research and development in the field of development of systems for monitoring and assessing the state of the transport complex, control and supervision systems in transport;

research and development of analytical systems and mathematical models that provide support for decision-making on the regulation of the functioning and management of the development of the transport complex;

development, scientific support and development of an automated system for monitoring

and project management of the implementation of federal target programs and strategies, creation and development of an information and analytical system for managing the implementation of the Transport Strategy.

The development of scientific support for the transport complex will be carried out in the following main areas:

organization and performance of works on scientific and methodological support of the transport complex;

creation of a scientific base (infrastructure) for scientific support of the transport complex;

training and attraction of personnel for scientific research in the transport complex, development and implementation of innovative transport technologies (primarily through the development of the transport scientific and educational complex);

assistance to the development of scientific schools of the transport complex.

Scientific support for the training and development of labor resources of the transport complex will be carried out in the following main areas:

development and scientific substantiation of methodological foundations and mechanisms of state regulation in the field of staffing of modes of transport, aimed at training, attracting and retaining qualified personnel in the transport industry, as well as scientific research and development in the field of creating competitive conditions for attracting and retaining personnel in the transport industry;

development and scientific substantiation of the methodological foundations for providing transport with professionally trained workers of mass professions, specialists and managers focused on long-term employment relationships and professional career development;

development and scientific substantiation of the methodological foundations for the training of specialists-managers of a wide profile and the development of a high level of competence among personnel of all types of transport to work in a unified transport system, active interaction between modes of transport, logistics complexes, unified technological chains and high quality standards;

research and development in the field of creating corporate personnel management systems focused on motivated and efficient work of employees, improving the quality and productivity of labor, as well as stimulating the active participation of personnel in the technical modernization and innovative development of transport;

scientific research and development in the field of creating the image of transport professions.

Experimental pilot projects are aimed at developing mechanisms, methods, regulatory, technical, technological, information and personnel support to achieve the goals and solve the problems of the Transport Strategy. Until 2015, it is necessary to implement a number of pilot projects aimed at testing and introducing highly efficient logistics technologies. Such projects are an important part of the development of a competitive market for transport services and a catalyst for the development of highly efficient commodity transport logistics technologies in Russia.

The following projects are envisaged at the federal, regional and municipal levels:

creation of a federal research and development center for integrated transport projects and a network of regional research and development centers;

development of transport corridors;

organization of interregional motor transport conveyors;

development of transport corridors and motor transport conveyors at the regional level;

rationalization of the movement of commodity masses at the municipal level;

development of transport and logistics systems at the junctions between modes of transport;

containerization of the transport system according to intra-regional andinterregional traffic flows.

The creation of a federal research and development center for integrated transport projects and a network of regional research and development centers is the main project of state patronage in the creation of transport and logistics systems in order to optimize the provision of commodity flows. The system of centers should provide:

development and monitoring of regional transport balances and, on their basis, the federal transport and economic balance;

strategic research, forecasting and complex modeling of commodity flows and providing them with transport resources;

development of projects of highly efficient competitive logistics technologies, as well as technological infrastructure to ensure the logistics of commodity flows, including in interregional and international traffic;

together with the administrations of regions and municipalities, the development and implementation of pilot projects and ensuring replication of their results.

The development of transport corridors provides for:

development of a classification of transport corridors throughout the Russian Federation, including international ones;

development of technical, technological and information standards for each type of transport operating in this corridor, meeting the high technical requirements of transport corridors, service and technological infrastructure, ensuring the use of highly efficient goods and passenger transport logistics technologies;

creation of competitive conditions for safety, speed and time of movement of goods and passengers, as well as their service.

This project is supposed to be implemented on the territory of the Russian Federation within the borders of the international transport corridor "North - South".

The organization of interregional motor transport conveyors provides for:

motivation for the creation of national or interregional forwarding and transport companies for the implementation of motor transport conveyors;

development and development of a methodological, regulatory and legal framework to ensure the availability, volume and competitiveness of transport services according to quality criteria for cargo owners at the level of the needs of the innovative development of the country's economy;

creation of transport and logistics infrastructure, including terminals of various types of logistics parks on the principles of public-private partnership.

This project should ensure an increase in the commercial speed of goods in interregional traffic up to 1000 - 1500 km per day with guaranteed rhythm, performance of motor transport systems by 3 - 4 times and, accordingly, profitability, as well as a proportional reduction in the costs of cargo owners for crediting goods in transit and in the warehouse.

At the regional level, the project is supposed to be implemented through regional research and development centers together with the federal research and development center based on its methods.

The development of transport corridors and road transport conveyors at the regional level implies the formation of rational routes for each distribution chain of goods for both modal and multimodal transportation.

The project should reduce the costs of cargo owners for crediting goods in transit by increasing the commercial speed of consignments from the sender to the consumer by 2-3 times and the speed of cargo handling at terminals, increasing the productivity and profitability of motor transport systems by 2-3 times due to the organization of cargo delivery on ring routes, providing an increase in the coefficient of mileage with cargo and the coefficient of utilization of load capacity by 2 - 2.5 times and the use of rolling stock up to 20 hours a day.

The rationalization of the movement of commodity masses at the municipal level provides for the choice of the shortest route, subject to the maximum possible load and mileage with cargo, and the use of ring and pendulum routes and technologies for reloading from side to side of vehicles. Such rationalization should be carried out by regional research and development centers together with the federal research and development center.

The project should ensure an increase in the load capacity utilization factor and the mileage utilization rate by at least 2 times, as well as an increase in the productivity of motor transport systems up to 4 times and a proportional reduction in the costs of commodity producers.

The development of transport and logistics systems at the junctions between modes of transport should ensure the optimization of commodity circulation.

In railway transport, an experimental project is envisaged for the introduction of commodity transport technologies for the delivery of goods from the sender to the consumer in a multimodal version that meets the best world analogues. The aim of the project is the possibility of providing delivery to any cargo owner from the sender to the consumer of any consignment of goods in the country at all railway stations, which is carried out in a multimodal version.

The project should ensure a 2.5-fold reduction in transport costs for cargo owners, a 4-fold reduction in wagon downtime under cargo operations, a 10-fold loss and damage to cargo, a 2.5-fold increase in the cost of cargo handling, and a 2-fold increase in the productivity of vehicles and workers. and a corresponding increase in the cost-effectiveness of road transport systems.

In inland water transport, in order to be in demand on the market, it is necessary to guarantee the predictability, rhythm and reliability of the functioning of commodity flows provided by river transport to cargo owners. The following mechanisms are expected to be worked out:

motivation for the creation of joint-stock forwarding and transportation companies for basin and inter-basin trunk transportation, capable of guaranteeing, together with road and rail transport, the delivery of goods of any batch just in time from the sender to the consumer;

creation of holdings uniting ports into a terminal and transport network coordinated by a single information and dispatching system.

The project should ensure an increase in river transport by 10-12 percent of the volume of all freight traffic (the level of the countries of the European Union), compensation at the expense of the river fleet for an increase in seasonal traffic in the spring-summer-autumn period, a decrease in the need for transport and throughput capacity of road and rail transport and a corresponding reduction in the need to create seasonal reserve capacities, as well as a reduction in injuries and environmental impact on the environment.

A pilot project is recommended to be carried out in the Volga basin as one of the highways of the international transport corridor "North - South".

Containerization of the transport system along intra-regional and inter-regional traffic flows is carried out to meet the domestic needs of production

and trade based on the use of containers of various types and provides for:

determination on the basis of the transport balance of the type and volume of the need for a container fleet for industrial hubs of regional and interregional commodity flows;

development of regulatory and methodological documents that ensure the functioning of the container system at the federal and regional levels;

development of mechanisms to motivate the production and repair of a container fleet of the required type in the required volumes;

formation of basic requirements for specialized structures for leasing or renting containers;

development of requirements for technical and technological conditions of nodal distribution container terminals and container terminals of cargo owners.

The project should provide an increase in the productivity of transport systems up to 5 times and a corresponding reduction in the costs of the cost of goods.

Pilot projects are expected to be invested on a one-time basis at the expense of federal funds, as well as on the basis of public-private partnership and combined partnership mechanisms at the federal, regional and municipal levels.

Upon reaching the goals of the pilot project, it is assumed that the shares will be sold on the market.

The development of scientific support for the Transport Strategy by means of transport involves the advanced innovative development of their scientific, technical and technological base on the basis of advanced world achievements and breakthrough technologies.

Scientific research in the field of railway transport, the implementation of which, among other sources, provides for financing from the funds of the scientific and technical development plan of the Russian Railways Open Joint Stock Company, provides for:

promising areas of scientific and technical development of railway transport in the Russian Federation, including the development of a set of technical regulations containing requirements for ensuring safety and environmental protection for objects of technical regulation in railway transport, the development of a regulatory and methodological framework for calculating the parameters of operational readiness, strength, safety, resource and risk, development of new technical requirements for serially supplied products and a regulatory framework for interaction with suppliers based on the principles of quality management;

ensuring the development of infrastructure;

development of the train traffic control and safety system;

creation of a maintenance system for high-speed and high-speed infrastructure and rolling stock;

implementation of transport logistics;

organization of production of a new generation of rolling stock.

The areas, the implementation of which provides for preferential financing at the expense of the investment program of the Russian Railways Open Joint Stock Company, include:

ensuring the development of infrastructure;

development of the train traffic control and safety system;

commissioning of high-speed electric trains and infrastructure for speeds up to 250 km/h and up to 350 km/h;

implementation of transport logistics.

Areas, the implementation of which provides for preferential financing at the expense of railway equipment manufacturers, include:

promising areas of scientific and technical development of railway transport in the Russian Federation, including the development of new types and models of rolling stock and infrastructure elements that ensure an increase in the reliability and safety of operation and comply with the requirements of international agreements to which the Russian Federation has acceded; development of fundamentally new integrated systems for diagnosing and monitoring infrastructure and rolling stock, as well as the use of high-precision systems for modeling infrastructure elements and rolling stock;

ensuring the development of infrastructure;

development of a train traffic control and safety system, which provides for the creation of an "intelligent" train with a built-in automatic guidance and self-diagnosis system;

target parameters for the implementation of transport logistics, which provide for the introduction of a positioning system and automated control of the safety of goods along the route;

organization of production of passenger and freight rolling stock of a new generation with increased axle loads, with a decrease in the tare weight of a freight car, using an asynchronous traction drive, a reduction in the specific fuel and electricity consumption for train traction and other progressive technical characteristics, including suitability for servicing disabled passengers .

The areas, the implementation of which provides for preferential financing from the federal budget, include:

promising areas of scientific and technical development of railway transport in the Russian Federation, including the creation of a system for the formation and control of regulatory requirements for vehicles and equipment that are developed, manufactured in the Russian Federation or imported into the Russian Federation, the development and application of the metric system of measures, as well as development and implementation of a set of special standards (regulatory framework for voluntary

certification systems) for transport industry facilities that are not subject to the main technical regulations;

production of new generation rolling stock.

Directions, the implementation of which provides for mixed financing at the expense of the open joint-stock company "Russian Railways", manufacturers of railway equipment and the federal budget, include:

organization of high-speed traffic in selected directions at speeds up to 300 - 350 km/h and the development of domestic production of the main elements of infrastructure and rolling stock;

organization of mixed suburban - urban passenger traffic in large transport hubs.

The main directions for the development of scientific support in the road sector are:

search and fundamental research to improve the design of roads and the theory of designing road networks, the development of mathematical modeling methods in the design of roads, the improvement of methods for improving the reliability and durability of road structures and artificial structures, the improvement of the operation of roads, including methods for predicting the service life of road and bridge structures , and methods for designing the life cycle of roads and artificial structures, as well as economics and planning activities in the road sector, primarily methods for long-term and medium-term planning of activities in the road sector based on cost optimization during the life cycle of the road and the creation of fundamentally new materials, structures and technologies for road workscompetitive in the world market;

applied scientific research within the framework of long-term and medium-term programs, formed taking into account the results of fundamental research, to improve road structures and work production technologies, ensuring an increase in the overhaul life of roads and road structures, the development of energy-saving and resource-saving technologies, improving the quality of road construction materials, primarily bitumen-containing binders and asphalt concrete, in order to increase the durability of road surfaces, as well as improve methods for monitoring technical parameters and the transport and operational condition of roads,methods for automating the collection and processing of road data for use in computer-aided design of roads and artificial structures and for planning and managing road activities;

improvement of indicators of the transport and operational condition of roads and road safety;

development of methods and computer programs for automated planning of road activities based on variant mathematical modeling of indicators of the transport and operational state of the road and the road network as a whole;

development of programs and schemes for the development of highway networks in the Russian Federation and regions;

development of various scientific and technical programs for the development of the road sector;

improvement of the road management system, including scientific support for the development of the legal and regulatory framework for the road sector, methods for competitive selection of contractors according to the criteria of the most cost-effective proposal, aimed at improving the quality of road works and ensuring the effectiveness of public-private partnership mechanisms and the regulatory framework for the widespread introduction of a system of long-term contracts aimed at achieving the normative indicators of the transport and operational condition of roads;

development of technical regulation in the road sector, aimed at improving the basic technical and environmental requirements that ensure high consumer properties of roads, the reliability and durability of road structures, the operability of the road network and the safety of road users, as well as stimulating the introduction of energy and resource-saving technologies in the implementation of road works;

experimental design work involving the development of new equipment for diagnosing the transport and operational condition of roads, devices for laboratory and field quality control of construction, repair and maintenance of roads and bridges in order to increase the reliability of information and the quality of these works, at the same time creating a system organizational and economic measures to stimulate the development and mass production of new road machinery, equipment for the production of high-quality road building materials by enterprises in the engineering industries.

To conduct experimental research and test new developments, it is necessary to create experimental test sites in different regions of the country and various climatic zones that would be available for testing by various research organizations.

The main directions for the development of scientific support in road transport are:

development of transport balances at the national and regional levels, their coordination with federal programs for the development and modernization of road infrastructure and infrastructure of other modes of transport;

determination of rational areas for the use of road transport and directions (mechanisms) of its interaction with other modes of transport in order to minimize transport costs and ensure the sustainable development of the transport system;

study of the effectiveness of legal, economic and administrative mechanisms for regulating the market of motor transport services;

marketing researches of the market and monitoring of its condition, forecasting of tendencies of development of the market of motor transportation services;

development of proposals to improve the availability and quality of motor transport services for consumers and increase the mobility of the population;

creation of modern transport and logistics technologies based on the achievement of complexity and high quality standards of transport services.

The main directions for the development of scientific support in air transport are:

scientific and methodological support and monitoring of the implementation of the Transport Strategy in terms of the development of air transport within the framework of the subprogram "Civil Aviation" of the federal target program "Development of the transport system of Russia (2020 - 2025)", other federal and industry target programs, general schemes and strategic development plans air transport until 2025, 2030 and 2035;

scientific and methodological support, analysis of problematic issues and forecasting the implementation of the goals of the Transport Strategy in terms of the development of air transport, based on monitoring the state of the market and studying the relationship between the development of its segments, subsystems, information and resource support for air transport;

scientific and applied research on the content and forms of an innovative model for ensuring the competitiveness of air transport, including in terms of the material and technical base, technology of the air transportation process, information technology and management;

marketing research of the air transportation market, monitoring its state and forecasting development trends, providing for an increase in the availability and quality of air transport services and population mobility, including within the region;

scientific support of issues of state regulation of the development of air transport, ensuring the competitiveness of services, expanding their accessibility to the population and the necessary supplies of a fleet of modern aircraft;

scientific and methodological developments in the field of air transport pricing in order to reduce the growth rate of the cost of services and tariffs for air transportation, as well as increase the availability of air transportation;

development of a regulatory framework that regulates the activities and protection of the interests of Russian air carriers on the international market, including in the context of the Russian Federation's entry into the World Trade Organization;

scientific research of the market of socially significant air transportation, as well as the development of proposals for improving the mechanism of their state support within the constituent entities of the Russian Federation;

scientific research in the field of integrated safety and ecology of civil aviation in order to form a long-term policy of the Russian Federation, harmonized with the requirements of the International Civil Aviation Organization and the European Union;

study of the situation and specification of forecasts for the development of the air transportation market and the aircraft fleet of the Russian Federation for 20 years;

scientific and methodological support for the development and maintenance of the operation of a unified state information and analytical system for civil aviation;

scientific substantiation of criteria, standards and procedures that contribute to the development of justified competition, the growth of business activity, labor productivity and the introduction of innovations by the subjects of the air transport market.

The main directions for the development of scientific support in maritime transport are:

analysis of the current state and forecast of changes in the cargo base of maritime transport in the medium and long term;

analysis of the world freight market and international maritime shipping;

development of sectoral targeted programs, general schemes and strategic plans for the development of seaports;

determination of the boundaries of territories and water areas of seaports in order to prepare relevant documents for submission to the Government of the Russian Federation;

determination of the structure of the marine transport fleet and its composition for the future;

determination of the need for ships of the supporting fleet for various purposes;

development of proposals for strengthening the interaction of maritime transport with adjacent modes of transport and cargo owners within the framework of intersectoral transport coordination, developing the principles of logistics in managing cargo flows and ensuring transportation along international transport corridors passing through the territory of Russia;

development of proposals for the development of progressive transport and technological systems (container, package, ro-ro, ferry, lighter, etc.);

development of a set of technical, economic, legal and other measures related to the development of transportation along the Northern Sea Route;

development of a set of measures to increase the competitiveness of domestic maritime transport, especially taking into account Russia's entry into the World Trade Organization;

development of proposals on measures of state support for maritime transport;

development of proposals for increasing the number of ships registered under the Russian flag,

reserving the cargo base for domestic maritime transport and building ships mainly at Russian shipyards;

preparation of proposals in the field of pricing in maritime transport, in particular, the development of a system of tariffs and port dues;

development of proposals and preparation of documentation for the creation and effective functioning of special port economic zones;

development of measures to improve the level of safety of maritime transport activities and environmental protection;

development of a regulatory framework that regulates the activities of maritime transport and ensures the protection of its interests in the field of international maritime navigation;

improving the forms and methods of training specialists in maritime higher and secondary educational institutions;

development of automated control systems for technological and information processes;

development of proposals for improving statistical reporting in maritime transport;

monitoring the functioning of maritime transport, the implementation of the adopted management decisions and the effectiveness of the measures taken.

The main directions for the development of scientific support in inland water transport are:

development and scientific and analytical support for the implementation of federal targeted programs for the development of the industry;

forecasting the socio-economic development of river transport in general and in individual regions;

scientific and technical support for the development of the transport and support fleet;

prospective development of river ports, shipbuilding and ship repair enterprises and other facilities;

development of intersectoral and transport coordination, logistics systems and intermodal transportation;

research in the field of legal and regulatory support for river transport;

research in the field of safe operation of the river fleet, environmental protection, as well as safety measures for the operation of the river fleet and its enterprises;

development of means of communication and information technologies in transport.

The main directions for the development of scientific support in industrial transport are:

development of a normal range of diesel locomotives, electric locomotives and traction units of dump trucks for industrial railway and road transport;

development of the type of loading and unloading machines and complexes for bulk, packaged cargo and containers;

reduction in the transport intensity of products, in particular, products of the metallurgical industry;

development of alternative modes of transport that allow efficient use of land, reduce the burden on the environment, increase the productivity and efficiency of production units;

optimization of the repair base of industrial transport.

The implementation of the directions of scientific support for the development of the transport system of Russia until 2035 will require an adequate development of the system of scientific and design organizations in the industry, their material base and staffing.

One of the priorities in the development of scientific support is the reconstruction of the system of scientific organizations (or their specialized divisions), whose activities are focused on the development of problems for the future development of the country's transport complex, the collection, examination, certification and implementation of the best innovative solutions in the field of development of the transport system.

The development of an effective state system of long-term planning requires the creation of a system of innovation-scientific and implementation centers for each type of transport and in the road sector in existing sectoral institutions. In addition, a general transport innovative experimental and innovative center with regional branches should be developed, which ensures the complexity of the development of transport as a single system, technological, economic, legal and organizational interconnection of adjacent modes of transport.

The tasks of developing the transport system of Russia until 2035 can be solved only if the industry is provided with a sufficient number of highly qualified specialists. In order to achieve the strategic goals of the development of the transport system of Russia until 2035, it is necessary to ensure the training of specialists and labor resources for the transport complex in the following areas:

development of the provision of labor resources in the field of design and implementation of projects for the development of transport systems;

development of laborresources in the field of operation of transport infrastructure and vehicles created in the process of implementing the strategy;

development of the provision of labor resources in the field of providing transport and logistics services and other transport services;

development of labor resources in the field of transport complex management;

development of technical, technological and other types of knowledge of labor resources to a level that ensures the implementation of the objectives of the Transport Strategy.

State regulation in the field of staffing of modes of transport is aimed at training, attracting and retaining qualified personnel and includes:

improvement of the system of training, retraining and advanced training of personnel in educational institutions of the transport complex;

improving the training program in accordance with changing market requirements and improving the quality of training;

improvement of programs for training and advanced training of personnel, as well as the widespread use of specialized simulators for training specialists of various types of transport;

improvement of the system of state control over the quality of personnel training for various modes of transport;

development of normative legal acts regulating the labor and financial relations of a trained specialist with a future employer who paid for his training, and state executive authorities in the field of transport if the training is paid for from the federal budget;

creation of a system of mentorship, succession and accumulation of unique experience in the field of transport;

formation in organizations of managerial personnel motivated to achieve corporate strategic goals;

assistance in strengthening and developing social partnership.

The main activities in the field of human resource development are:

providing transport at all levels with professionally trained workers of mass professions, specialists and managers focused on long-term employment relationships and the development of a professional career in railway transport;

training of specialist managers of a wide profile and development of a high level of competence among personnel of all types of transport to work in a unified transport system, active interaction between modes of transport, logistics complexes and unified technological chains and high quality standards;

promoting the creation of corporate personnel management systems focused on motivated and efficient work of employees, improving its quality, labor productivity and active participation in technical modernization and innovative development of transport;

creation of effective models of educational institutions that introduce science and production into the education process;

improvement of the material and technical base of educational institutions, including the acquisition of training air, sea and river vessels, simulators, construction and reconstruction of buildings and structures.

To carry out these activities, you must:

switch to long-term planning for the training of specialists, including in new areas of training (specialties) in the field of logistics, transport services, inter-transport interaction and other areas;

ensure the development and implementation of mechanisms for long-term cooperation between the Ministry of Transport of the Russian Federation, the Federal Service for Supervision in the Sphere of Transport, federal agencies, transport companies and educational institutions in the field of training and advanced training of personnel, in particular, to expand the scope of the state order, targeted contracts in the format of state -private partnerships, including using new financial and credit schemes, and science, in particular, to ensure technical and technological modernization, the subsequent innovative development of transport through fundamental, exploratory and applied research, primarily on the basis of university complexes, by strengthening their social, material and technical and scientific and laboratory base,creation of research and production, innovation and implementation centers, technology parks, transfer of the latest models of equipment, technology and software to them;

stimulate the concentration of intellectual and material resources in large university complexes of federal and regional significance, which have a wide network of territorial branches, allowing them to provide a full educational cycle, starting with the training of skilled workers and workers with secondary vocational education, and all types of lifelong learning;

to ensure the training of specialists in mobilization training for each mode of transport;

expand the practice of providing jobs for students of educational institutions for industrial and undergraduate practice and consolidate its legal foundations for greater adaptation of graduates to real working conditions and production requirements;

to develop a system of scientific internships and postgraduate training of employees, practical internships for scientific employees of educational institutions, as well as to stimulate the reproduction of scientific and pedagogical personnel and the improvement of their qualifications;

to strengthen ties between employers and educational institutions (corporate programs and other forms of coordination of interests and requirements for the selection of students, monitoring by the customer of educational services of the educational process, the quality of training, the final control of knowledge while expanding the system of guaranteed employment of successful graduates in their specialty and a predetermined position, as well as adaptation of bachelor graduates to the requirements of employers in the course of additional professional education in transport universities, combining education in higher and secondary specialized educational institutions with practical work in working positions);

to develop a system of vocational training for workers of mass professions, technicians, craftsmen

and other specialists on the basis of maintaining and strengthening the system of primary and secondary vocational education as part of university complexes;

expand cooperation with educational institutions of the Ministry of Education and Science of the Russian Federation and foreign educational institutions in the preparation of specialists in the field of transport;

introduce integrating educational technologies (unified information networks for advanced training in the field of issues related to state regulation) with the participation of the largest companies and educational institutions and taking into account their financial interests (issues of integrated transport, environmental and industrial safety);

to pursue an effective coordinated youth policy aimed at stimulating the employment of graduates of educational institutions in their specialty and establishing long-term stable labor relations with them, as well as motivating the acquisition of high-quality knowledge and practical skills that will shorten the period of adaptation of young specialists to working conditions;

pursue a coordinated long-term policy aimed at increasing the prestige of transport professions;

identify and develop appropriate mechanisms for monitoring, analysis and decision-making, control tools and targets to make the activities of human resource management in transport more systematic and more efficient (in terms of cost).

The main activities in the field of social policy in transport are:

strengthening the economic position of transport enterprises, increasing their competitiveness and economic efficiency as a necessary condition for increasing the potential for increasing wages and filling the social package provided to the personnel of transport enterprises;

ensuring the social guarantees fixed in the labor legislation, expanding and improving corporate social packages on the basis of temporary tripartite agreements (bilateral - for federal state unitary enterprises, federal state institutions and state-owned enterprises), reflecting the current balance of interests of employers, industry workers and the state;

observance of the differentiation of remuneration depending on its complexity (qualification of the employee);

promotion of social responsibility of business, as well as the use of social partnership agreements in the interests of developing human resources.

The sectoral social standard should play a significant role in raising the prestige and the level of wages in transport, including the minimum wage. The main components of social standards can be considered:

working conditions and remuneration (the amount of remuneration, employment conditions and working hours);

social package (pension provision, paid leave, medical care, length of rest, the possibility of improving health (going in for sports, organizing recreation) and solving the housing issue and education);

protection of the employee within the framework of labor relations (labor conditions and labor protection, conditions for the release of employees and insurance).

The main direct mechanisms for the implementation of the Transport Strategy are federal and regional targeted programs. The composition and structure of these programs should meet the main targets, goals, objectives and mechanisms for the implementation of the Transport Strategy.

At the first stage of the Transport Strategy (until 2025), the federal target program "Development of the transport system of Russia (2020-2025)" should be implemented, which includes 5 subprograms formed according to the sectoral principle ("Railway transport", "Roads", "Maritime transport", "Inland water transport" and "Civil aviation"), and the functional subprogram "Development of export of transport services".

At the second stage (2025 - 2035), the main mechanism for implementing the Transport Strategy will be federal targeted programs for the development of the transport system for 5-year periods.

At the same time, it is advisable to combine the subprograms included in them in 3 areas (two functional and one sectoral):

subprograms aimed at achieving general economic, general social and general transport main strategic targets of the Transport Strategy;

subprograms aimed at putting into operation the main mechanisms for the implementation of the Transport Strategy;

subprograms aimed at achieving the strategic targets of the Transport Strategy by types of transport activities - in road, rail, inland waterway, sea and air transport.

Within the framework of these subprograms:

a single transport space of the country is being formed, and complex projects are being implemented for the development of transport hubs and traffic control centers that ensure the operation of transport corridors;

a new type of transport infrastructure is being created - integrated transport, storage and commodity transport complexes, which form an integrated system of interaction, including cargo owners, as well as integration of all segments of the transport process and logistics is ensured and a single transport system of the country is being formed, on the basis of which integration into the global transport space and realization of Russia's transit potential;

the development of technical and technological parameters of international transport corridors to a level competitive with world analogues is ensured,

planning of their development and coordination within the framework of international cooperation is ensured, conditions are created for expanding the access of Russian transport service providers across all modes of transport to foreign markets, and measures are being taken to strengthen the role Russia in the formation of international transport policy;

ensures the development and implementation of minimum social transport standards to ensure the possibility of movement of all segments of the population on various modes of transport throughout the country, as well as the development and implementation of quality standards for passenger service in all modes of transport;

due to the systemic set of measures, the achievement of a level of safety in all modes of transport that meets international and national requirements is ensured, and a single set of measures is being implemented to stimulate the reduction of the level of technogenic impact of all modes of transport on the environment and human health and the achievement of international environmental standards for all modes of transport;

unified integrated models, technologies, standards, legal framework and methods of state regulation, which are common for various types of transport, are being developed and put into effect.

On the basis of these comprehensive activities and projects, common models and integration technologies, standards and legislative regulations, as well as general methods of regulation that have a general social, general economic and general transport orientation, within the framework of programs aimed at achieving the strategic guidelines of the Transport Strategy, subprograms by modes of transport, taking into account the specifics of the development of each mode of transport, as well as the needs of the economy and society in relation to these specific modes of transport.

Thus, from 2020 to 2035, federal targeted programs consisting of these subprograms and developed to implement the Transport Strategy should be formed in the following areas:

formation of a single transport space in Russia based on the balanced development of an efficient transport infrastructure;

ensuring the availability, volume and competitiveness of transport services according to quality criteria for cargo owners at the level of the needs of the innovative development of the country's economy;

ensuring the availability and quality of transport services for the population in accordance with social standards;

integration into the global transport space and realization of the country's transit potential;

improving the security of the transport system;

reducing the harmful impact of transport on the environment;

improvement of the legal framework and methods of state regulation of the development of the transport system, ensuring the achievement of the goals and indicators of the Transport Strategy;

training and development of personnel potential of the transport complex;

creation of an effective system for managing the implementation of the Transport Strategy;

advancing development of the scientific, technical and technological base of the transport complex;

highways and road transport;

railway transport;

inland water transport;

sea transport;

civil Aviation;

air navigation.

The implementation of the Transport Strategy is associated with risks that may hinder the achievement of planned results. Such risks include macroeconomic, geopolitical, operational, social, man-made and environmental risks.

Macroeconomic risks are associated with the possibility of a slowdown in economic growth and the level of investment activity, a crisis in the banking system and the emergence of a budget deficit.

The sources of such risks are:

lack of financial resources due to outstripping price growth in sectors of the economy, supplying products for railway transport;

decrease in freight traffic due to insufficient development of transport infrastructure;

a decrease in the volume of freight traffic due to a change in their structure and an increase in the share of high-tech cargo;

decrease in the volume of transit freight traffic due to the development of alternative foreign routes bypassing the territory of the Russian Federation;

lack of capacity and low technical level of development of domestic engineering;

unbalanced development of the infrastructure of related modes of transport (lack of port facilities, storage terminals, etc.);

non-compliance of the allocated investments in the construction and technical base of transport with the requirements of the Transport Strategy for the level of infrastructure development and the quality of transport services.

An unfavorable scenario for the development of the Russian economy will lead to the actual conservation of the technical backwardness of the transport infrastructure for a fairly long period of time. In practice, this means a disruption in the implementation of the Transport Strategy and the stagnation of the transport industry.

Geopolitical risks are relevant for all modes of transport. In the field of navigation, they lead to the restriction of navigation and the curbing of the further development of Russian port facilities. The instability

of the international situation may have a negative impact on the implementation of projects to create a network of air transportation hubs.

The successful integration of the Russian Federation into the international transport system largely depends on a stable political situation in neighboring regions. The deterioration of the international situation may lead to a decrease in the attractiveness and competitiveness of the Russian transport system.

Operational risks are associated with shortcomings in the systems and procedures for managing, supporting and monitoring the implementation of the Transport Strategy, including shortcomings in their legal and regulatory support.

Operational risks include risks associated with negligent or incompetent actions of personnel, as a result of which material damage may be caused, transactional risks, operational control risks, risks of support systems, technological risks, insurance risks and others.

The unfavorable factors that increase these risks include the absence of a number of fundamental regulatory legal and strategic documents necessary for the implementation of the Transport Strategy, such as a promising layout of the distribution of productive forces, the main provisions of the demographic and migration policy of the Russian Federation, the foreign trade development strategy of the Russian Federation and other documents, as well as the lack of a transport balance as the main tool for identifying imbalances in the process of forecasting and establishing a balance between the demand for transport services and their supply, and many other factors.

The occurrence of social risks is determined by:

deterioration of the demographic situation and a decrease in demand for passenger and freight transportation;

shortage of qualified labor force, outflow of highly qualified personnel to other sectors of the economy due to lower wages in transport;

shortage of labor resources for the implementation of infrastructure transport projects in remote regions, primarily in the regions of Siberia and the Far East.

Technogenic and environmental risks are caused by a high degree of physical deterioration of technical equipment, the human factor, natural phenomena, as well as vandalism and terrorist acts. Elimination of their consequences requires serious additional investments and will lead to the diversion of funds from other objects of the transport system.

These main risks include:

failures in the organization of traffic due to accidents at industrial facilities related to ensuring the operation of transport;

failures in the organization of the movement of vehicles due to man-made accidents in adjacent modes of transport, in the waters of seaports, on main highways and in close proximity to railways;

temporary suspension of transport due to fires and natural disasters;

decrease in the environmental safety of transport due to the occurrence of man-made accidents at transport facilities.

Among the side effects of such incidents, one can expect a decrease in investment attractiveness and a decrease in the rating of confidence in the transport industry on the part of credit organizations and international financial institutions.

The direct consequences of these risks are the incomplete achievement of the objectives of the Transport Strategy. The mechanisms and implementation plans proposed in the Transport Strategy are formed in such a way as to minimize the possible negative consequences of these risks during its implementation. The implementation of the Transport Strategy will take place in two stages:

the first stage (until 2025) - the completion of the modernization of the transport system using targeted investment methods and the elimination of "bottlenecks" and the transition to its systemic integrated development in all key areas;

the second stage (2025 - 2035) - intensive innovative development of the transport system in all directions to ensure an innovative socially oriented development path for Russia.

The first stage of the implementation of the Transport Strategy is based on the results of the implementation of the federal target program "Modernization of the transport system of Russia (2002 - 2010)" and is focused on solving the tasks set within the framework of the federal target program "Development of the transport system of Russia (2010 - 2015)" and others existing programs, and includes the development of a modern and efficient transport infrastructure that provides the necessary throughput in the main directions of transportation, the renewal of vehicle fleets, the composition of the sea, river and air fleet, and the improvement of technological processes. These tasks are aimed at accelerating the movement of goods and reducing transport costs in the economy, increasing the availability of transport complex services for the population.

At this stage, the main attention in the development of transport infrastructure will be given to the formation of a single road network, year-round accessible to the population and business entities, the elimination of existing gaps and "bottlenecks" of the transport network, including in the Asian part of Russia, as well as the development of large transport hubs in the main directions of transportation, transport approaches to checkpoints across the state border of the Russian Federation and transport hubs. On this basis, infrastructure conditions will be created for the development of potential points of economic growth, including the integrated development of new

territories and the development of mineral deposits, primarily in Siberia and the Far East.

The main directions of development in the sectoral context at the first stage are characterized by:

in the field of railway transport - the modernization of rolling stock, permanent devices and structures, an increase in the throughput of railway network sections, the formation of railway network directions with the circulation of trains of increased weight and axle load, the construction of railway lines in areas of new development and for the organization of high-speed and high-speed passenger traffic , development of the railway network in the directions of international transport corridors, construction of bypasses of large railway junctions, provision for all carriers of non-discriminatory access to infrastructure services, equal conditions for competition and uniform requirements for ensuring security;

in the field of road economy - increasing the accessibility of the road network for the population, the beginning of the formation of a network of highways and high-speed roads in the directions of international transport corridors, the construction and reconstruction of roads in the regions of Siberia and the Far East, ensuring the development of natural resources and the connection of settlements with the backbone transport network, as well as the construction of bypasses of the largest cities;

in the field of air transport - the development of international hub airports (hubs), a network of domestic hub airports and regional airport networks that provide connectivity to the core airport network, a radical renewal of the aircraft fleet, the development of the Russian air navigation system and the creation of enlarged air traffic control centers;

in the field of maritime transport - increasing the throughput capacity of Russian seaports and the carrying capacity of the domestic transport fleet, updating the marine fleet, ensuring the growth of cargo and passenger traffic on socially significant routes;

in the field of inland water transport - the elimination of sections that limit the throughput of the Unified deep-water system of the European part of the Russian Federation, the development of port infrastructure on inland waterways of international importance, an increase in the length of inland waterways with guaranteed dimensions of ship passages and illuminated conditions, the reconstruction of hydraulic structures, the reconstruction of passenger stations and improving the quality of passenger service, as well as the construction of a cargo and passenger fleet.

The second stage of the implementation of the Transport Strategy includes:

creation of a market for competitive transport services to meet the needs of intensive innovative development of the economy and improve the quality of life of the population, increase the competitiveness, productivity and profitability of transport systems;

access to the world level of technological and technical development of transport;

creation of reserves necessary to ensure the accelerated development of the transport system and increase its competitiveness, efficiency and quality of transport services, create infrastructural conditions for the development of new "points" of economic growth in the country;

expansion of the core transport network;

implementation of the country's transit potential, including joint projects within the EurAsEC and with other states;

diversification of directions for export deliveries of Russian hydrocarbons;

increasing the role of transport and logistics infrastructure in the organization of goods distribution, as well as the transformation of logistics transport centers into control elements of the goods movement system.

At this stage, a transition to the systemic development of the country's transport system will be ensured on the basis of the formation of a single transport space in Russia, which includes:

creation of a unified balanced system of transport communications of the country on the basis of a differentiated development of communication routes for all types of transport;

increase in capacity and achieve the best world indicators in terms of speed parameters of the transport infrastructure, as well as an increase in the share of high-speed communications;

creation of an interconnected integrated system of commodity transport technological infrastructure for all types of transport and cargo owners, an integrated system of logistics parks, as well as a unified information environment for the technological interaction of various types of transport and participants in the transport process to form a modern commodity distribution network that provides the volume and quality of transport services in the country;

development of innovative technologies for construction, reconstruction and maintenance of infrastructure.

At this stage, the transport system should reach a level that ensures the absence of infrastructural restrictions on the country's future socio-economic development.

The balanced development of the country's transport system will increase the competitiveness of domestic goods and services in world markets, bring population mobility indicators closer to the level of developed countries, which will be one of the most important factors in improving the quality of human capital in the country, as well as reduce differentiation in the availability of transport services for different regions and social groups of society.

It is envisaged to provide the population with high-quality transport services in accordance with minimum social transport standards. It is intended to gradually increase the level of these standards on a progressive scale.

The development of all types of transport will continue. Particular attention will be paid to the integrated development of large transport hubs and the creation of a transport and logistics infrastructure.

The main directions of development at the second stage are characterized by:

in the field of railway transport - the development of the main main lines, the construction of bypasses of large junctions, the formation of a deep bypass of the Moscow junction, the construction of second and third bridge crossings over the river. Volga, r. Ob, r. Amur and others, as well as a significant expansion of the range of high-speed traffic;

in the field of air transport - the expansion of the airfield network as a result of the development, mainly, of regional air transport infrastructure, the development of airport infrastructure, including those that are not part of the core network, maintaining the airports of the core network in serviceability and ensuring the balanced development of the entire air transport infrastructure;

in the field of road economy - the development of new directions of highways that are part of federal routes, not only providing interregional communications, but also allowing the integration of a disparate road network of individual regions into a single transport system of Russia, roads connecting the administrative centers of the constituent entities of the Russian Federation by the shortest distance, regional highways that are part of international transport corridors and provide access to automobile checkpoints, highways that provide motor transport links of subjects located in the north-east of the country with the road network of Russia, highways that provide access from the federal road Russian network to seaports, and highways,ensuring the unloading of large transport hubs, as well as the modernization of existing and construction of new roads in the zone of the North and areas of new development, the comprehensive modernization and development of the road network in the largest transport hubs of Russia, the construction and reconstruction of roads that form a system of toll highways and express roads;

in the field of development of public passenger transport - the development of a dedicated infrastructure for public passenger transport, urban off-street transport systems, as well as the development of intermodal passenger transportation systems, the modernization and growth of rolling stock fleets;

in the field of maritime transport - an increase in the throughput of seaports and an increase in the efficiency of their work in coordination with the creation of a logistics system that includes both port terminals for various purposes and terminals in large transport hubs of the country, including "dry ports", as well as an increase in the deadweight of maritime transport a fleet registered under the Russian flag;

in the field of inland water transport - the development of the infrastructure of inland waterways and river ports to ensure transportation along international transport corridors, including the development of a water transport connection between the Azov-Black Sea and Caspian basins, as well as the development of the tourism business.

A necessary condition for the implementation of the Transport Strategy at all stages is the improvement of the investment climate and the development of market relations in transport based on the formation and development of investment management mechanisms, including on the terms of public-private partnership.

Assessment of the necessary resource support for development transport system The implementation of the Transport Strategy is ensured by a stable and reliable financing system that takes into account the specifics of transport as an infrastructure industry.

Capital investments in 2010 - 2015 are taken into account in the implementation of the federal target programs approved by the Government of the Russian Federation "Development of the transport system of Russia (2010 - 2015)", "Economic and social development of the Far East and Transbaikalia for the period up to 2013", "Modernization of the Unified System organization of the air traffic of the Russian Federation (2009 - 2015)", "Improvement of the federal system of reconnaissance and airspace control of the Russian Federation (2007 - 2010)", "Global navigation system", programs for the construction of Olympic facilities and the development of Sochi as a mountain climatic resort and other programs.

State capital investments at the expense of the federal budget are planned to be allocated primarily for the implementation of the following activities:

construction and reconstruction of motor roads of federal importance, provision of subsidies for the construction and reconstruction of public roads of regional and intermunicipal significance;

reconstruction and construction of federal civil aviation infrastructure facilities;

reconstruction and construction of federal facilities in sea and river ports, construction of sea and river vessels of the supporting fleet;

reconstruction of inland waterways and hydraulic structures on them.

The funds of the regional budgets are planned to be directed primarily to the development of regional roads, the suburban passenger complex of railway transport, the construction of new railway lines of great social and economic importance for the regions,

as well as the development of air transport infrastructure facilities.

Extrabudgetary funds are planned to be used primarily to finance commercial projects for the development of the infrastructure of transport hubs, the formation of transport systems in the territorial production clusters created in the regions, as well as the organization of transport and logistics centers in the largest transport hubs, the creation of toll and express highways and highways.

In order to develop the domestic production of materials, machinery and equipment for the transport system of the Russian Federation, it is advisable to provide measures for state support of their manufacturers, stimulating the transition to an innovative development model and attracting private investment both in the transport industry and in industry segments engaged in the manufacture of modern materials, machines and equipment. transport system equipment. Such measures can be customs and tariff regulation aimed at reducing import duties on equipment, as well as subsidizing the interest rate on loans for enterprises engaged in the production of modern equipment and its purchase for use in the transport complex.

The cost of scientific support for the implementation of the Transport Strategy will amount to 1.26 trillion rubles in 2025-2035. rubles in the prices of the corresponding years.

The specific composition and scope of work of scientific support for the implementation of the Transport Strategy is envisaged to be determined in detail when developing federal targeted programs that ensure the implementation of the Transport Strategy for the relevant periods.

Conclusion

Financing of the Transport Strategy is envisaged to be carried out at the expense of the federal budget, the budgets of the constituent entities of the Russian Federation and extrabudgetary sources.

Funds from the federal budget are directed to the following purposes:

maintaining in working condition and reproduction of transport infrastructure facilities that are state-owned;

reconstruction and construction of transport infrastructure facilities of great socio-economic importance, as well as ensuring the safe functioning of the transport system;

transport security;

the implementation and stimulation of measures to maintain the mobilization readiness of means, transport facilities and means of communication, as well as measures carried out in the interests of national security;

ensuring the functions of state regulation and management in the transport industry;

conducting fundamental scientific research and implementing innovative scientific and technical projects of national and industry-wide importance.

Along with direct budget financing, state support can be provided in the following forms:

co-financing on contractual terms of investment projects with the registration of property rights of the Russian Federation, including financing the costs of managing investment projects and developing project documentation;

granting subsidies to the budgets of the constituent entities of the Russian Federation for the development of transport infrastructure;

providing subsidies to transport organizations engaged in socially significant transportation;

subsidizing interest rates on attracted loans to transport organizations to finance the costs associated with the purchase of vehicles;

providing, in accordance with the program of state external borrowings of the Russian Federation and the program of state internal borrowings of the Russian Federation and constituent entities of the Russian Federation, state guarantees for loans attracted by domestic organizations in order to implement the most significant investment projects in the field of transport;

allocation of funds to the authorized capital of legal entities;

development and implementation of economic mechanisms that stimulate the accelerated renewal of the fleet of vehicles, including assistance in the development of leasing modern vehicles, insurance and lending to carriers;

provision of benefits when establishing the conditions for the lease of state property, land allocation and land use.

The total volume of capital investments in the Transport Strategy is calculated in the prices of the corresponding years, taking into account the value added tax, and is estimated at 170.6 trillion. rubles.

The share of total capital investments for the implementation of the Transport Strategy in relation to the total gross domestic product of Russia will average 3.97 percent.

The share of total investments in fixed capital in Russia's total investments for 2020-2025 will be 12.7 percent and for the period 2025-2035 - 10 percent.

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Issue Article

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PRIORITIES AND GOALS OF LONG-TERM SOCIO-ECONOMIC DEVELOPMENT OF THE ARKHANGELSK REGION AS A REGION OF THE RUSSIAN ARCTIC. Message 1

Abstract*: in the article, the authors analyze the main directions for the implementation of the Strategy for the socio-economic development of the Arkhangelsk region, which will provide:*

increasing the competitiveness of the seaport of Arkhangelsk, including the modernization of existing sea terminals, dredging, the creation of a new deep-water area, production and logistics complexes and access infrastructure, the introduction of coordination systems and digital management of the transport hub;

development of transport infrastructure (railroads, waterways and motor roads) providing a connection between the seaport of Arkhangelsk and the territories of the North-West of Russia, the Urals and Siberia, including the construction of railway sections Karpogory - Vendinga and Mikun - Solikamsk;

development of the international airport of Arkhangelsk;

development of the woodworking industry and the pulp and paper industry, including the formation of a modern full-cycle timber processing complex, as well as the introduction of biofuel production technologies from timber processing waste;

development of a cultural, educational, ethnographic and ecological tourism cluster in the Arctic territories and sea cruise tourism in the Solovetsky Islands.

With the development of the territory of the Arkhangelsk region, taking into account the prospects for the development of the Arctic zone and the Northern Sea Route, a competitive regional economy of the international level will be created, which will require significant investments, primarily in infrastructure. Thus, the competitiveness potential of the Arkhangelsk region largely depends on federal plans for the development of its territories, and they will be successfully implemented.

Key words*: Advanced Development Territory (TOR), economic activity, significance, efficiency, socio-economic development strategy, financial condition, sustainable TEP, resources, profit, profitability, priority, preferences, demand, competitiveness.*

Language*: English*

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Introduction

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The main directions for the implementation of this Strategy in individual municipalities of the Arkhangelsk region are:

a) increasing the competitiveness of the seaport of Arkhangelsk, including the modernization of existing sea terminals, dredging, the creation of a new deep-water area, production and logistics complexes and access infrastructure, the introduction of coordination systems and digital management of the transport hub;

b) development of transport infrastructure (railway lines, waterways and motor roads) that ensures the connection of the seaport of Arkhangelsk with the territories of the North-West of Russia, the Urals and Siberia, including the rationale for the construction of the Karpogory-Vendinga and Mikun-Solikamsk railway sections;

c) development of the international airport of Arkhangelsk;

d) development of the woodworking industry and the pulp and paper industry, including the formation of a modern full-cycle timber processing complex, as well as the introduction of biofuel production technologies from timber processing waste;

e) development of the shipbuilding and ship repair industry, including the formation of additional capacities on its basis in order to ensure the construction of structures and the production of equipment for oil and gas production on the continental shelf;

f) development of a lead-zinc mineral resource center on the Novaya Zemlya archipelago;

g) development of diamond mineral resource centers;

h) creation and development of the federal center of Arctic medicine;

i) development of the fishing cluster, including the construction, modernization and repair of the fishing fleet, the creation of enterprises for the production of fish and other products from aquatic biological resources, the development of biotechnology and aquaculture;

j) development of a cultural, educational, ethnographic and ecological tourism cluster in the Arctic territories and sea cruise tourism in the Solovetsky Islands.

The Strategy for the socio-economic development of the Arkhangelsk region until 2035 (hereinafter referred to as the Strategy) is a strategic planning document for the Arkhangelsk region, developed as part of goal-setting, defining a strategic vision, priority areas for the socio-economic development of the Arkhangelsk region, consistent with the goals and objectives of the socio-economic development of the Arkhangelsk region areas for the long term.

The legal basis of the Strategy is:

the Constitution of the Russian Federation;

Federal Law of June 28, 2014 No. 172-FZ "On Strategic Planning in the Russian Federation";

Charter of the Arkhangelsk region;

regional law dated June 29, 2015 No. 296-18-OZ "On strategic planning in the Arkhangelsk region".

The Strategy takes into account the main provisions:

Decree of the President of the Russian Federation of May 7, 2018 No. 204 "On the National Goals and Strategic Objectives of the Development of the Russian Federation for the period up to 2024";

Fundamentals of the state policy of regional development of the Russian Federation for the period up to 2025, approved by Decree of the President of the Russian Federation dated January 16, 2017 No. 13;

Fundamentals of the state policy of the Russian Federation in the Arctic for the period up to 2020 and beyond, approved by the order of the President of the Russian Federation dated September 18, 2008 No. Pr-1969;

Fundamentals of the state policy in the field of environmental development of the Russian Federation for the period up to 2030, approved by the President of the Russian Federation on April 30, 2012;

the National Security Strategy of the Russian Federation, approved by Decree of the President of the Russian Federation of December 31, 2015 No. 683;

Strategy for the Development of the Information Society in the Russian Federation for 2017 - 2030, approved by Decree of the President of the Russian Federation of May 9, 2017 No. 203;

Strategy for Scientific and Technological Development of the Russian Federation, approved by Decree of the President of the Russian Federation of December 1, 2016 No. 642;

Strategy for the development of the Arctic zone of the Russian Federation and ensuring national security for the period up to 2020, approved by order of the President of the Russian Federation on February 8, 2013 No. Pr-232;

the Environmental Security Strategy of the Russian Federation for the period up to 2025, approved by Decree of the President of the Russian Federation of April 19, 2017 No. 176;

Economic Security Strategy of the Russian Federation for the period up to 2030, approved by Decree of the President of the Russian Federation of May 13, 2017 No. 208;

Strategy of the state cultural policy for the period up to 2030, approved by the order of the Government of the Russian Federation of February 29, 2016 No. 326-r;

Strategy for the development of small and medium-sized businesses in the Russian Federation for the period up to 2030, approved by the order of the Government of the Russian Federation dated June 2, 2016 No. 1083-r;

Strategy of the state national policy of the Russian Federation until 2025, approved by Decree of the President of the Russian Federation of December 19, 2012 No. 1666;

Road Safety Strategy in the Russian Federation for 2018 - 2024, approved by Decree of the Government of the Russian Federation dated January 8, 2018 No. 1;

Strategy for Spatial Development of the Russian Federation for the period up to 2025, approved by Decree of the Government of the Russian Federation of February 13, 2019 No. 207-r;

Target models for simplifying business procedures and increasing the investment attractiveness of the constituent entities of the Russian Federation, approved by Decree of the Government of the Russian Federation dated January 31, 2017 No. 147-r; Guidelines for the development and adjustment of a strategy for the socio-economic development of a constituent entity of the Russian Federation and an action plan for its implementation, approved by order of the Ministry of Economic Development of the Russian Federation dated March 23, 2017 No. 132;

The procedure for developing, adjusting, monitoring and controlling the implementation of the strategy for the socio-economic development of the Arkhangelsk region, approved by the Decree of the Government of the Arkhangelsk region of December 15, 2015 No. 498-pp; other regulatory legal acts of the Russian Federation and regulatory legal acts of the Arkhangelsk region, ensuring the implementation of strategic planning processes for the socio-economic development of the Arkhangelsk region. The strategy was developed taking into account the forecast for the socio-economic development of the Arkhangelsk region for the long term until 2035, approved by order of the Government of the Arkhangelsk region dated November 28, 2018 No. 506-rp / dsp, the forecast for the socio-economic development of the Arkhangelsk region for 2019 and for the planning period 2020 and 2021, approved by Decree of the Government of the Arkhangelsk Region of October 11, 2018 No. 421-rp, and the budget forecast of the Arkhangelsk Region for the period up to 2028, approved by Decree of the Government of the Arkhangelsk Region of February 18, 2016 No. 38-rp. The state authorities of the Arkhangelsk region took part in the development of the Strategy,

In order to ensure the openness of the Strategy development process and involve the maximum number of interested participants in the development of the main directions and priorities of the socio-economic development of the Arkhangelsk region, an Internet portal https://strategy29.ru/ was created, which contains reports, draft documents, civil initiatives and expert opinions, as well as a number of discussion platforms were organized on key issues of socio-economic development of the Arkhangelsk region (Figure 1).

Figure 1. Arkhangelsk region

Main part

Decree of the Administration of the Arkhangelsk Region dated December 16, 2008 No. 278-ra/48 approved:

The Strategy for the socio-economic development of the Arkhangelsk region until 2035 (hereinafter referred to as the Strategy until 2035) as the basic document for the strategic development of the Arkhangelsk region, developed using the program-target method based on the legal, economic and organizational mechanisms used in public administration;

The main activities of the executive bodies of state power of the Arkhangelsk region for 2018-2025, which established target indicators for monitoring the implementation of the goals of the Strategy until 2035 and key activities aimed at achieving the established goals for the period from 2019 to 2021. The implementation of the goals of the Strategy until 2035 was carried out within the framework of state, targeted and other programs of the Arkhangelsk region.

The key indicator of achieving the goals of the Strategy until 2035 is the level of gross regional product (hereinafter referred to as GRP) per capita. Under the base development scenario, the projected level of GRP per capita was to be 409 thousand rubles/person, which is comparable to the level of GRP of the Czech Republic, Portugal, Taiwan and South Korea in 2006. To meet the target, the average annual growth of GRP per capita in 2030 was to be 5.2 percent, but for the period from 2006 to 2015 it was 3.4 percent. If this trend continues, the level of GRP per capita by 2030 compared to 2006 will increase by 84 percent, while the projected growth by 2035 in the baseline scenario is 140 percent. The current level of development of the Arkhangelsk region exceeds the forecast values of the pessimistic scenario, according to which, in the long term, an increase in the level of GRP per capita by 62.5 percent was expected. The current growth rates of average per capita incomes of the population (2.8 percent) are lower than the growth rates of average per capita incomes of the population under the pessimistic scenario of development (3.0 percent).

The level of average labor productivity in the Arkhangelsk region under the base scenario of development by 2035 should be 2.3 million rubles with an annual growth rate of 4 percent. The current CAGR of the indicator is 3.4 percent. If growth rates continue, average labor productivity will increase by 85 percent by 2035, slightly less than the projected doubling of the figure.

In general, in the context of economic crises, the positive changes achieved have made it possible to increase the real disposable income of the population by 11 percent since 2008. The real average monthly accrued wages increased by 16 percent from 2008 to 2016, and monetary income per capita per month, adjusted for inflation, increased by 18 percent.

There are significant changes in the demographic situation of the Arkhangelsk region. First of all, life expectancy has increased by more than 3 years. A significant role was played by a persistent trend towards a decrease in mortality from socially significant diseases. The infant mortality rate in 2016 decreased by 34.4 percent compared to 2008.

During the period of implementation of the Strategy until 2035, there were serious external and internal challenges both for the country as a whole and for each subject of the Russian Federation. The key reasons that prevented the implementation of the objectives of the Strategy until 2035 are:

insufficient level of funding, including from the federal budget, projects and activities of the Strategy until 2035, as well as programs adopted for its implementation;

lack of general plans and rules for land use and development in many urban and rural settlements of the Arkhangelsk region;

low rates of construction, including due to the lack of own working capital from developers;

unfavorable demographic trend;

backwardness of the material and technical base of industrial organizations; critical level of physical and obsolescence of equipment;

low investment attractiveness in the field of housing and communal services (hereinafter - housing and communal services);

high level of deterioration of housing and communal infrastructure; slowdown in the growth of tax and non-tax revenues of the regional and federal budgets.

The implementation of the agreed Strategy until 2035 in the period from 2018-2019 took place in 3 stages (Figure 2):

from 2020 to 2025 - on the basis of annually approved and adjusted plans of priority measures for the corresponding year;

from 2026 to 2030 - through long-term state programs of the Arkhangelsk region;

from 2031 to 2035 - by consolidating the state programs of the Arkhangelsk region.

Figure 2. Administrative and territorial division of the Arkhangelsk region

Within the framework of the first and second stages, the following results can be noted.

Among the 66 indicators that in the new structure of goals can be attributed to the direction "Preservation and development of human capital", in relation to 36 indicators there is information on the achievement of target values at least once in the period 2021-2025, which will amount to 54.5 percent of the total number of indicators. For other indicators, there is either no information on their achievement, or such indicators have not yet been achieved. Of the 60 indicators that can be attributed to the "Space that is comfortable for living" direction, for 21 indicators there is information about their possible achievement of target values at least once in the period 2021-2025, which is 35 percent of the total number of indicators. For other indicators, there is either no information on their achievement, or such indicators have not yet been achieved. Out of 173 indicators, which can be attributed to the direction "Favorable conditions for sustainable economic growth", for 60 indicators there is information on their possible achievement of target values for the period 2021-2025, which is 34.68 percent of the total number of indicators. For other indicators, there is either no information on their achievement, or such indicators have not yet been achieved.

Of the 21 indicators that can be attributed to the "Consolidation of the population and the development of civil society" direction, for 11 indicators there is information about their possible achievement of target values for the period 2021-2025, which is 53.38 percent of the total number of indicators. For other indicators, there is either no information on their achievement, or such indicators have not yet been achieved.

In connection with the analysis and evaluation of the effectiveness of the implementation of the Main Directions for the Activities of the Executive Bodies of State Power of the Arkhangelsk Region for 2009-2012, 85 project-type measures were identified. Of these, within the framework of the submitted reports, there is information on the implementation or partial implementation of 22 initiatives, which is 25.88 percent of the total number of allocated initiatives.

Implementation of state programs of the Arkhangelsk region

From the list of activities listed in the framework of the main activities of the executive bodies of state power of the Arkhangelsk region for 2009-2012, 59 initiatives were identified related to the development of various programs and program documents, of

which 29 initiatives have information on implementation or partial implementation, which is 49.15 percent.

At the third stage of the implementation of the Strategy until 2035, after the consolidation of the state programs of the Arkhangelsk region, the efficiency of their implementation has increased significantly. The degree of performance was determined as the ratio of the actual value of indicators according to the reports on their performance to the planned value.

The average degree of performance of the program is the median value of the degree of performance of each individual indicator of the program. The average degree (median value) of program implementation for the period 2012-2014 is 100 percent, the average degree of program implementation in 2015 is 97 percent, and in 2016 it is 96 percent.

The Arkhangelsk Region is actively involved in the implementation of federal target programs (hereinafter also referred to as FTPs), state programs of the Russian Federation, including state programs of the Russian Federation aimed at developing the Arctic zone of the Russian Federation. Participation in the Federal Target Program and state programs of the Russian Federation allows the Arkhangelsk Region to attract additional funds from the federal budget that contribute to the socio-economic development of the Arkhangelsk Region (Table 1).

Table 1. Summary information on the participation of the Arkhangelsk region in federal targeted programs

	2016	2018	2019	2020	2021
Total FTP financing from the federal budget, billion rubles	1096.1	1025.5	937.3	966.1	893.7
Number of FTPs in which the Arkhangelsk Region took part, units	22	19	15	14	12
Financing of the Arkhangelsk Region from the federal budget within the FTP, billion rubles	7520.7	8608.5	7905.8	–*	4640.6
The share of financing of the Arkhangelsk region within the FTP, percent	0.69	0.84	0.84	–*	0.52

For the period 2016 - 2021, 96,610.4 million rubles were provided to the regional budget for the implementation of activities within the framework of federal target programs, state programs of the Russian Federation and the federal targeted investment program from the federal budget, of which 80,563 million rubles were disbursed (83.4 percent). The lowest level of disbursement occurs in the period 2016-2017, when up to half of the funds were not disbursed.

In 2018 - 2021, the Arkhangelsk region took part in 19 state programs of the Russian Federation, as well as in 12 FTPs and 1 project for the non-program part of the federal targeted investment program (table 2).

Table 2. Development of funds within the framework of federal target programs, state programs of the Russian Federation, non-program part of the federal targeted investment program

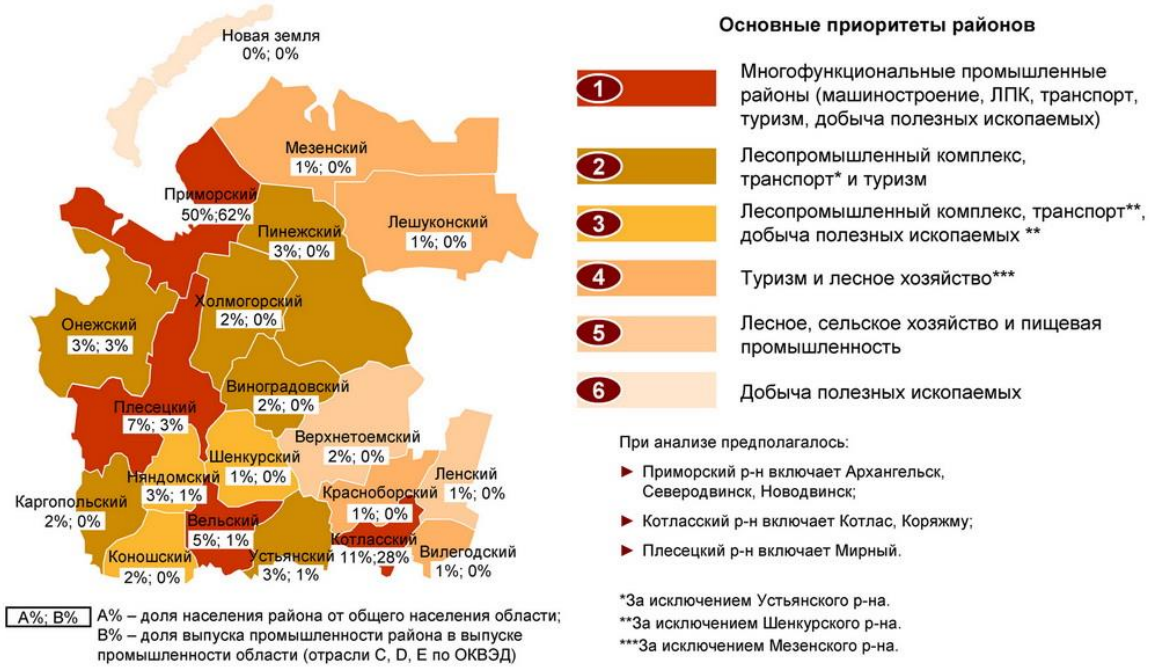
	2017		2018		2019		2020		2021	
	Received	Mastered	Received	Mastered	Received	Mastered	Received	Mastered	Received	Mastered
Total, million rubles	8986.2	4,579.5 (51%)	9940.6	5255.5 (52.9%)	24,683.4	22,356.7 (90.6%)	28,650.4	24,697.4 (86.2%)	24349.8	23,674.6 (97.2%)
Federal budget	7520.7	3,121.9 (41.5%)	8,608.5	4001.8 (46.5%)	13,212.9	10,924.1 (82.7%)	15563.1	12,141.4 (78%)	10800.5	10,236.2 (94.8%)
Regional budget	433.1	424.7 (98.1%)	613.0	495.6 (80.8%)	2,296.5	2259.6 (98.4%)	2830.0	2504.5 (88.5%)	5949.5	5,853.3 (98.4%)
extrabudgetary source	1,032.4	1,032.9 (100 %)	719.1	758.1 (105.4%)	9,174.0	9,173.0 (100 %)	10,257.3	10,051.5 (98%)	7,599.8	7,585.1 (99.8%)

The Arkhangelsk region participates in approximately one third of federal targeted programs that provide for budget investments in capital construction projects. The regional budget from the federal budget for the period from 2016 to 2021, within the framework of federal targeted programs,

was provided with 31,840.9 million rubles of budgetary appropriations, which is 0.51 percent of all funds allocated from the federal budget (38th place). At the same time, the leaders in receiving funds from the federal budget for the implementation of construction projects and reconstruction of capital construction projects are the city of Moscow (9.2 percent), the Krasnodar Territory (8.0 percent), the Moscow Region (6.9 percent), the city of St. Petersburg (5.5 percent) and Primorsky Krai (3.7 percent).

Positive changes in 2016-2021 were manifested in an increase in the share of the employed population in the tertiary sector of the economy (trade and services) and a decrease in the share of the employed population in the primary sector of the economy (agriculture and mining), while at the same time increasing the volume of gross value added created in them (Figure 3).

The processes that have taken place have had a positive impact on labor productivity. The highest levels of labor productivity in the economy of the Arkhangelsk region in 2021 were recorded in the mining industry, fishing and fish farming. The leadership of the extractive industry in the Arkhangelsk region in terms of labor productivity corresponds to the all-Russian trend.



Отраслевые приоритеты районов Архангельской области //Стратегия социально-экономического развития Архангельской области до 2030 года, 2008.С.57

Figure 3. The main priority areas of the Arkhangelsk region

The Arkhangelsk region, like many regions of the Russian Federation, is facing the problem of population aging. The Arkhangelsk region has one of the highest rates in the Russian Federation in terms of the number of pensioners per 1,000 people. In this regard, in the Arkhangelsk region, the share of spending on social policy in total spending is higher than the average for the Russian Federation. At the same time, the structure of insurance payments corresponds to the all-Russian tendencies. About 75 percent of all insurance payments are accounted for by the payment of pensions (Figure 4).

Picture. 4. Growth/decline in gross value added per employee, % to the previous year

In connection with the aging of the population, the need for social services is increasing, therefore mechanisms are being developed in the Arkhangelsk region to include the segment of paid social services. The number of stationary institutions providing social services is insufficient, which is confirmed by the priority data - almost a third of citizens cannot receive this type of assistance. Therefore, in the Arkhangelsk region, a package of regulatory documents has been developed related to improving the efficiency of work in the field of social services for the population, and a whole range of social support measures is being provided aimed at social support for all categories of citizens (table 3).

To determine the competitiveness of the Arkhangelsk region at the regional level, the positions of the Arkhangelsk region in the leading interregional rankings were analyzed: the National rating of the state of the investment climate in the constituent entities of the Russian Federation, the rating of innovative development of the constituent entities of the Russian Federation of the Institute for Statistical Research and Economics of Knowledge of the National Research University Higher School of Economics (hereinafter - ISSEK NRU HSE), Rating of Russian regions in terms of quality of life "RIA Rating", Regional Competitiveness Index AV RCI Consortium Leontief Center - AV Group is shown in Table 4.

These ratings make it possible to identify competitive advantages, as well as to identify the main shortcomings of the Arkhangelsk region in comparison with other constituent entities of the Russian Federation, based on the assessment of the Arkhangelsk region on key competitive factors, such as the economic and investment climate, sales markets and economic complexes, the quality of institutions, innovative development, human capital and quality of life of the population, natural resource capital, financial capital, real capital.

Table 3. Positions of the Arkhangelsk region in the ratings

Rating	Position of the Arkhangelsk region / number of positions					
	2013	2016	2020	2025	2030	2035
AV RCI Regional Competitiveness Index	42/83	39/83	36/83	40/83	37/83	45/85
National rating of the state of the investment climate in the constituent entities of the Russian Federation	-	-	-	55/76	51/83	75/85
Rating of innovative development of subjects of the Russian Federation	76/83	-	55/83	46/83	63/83	59/85

The Arkhangelsk region occupies a low position in these ratings, which is due to the location of the territory of the Arkhangelsk region in the Arctic zone of the Russian Federation, which adversely affects the investment and business climate. In addition to high energy tariffs, entrepreneurs face an increased burden

associated with the need to provide state guarantees and compensations for people working and living in the Far North and equivalent areas. Low population density and adverse climatic conditions significantly increase infrastructure and transport costs.

The Arkhangelsk region has a unique development potential, which makes standard estimates inapplicable for comparison with other regions of the Russian Federation.

The development of the territory of the Arkhangelsk region, taking into account the prospects for the development of the Arctic zone and the Northern Sea Route, can create a competitive regional economy at the international level, but requires significant investment, primarily in infrastructure.

Table 4. The impact of the external environment on the socio-economic potential and competitiveness of the Arkhangelsk region

Factor groups	Description of trends	Object of influence	The nature of the impact
POLITICAL	GLOBAL TRENDS		
	The international political situation in the Arctic in the medium and long term, characterized by a high level of legal certainty and a low level of conflict in interstate relations	institutional/ innovation / production potential	Capacity Development
	Reducing the degree of dominance of Western countries in global systems of international cooperation		
	The growth of the political and economic importance of the Arctic region, the development of international cooperation on the development of the Arctic and the development of its natural resources, the involvement of the countries of Southeast Asia in economic and political cooperation in the Arctic		
	Growing Threat of Expansion of International Terrorism		Potential reduction
	Increasing the openness of power: developing forms of citizen participation in the process of public administration, increasing transparency and accountability of the activities of public authorities	institutional potential	Capacity Development
	DEVELOPMENT TRENDS IN THE RUSSIAN FEDERATION		
	Strengthening mutual distrust between the Arctic countries due to the aggravation of relations between Russia and Western countries	institutional/ production potential	Potential reduction
	Slowdown of the institutionalization of pan-Arctic cooperation to counter new security challenges in the Arctic		
	Improving the system of cooperation between the Russian Federation and the countries of the Barents / Euro-Arctic region	Institutional / innovativepotential	Capacity Development
	Activation of interregional cooperation and cooperation at the level of cities located in the Arctic zone of the Russian Federation		
	Activation of the participation of the Russian Federation in international fisheries organizations to protect the interests of domestic fisheries	Industrial potential	
ECONOMIC	GLOBAL TRENDS		
	The transition of leadership in development from individual states to urban agglomerations	Industrialpotential	Potential reduction
	Exhaustion of the potential of the resource model of economic development and reduction of the influence of traditional growth factors		
	Tougher international and interregional competition for investors	Financial potential	
	Widening savings gap in the global economy		
	The growing influence of the quality of infrastructure and space in general on the choice of a region for life, development and investment		
	The shift of the world center of production and consumption to Asia, mainly to China and India, which determines the high	Industrialpotential	Capacity Development

	potential of Eurasian integration		
	Global access to financial instruments and investments	Financial potential	
	Movement of capital from developed markets to emerging markets		
	Activation of the international use of national currencies, the formation of a multi-currency standard using national and regional currencies		
	DEVELOPMENT TRENDS IN THE RUSSIAN FEDERATION		
	Increasing dependence of the Russian Federation's balance of payments on capital flows and possible disturbances in global financial markets	Financial potential	Potential reduction
	Slowdown in the development of the Russian economy and continued risks of deterioration in the financial and economic situation of Russian producers due to the unstable foreign policy situation and the deterioration of trade relations with Western countries		
	Increasing the vulnerability of the Russian economy to global cyclical crises and the waves they generate	Financial /	
	conjuncture (ups and downs); increased risks of lower growth rates of investment in fixed assets, deterioration of the balance of payments and a noticeable weakening of the ruble	Industrialpotential	
	Uncertainty of the tax regime in the Arctic zone of the Russian Federation; underdevelopment of the regulatory framework		
	Diversification of the Russian economy through the accelerated development of non-primary industries	Production / Labor potential	Capacity Development
	Reducing the number of people employed in the economy of the Russian Federation, especially in the sectors of the real sector of the economy; change in the existing structure of employment, increase in demand for highly qualified personnel		Potential reduction
	Activation of the use of the Arctic zone of the Russian Federation as a strategic resource base of the Russian Federation, providing a solution to the problems of the socio-economic development of the Russian Federation	Industrialpotential	Capacity development
	Orientation of the oceanic fishery of aquatic biological resources to the exclusive economic zone of the Russian Federation and catch of the most massive and currency-intensive fishery objects		
	Strengthening the polarization of economic development, causing the imbalance in economic development between the subjects of the Russian Federation, including the subjects of the Arctic zone of the Russian Federation	Production potential / Infrastructure potential	Potential reduction
	Implementation of new projects for the economic development of the Arctic territories, including through their co-financing from the budgets of various levels of the budget system of the Russian Federation		Capacity Development
	Comprehensive development of all spheres of the economy of the regions of the Northwestern Federal District, active implementation of the transport and transit functions of the federal district, accelerated development of service sectors by including the regions of the Northwestern Federal District in the integration processes of the countries of the Baltic and Arctic regions		
	Expansion of the use of the Northern Sea Route as a national unified transport communication of the Russian Federation in the Arctic		
EN VI	GLOBAL TRENDS		

	An increase in the per capita level of resource consumption, which increases the anthropogenic pressure on the environment, the growth of environmental problems and the growing shortage of basic resources	natural resourcepotential	Potential reduction
	Deterioration of the environmental situation in the Arctic due to global climate change and increased economic activity in the Arctic region		
	Depletion of the natural resources of the World Ocean, increased competition between countries for the right to use natural resources unevenly distributed in the water area and coastal zone of the World Ocean		
	DEVELOPMENT TRENDS IN THE RUSSIAN FEDERATION		
	An increase in the technogenic and anthropogenic load on the environment with an increase in the probability of reaching its limit values in the waters of the Arctic Ocean, as well as in the territory of the Arctic zone of the Russian Federation	Natural resource / Production potential	Potential reduction
	Accelerating the transition to environmentally efficient development of the economy of the Russian Federation, increasing the volume of budgetary financing of environmental protection		Capacity Development
SOCIAL	GLOBAL TRENDS		
	Population aging in developed and emerging countries	Labor potential	Potential reduction
	Increasing middle-class populations in developing countries and declining numbers of people living below the poverty line		Capacity Development
	Leadership of human capital among long-term factors for the development of the future economy		
	Improving the quality of education, due to changes in working conditions due to the use of new technologies and the opportunities for widespread use of information and communication technologies (hereinafter referred to as ICT) in education		Capacity Development
	The aggravation of the situation of the indigenous peoples of the North due to the intensification of economic activity in the Arctic		Potential reduction
	DEVELOPMENT TRENDS IN THE RUSSIAN FEDERATION		
	Structural changes in the population of the Russian Federation, due to the reduction in the number of women of active	Labor /	Potential reduction
	reproductive age and an increase in the average age of the mother at the birth of her first child	Industrialpotential	
	Preservation of negative demographic processes in the regions of the Arctic zone of the Russian Federation		
	The outflow of labor resources (especially highly qualified) to the constituent entities of the Russian Federation with more favorable climatic conditions and foreign countries		
	Updating the training program in accordance with changing market requirements and improving the quality of training		Capacity Development
TECHNOLOGICAL	GLOBAL TRENDS		
	Expanding the use of modern information technologies and new means of communication	Industrial/ Infrastructure potential	Capacity Development
	Expansion of space programs		
	Growth in labor productivity by increasing its technical equipment and developing methods and technologies to increase efficiency	Labor / Production potential	
	Reducing the role of distance as a constraint on international and interregional cooperation through the development of multimodal transport and logistics systems using intelligent technologies	Industrial potential	
	DEVELOPMENT TRENDS IN THE RUSSIAN FEDERATION		

	Stimulating the commercialization of domestic research and development (hereinafter referred to as R&D), including through "forcing" large companies with state participation to innovate and developing innovative development programs by them	Production potential / Labor potential	Capacity Development
	Increasing the knowledge intensity of industrial production, increasing the need for automated processes		
	Growth of internal costs for R&D, as well as the implementation of projects of innovation centers at the regional level, combining the objects of federal and regional educational, scientific and innovation infrastructure available in the regions		
	Expansion of fundamental and applied scientific research in the Arctic zone of the Russian Federation		
	Increased depreciation of fixed assets in industry	Industrial potential	Potential reduction

With the current budget policy in the Russian Federation, the implementation of large-scale plans for the development of the territories of the Arkhangelsk region, classified as regions of the Far North and equivalent areas, is possible only with the active participation of the federal budget and major investors. Thus, the competitiveness potential of the Arkhangelsk region largely depends on federal plans for the development of its territories.

When developing the Strategy, it is necessary to focus on the main advantages of the Arkhangelsk Region, which ensure its competitiveness.

The Arkhangelsk region is located in the north-east of the largest centers of the Russian Federation - the cities of Moscow and St. Petersburg. The presence of highways and railway communication provides intensive ties between the constituent entities of the Russian Federation. An additional advantage of the Arkhangelsk region is the availability of access to the sea, which ensures the development of fisheries, shipbuilding, as well as the activities of shipping and service companies.

The Arkhangelsk region is part of the Northern macroregion, which also includes the Republic of Komi and the Nenets Autonomous Okrug.

The Arkhangelsk region is rich in minerals. On the territory of the Arkhangelsk region, there are developed deposits of diamonds and bauxite, and there are significant promising reserves. Polymetallic ores occur on the island territories, the reserves of the Pavlovskoye deposit are approved and profitable for exploitation.

Agriculture based on dairy cattle breeding is a traditional branch of the Arkhangelsk region. Currently, active restoration and development of dairy cattle breeding is observed in the south of the Arkhangelsk region.

Educational organizations of the Arkhangelsk region are characterized by a high quality of graduate training. This is evidenced by the results of the unified state exam. The system of higher professional education of the Arkhangelsk region ensures the release of highly qualified specialists of a wide range, competitive in the labor market of the Russian Federation.

A three-level system of providing medical care to the population has been created on the territory of the Arkhangelsk region. Standardized mortality rates show a clear downward trend.

Due to the presence of remote and hard-to-reach settlements and low population density in the healthcare sector of the Arkhangelsk region, telemedicine has been developed. The number of remote consultations is increasing every year. The Arkhangelsk region also has a high-tech perinatal center designed not only for inpatient treatment, but also for remote monitoring.

The most important advantage of the economy of the Arkhangelsk region is the presence of two industrial clusters - shipbuilding and timber processing. The activities of shipbuilding organizations are mainly focused on the production of single products for the needs of the military-industrial complex. The timber processing cluster provides comprehensive timber processing and the production of competitive products both on the Russian and international markets. The orientation of the organizations of the timber industry complex towards the sustainable development of the Arkhangelsk region, expressed in carrying out reforestation work, is also noted.

The Arkhangelsk region has a rich cultural heritage, represented by historical settlements, architectural ensembles, as well as spiritual cultural heritage and traditional crafts. This contributes to the development of tourism, which is currently the most developed on the Solovetsky Islands and in the city of Arkhangelsk.

Among other subjects of the Russian Federation in the Arkhangelsk region, the institution of territorial public self-government (hereinafter also referred to as TPS) has been most developed. This makes it possible to ensure the self-organization of the population to solve local issues.

A necessary condition for the development of the Strategy is the identification of problems and challenges facing the Arkhangelsk region, the development of which is inevitable while maintaining

existing trends. The analysis carried out allows us to identify a number of points that can become a barrier to ensuring sustainable socio-economic development of the Arkhangelsk region.

Although in recent years the decline in the number of employed people has led to an overall increase in labor productivity in the economy, a prolonged decline in the population may become a long-term barrier to the development of the economy of the Arkhangelsk region. At the same time, in the context of the deteriorating demographic situation in the Russian Federation, the issue of internal Russian migration will become increasingly important for most regions of the Northwestern Federal District (hereinafter referred to as the NWFD) and the Russian Federation as a whole.

The natural zones of the Arkhangelsk region are replaced from the taiga in the south of the Arkhangelsk region to the arctic deserts in the island territories of the Arctic Ocean. The location in high latitudes causes unfavorable natural conditions for doing business, which contributes to the growth of costs.

The settlement system on the territory of the Arkhangelsk region is characterized by the concentration of residents and economic activities, the territories outside the main centers of settlement remain poorly developed. Despite the concentration of the population in the largest cities of the Arkhangelsk region, their number and remoteness from each other prevents the formation of agglomeration settlement systems that are favorable for the development of the economy due to economies of scale.

The level of labor productivity in a number of sectors of the economy of the Arkhangelsk region is below the average Russian level and the average level in the Northwestern Federal District.

In the territories of the Arkhangelsk region, classified as regions of the Far North and areas equated to them, one of the main problems that negatively affect the investment and business climate, in addition to high energy tariffs and a harsh climate, is an increased burden on business associated with the payment of a district coefficient and a percentage surcharge to wages for work experience in the regions of the Far North and areas equivalent to them, as well as other benefits to employees. In the conditions of increased competition of the constituent entities of the Russian Federation for human and financial resources, this factor may become an additional barrier to increasing the competitiveness of enterprises in the Arkhangelsk region.

Despite the presence of significant potential in the field of scientific research and innovation, it is largely not used by the real sector of the economy. In world practice, there is a tendency to increase the importance of scientific developments, in connection with which there is a need to develop a technology transfer mechanism and use the accumulated potential (Table 5).

In the context of the growing role of the Arctic region in the Russian Federation and in the world, the lack of the necessary transport infrastructure creates risks of insufficient use of this trend by the Arkhangelsk region.

Significant investments in the sphere of public administration and security have a low economic effect for the sectors of the economy of the Arkhangelsk region.

The Arkhangelsk region is characterized by a significant amount of investments from the federal budget, which do not depend much on the socio-economic situation of the Arkhangelsk region and can lead to a significant drop in investment activity in the conditions of the termination of their receipt.

Table 5. SWOT Analysis Matrix

Benefits and Opportunities	Benefits and Threats
1. Special attention of executive bodies of state power to the role of human capital development in accordance with federal plans to significantly increase funding for improving the quality of life of the population. 2. Implementation of cross-border cooperation projects on the basis of a favorable parity for the economy of the Arkhangelsk region. 3. Strengthening export specialization, advancing the development of elements of the service economy of subregional and global significance. 4. Unleashing the transport and logistics potential of the Arkhangelsk region through the implementation of major investment projects of federal and international importance. 5. Opportunity to expand long-term international cooperation on sustainable development issues due to	1. Migration outflow of highly qualified specialists and graduates of higher educational institutions along with the high quality of education. 2. Favorable geographical position, leveled by an underdeveloped road network. 3. An effective policy of the executive bodies of state power to create a favorable investment climate, limited by low investment activity against the backdrop of negative geopolitical trends. 4. Potential for export growth and expansion of foreign trade relations, limited by sectional pressure on the Russian economy. 5. High growth rate of labor productivity in certain industries (fishing, key industries and the transport and logistics complex), limited by the low availability of production automation tools.

high environmental potential and favorable geographical position (joining the Barents / Euro-Arctic region).	
Disadvantages and opportunities	Disadvantages and Threats
1. Slowing down the rate of human capital decline through the implementation of the new federal state policy in the Arkhangelsk region. 2. Growth of investment attractiveness of the Arkhangelsk region, leveling infrastructure restrictions in key sectors of the economy of the Arkhangelsk region. 3. High potential for the development of the consumer sector and the construction market, leading to an increase in the diversification of a highly specialized economy. 4. Reducing the negative impact on the environment of the Arkhangelsk region through the implementation of incentive measures of state policy. 5. A high level of deterioration and a low level of availability of energy and utility infrastructure, which will be overcome as part of the investment programs of federal infrastructure companies and the implementation of programs to involve alternative types of resources and a general increase in the energy efficiency of the economy.	1. Significant migration outflow, increasing due to the increasing attractiveness of other subjects of the Russian Federation. 2. high death rate, strengthened by the general structural trends of population groups (aging), with a low potential for migratory influx of people of working age. 3. Insufficient level of equipment of the material and technical base of the general education system against the background of low investment opportunities of the regional budget. 4. The low provision of the Arkhangelsk region with basic food products produced on its territory, formed due to the limited production volumes and the high cost of local agricultural products. 5. Low level of territorial development, low territorial density of economic facilities, which reduce the efficiency of using infrastructure with limited investment opportunities, as well as complicate the neutralization of threats of various emergencies, including fires and accidents at water bodies.

Main strategic goal: The Arkhangelsk region is the center of the Russian North, attracting and uniting people for comprehensive development, implementation of advanced ideas and comfortable living.

The main value of the Strategy is a person.

The first priority of the Strategy is the preservation and development of human capital by improving the efficiency of social infrastructure and the quality of social services.

Priority Goals:

a well-formed culture and system of health savings aimed at the responsible attitude of citizens to their health, the development of a system for the provision of primary health care and specialized, including high-tech, medical care, including through the introduction of patient-oriented principles;

high-quality and affordable education, including the modernization of fixed assets of educational organizations, improving the quality and accessibility of all educational services, providing opportunities for the use of modern educational technologies, increasing the connectivity of the labor market and the vocational education system, focusing on the needs of the economy in the formation of a system of additional professional education;

development of the Arkhangelsk region as a center of culture with a rich historical heritage through the preservation of cultural monuments and cultural heritage sites, raising the cultural level of the population, reorganizing the tourism infrastructure, adapting the tourism industry to world standards, expanding tourist destinations;

a developed system of physical culture and sports education through the promotion of a healthy lifestyle and physical activity, improving the quality and accessibility of sports infrastructure facilities, creating a system of school sports leagues, a system of support and support for talented athletes;

welfare accessible to everyone, provided by the organization of measures to support socially vulnerable groups of the population and their involvement in the economy, increasing the financial literacy of the population, promoting youth entrepreneurship and employment of young professionals, supporting young, large and single-parent families.

For a human-centered approach, the second important condition for improving the quality of life is the creation of a space that is comfortable for living, the development of infrastructure, as well as the formation of environmentally sustainable and cost-effective conditions for people to live and conduct economic activities.

Priority Goals:

affordable, comfortable and high-quality housing through the formation of a housing construction market, increasing the availability of mortgage housing loans, creating a rental housing market, improving the quality of housing services and living conditions, ensuring an increase in the efficiency of land use for urban development purposes;

modern communal and energy infrastructure aimed at energy supply by increasing the share of self-generated capacities, increasing energy efficiency, as well as improving the quality of communal infrastructure through the formation of high quality

standards;

affordable and high-quality transport communication aimed at increasing the level of connectivity of the territory of the Arkhangelsk region through the formation of a transport framework, including an increase in the number of transport hubs and an increase in the throughput of the transport network, as well as the reorganization of the system of spatial mobility of cities;

improving the quality of life in urban and rural settlements through the improvement of public and courtyard areas with the involvement of the public, the restoration and revitalization of unused buildings and territories, the creation of a qualitatively different image of cities and towns;

creating a favorable environment, including reducing the aggressive impact of industrial production, reducing the negative factors of anthropogenic impact, increasing the efficiency of waste management and the use of "green technologies" in construction.

These goals are aimed at improving the quality of life in urban and rural settlements of the Arkhangelsk region and are a means of solving social, economic and environmental problems of sustainable development.

The next key priority is to create favorable conditions for sustainable economic growth. Formation of an investment-attractive environment, increasing the innovative activity of organizations, stimulating technology transfer and active interaction between business and science, improving cluster policy will create new drivers for the development of the Arkhangelsk region.

Priority Goals:

a functioning market for research and development, formed through the creation and development of high-tech laboratories and research centers, the initiation of technology transfer and the formation of small innovative organizations within emerging and developing clusters, support for young scientists, increasing the level and number of specialized industry research and development;

balance in the labor market, ensured by the creation of a system of incentives for advanced training and updating of professional competencies, employment of socially vulnerable groups of the population, improvement of working conditions in organizations, reduction of employment in the informal sector of the economy and an increase in the prestige of working professions;

an effective business support and development system implemented through the creation of a service model for providing support to small and medium-sized businesses (hereinafter referred to as SMEs). Promoting entrepreneurial activity, simplifying the access of SMEs to state and municipal procurement;

integrated development of rural areas, supported by investment projects and entrepreneurial initiatives, as well as diversified depending on the characteristics of socio-economic development and long-term prospects of the municipalities of the Arkhangelsk region;

global competitiveness of priority sectors of the economy and the development of exports, implemented through the improvement of the cluster policy of the Arkhangelsk region. Due to the increased social burden of organizations located in the Arctic zone of the Russian Federation, innovative production is the only way to increase the competitiveness of products and growth.

A distinctive feature of the Strategy is the allocation of a separate priority dedicated to the consolidation of the population and the development of civil society. The model of innovative development is deeply unstable and requires other models of social relations and social management. The process of transforming society, acquiring a new quality for it can be successful only if the existing social capital is mobilized and effectively used, and creative human spiritual and moral foundations are developed.

Priority Goals:

a society based on trust and mutual responsibility, formed through the involvement of residents in determining the goals of the long-term development of the Arkhangelsk region, subject to confidentiality, as well as through ensuring social cohesion of regional communities;

increasing the responsibility of young people for the future of the Arkhangelsk region, reducing the migration outflow from the Arkhangelsk region through the involvement of the population in the implementation of initiatives proposed by youth communities, increasing the role of youth in volunteer movements, forming a managerial reserve at the regional and municipal levels from youth representatives, organizing cultural activities for youth;

an effective system of public security aimed at reducing the number of offenses, popularizing anti-corruption, developing a unified system for preventing emergencies, involving citizens in monitoring public security and creating conditions for peaceful and dynamic socio-economic development;

increasing the role of the family as the basis of spiritual and moral development and the fundamental social institution of modern society by increasing the birth rate and ensuring social protection of the family and childhood, supporting young families, preventing family troubles and stimulating the social activity of families;

creation of a unified civil society based on the traditions and culture of the Arkhangelsk region through the strengthening of civic identity, increasing interest in and respect for the cultural values and traditions of all ethnic communities.

Creation of conditions conducive to maintaining and strengthening health, increasing life expectancy

and improving the quality of life of the population. Low level of commitment of the population to a healthy lifestyle.

Widespread risk factors for the development of cardiovascular and oncological diseases (more than 70 percent of the population of the Arkhangelsk region).

Natural population decline against the background of migration outflow and aging of the population (increase in the proportion of people over 65 years of age in the total population of the Arkhangelsk region).

Decrease in mortality rates for the main classes of diseases: in the period 2018–2021, mortality from tuberculosis decreased from 5.7 to 2.4 cases per 100 thousand of the population, from diseases of the circulatory system - from 752.0 to 749 cases per 100 thousand of the population , from neoplasms (including malignant) - from 243.3 to 240.6 cases per 100 thousand population.

Decreased mortality of the working-age population: in the period 2018-2021, the mortality of the working-age population decreased from 612.1 to 553.6 cases per 100,000 people of working age.

Active development of a system of measures to promote a healthy lifestyle, increase the availability and quality of medical care, and introduce remote forms of work.

By 2035, a healthcare system will operate in the Arkhangelsk region, formed according to the principles of patient-oriented medical organizations and ensuring the availability and quality of medical care for the population of the Arkhangelsk region. In addition, by 2035, an interdepartmental system will be organized to form a culture of health saving among the population. A healthy lifestyle will be perceived in society as a mandatory norm of behavior, and health as a value that requires responsibility, attention and effort. The annual coverage of the population with preventive medical examinations will reach 90 percent, and a set of measures will be in place to promote a healthy lifestyle and medical literacy. Technologies for remote monitoring of the health status of patients, including pregnant women and persons.

The growth of life expectancy and the improvement of health indicators of citizens of all ages will be ensured by the widespread use of modern medical technologies, the commitment of the population to a healthy lifestyle, the formation of a new model for organizing medical care and new professional competencies of medical personnel.

The key to increasing the life expectancy of the population of the Arkhangelsk region and reducing mortality is due to the formation among the population, starting from childhood, of a culture of health conservation and a sense of personal responsibility for maintaining their health.

The formation of a responsible attitude of citizens to their health is a key factor influencing the improvement of public health. The approximate ratio of various factors to ensure the health of a modern person, determined by the experts of the World Health Organization, includes 4 main groups of such factors:

Figure 5. Factors for ensuring human health

A necessary element of a culture of health saving is a culture of mutual obligations, which implies both obligations on the part of the state to ensure the protection of health and state guarantees for the provision of medical care, and the obligations of the population to take care of their own health (Figure 5).

Creation of an interdepartmental system for the formation of a culture of health saving and motivation

of citizens to lead a healthy lifestyle, including through information on disease prevention, popularization of sports and physical culture, formation of motivation for healthy eating, prevention of non-medical drug use, promotion of reducing alcohol and tobacco consumption.

Promotion of the idea of personal responsibility of citizens for the state of their health.

Attracting and supporting the constant active participation of educational and medical organizations, cultural institutions, the media, public organizations, local governments in activities to inform the population about health risk factors, the formation of a culture of health savings and motivation for a healthy lifestyle among the population.

Stimulation and support (organizational, material, informational) of local civic initiatives in the development of a healthy lifestyle.

Development of a system for early detection of diseases, pathological conditions and risk factors for their development, including medical examinations and medical examinations of the population, including measures to correct risk factors for the development of non-communicable diseases, including in the form of individual in-depth preventive counseling and group preventive counseling of citizens II and III health groups (as part of the second stage of clinical examination), routing of patients of II and III health groups, dispensary observation.

A set of new forms and methods of work with the population will be formed to help citizens realize responsibility for their health and rational use of medical services.

The share of citizens leading a healthy lifestyle will increase to 50 percent by 2035.

By 2025, the total fertility rate will increase to 1.7 children per woman on average.

By 2030, there will be a reduction in the mortality of the working-age population to 431.4 cases per 100,000 population.

By 2035, the life expectancy of the population in the Arkhangelsk region will increase and will be about 80 years.

Refusal to implement the project will lead to continued low involvement of the population in the protection and preservation of health in the long term, which, against the background of the predicted increase in population aging, which acts as a factor in the development of chronic diseases, will lead to a reduction in healthy life expectancy.

One of the priority areas for the development of health care in the Russian Federation is to improve the provision of medical care, including the creation of a new model of a medical organization that provides primary health care based on the principles of lean production. A new model of a medical organization is a patient-oriented medical organization, the hallmarks of which are a benevolent attitude towards the patient, the absence of queues due to the proper organization of the work of staff, high-quality medical care, the priority of preventive measures in primary health care, namely, the creation of a regional center for organizing primary healthcare. -sanitary assistance in the period 2018 - 2022.

Conducting an assessment of the level of patient satisfaction with the quality of medical care in medical organizations participating in the project.

Implementation of lean production technology in the management and organizational processes of medical organizations providing assistance to the population on an outpatient basis, in the following main areas:

redistribution of workload between doctors and paramedical personnel;

optimization of internal logistics of polyclinics, separation of patient flows;

transition to electronic document management, reduction of paper documentation;

open and polite reception;

comfortable conditions for patients in waiting areas;

implementation of monitoring of the compliance of the actual waiting periods for the provision of medical care by a doctor from the moment a patient contacts a medical organization with the established waiting periods in accordance with the Program of State Guarantees for Free Provision of Medical Care to Citizens.

By 2025, the level of satisfaction of the population with the quality of medical care will be 52 percent, and by 2035 it will increase to 62 percent. By 2025, 90 percent of citizens will be covered by preventive medical examinations at least once a year.

Refusal of the project entails the formation of risks of reducing the quality of primary health care and the effectiveness of measures aimed at creating a culture of health savings and the development of medical prevention. The project is aimed at ensuring the development of infrastructure for primary health care, specialized, including high-tech, medical care, strengthening and efficient use of the material and technical base of the healthcare industry in the Arkhangelsk region.

Construction of new healthcare facilities and reconstruction and overhaul of existing medical organizations. Strengthening the material and technical base of medical organizations. Development of regional air ambulance: renewal of the helicopter fleet with the necessary medical equipment, construction of helipads. Implementation of a set of organizational and management measures to improve the efficiency of medical equipment use:

formation of a plan for the renewal of medical equipment based on the need for this, strategic directions for the development of healthcare, modern achievements in medicine;

training and advanced training of specialists to

work on medical equipment;

preparation of specialized premises necessary for the installation of medical equipment, purchase of consumables, maintenance of medical equipment.

Implementation of a set of engineering and organizational measures to ensure the rational use of energy resources and water in medical organizations.

The strengthening of the material and technical base of medical organizations in the Arkhangelsk region will be ensured by carrying out current and major repairs, equipping with medical equipment, as well as building new facilities.

The quality and timeliness of the provision of emergency, including sanitary and aviation, medical care to residents of the Arkhangelsk region will improve.

The creation of an effective health infrastructure that meets the needs of the population will be ensured.

The rejection of the project creates the risks of reducing the availability and quality of medical care in the long term. In addition, the risks of technological backwardness of state medical organizations located on the territory of the Arkhangelsk region and a decrease in the qualifications of medical workers are increasing.

The project is aimed at ensuring the introduction of innovative medical technologies into medical organizations, including a system for early diagnosis and remote monitoring of the health of patients.

Carrying out structural changes in the system of primary health care, aimed at the introduction of modern diagnostic, therapeutic and preventive technologies for restorative treatment and rehabilitation.

Development of a system for providing palliative care in hospitals to seriously ill patients.

Development of a system for the provision of specialized medical care with the routing of patients to medical organizations of a three-level system for the provision of medical care.

Increasing the volume of high-tech medical care.

Improving the work of emergency medical care with the optimization of time indicators for the delivery of patients, the introduction of effective methods of treatment at the prehospital stage.

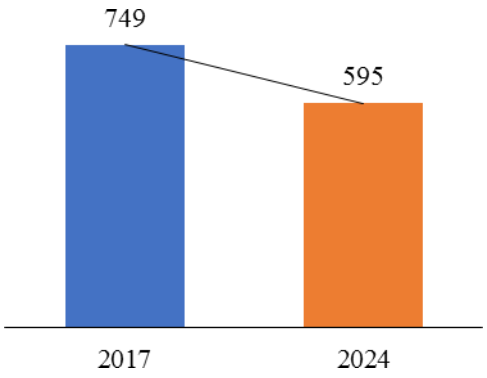
Ensuring the development of personalized medicine through training and advanced training of medical specialists and the introduction of an individual approach to the treatment of patients.

By 2025, there will be a reduction in mortality from diseases of the circulatory system to 595 cases per 100,000 population.

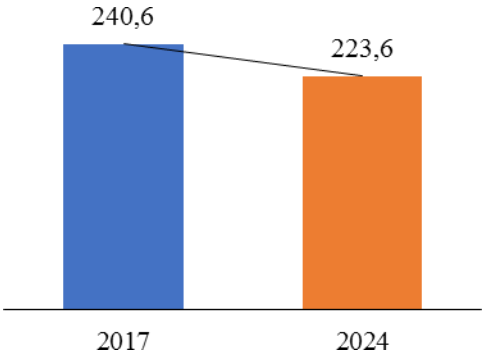
By 2025, there will be a reduction in mortality from neoplasms, including malignant ones, to 223.6 cases per 100,000 population.

By 2025, there will be a reduction in infant mortality to 4.9 cases per 1,000 children born.

By 2035, the number of patients who will receive free medical care, including high-tech medical care, will increase 1.5 times.



Picture. 6. Mortality from diseases of the circulatory system, the number of cases per 100 thousand population



Picture. 7. Mortality from neoplasms, number of cases per 100 thousand population

In the context of the growing need of the population for medical care and the rise in the cost of new medical technologies, the refusal to implement the project creates additional risks of reducing the availability of quality medical services, while the population's requests for medical care in accordance with the latest technologies will not be able to be implemented in the required volume by state medical organizations in within the framework of compulsory health insurance, which will lead to an increase in the volume of medical services provided on a reimbursable basis (Figures 6-7). The project is aimed at improving the quality of medical care and increasing its accessibility for all residents of the Arkhangelsk region by expanding the use of information and telecommunication technologies in healthcare, introduction of mechanisms for the interaction of medical organizations on the basis of a unified state information system in the field of healthcare. Implementation of a set of measures aimed

at ensuring the interaction of the regional medical information system with federal information services and centralized nosological registers in order to ensure the principle of single entry and multiple use of medical information about patients.

Connecting state medical organizations located on the territory of the Arkhangelsk region to the system for monitoring the possibility of registering citizens for an appointment with a doctor. Equipping and re-equipping the workplaces of medical workers in medical organizations providing primary health care with computer equipment, automated workplaces connected to medical information systems, and electronic signatures.

Re-equipment of the regional data processing center with high-performance server equipment in order to ensure the technical feasibility of functioning in the face of an increase in the volume of processed information.

Training of medical workers in order to increase the level of knowledge about the possibilities of using modern information technologies (including medical information systems) in healthcare, development of programs and mechanisms to encourage medical workers to use such technologies in practice.

It will be possible to maintain medical documents in electronic form using an electronic signature, organize electronic document management in medical organizations and between medical organizations, and also provide an opportunity for citizens to access their medical documents, including through the personal account of the patient "My Health" on the Unified portal of state and municipal services.

100 percent of citizens insured in the compulsory health insurance system will be provided with electronic medical records.

Taking into account regional specifics and needs, a multi-level system of telemedicine consultations will be organized, including a service of delayed telemedicine consultations and a service of telemedicine requests in real time.

Equal access of the population to information medical resources and services will be 100 percent ensured, both in urban and rural settlements of the Arkhangelsk region.

Refusal to implement modern digital technologies in healthcare will lead to limited access to quality medical care against the background of a predicted increase in the need for medical care due to the aging of the population, as well as lead to a decrease in the efficiency of medical organizations and exacerbate the technological backlog of the healthcare sector in the Arkhangelsk region. The project is aimed at developing the personnel potential of the healthcare sector in the Arkhangelsk region, including updating the professional competencies of medical workers, increasing their social status and level of labor motivation, and developing medical education.

Implementation of a set of measures aimed at training medical and pharmaceutical personnel, including expanding the targeted admission of students with the obligation to employ them.

Introduction of economic mechanisms aimed at increasing the interest of medical organizations of the Arkhangelsk region of any organizational and legal form in providing a clinical base for teaching students.

Implementation of a new system of continuous additional professional education using modular educational programs to improve the skills and retrain medical and pharmaceutical workers, as well as health care managers. Attracting medical specialists in demand in the Arkhangelsk region, including by providing them with social support measures. Development of a system for managing the human resources potential of healthcare in the Arkhangelsk region.

Increasing the prestige of the profession and the social status of medical workers. Implementation of socio-cultural and informational measures that ensure the formation of public confidence in medical workers and respect for medical activities. Increasing the level of labor motivation of medical workers by strengthening the differentiation of official salaries depending on the professional category.

After 2018, the amount of remuneration of employees of medical organizations of state and municipal forms of ownership with a higher medical (pharmaceutical) education will remain at a level of at least 200 percent of the average monthly income from labor activity in the economy of the Arkhangelsk region, for nurses - at least 100 percent of average monthly income from labor activity of the population in the Arkhangelsk region.

By 2035, the personnel structure of the health care system of the Arkhangelsk region will be formed, fully ensuring the guarantees and quality of medical services. The rejection of the project will lead to an increase in the shortage in the staff of state medical organizations located in the Arkhangelsk region. Disclosure of talents and abilities of each student in order to further successful self-realization for the benefit of society. From an economic point of view, well-being is determined by the level of development of productive forces and the nature of economic relations, reflecting the current level of development and capabilities of the economy.

The core of human capital is knowledge and skills that produce added value for the economy as a whole and for their owner in particular. The quality of human capital as a key resource for the development of the economy and society is formed by the education system.

A sufficiently high level of secondary general and additional education, which allows students of general educational organizations to be selected for the best higher educational institutions of the Russian

Federation. However, the results of the unified state exam in such subjects as specialized mathematics, chemistry, English, informatics and ICT show average scores below the national average.

A significant degree of depreciation of fixed assets in the field of education. The number of buildings of educational organizations requiring major repairs in 2018 amounted to 161 units (47 percent). At the same time, educational organizations located in rural areas are characterized by the presence of a higher proportion of wooden buildings and premises of preschool educational organizations. Differences in personnel potential and remuneration in the education system in the inter-district context. This trend is due, among other things, to the specifics of the Arkhangelsk region: for workers in the regions of the Far North and areas equated to them, regional coefficients and percentage bonuses to wages are applied, as well as a coefficient for work in rural areas. Shifting priorities in the perception of education.

Strengthening the gap in the development of the education system in the context of the municipal districts of the Arkhangelsk region. High-risk municipal districts of the Arkhangelsk region are singled out, where the rate of reduction in the contingent of newborns, toddlers and preschool children (from 0 to 6 years old) and primary school age (from 7 to 10 years old) exceeds the average predicted value for the Arkhangelsk region as a whole. These include the following municipal districts of the Arkhangelsk region: Vilegodsky, Vinogradovsky, Konoshsky, Kotlassky, Krasnoborsky, Kholmogorsky and Shenkursky. The trend of reduction of children in educational institutions is observed in the following municipal districts of the Arkhangelsk region: Kotlassky, Konoshsky, Lensky, Nyandoma and Shenkursky. In certain municipal districts of the Arkhangelsk region, there is a positive trend towards an increase in graduation from general educational institutions, that is, the number of potential students for training in secondary vocational education programs (hereinafter referred to as SVE) and programs for in-demand professions (Velsky, Vilegodsky, Kargopolsky, Leshukonsky, Primorsky and Ustyansky districts) . Low level of responsibility and involvement in the process of education on the part of parents. The distancing of the education system of the Russian Federation from the family reduces the motivation of students to receive education. Primorsky and Ustyansky districts). Low level of responsibility and involvement in the process of education on the part of parents. The distancing of the education system of the Russian Federation from the family reduces the motivation of students to receive education. Primorsky and Ustyansky districts). Low level of responsibility and involvement in the process of education on the part of parents. The distancing of the education system of the Russian Federation from the family reduces the motivation of students to receive education.

Incomplete compliance of the current state of the infrastructure of the educational system with its needs. In particular, this is typical for sparsely populated municipalities of the Arkhangelsk region in relation to the education of children with special physical and mental development (Figure 8).

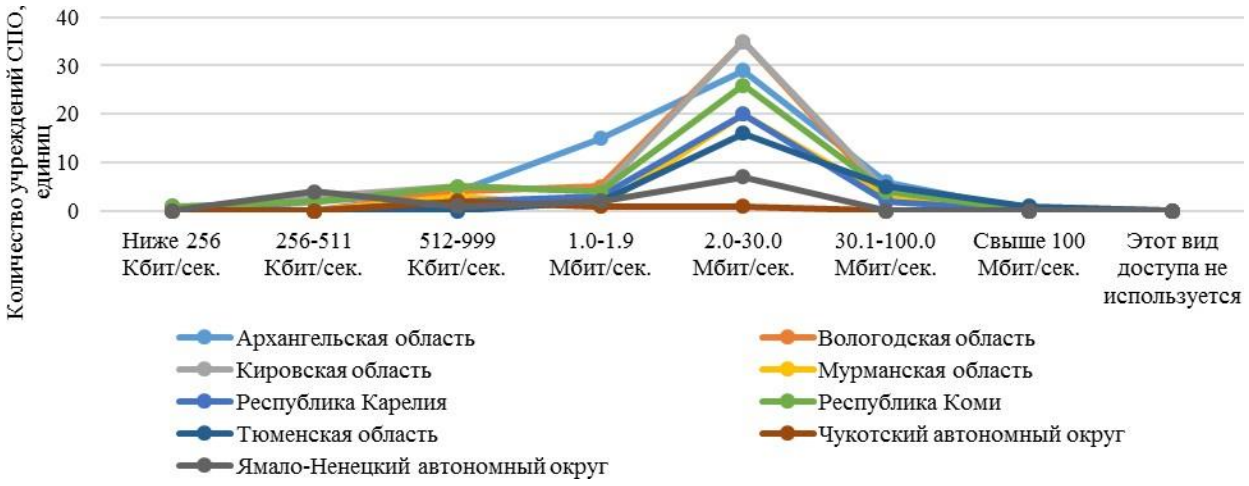


Figure 8. Maximum access speed of the information and telecommunications network "Internet" in SPO institutions

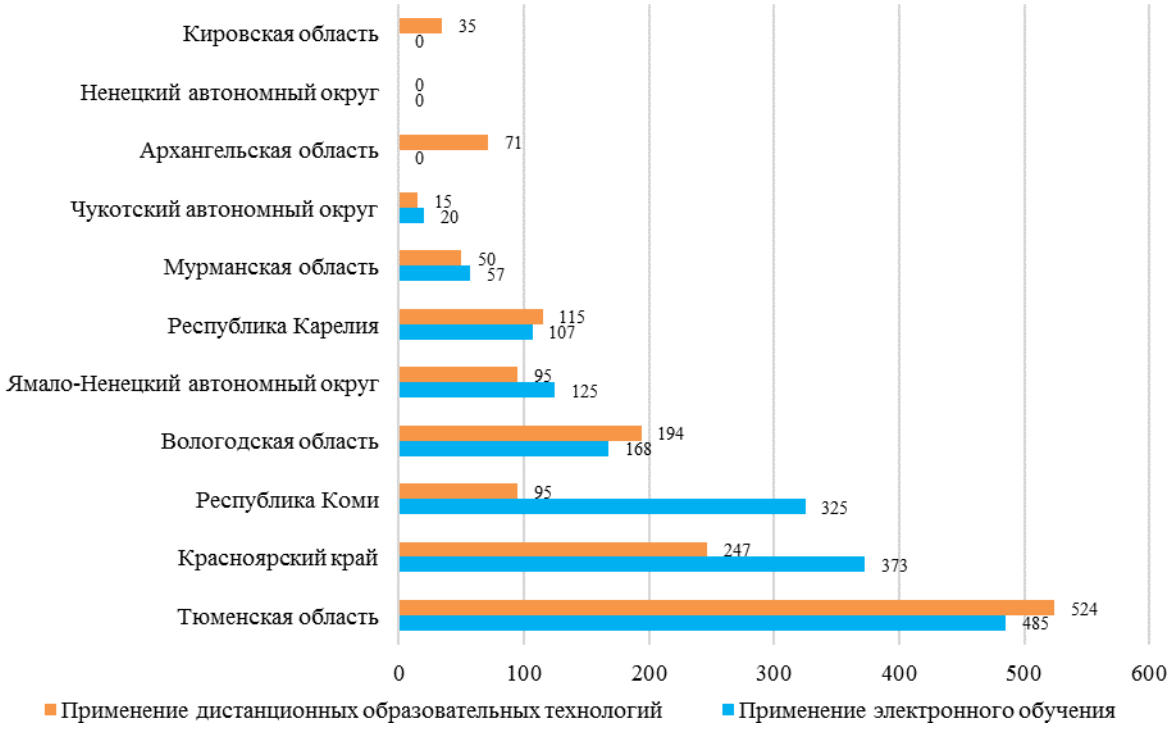
Increase in the share of students in the second shift (for 5 years - by 23 percent). In 2020, about 7.8 percent of the total number of students attended classes on the second shift.

Difficulties in professional orientation of young people. Graduates of general educational organizations experience difficulties with choosing a future profession. Open door days at the enterprises of

the Arkhangelsk region are focused, in most cases, on students in specialized educational programs of secondary vocational education and higher education.

Migration of talented youth. Every third graduate of higher educational institutions and (or) SVE organizations located in the Arkhangelsk region in 2021 left for employment in other regions of the Russian Federation. Active development of distance education methods, online educational platforms, ensuring the availability of educational programs regardless of the place of residence of citizens and their initial level of education (Figure 9).

Implementation of the possibilities of school self-government. Successful practices are noted in terms of organizing school self-government, as well as in terms of using the center of educational activities.



Picture. 9. Number of educational organizations implementing educational programs using e-learning and distance learning technologies, units

Education should contribute to the development of human capital, increase the number of quality jobs, be an instrument of social sustainability in the face of uncertainty and accelerating transformations in the economy. Thanks to investment projects, the education system must go through major technological changes.

Implementation of modern approaches to education: from the paradigm of learning to the paradigm of self-realization; from knowledge, skills and abilities to the formation of personal and subject competencies, from traditional teaching methods to modern educational technologies and the format of cooperation and co-creation.

The education system of the Arkhangelsk region should provide conditions for the development of a successful and competent person, capable of learning and retraining throughout his active life. For the purpose of strategic planning in the context of project strategizing, a number of projects are proposed, the implementation of which will lead the education sector to a new quality.

The development of children aged 0 to 3 years, as well as children of preschool age, largely determines their achievement in school, which, in turn, is critical for success in life. Preschool childhood should be accompanied by professionals in the field of early development, therefore, 100 percent of preschool children should be provided with places in preschool educational organizations (hereinafter also - PEO).

Implementation of a targeted model of information and educational support for parents, including the creation, including in preschool educational and general educational organizations, of counseling centers that ensure that parents of preschool children receive methodological, psychological and pedagogical, including diagnostic and advisory, assistance free of charge. Development of the non-state sector in the field of preschool education. Establishment of resource centers for preschool educational organizations that provide network training for preschool teachers in the field of inclusive education.

Elimination of the queue in preschool educational organizations for children under 3 years of age in order to create conditions for the implementation of the labor activity of women with children under 3 years of age.

By 2025, the proportion of children aged 0 to 3 who have the opportunity to attend pre-school educational organizations will be 100 percent. At least 75 percent of all families with children aged 0 to 3 and up to 90 percent of families with children with disabilities aged 0 to 6 will receive regular (at least once a month) specialist consultations.

The abandonment of the project will result in a continued annual loss of human capital in the Arkhangelsk Oblast due to problems encountered during preschool years, in the amount of 5 to 10 percent, which is equivalent to a loss of 3 to 7 percent of GRP per year.

One of the serious problems of modern school education is the growing lag behind the requirements of the digitalization of the economy and public life. School education provides the skills and knowledge of yesterday, in connection with which, the issue of creating conditions for continuous professional development of teachers, eliminating professional teacher deficits in order to ensure the quality of general education and achieve high results in mathematical, natural sciences, humanitarian and digital areas remains relevant. .

Creation of an integrated comfortable system for overcoming learning difficulties, taking into account the developmental characteristics of each child.

Providing equally students of general education organizations located in urban and rural settlements of the Arkhangelsk region with opportunities for in-depth mastering of any subjects, development of abilities and talents in various manifestations, including using the resource of non-formal education.

Overcoming the problem of technological lag of general education organizations located in rural settlements, and the formation of a modern digital and material and technical infrastructure of general education organizations located in urban and rural settlements, while providing schoolchildren with one-shift education.

Formation of a comprehensive integrated system of education for children and youth with disabilities, taking into account the developmental characteristics of each.

Involvement of parents and society as a whole in the educational process through the development of a mentoring system, educational volunteering. Creating a space for teamwork, a platform for generating ideas and implementing successful practices. Ensuring the safe transportation of students living in rural settlements of the Arkhangelsk region to general educational organizations; setting the service life of school buses no more than 10 years.

Connection of general educational organizations to the Internet information and telecommunications network (hereinafter referred to as the Internet network) at a speed that allows at least half of the schoolchildren to simultaneously actively use modern Internet resources (with a connection speed of at least 100 Mb / s - for general education organizations located in cities, 50 Mb / s - for general education organizations located in rural areas and urban-type settlements, by 2024); formation of a modern digital educational environment (network resources, computer classes, office work, accounting, etc.).

By 2030, the mass use of digital learning games and simulators in the educational process with elements of the open information and educational environment "Russian Electronic School" will be ensured.

By 2025, the material and technical base of general educational organizations located in small towns and rural areas of the Arkhangelsk region will be updated to implement basic and additional general educational programs of digital and humanitarian profiles.

By 2022, modern digital technologies will be introduced into the main general education programs.

For 50 percent of teaching staff (depending on whether the subject of verification requires tasks completed during and after school hours), the time spent on office work will be reduced by 25 percent.

For 100 percent of schoolchildren living in rural settlements, safe transportation to general educational organizations will be provided.

By 2025, all educational organizations located on the territory of the Arkhangelsk region will be provided with an Internet connection with a connection speed of at least 100 Mb / s - for educational organizations located in cities, 50 Mb / s - for educational organizations located in rural areas and urban-type settlements, guaranteed Internet traffic.

Refusal of digitalization will radically reduce the impact of projects to develop talents and ensure equality in educational opportunities.

The system of additional education of the future should include educational loft spaces, exploitatoriums, clubs, science cities, game centers, technology parks, online education, supported by joint projects of business communities, enterprises, public and non-profit organizations.

Increasing the availability of all forms of education, including the development of a system of additional education and extracurricular activities.

Creation in the system of additional education together with higher educational institutions and colleges of technological workshops for the development of high technologies by schoolchildren; the involvement of organizations in the projects of the open joint-stock company RUSNANO.

Modernization of infrastructure for the creation of integrated cultural and sports (educational and

entertainment) complexes in rural areas, development of a model of inter-settlement complexes.

The accessibility of all forms of education, including the system of additional education and extracurricular activities, will be increased.

The proportion of children aged 5 to 18 receiving additional education in 2024 will be 80 percent.

Refusal to implement the project may lead to a decrease in the creative potential and cultural level of the inhabitants of the Arkhangelsk region, as well as to an increase in their dissatisfaction with the quality of life. The inability to realize creative potential in music, art, technology will lead to the fact that the Arkhangelsk region will not receive a new generation of talented youth.

Allocation of certificates to stimulate the passage of additional professional education courses for the working and non-working population. For the working population, it is assumed that the certificate will pay no more than 50 percent of the cost of the course, the remaining amount is paid by the employer or student. For the non-working population, the certificate pays 100 percent of the cost of the course.

Formation of a comfortable environment for continuous education and updating of professional competencies for a person of any profession and a resident of any area.

Creation of a technological platform for networking in order to accelerate the retraining of mid-level specialists and skilled workers.

By 2030, the modernization of the structure for training mid-level specialists at the request of sectoral and intersectoral labor markets will be completed.

A comfortable environment will be created for continuous education and updating of professional competencies of a person of any profession and a resident of any locality.

A modern technological networking platform will be created in order to accelerate the retraining of mid-level specialists and skilled workers.

Refusal of the project entails an increase in the disproportion of the labor market and the impossibility of continuous professional development.

Formation of a network of centers (colleges) for advanced training in the field of high technologies, which will implement experimental intensive educational programs of secondary vocational education with a reduction in training time and rapid entry of young people into the labor market in modern specialties using digital technologies.

Creation of an adaptive system of targeted practice-oriented development of students' competencies within the framework of network and cluster interaction of educational organizations with organizations for the long-term development of the economy of the Arkhangelsk region by groups of industries until 2020.

Development of a digital educational environment for the purpose of obtaining a profession: creation and implementation of modern digital hardware stimulator complexes, simulators and corresponding complexes of methodological support for practicing practical skills by students of secondary vocational education; introduction to the educational process of organizations of secondary vocational education and higher education of the system of individualization of the educational process of the LMS type; development of the practice of blended learning in vocational and higher education programs; support of online courses with practical and laboratory work in the field.

By 2035, 100 percent of secondary vocational education students will have the opportunity to practice their professional skills on the basis of modern digital hardware simulators and simulators.

By 2025, 100 percent of specialized centers of excellence in the Arkhangelsk region will be accredited according to World skills Russia standards.

By 2035, in 100 percent of educational institutions of secondary vocational education and higher professional education, a system of individualization of the educational process of the LMS type will be introduced.

The abandonment of the project will lead to a slowdown in the pace and scale of technological renewal, which will make it difficult to diversify the economy and accelerate economic growth.

Protection of cultural heritage sites in order to preserve the cultural code and historical memory for future generations.

High level of provision with cultural objects. The Arkhangelsk region ranks 29th in terms of the availability of library collections (6,870 items per 1,000 people) and 14th in terms of the number of museum visits (898 people). Coverage of the population of the Arkhangelsk region with library services is 31.01 percent. High level of depreciation of fixed assets of cultural institutions. The degree of depreciation of fixed assets of commercial organizations in the Arkhangelsk region in 2021 amounted to 43.9 percent, non-profit organizations - 54.4 percent.

Implementation of a significant number of international and interregional projects in the field of culture and intercultural interaction. The Arkhangelsk region hosts an international festival of street theaters, since 2014 the project "International Artistic Residence" in the Arkhangelsk region "AiR: Artists-in-residence" has been implemented. Cooperation between musical organizations of the Arkhangelsk region and Northern Norway is actively developing within the framework of the international festival of choral performance "Northern Choral Assemblies".

An increase in household spending on the services of cultural institutions. In the general structure of expenses of the inhabitants of the Arkhangelsk region, the share of expenses on culture is about 3.5 percent, this figure is increasing every

year.

High density of cultural heritage sites. On the territory of the Arkhangelsk region there are 1,957 cultural heritage sites (hereinafter referred to as CHOs), which is about 1.5 percent of the total number of CHOs of the peoples of the Russian Federation, which is 1.5 times higher than the average for the constituent entities of the Russian Federation.

Critical state of a large number of OKNs. Only 40 percent of OKN are involved in the economic turnover. The remaining OKNs are either lost or not used. Lost 30 percent of the architectural heritage of wooden architecture for religious purposes, which were under state protection; over one quarter of the existing wooden architecture buildings are in a state of disrepair and ruin.

Inefficient urban planning policy. Due to the active development of territories, historical settlements and historical quarters are losing their individual appearance. In addition, it is noted that the CHO is not protected from external influences associated with modern development of territories.

Low level of quality of tourist infrastructure. Many CHOs are located at a considerable distance from each other. At the same time, the low quality of the road surface of regional and local roads, the low level of development of roadside services and port and berthing infrastructure make such WPAs inaccessible to tourists.

By 2035, residents of the Arkhangelsk region will be able to use ample opportunities for education and creative activities. The Arkhangelsk region will take the place of the leader in the field of Arctic tourism, a network of rural tourist destinations of ethnographic, ecological and agro-tourism will be developed.

The sphere of culture of the Arkhangelsk region will receive opportunities for further development thanks to a well-thought-out long-term policy for the preservation of cultural heritage, comprehensive education, and tourism. The implementation of the projects will prevent the development of negative trends in terms of the irretrievable loss of the CHO in the Arkhangelsk region: the number of CHO that are in poor condition will be reduced; the state of preservation of COPs that are in a ruined and emergency state is stabilized by their conservation. The leadership position of the Arkhangelsk region in the field of Arctic tourism will be established. The share of buildings of cultural and art institutions of the Arkhangelsk region, the condition and equipment of which is satisfactory, by 2035 will be 100 percent. The widest possible involvement of citizens in cultural education and creative activity will be ensured. A high level of satisfaction of citizens with the quality of the provision of state and municipal services in the field of culture will be achieved. Cultural monuments make up a significant part of the cultural heritage of the Arkhangelsk region, so their preservation is a key aspect of the existence of the Arkhangelsk region. Preservation of cultural heritage includes the organization of a set of measures for the restoration, conservation and maintenance of a satisfactory state of cultural heritage of the Arkhangelsk region, which will allow new generations to join the rich historical and cultural sphere of the Arkhangelsk region. Organization of a program-targeted solution to the problem of the emergency state of the OKN.

Ensuring the state protection of the OKN by approving the boundaries of the territories of the OKN and their objects of protection.

Implementation of measures to identify the owners of OKN.

Conservation of OKNs that are in an emergency and ruined state.

Creation of an electronic database of OKN.

There will be an increase in the number of OKN in a satisfactory condition up to 40 percent.

It is planned to increase the number of mothballed conservatory objects that are in an emergency and ruined state and require restoration work, up to 50 percent.

Approval of the boundaries of the territories of all CHOs and their objects of protection is expected.

It is planned to establish the boundaries of all historical settlements of federal significance, their objects of protection.

There will be an automation of the process of accounting for information about OKN located on the territory of the Arkhangelsk region.

The rejection of the project will lead to the irreparable loss of the OKN, the loss of the historical memory of the people, its spiritual component.

Culture plays an important role in shaping a person's personality. The implementation of the project will contribute to the growth of involvement in the cultural life of the Arkhangelsk region and the spiritual development of the inhabitants of the Arkhangelsk region.

Creation of virtual theater venues and concert halls.

Acquisition of book collections of libraries of municipalities of the Arkhangelsk region.

Creation (updating) of Internet sites of libraries with the possibility of providing library services in electronic form.

Regular holding of major international music and theater competitions and festivals.

Creation of a network of social and cultural "centers of attraction". Formation of a cluster of creative and cultural industries. Creation of a regional symphony orchestra.

Increasing the number of children's art schools.

Staffing of cultural institutions with highly qualified specialists.

Modernization of professional educational organizations in the sphere of culture.

Improving the complex of measures of cultural

support for socially vulnerable groups of the population.

It is planned to connect all libraries to the Internet.

The number of exhibition projects implemented in the Arkhangelsk region will increase to 20.

The share of cultural and art institutions in a satisfactory condition in the total number of cultural and art institutions will increase to 68 percent.

The proportion of children studying in children's art schools in the total number of children in the Arkhangelsk region will increase to 18 percent.

Public access to library collections (including in electronic form) will be 100 percent ensured.

Satisfaction of the population with services in the field of culture will increase up to 97 percent.

The main consequence of the refusal to implement the project will be the deterioration of the social situation due to limited opportunities for leisure activities and a decrease in the general level of culture of the inhabitants of the Arkhangelsk region.

Certain territories of the Arkhangelsk region are located in the Arctic zone of the Russian Federation, in particular, the national park

"Russian Arctic" and the federal reserve "Franz Josef Land", which provide ample opportunities for the development of ecological and cruise tourism in the Arctic. In connection with the growing interest in Arctic tourism, it is proposed to implement a project for the development of tourism activities in the Arkhangelsk region, classified as part of the Arctic zone of the Russian Federation. The implementation of the project contributes to the disclosure of the tourism and economic potential of the territories.

Development and promotion of unique tourist routes.

Implementation of measures to develop transport and tourism infrastructure.

Organization of viewing platforms and places of recreation.

Development of measures to ensure the diversity of tourism programs and entertainment.

Improving the qualifications of specialists in the field of tourism.

The volume of paid tourist services provided by organizations located in the municipalities of the Arkhangelsk region, belonging to the land territories of the Arctic zone of the Russian Federation, will increase.

The number of tourists in the Arctic zone of the Russian Federation will increase.

The quality of tourism services provided will improve.

If the project is abandoned, the Arkhangelsk region risks losing a significant share of financial resources due to an increase in the tourist flow to the Arctic.

In the villages of the Arkhangelsk region, the traditional way of life, which has been formed over many centuries, has been preserved. In addition, Russian wooden architecture is a unique world phenomenon.

Determination of the list of rural settlements of the Arkhangelsk region in order to form a targeted program for the development of territories in the Arkhangelsk region.

Creation of visit - centers.

Preservation and promotion of local attractions, folk traditions, folklore, development of folk art crafts.

Organization of programs for children's recreation in rural areas during school holidays.

Implementation of a set of measures to attract investment in the development of rural areas of the Arkhangelsk region.

Tourist routes have been formed, including objects of historical and cultural heritage and places of traditional existence of folk art crafts, in rural areas of the Arkhangelsk region.

An increase in employment of the rural population in the tourism sector is expected.

An increase in the number of tourists in rural areas is expected, including at the expense of schoolchildren.

Investment projects will be implemented to develop tourism services in rural areas.

If the project is abandoned, the countryside will lose its attractiveness not only for tourists, but also for local residents, who will continue to migrate to large cities. A significant part of the unique Russian wooden architecture will be lost.

In the Arkhangelsk region, many Orthodox shrines have been preserved that attract the attention of pilgrims. The main attraction of tourist flows are the Solovetsky Islands. At the same time, it is necessary to promote other places of pilgrimage and objects of religious tourism in the Arkhangelsk region.

Modernization of the infrastructure of the Solovetsky Archipelago to increase the margin of safety of the territory for a comfortable and safe stay of tourists.

Information campaign to promote the Solovetsky, Onega Cross, Anthony-Siya, Verkolsky, Sursky, Oshevensky monasteries in order to optimize tourist flows.

It is expected to distribute the load between the objects of religious tourism in the Arkhangelsk region.

The influx of tourists arriving in the Arkhangelsk region to visit monasteries, temples and other revered places will increase.

The rejection of the project will entail a decrease in the volume of religious tourism in the Arkhangelsk region, and will become an obstacle to the popularization of its historical and cultural heritage.

The growth of the tourist flow of Russian and foreign tourists allows to increase the flow of funds into the economy of the Arkhangelsk region. The goal of the project is to remove obstacles that limit the flow

of tourists to the Arkhangelsk region. The implementation of the project will ensure an increase in financial flows to the economy of the Arkhangelsk region, as well as an increase in the prestige of the Arkhangelsk region at the world level.

Creation of versions of sites of tourist organizations, tour agencies, accommodation facilities, including in foreign languages.

Attracting students of specialized specialization to work in the summer season, which will solve the problem of attracting labor force on temporary contracts during the high season. Publications about the tourist potential of the Arkhangelsk region in the mass media.

Branding of individual territories with subsequent promotion of the brand in the global market.

Creation of tourist information centers in the main tourist destinations.

Participation in international tourism exhibitions.

The share of tourism in the GRP of the Arkhangelsk region will increase.

The level of employment of the population of the Arkhangelsk region in the tourism sector will increase.

The recognition of the Arkhangelsk region in the international arena will increase.

Refusal to attract tourists will lead to a decrease in the competitiveness of the Arkhangelsk region and will entail a decrease in financial flows to the economy.

Creation of conditions for introducing citizens to a healthy lifestyle, including physical education and sports, development of sports infrastructure and increasing the availability of its facilities for all categories of the population of the Arkhangelsk region, as well as increasing the competitiveness of athletes of the Arkhangelsk region in competitions at the All-Russian and international levels .

An increase in the proportion of residents of the Arkhangelsk region who systematically go in for physical culture and sports from 11.1 percent in 2018 to 32.2 percent in 2021. However, most of the population is still not covered by systematic physical culture and sports.

High differentiation in terms of accessibility of sports infrastructure facilities. The average provision of residents of the Arkhangelsk region with sports facilities is 49.1 percent of the norm. However, in 11 municipalities of the Arkhangelsk region (Arkhangelsk city, Vinogradovsky municipal district, Kargopolsky municipal district, Mirny city, Novaya Zemlya, Novodvinsk city, Nyandoma municipal district, Plesetsky municipal district, Primorsky municipal district, Severodvinsk city, Shenkursky municipal district) indicator is below average.

Dissatisfaction of a significant proportion of the population with the existing sports infrastructure. According to the results of the 2020 youth survey, 54 percent of the population consider the sports infrastructure of the Arkhangelsk region to be satisfactory or rather satisfactory, while 45.1 percent assess it as negative. According to young people, the best conditions for sports are created in the Vilegodsky and Primorsky municipal districts, the city of Koryazhma. The lowest indicators of youth satisfaction with the availability of sports facilities were recorded in Krasnoborsky, Kargopolsky, Plesetsky and Verkhnetoemsky municipal districts.

Weak involvement of the municipalities of the Arkhangelsk region in the development of the sphere of physical culture and sports. Most sports facilities are municipally owned, but a significant part of them are in poor technical condition and need major repairs or reconstruction.

By 2035, physical culture will become a mass phenomenon, the value of a healthy lifestyle will be established in the public mind. The concept of "Sport is life" will contribute to the development of a system of physical education for the population of all ages, the promotion of a healthy lifestyle, the identification of gifted children and young people, and the development of elite sports. Physical culture and sports will become a habitual part of life and a need for most residents of the Arkhangelsk region. Access to sports infrastructure will be ensured for all citizens, regardless of their age, in accordance with their preferences, level of physical fitness and health status.

In order to optimize the functioning of the industry, projects will be implemented aimed at modernizing the sphere of physical culture and sports, taking into account climatic, economic, environmental and socio-cultural aspects.

The development of mass sports and the promotion of a healthy lifestyle among all categories and groups of the population of the Arkhangelsk region are necessary for an active life at any age. The implementation of the project will increase the motivation of citizens to systematic physical education and sports and maintain a healthy lifestyle.

Development of regulatory and legal support for measures to stimulate sports and mass work and active family recreation of the population at the place of residence.

Creation of sports and health programs for people of all ages.

Conducting family sports events on a regular basis.

Implementation of the All-Russian physical culture and sports complex "Ready for Labor and Defense" (GTO).

Ensuring access of socially oriented non-profit organizations to the provision of services within the framework of regional programs in the field of physical culture and mass sports.

Creation of an information and educational system to increase the level of knowledge about the

negative impact of risk factors on health, the possibilities of their reduction.

Development of measures to involve the population in a physically active lifestyle, sports.

The share of the population systematically engaged in physical culture and sports in the total population will increase to 55 percent, the share of students in the total number of students and students - up to 85 percent.

If the project is abandoned, the level of physical activity of the inhabitants of the Arkhangelsk region is expected to decrease, as well as the level of the culture of maintaining a healthy lifestyle, which will lead to the risk of an increase in morbidity.

Modern conditions require the modernization of the system of physical education in educational organizations. The implementation of the project will improve the quality of physical training in educational institutions and increase the number of students who are systematically involved in physical culture and sports.

Mutual integration of physical education programs in general educational organizations and organizations of additional education.

Development and implementation of programs for the development of school sports leagues in team sports.

Improving the interaction of subjects of physical culture and sports at the regional and municipal levels.

Opening of a network of school sports clubs.

An increase in the level of interest of schoolchildren and students in physical culture and sports is expected.

The proportion of children and young people regularly involved in sports sections, clubs and other sports-oriented organizations in the total number of children and young people will increase to 45 percent.

Ensuring the competitiveness of sports clubs in the Arkhangelsk region at the national level.

The rejection of the project will become an obstacle to solving the problems of physical education in educational organizations, which will not allow creating an effective system of educating healthy youth.

The aim of the project is to improve the system for identifying, supporting and developing abilities and talents in sports among children and young people by ensuring continuity between the elements of the regional system of physical culture and sports in terms of identifying, selecting, as well as subsequent support and support of talented athletes. The implementation of the project will ensure the creation of favorable conditions for the formation, training and preservation of the sports reserve, starting from the stage of youth sports.

Development and implementation of a system of sports selection of gifted young athletes in various sports based on the model characteristics of physical and technical readiness, indicators of physical development and health assessment results.

Financial support for young talents in the Arkhangelsk region.

Creation of a scouting institute, which will allow organizing the search for talented athletes outside the Arkhangelsk region.

It is planned to create comfortable conditions for the stay of gifted young athletes in the teams of the Arkhangelsk region.

Athletes from the Arkhangelsk region will regularly participate in the World Universiade and the Youth Olympic Games.

Refusal to implement the project will not allow creating conditions conducive to worthy competition among talented athletes, which will negatively affect their motivation. The rejection of the project will lead to a slowdown in the growth of sports results due to the lack of competition between athletes.

The project is aimed at creating favorable conditions for the training of high-class athletes. The implementation of the project will increase the competitiveness of athletes of the Arkhangelsk region in the All-Russian and international sports arena.

Optimization of the training process based on the introduction of modern sports and pedagogical technologies.

Provision of sports teams in the Arkhangelsk region with modern equipment, inventory and equipment, as well as medical support.

Development of a regional program for the development of a sports reserve for Olympic and Paralympic sports.

Modernization of the management system for the preparation of high-class athletes aimed at results.

Implementation of a new system of remuneration for workers employed in the field of physical culture and sports, taking into account the effectiveness of their professional activities.

It is planned to equip the national sports teams of the Arkhangelsk region with modern equipment, inventory and equipment.

The number of athletes of the Arkhangelsk region included in the sports teams of the Russian Federation in sports will increase to 120 people.

The number of prize-winning places won by athletes of the Arkhangelsk region at all-Russian and international sports competitions in Olympic, Paralympic, Deaflympics sports will increase to 1300 units.

It is planned to increase the number of members of the sports teams of the Russian Federation in Paralympic sports from among persons with disabilities.

The number of sports judges, trainers-teachers and specialists working in the field of physical culture and sports who have undergone advanced training and professional retraining will increase to 220 people.

The abandonment of the project will lead to the loss of competitiveness of the Arkhangelsk region in

the field of elite sports at the national and international levels.

Sports infrastructure must comply with modern trends, be flexible and accessible to all segments of the population. The goal of the project is to create a modern sports infrastructure and develop the material and technical base for physical culture and sports, including through the use of public-private partnership mechanisms. The implementation of the project will ensure the creation of comfortable conditions for physical culture and sports for all categories and groups of the population.

Improving the material and technical support of physical culture and sports organizations, including through the use of public-private partnership mechanisms.

Development of a set of measures to provide support to enterprises (regardless of ownership) that build sports facilities.

Development of a system for assessing the effectiveness of the activities of local governments on the basis of indicators characterizing the development of the infrastructure of physical culture and sports. Development of measures to involve people with disabilities, disabled people and socially unprotected categories of citizens in physical culture and sports.

Ensuring the accessibility of sports facilities for persons with disabilities, the disabled and socially unprotected categories of citizens.

The number of sports facilities in the Arkhangelsk region will increase to 2,500 facilities.

The increase in the one-time capacity of sports facilities in relation to the all-Russian indicator will be 60 percent.

Increasing the proportion of people with disabilities and people with disabilities systematically involved in physical culture and sports in the total number of this category of the population up to 20 percent.

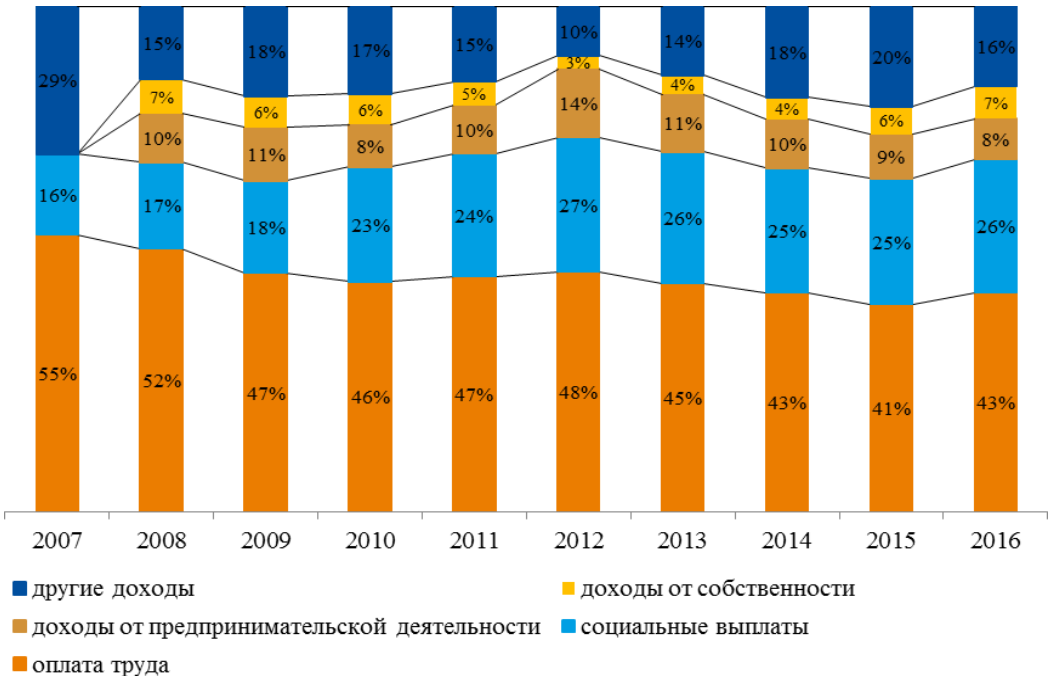
Municipal formations of the Arkhangelsk region will have sports facilities necessary for the organization and holding of physical culture and sports events, in accordance with the needs of the population.

If the project is abandoned, the residents of the Arkhangelsk region will be placed in unequal conditions in terms of access to sports infrastructure, which will affect the social disunity of citizens.

Increasing the income level of all categories of the population and improving the socio-economic conditions of life in the Arkhangelsk region, providing not only the opportunity to satisfy the primary basic needs of the population, but also to form a sustainable model of socio-economic activity based on the availability of goods and services to meet the needs of other categories through expanding the economic potential of the population.

From an economic point of view, the well-being of the population is determined by the level of development of productive forces and the nature of economic relations that express the current level of development and opportunities of the economy.

Growth of real disposable incomes of the population. During the period 2016-2020, the real disposable income of the population increased by 23 percent. The level of per capita income of the population of the Arkhangelsk region is higher than the national average, however, it is lower than the same indicator for the Northwestern Federal District.



Picture. 10. The structure of income of the population of the Arkhangelsk region

Disproportionate income structure of the population. For the period 2016 - 2020, there is a gradual decrease in the level of wages with an increase in social payments to the population (Figure 10).

Favorable level of pension provision. For the period 2016 - 2020, the real amount of assigned pensions increased by 1.5 times and by the end of 2021 amounted to 20,470.5 rubles (11th place in this indicator in the Russian Federation).

Insignificant excess of the proportion of the poor able-bodied population. For the period 2018-2021, the share of the population with incomes below the subsistence level amounted to 13-16 percent of the total population of the Arkhangelsk region, which slightly exceeds the share of the population with incomes below the subsistence level in the Russian Federation (10-13.3 percent). During this period, there was also an increase in the proportion of poor citizens living in cities.

Increasing territorial and sectoral differentiation by income. This trend is due to the geographical distribution of natural resources and large production centers in the Arkhangelsk region. Thus, the highest average wages were noted in the Mezensky municipal district (material production, fishing) and Severodvinsk (manufacturing industry).

Maintaining the economic potential of the middle class. The share of the middle class has increased by about 10 percent over ten years and, according to estimates for 2021, is about 24-26 percent of the population of the Arkhangelsk region. A high share of expenditures on food products and housing and communal services in the structure of household expenditures. Food products, payment for housing and communal services and transport services account for more than half of household expenditures, which is typical for countries with a low level of well-being of the population (Figure 11).

Picture. 11. The structure of expenditures of the population of the Arkhangelsk region in 2021

Increasing the credit burden to 32 percent with an overall reduction in lending risks. At the same time, the level of debt burden of the population corresponds to the average for the Russian Federation.

Growth in the volume of issued mortgage loans. From July 1, 2019 to August 1, 2021, total mortgage lending increased by almost 39 percent. This indicator indicates the stabilization of incomes and the intensification of the economic activity of the population in relation to the acquisition of real estate. Thus, the expectations of the population regarding well-being become persistently favorable.

Outstripping growth rates of wages relative to the growth rate of prices for goods and services. In general, there is a positive trend in the purchasing power of the population. The level of prices for food products has increased by 2.8 times over ten years, for services - by 2.6 times, for non-food products - by 2 times.

Gradual increase in the total area of residential premises. For the period 2018-2021, the area of residential premises increased by 9 percent in urban settlements, by 31 percent in rural settlements.

By 2035, a high level of well-being for residents of the Arkhangelsk region with any social status should be achieved, provided with widespread employment opportunities and a high level of education. A variety of expensive environmentally friendly products, services that meet the needs of the population, comfortable housing and high-tech healthcare - all this will be equally available to all residents of the Arkhangelsk region. Regional programs to support young families and single parents in difficult life situations will be implemented, socialization and employment of the disabled will be ensured. The growth in the level of income of the

population will allow the Arkhangelsk region to become one of the leading subjects of the Russian Federation in terms of the well-being of residents.

One of the most important areas of the social policy of the Arkhangelsk region is to improve the welfare of socially vulnerable groups of the population. The implementation of comprehensive social policy measures in the Arkhangelsk Region, such as support for single-parent families, assistance in finding jobs for low-income citizens, will ensure the involvement of these population groups in the socio-economic life of the Arkhangelsk Region and increase the level of well-being of this category of the population. The project also provides for the promotion of folk crafts and handicrafts; increasing the level of adaptation of the traditional economic activities of the indigenous peoples of the Arkhangelsk region to modern economic conditions, along with ensuring the protection of their original habitat and traditional way of life.

Provision of social assistance on the principles of fairness and targeting, in order to provide quality assistance to citizens in need of such assistance.

Development and implementation of a system for monitoring the living standards of the population. Providing support to single-parent families, orphans, lonely elderly people in nursing homes, inmates of boarding schools and other socially vulnerable groups of the population using public-private partnership mechanisms, involving socially oriented entrepreneurship and non-profit organizations.

Providing citizens belonging to socially vulnerable groups of the population and not employed in the economy with decent work and comfortable living conditions.

Providing guarantees for the rights of the indigenous small people of the Arkhangelsk region - the Nenets, including support for their economic, social and cultural development.

Reducing the level of economic vulnerability of vulnerable categories of the population.

The level of economic protection of socially vulnerable groups of the population will increase.

The effectiveness of the social policy of the Arkhangelsk region in terms of supporting socially vulnerable groups of the population will increase.

The real income level of the population will rise.

Refusal to implement the project may cause stagnation of the current situation of socially vulnerable groups of the population, which will negatively affect the possibilities of involving these groups of the population in the socio-economic activities of the Arkhangelsk region.

The level of well-being of each person is determined not only by the level of income and the provision of basic goods and services, but also by the ability to correctly distribute their own resources and opportunities. The implementation of state programs in the Arkhangelsk region, the provision of support and the implementation of financial literacy training are key elements in improving the financial security of the population, the level of personal financial opportunities of citizens and reducing the level of credit burden.

Implementation of the theoretical foundations of financial literacy in the framework of curricula mastered in the framework of school and vocational education.

Providing pensioners with the opportunity to attend special financial literacy courses.

Formation of a comprehensive theoretical and practical system for teaching financial literacy to children, adults and pensioners.

Creation of regional educational programs aimed at increasing the level of financial literacy of the population through educational lectures, master classes, interviews, seminars and other forms of education.

It is expected to increase the financial literacy of the population and the formation of financial consciousness.

The level of credit burden on the population in microfinance organizations will decrease.

The number of registered cases of bankruptcy of individuals will decrease.

The foundations for a rational approach of citizens to planning individual and family budgets will be formed.

Refusal to implement the project will lead to the lack of formation of the basics of financial literacy among the population, which in the long term may lead to a decrease in the level of well-being due to inappropriate individual economic activity. Supporting young professionals and creating in-demand jobs is one of the main areas for maintaining a high level of well-being among young people. Assistance to young people in employment, development of SMEs, including with the participation of young people, are necessary mechanisms for the development of social mobility for this category of the population.

Support for young people in finding employment in accordance with the specialties of higher and secondary education, as well as assisting young professionals in finding employment in specialized jobs.

Formation of favorable conditions for the opening of small and medium-sized businesses and the development of a system of grants for the development of youth SMEs.

Reducing the tax burden on small and medium-sized businesses, expanding the level of cooperation between state and municipal enterprises with small and medium-sized businesses.

Increasing the level of youth employment.

Reducing the level of labor migration among young people.

Providing the opportunity to purchase or rent housing on preferential terms.

By 2030, the share of young people employed in the specialties of higher and secondary education will be at least 50 percent.

There will be an increase in the share of small and medium-sized businesses by 50 percent, of which at least 20 percent will be youth businesses.

Increasing the competitiveness and economic potential of SMEs. Reducing the level of youth labor migration to 5-10 percent.

Refusal to implement the project will lead to an increase in migration trends due to labor migration factors, as well as a reduction in the youth professional personnel reserve in the Arkhangelsk region. Family support is one of the key vectors of the social policy of the Arkhangelsk region. Support is especially needed for families in connection with the birth of children and the acquisition of housing. The implementation of state programs of the Arkhangelsk region to provide subsidies for housing, as well as the creation and implementation of mechanisms for financial support for families after the birth of a child, are aimed at resolving the main problems of families and improving their well-being.

Implementation of state programs of the Arkhangelsk region to provide subsidies for housing.

Implementation of financial support mechanisms for families after the birth of a child.

Formation of mechanisms to assist young families in the acquisition of living space.

Creation of conditions for the implementation of labor activities of women with children, including the elimination of the queue in preschool educational institutions for children under three years of age.

By 2025, the number of families provided with their own housing will increase by 35 percent.

There will be a reduction in the economic burden on families after the birth of a child.

Specialized programs will be created in the Arkhangelsk region to assist families in acquiring living space (or to provide the opportunity to rent living space in social housing).

Failure to implement the project can significantly reduce the economic opportunities of young families.

Providing the population of the Arkhangelsk region with affordable, comfortable and high-quality housing that meets modern requirements.

Increasing the volume of commissioning of residential premises. In the period 2019-2021, 1,709.1 thousand sq. m. m of housing, which is 36.5 percent more than in 2016-2018.

A high level of housing provision for the population. At the end of 2021, the provision indicator amounted to 27.6 square meters. m per person, with an average for the Russian Federation of 25.2 sq. m.

A high degree of depreciation (over 30 percent) of more than half of the housing stock in the Arkhangelsk region. In this regard, the satisfaction of citizens with the technical condition of housing and the quality of services provided is decreasing.

High volumes of mortgage lending. Mortgage lending, the volume of which is one of the highest in the Northwestern Federal District, is the main instrument for the purchase of housing by the population.

Low provision of land plots with engineering infrastructure. Insufficient supply of land for construction.

High administrative barriers. The duration of the procedures required to obtain permits for construction limits the investor's ability to implement investment projects in the Arkhangelsk region.

Lack of a unified construction policy. The construction of new districts is carried out outside urban areas, often not provided with social, business and transport infrastructure.

Unformed rental housing market. The absence of a civilized market for commercial and non-commercial rental housing. The high market value of acquiring housing in property exacerbates the problem of providing the population with housing.

By 2035, the situation with the housing provision of the population, the quality of residential real estate and housing services will fundamentally change for the better. Families in the Arkhangelsk region will have more opportunities to purchase housing on a mortgage, which will significantly improve their living conditions. The existing housing stock will undergo a deep renovation, comfortable conditions will be created in common areas. The population will have the opportunity to participate in housing management. The appearance of the cities of the Arkhangelsk region will meet the aesthetic needs of residents, combining new architectural solutions with historical and cultural features.

The project provides for the formation of a housing construction market in the Arkhangelsk region, capable of providing the population with affordable housing, maintaining a high rate of commissioning of new housing, creating a highly efficient regional business community, organizing support for the unity of requirements for building characteristics, environmental efficiency and finishing standards for public areas. The implementation of the project will improve the living conditions of the population, as well as ensure the formation of a safe and comfortable environment for life.

Redistribution of certain powers in the field of urban planning between local governments and state authorities of the Arkhangelsk region.

Optimization of control and supervision activities and reduction of administrative procedures in construction.

Creation of a system of project financing of housing construction with the attraction of citizens'

funds through banking instruments.

Adoption of strategic documents in the field of construction development and ensuring the functioning of the housing market.

Implementation of projects for the construction of affordable and comfortable housing for various categories of citizens.

Creation of conditions for the development of individual housing construction.

Creation of conditions for the growth of supply in the housing market that meets the needs of various categories of citizens.

Providing conditions for the creation of a regional business community capable of ensuring high rates of real estate construction.

The terms for obtaining urban planning plans for land plots (hereinafter referred to as GPZU), building permits, and cadastral registration will be reduced.

By 2025, the share of services provided for the issuance of GPZU, construction permits, and cadastral registration in electronic form will be 80 percent.

There will be an increase in the effectiveness and efficiency of control and supervision activities.

It is planned to develop and approve an action plan ("road map") for the development of housing construction in the Arkhangelsk region.

It is planned to create a fund to accumulate funds for financing and organizing housing construction, implemented with the provision of state support for socially priority categories of citizens.

By 2025, a transition will be made from concluding agreements for participation in the shared construction of apartment buildings to using the mechanism of escrow accounts.

The number of formed land plots for the development of individual housing construction will be increased.

The volume of flexible housing stock will be increased for short-term relocation of residents from emergency premises.

It is planned to increase the volume of construction of new housing to provide housing for socially priority categories of citizens (Figure 12).

Pilot projects for the construction of turnkey cottage wooden districts in small towns of the Arkhangelsk region will be implemented.

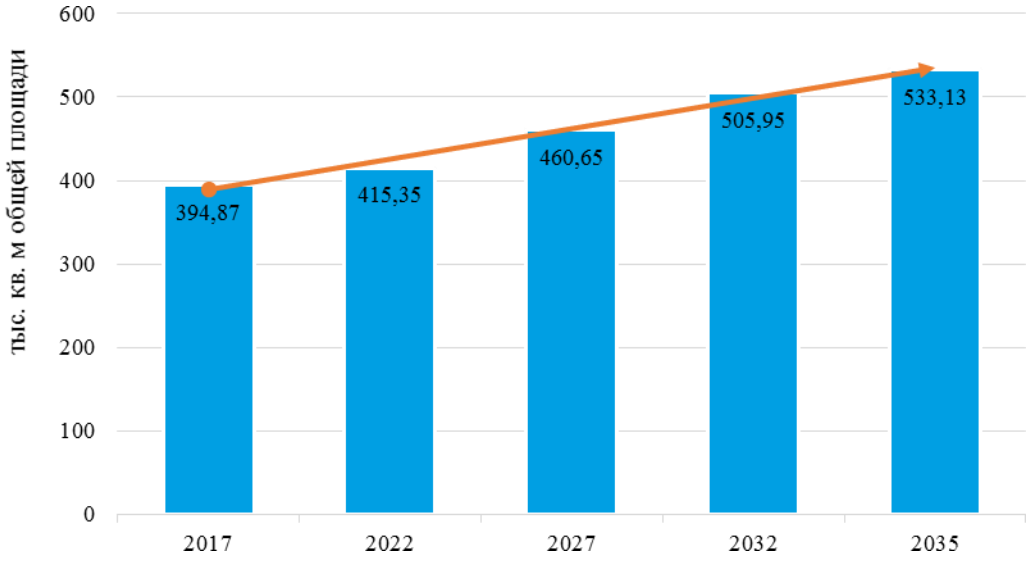
By 2035, an increase in the volume of housing commissioning will be ensured from 395 to 533 thousand square meters. m per year.

The growth of private investment in the construction market of the Arkhangelsk region will be ensured.

The abandonment of the project entails a decline in the construction and related industries, accompanied by a slowdown in the rate of commissioning of residential space and the emergence of risks of increasing social tension among the population due to the inability to improve their living conditions.

A significant increase in the comfort of living conditions for the population, providing for the comprehensive development of the housing services market, as well as the development of public control in the housing and communal services sector. As a result of the project implementation, safe and favorable living conditions for citizens in apartment buildings, uninterrupted provision of housing services, as well as a high degree of involvement of residents in housing management will be ensured.

Creation of conditions for increasing the level of satisfaction of citizens with the quality and cost of services for the maintenance and current repair of the common property of apartment buildings.



Picture. 12. Forecast of the volume of commissioning of housing in the Arkhangelsk region, thousand square meters. m of total area

Increasing the activity and responsibility of the owners of premises in apartment buildings through the development of forms of self-government of citizens in the housing and communal services sector.

Formation of incentives for owners of residential premises to preserve and increase the value of premises in an apartment building.

By 2030, more than 75 percent of the population will be satisfied with the residential premises occupied and the intra-house infrastructure.

The accessibility of apartment buildings for the disabled and other people with limited mobility will be increased.

By 2035, the level of collection of funds for the overhaul of apartment buildings will increase.

The energy efficiency of housing and communal services will be improved.

The rejection of the project entails the emergence of risks of reducing the involvement of the population in ensuring public control of housing and communal services, lack of incentives for the population to take care of the occupied living space.

The project is aimed at increasing the availability of mortgage housing loans to the population, taking into account the balance of interests of lenders and borrowers, the information transparency of the housing mortgage lending market and the unification of procedures for issuing and supporting mortgage housing loans. As a result, the population will be provided with access to mortgage housing loans through the formation of packages of banking offers for various categories of citizens, including those that include the possibility of making a down payment.

Formation of a sustainable system for attracting long-term resources to the housing mortgage lending market.

Formation of conditions for increasing the information transparency of the housing mortgage lending market.

Formation a wide range of mortgage offers lending to the population, including opportunities for down payment.

By 2025, more than 50 percent of the families of the Arkhangelsk region will have the opportunity to purchase housing on a mortgage.

A reduction in the cost of mortgage housing loans for socially priority categories of citizens will be ensured.

The population will have access to various options for mortgage lending, containing differentiated conditions.

By 2035, the volume of mortgage lending to the population will grow by 8.5 times.

The rejection of the project will entail a decrease in the possibility of acquiring housing as a property for certain categories of citizens, as well as limiting the growth of the mortgage lending market.

The project provides for the formation of a developed rental housing market. As a result of the project implementation, an institution of non-commercial rental housing will be created, which will improve the regional policy on providing housing for vulnerable categories of citizens through the provision of social housing for rent.

Development of the rental housing market as an alternative to the acquisition of housing in the property, providing for the creation of segments of institutional and non-commercial rental housing.

It will create the possibility of long-term rental housing on transparent market conditions without the risk of early termination of the contract.

The territorial mobility of the population of the Arkhangelsk region will be increased.

The possibility of accommodating specialists coming to the Arkhangelsk region will be provided through the development of the rental housing market.

Pilot projects for the construction of socially oriented rental housing will be implemented.

Mechanisms will be developed to attract investment in rental projects, including at the expense of the population and institutional investors.

The rejection of the project will limit the ability of certain categories of citizens to improve their living conditions, as well as reduce the mobility of labor resources.

Territory redevelopment

The project is aimed at the rational use of land resources within the boundaries of the cities of the Arkhangelsk region for the purposes of urban development, which provides for an inventory of existing built-up areas and the creation of mechanisms for compensating the cost of housing for citizens during the development of built-up areas. The implementation of the project will ensure the development of built-up areas by ensuring the introduction of flexible regional standards for the integrated development (development) of territories that take into account the historical, cultural and climatic features of each city of the Arkhangelsk region.

Creation of a comfortable urban environment during the reconstruction of built-up areas.

Creation of flexible standards for the integrated development (development) of territories, taking into account the characteristics of each city of the Arkhangelsk region.

There will be an introduction of a single mechanism for the development of built-up areas.

The resettlement of citizens will be carried out with guaranteed compensation for the market value of housing or the provision of new housing.

Land surveying of all lands within the city boundaries and registration of land plots for cadastral registration will be carried out.

The index of the quality of the urban environment will be increased according to the criterion "Housing and adjacent spaces".

The rejection of the project entails a decrease in the possibility of the cities of the Arkhangelsk region to become points of attraction for business and the economically active population.

Increasing competitiveness, financial stability, energy and environmental security of the system of communal and energy infrastructure aimed at meeting the needs of the socio-economic development of the Arkhangelsk region.

The utility and energy infrastructure will act as a point of growth in the implementation of the Strategy, which, in turn, will provide an additional impetus to the development of the fuel and energy complex (hereinafter referred to as the fuel and energy complex).

Increasing demand for energy resources. An increase in the consumption of energy resources, which is primarily associated with the activities of enterprises engaged in the mining and manufacturing industries.

Uneven distribution of energy resources on the territory of the Arkhangelsk region. The presence of disproportions in the placement of the main generating capacities contributes to the formation of scarce energy regions. The presence of isolated energy systems. Preservation of zones of decentralized energy supply in the Arkhangelsk region, limiting the possibilities of technological connection and uninterrupted supply of electricity during periods of peak load.

Lack of incentives to increase investment. Reducing the volume of capital investments in the fuel and energy complex and the public utilities sector. As a result of state regulation of the tariff sphere, resource supplying organizations of the Arkhangelsk region have low incentives to increase investments. At the same time, the results of the actual implementation of the investment programs of organizations in the fuel and energy complex and the public utilities sector often differ from those planned.

A high degree of depreciation of infrastructure and fixed assets, external and internal engineering networks, especially in Verkhnetoemsky, Vinogradovsky, Kargopolsky, Kotlassky, Konoshsky districts, as well as in cities of regional significance.

A significant amount of inefficient, physically and morally obsolete equipment. Gradual modernization and replacement of existing equipment of boiler houses for the use of biofuels.

High costs of the population for utilities in the structure of consumer spending of the population with an insufficient level of quality and completeness of services. Imperfection of the current model of relations between consumers and resource-supplying organizations.

High potential for the use of natural gas in the Arkhangelsk region. In the period from 2018 to 2021, Public Joint Stock Company Gazprom invested RUB 6,130.59 million in gas transmission facilities in the Arkhangelsk Region.

The problem of ensuring the rational and environmentally responsible use of energy resources. To date, the grid infrastructure does not allow for the efficient use of renewable energy sources, energy-efficient equipment and intelligent control systems.

By 2035, the utility and energy infrastructure will ensure the transition of the economy and social sphere of the Arkhangelsk region to a higher, qualitatively new level. Due to the extensive modernization of the fuel and energy complex, the energy independence of the Arkhangelsk region will be achieved. Consumers of energy resources will have access to modern environmentally friendly and energy efficient infrastructure. The high involvement of the population in the management of communal infrastructure will significantly improve the quality of services and the efficiency of resource consumption. A wide gas distribution network will ensure the creation of new industrial facilities and the development of new territories.

Providing consumers of the Arkhangelsk region with energy resources, increasing the energy and environmental efficiency of the fuel and energy complex, modernizing generating capacities, as well as creating conditions for the widespread use of renewable energy sources. As a result of the implementation of the project, the energy independence of the Arkhangelsk region will be ensured and a developed energy system will be formed that can satisfy effective demand for energy resources while ensuring affordability of prices and energy infrastructure.

Development of centralized generation with successive connection to it of a number of isolated power districts.

Modernization of generating capacities and creation of promising generation facilities based on renewable energy sources.

Optimization of the structure and load of electric and heat generating capacities while maintaining the priority of generating electric and thermal energy in a combined mode.

Creation of conditions for a complete transition to the use of environmentally friendly fuels (natural gas, biofuels) in the municipal energy sector.

By 2025, Mezensky and Leshukonsky municipal districts of the Arkhangelsk region will be connected to the centralized power supply system.

The decommissioning of economically inefficient, physically and morally obsolete power equipment with the introduction of the required volume of new capacities will be ensured.

The conditions for the economic efficiency of commissioning new generating capacities operating on the basis of renewable energy sources will be determined.

By 2030, 90 percent of the electricity consumed in the Arkhangelsk region will be generated from its

own sources.

By 2035, the share of consumed imported resources (hard coal, fuel oil, diesel fuel) will be less than 1 percent.

By 2035, there will be a complete transition of the boiler houses of the Arkhangelsk region to the use of biofuel or natural gas as the main type of fuel.

Refusal to implement the project in the conditions of ensuring economic growth entails the risks of an increase in the energy deficit of the Arkhangelsk region and an increase in dependence on the energy systems of neighboring constituent entities of the Russian Federation.

The project provides for an increase in investment in the fuel and energy complex and the public utilities sector, aimed at modernizing existing equipment and networks, increasing the resource and economic efficiency of the equipment used, as well as decommissioning obsolete and inefficient equipment. The large-scale modernization of the engineering infrastructure will improve the reliability and safety of providing electricity, power, water supply and sanitation to consumers, as well as improve the energy efficiency and environmental friendliness of networks and equipment.

Modernization of networks and equipment, creation of conditions for the introduction of intelligent accounting and control systems.

Modernization of water supply and sanitation systems, including the use of advanced water treatment technologies. Improving the efficiency of using energy and water resources in the Arkhangelsk region.

Increasing the investment attractiveness of utility and energy infrastructure facilities in the Arkhangelsk region.

Reliable deliveries of electric energy to consumers will be ensured under conditions of peak loads.

There will be a decrease in the level of technological losses of thermal energy, water and wastewater during transportation through networks.

The number of accidents and emergencies at hot and cold water supply and sanitation facilities will be reduced.

By 2035, drinking water from centralized water supply in the Arkhangelsk region will fully comply with the standards for sanitary-chemical and microbiological indicators.

The implementation of measures to improve the energy efficiency of networks and equipment of resource supply organizations will be ensured.

By 2035, the average depreciation of fixed assets of enterprises in the fuel and energy complex and the public utilities sector will decrease by 15–20 percent.

An annual growth of investments in public energy infrastructure by 3-6 percent will be ensured.

The risk of abandoning the project will lead to an increase in the physical and moral depreciation of fixed production assets, a decrease in the efficiency of the fuel and energy complex and the public utilities sector, which will create barriers to ensure the accelerated socio-economic development of the Arkhangelsk region.

The project is aimed at creating a new model of relationships between consumers and suppliers of energy resources and utilities, based on guaranteed reliability and quality of services provided. Improving existing relationships will make it possible to provide the population with communal services that meet high quality standards, increase the level of satisfaction of the population with these services, form a transparent pricing system, ensure the development of competitive relations and increase the involvement of the population in the management of communal infrastructure.

Improving the quality of public services aimed at ensuring the uninterrupted provision of heating, hot and cold water supply, sanitation, electricity and gas supply.

Strengthening the role of consumers in the public utilities market, encouraging consumers to actively participate in the management of public utilities infrastructure.

Elimination of inefficient management of housing and communal services, carried out by unitary enterprises.

Creation of the technical possibility of providing a full range of public services for a comfortable stay of a person.

By 2030, at least 75 percent of utility service recipients will be satisfied with their quality and volume.

The active participation of consumers in the formation of the retail electricity market will be ensured (influence on demand through participation in the regulation of the load schedule).

The work of the mechanism of long-term regulation of the total payment of citizens for public utilities will be ensured, excluding an unreasonable increase in fees for public utilities.

The development of a concession model of public-private partnership in the public utilities sector will be ensured.

A mechanism will be created to synchronize the investment programs of resource-supplying organizations with long-term plans for developing territories for housing construction.

The terms of passage and the number of procedures required for the implementation of technological connection to networks will be reduced.

Refusal of the project will reduce the indicator of consumer satisfaction with the quality of services provided, as well as the degree of public control and involvement of the population in the management of communal infrastructure.

The project is aimed at creating and developing a gas distribution infrastructure in the Arkhangelsk

region, which ensures the creation of new capital investment facilities and the development of promising development areas. The implementation of the project provides for the provision of safe gas supply to consumers, as well as the creation of new industrial facilities and the development of new territories for housing construction.

Creation of conditions for the implementation of large-scale gasification of the Arkhangelsk region, aimed at increasing the competitiveness of enterprises, as well as the creation of new industrial facilities.

Growth of investments in the construction of gas pipelines and modernization of the gas distribution network in the Arkhangelsk region will be ensured.

There will be a reduction in the time required to complete the procedures required for connection (technological connection) of capital construction facilities to the gas distribution network.

Increased payment discipline of consumers will be ensured.

By 2035, the level of gasification of the Arkhangelsk region will be 15-20 percent.

Refusal to implement the project not only reduces the economic and investment attractiveness of the Arkhangelsk region, but also entails the risk of failure to implement measures for the transition of the Arkhangelsk region to the use of environmentally friendly fuel resources.

The project involves the transformation of the energy and utility infrastructure of the Arkhangelsk region through the introduction of digital technologies and platform solutions. The implementation of the project will increase the efficiency of production and use of resources, as well as labor productivity, obtaining additional effects due to the emergence of new services and solutions based on a large amount of technological data, building vertical and horizontal intra-industry and inter-industry interactions.

Creation of conditions for the introduction of technological innovations in the modernization of the fuel and energy complex of the Arkhangelsk region.

By 2035, the cost of introducing technological innovations in the total volume of shipped goods, work performed, services will amount to at least 2.5 percent.

The use of a large amount of data from digital systems will be ensured to improve the efficiency of production and use of resources.

The abandonment of the project will lead to an increase in the technological gap in the face of increased global technological competition. Creation of a transport system that provides spatial connectivity of the Arkhangelsk region, as well as transport links with other constituent entities of the Russian Federation and foreign countries. Organization of fast and uninterrupted transport communication in the regions of the Far North and equivalent areas, contributing to the creation of comfortable conditions for local residents and guests of the Arkhangelsk region, the growth of trade and business contacts.

Growing importance of the Arkhangelsk region in the international and interregional transport systems. The development of navigation along the Northern Sea Route and the implementation of multimodal deliveries of goods will require an increase in the throughput and quality of services of the transport system of the Arkhangelsk region.

Lack of year-round overland transport communication in part of the territories. Six regional centers of the Arkhangelsk region (the village of Karpogory, the village of Yarensk, the village of Verkhnyaya Toima, the city of Mezen, the village of Leshukonskoye and the city of Shenkursk) do not have year-round road communication with the city of Arkhangelsk due to the lack of bridges across the Mezen, Northern Dvina, Pinega and Vychegda rivers. Ensuring transport accessibility of the population is carried out through the organization of ferry crossings and floating bridges, the operation of which is impossible during periods of stable autumn freeze-up and spring ice drift (Figure 13).

114 settlements of the Arkhangelsk region with a population of more than 100 people in each do not have a motor transport connection with the network of public roads on paved roads.

Non-compliance of the road network with regulatory requirements. In 2021, 85.4 percent of regional public roads were in substandard condition (according to the results of technical condition diagnostics), which required capital investments.

Inconsistency of the road network and road structures with modern challenges. On the Ust-Vaga-Yadrikha highway in the period 2018-2021, there was an increase in traffic intensity for trucks and buses by 2 times, for cars - by 3.5 times. At the same time, this road passes through large settlements and is characterized by the presence of sections without improved road surface, which significantly restricts traffic (Figure 14).

The total length of inland waterways included in the list of inland waterways of the Russian Federation, approved by Decree of the Government of the Russian Federation dated December 19, 2002 No. 1800-r, on the territory of the Arkhangelsk Region is 3,443 km. The main shipping routes within the boundaries of the Arkhangelsk region: r. Northern Dvina (with delta) - 680 km, r. Pinega - 654 km, r. Mezen - 372 km, r. Pyoza - 301 km, r. Vaga - 256 km, r. Vychegda - 213 km, r. Kuloy - 208 km, r. Onega/Malaya Onega – 155 km. On the territory of the Arkhangelsk region there are the ports of Arkhangelsk and the port of Kotlas.

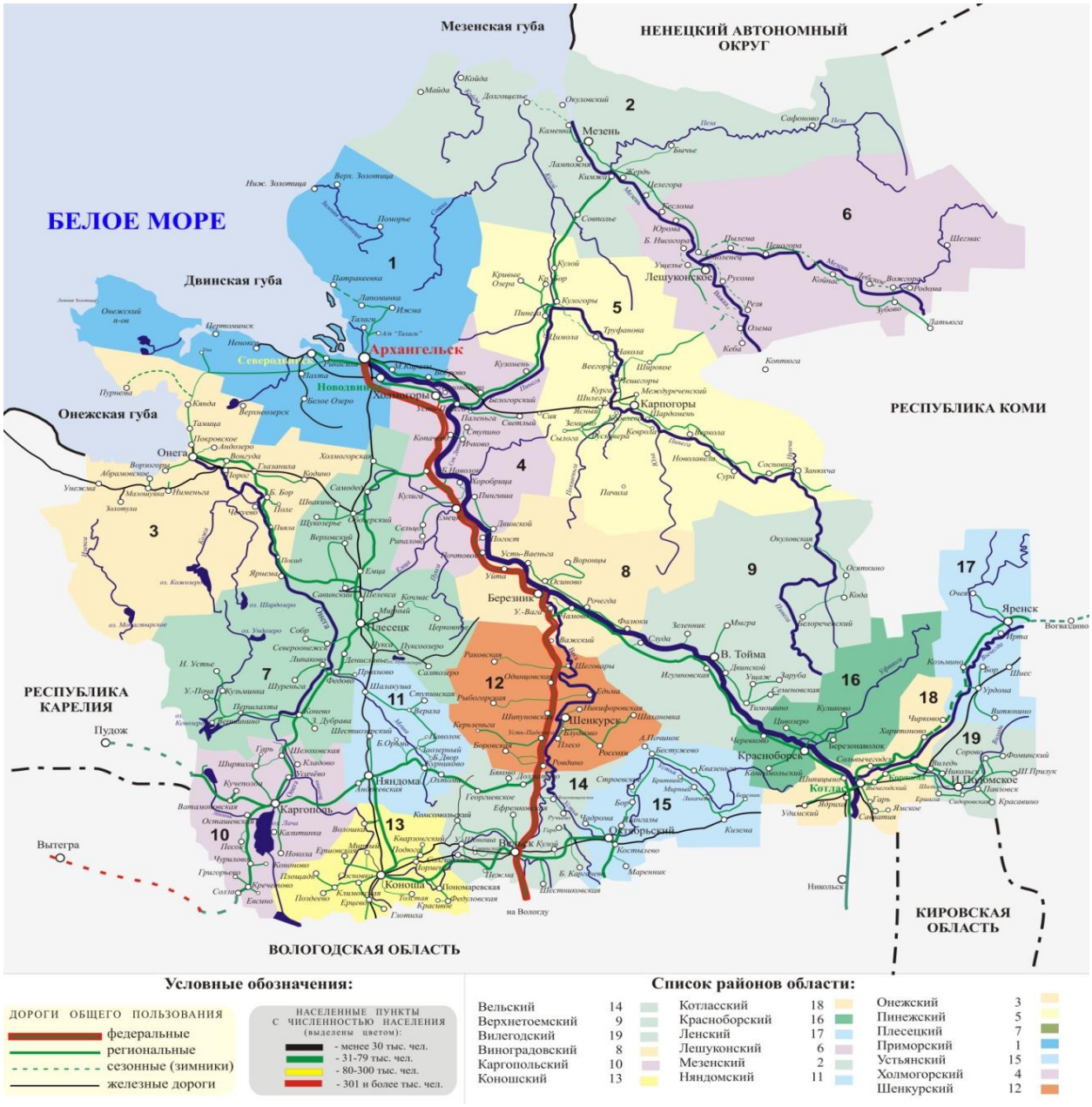
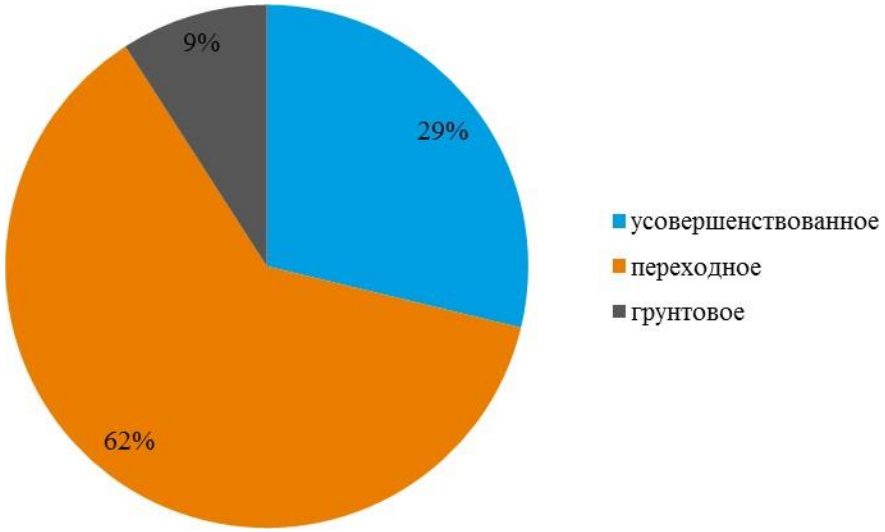


Figure 13. Map - scheme of public roads of the Arkhangelsk region

The supported dimensions of ship passages on the main river transport routes of the Arkhangelsk region in 2018-2021 are somewhat inferior to those of the nineties. Nevertheless, the river fleet is successfully functioning and developing, following the global trend in the development of river navigation. This trend includes the cost-effective principle of constructively reducing the draft of ships without loss of cargo capacity. In the conditions of a tough market economy, having no obvious competitive advantages, large-tonnage vessels with a large draft are recognized as economically unprofitable on the rivers of the European North, including the Arkhangelsk region, and are disposed of. The main part of the transport fleet is made up of barge-towing trains that are optimal in terms of their technical characteristics. Besides, these types of vessels successfully carry out the withdrawal of rafts. These ships and trains most fully meet the existing needs. The established dimensions of ship passages on inland waterways fully allow the transportation of goods and passengers.

In the period from 2018 to 2021, the volume of cargo transportation in the North Dvina basin of inland waterways of the Russian Federation within the borders of the Arkhangelsk region decreased from 1960.1 thousand tons to 1775.7 thousand tons.



Picture 14. Road surface of motor roads of regional or intermunicipal significance in 2021

Stable characteristics of passenger traffic in the North Dvina basin of inland waterways of the Russian Federation. The volume of passenger traffic is consistently high and amounts to about 1.0 - 1.1 million passengers per year. Mostly such transportation is carried out between the island territories in the area of the city of Arkhangelsk, where there are practically no alternative modes of transport. There is a prospect of increasing passenger traffic through the development of other areas, including cruise routes.

The imbalance of the railway network. The density of railway tracks in the Arkhangelsk region is lower than the national average due to the low population density. There is no direct railway line between the city of Arkhangelsk and the city of Kotlas, as well as the city of Arkhangelsk and the Komi Republic, which contributes to significant time and financial costs.

Availability of a regional aviation network. Of the 19 municipal districts of the Arkhangelsk region, 13 districts have airports and airfields of local airlines. However, the infrastructure of most airfields and landing sites of local airlines is technically outdated and has a significant need for reconstruction and modernization.

Lack of direct air communication with other subjects of the Russian Federation. Regular air flights are carried out only within the Arkhangelsk region and to the cities of the North-West Federal District, as well as to the city of Moscow and resort cities of the Russian Federation. To fly to other cities, you need a transfer in the city of Moscow. Foreign flights are carried out by irregular (charter) transportation and have a limited set of destinations.

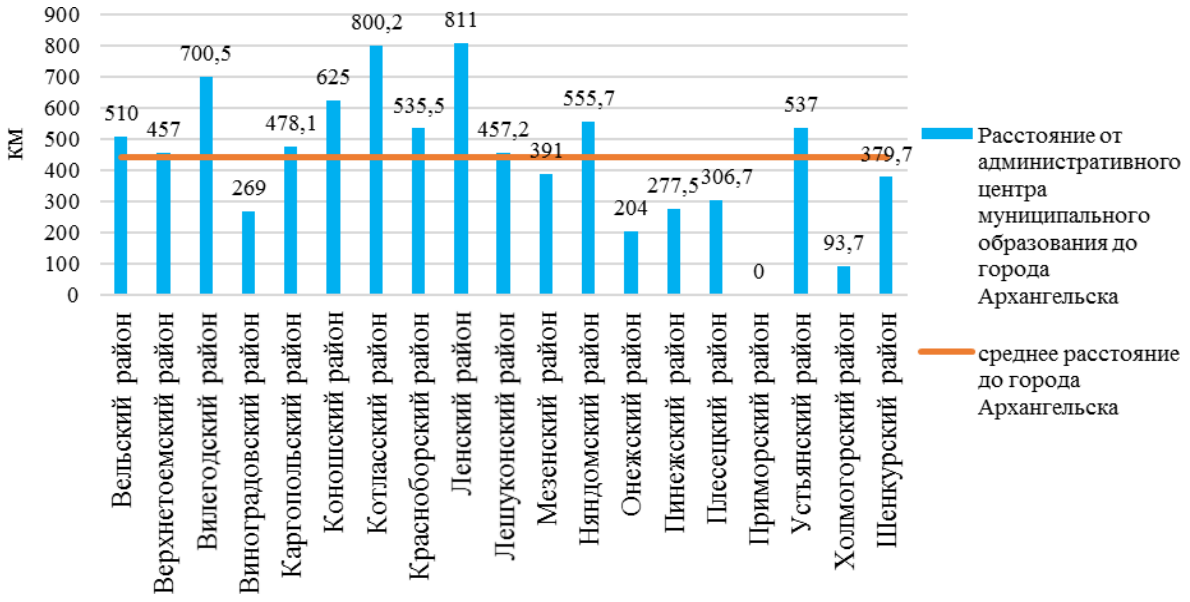
The downward trend in the dynamics of indicators of cargo transportation by air. Until 2014, an increase in air cargo traffic was typical, then a slight decrease in the volume of air transport followed.

Low quality of passenger transportation services. There is an upward trend in the number of bus transportation. However, the bus network is marked by a limited list of routes, and there is also no bus service in a number of municipal districts in the east of the Arkhangelsk region. There is a continuing stagnation in the development of public transport due to the low level of development of the material and technical base. There is also low transport accessibility for people with limited mobility.

Lack of resources to maintain and develop transport infrastructure. The provision of financial resources for road activities in relation to public roads of regional significance is 18.6 percent of the regulatory requirement.

By 2035, the transport system of the Arkhangelsk region will serve as a framework linking the space of the Arkhangelsk region and providing international and interregional contacts. The population of the Arkhangelsk region will be satisfied with the high level of transport services, and the guests of the Arkhangelsk region will be satisfied with the opportunity to travel comfortably. It will be possible to eliminate transport and communication restrictions for the development of the economy of the Arkhangelsk region and the performance of a loading and transit function in servicing the Northern Sea Route.

The organization of a hierarchical system of transport communications lies at the heart of achieving the connectedness of space. Equally important is the presence of transport communications along the settlement frame. This mainly applies to land and river transport. Due to significant distances, as well as the presence of natural barriers, a regional aviation system is used to overcome space. The development of the city of Arkhangelsk as an aviation hub contributes to strengthening contacts not only with the settlements of the Arkhangelsk region, but also with other constituent entities of the Russian Federation and foreign countries.



Picture 15. Distance from the administrative center of the municipality to the city of Arkhangelsk

The transport system of the Arkhangelsk region should provide conditions for the comfortable movement of people and goods. For the purposes of strategic planning in the context of project strategizing, a number of projects are proposed, the implementation of which will allow achieving a new quality of transport infrastructure (Figure 15)

The most important aspect of the development of the Arkhangelsk region is the creation of a system of roads covering the entire territory of the Arkhangelsk region. The high density of the road network will ensure fast, comfortable and year-round communication.

Reconstruction of the Arkhangelsk highway (from the village of Rikasikha)

Onega - Nadvoitsy (to the border of the Arkhangelsk region).

Construction of the highway Arkhangelsk - Naryan-Mar.

Reconstruction of the Kotlas-Solvychegodsk-Yarensk highway with the replacement of the roadbed with an improved one and the construction of a bridge across the Vychegda River connecting the Vatsa-Durnitsyno-Kozmino and Zabolotye-Solvychegodsk-Yarensk highways.

Reconstruction of the Ust-Vaga-Yadrikha highway, bringing the entire highway into a standard condition and replacing the transitional pavement with an improved one, construction of sections of the highway with the withdrawal of the highway outside the residential areas of settlements (bypassing the village of Cherevkovo, the village of Shipitsyno, the village of Krasnoborsk).

Construction of the motor road Velsk - Shangaly - Kotlas on the section Oktyabrsky settlement - Udimsky settlement.

Bringing the roads connecting the district centers with the city of Arkhangelsk to the standard condition with the replacement of the road surface with improved one and the construction of bridges to unite the district centers.

Stimulation of local self-government bodies for the development and modernization of local roads, construction of bridges.

Reconstruction of the bridge across the Nikolsky mouth of the Northern Dvina River.

By 2025, the share of regional roads that meet regulatory requirements in their total length will exceed 32 percent.

By 2035, the share of the length of public roads serving traffic in overload mode in the total length of public roads of regional significance will be 2.5 percent.

All district centers will be connected to the city of Arkhangelsk all year round.

Between the city of Arkhangelsk and the city of Kotlas, transport links will be improved and the volume of movement of passengers and goods will be increased, as well as between other large settlements of the Arkhangelsk region.

A motor road will be built between the Oktyabrsky settlement and the town of Kotlas.

Residents of settlements will quickly get to the regional center.

There will be an increase in interregional cooperation due to the functioning of highways connecting the Arkhangelsk region with neighboring regions of the Russian Federation.

The efficiency of passenger and freight road transport will be increased.

The abandonment of the project contributes to limiting the interaction of the Arkhangelsk region with

neighboring subjects of the Russian Federation, which will not allow influencing the peripheral territories of the Arkhangelsk region. Refusal to build and reconstruct roads of regional significance can lead to degradation of the settlement system and migration outflow from the Arkhangelsk region, since the poor condition of highways hinders the development of settlements and the growth of GRP as a result of the non-involvement of certain territories of the Arkhangelsk region in the economy of the Arkhangelsk region. The aim of the project is to improve the existing system of flights by air passenger transport within the Arkhangelsk region and beyond its borders in order to connect the city of Arkhangelsk with territorially remote regional centers and geographically isolated settlements. The leading hub for intra-regional flights is Vaskovo Airport (Primorsky District), for some destinations - Talagi Airport (Arkhangelsk). The formation of a network of interregional flights by air passenger transport is necessary to increase the spatial connectivity of the constituent entities of the Russian Federation. The city of Arkhangelsk can act not only as a hub for communication between the settlements of the Arkhangelsk region, the administrative centers of the Northwestern Federal District, the largest cities of the Russian Federation, but also as an air gate for the development of the Arctic zone of the Russian Federation. Reconstruction of the runway of the Talagi airport. Organization of a cargo hub based on the Talagi airport. Assistance in the modernization of the aviation fleet. Reconstruction of the Solovki airport. Reconstruction of the Kotlas airport. Creation of an airfield in the city of Kargopol.

As a result Reconstruction of the runways of airfields in the Arkhangelsk region.

Expansion of the network of interregional passenger routes, including the administrative centers of the Northwestern Federal District and the largest cities of the Russian Federation. Organization of flights to other subjects of the Russian Federation, whose territories are part of the Arctic zone of the Russian Federation.

By 2025, the number of direct interregional regular passenger air routes bypassing the city of Moscow will exceed 50 percent of the total number of domestic regular air routes.

Accessible and regular air communication between the city of Arkhangelsk and other settlements of the Arkhangelsk region will be provided.

Northern delivery will be implemented and work will be carried out in the Arctic zone of the Russian Federation.

Airports "Solovki" and "Kotlas" will carry out long-haul interregional flights (the cities of St. Petersburg and Moscow).

The growth of passenger and freight traffic will increase the economic efficiency of carriers.

There will be an increase in the intensity and efficiency within the regional interaction between the Arkhangelsk agglomeration and other subjects of the Russian Federation, including the subjects of the Russian Federation, whose territories are part of the Arctic zone of the Russian Federation.

Transport costs will be reduced due to the “rapprochement” of space. The variety of destinations will increase and the cost of air travel on them will decrease.

The abandonment of the project contributes to the strengthening of the spatial disunity of the Arkhangelsk region, the preservation of the high cost and inaccessibility of air transport services for the population and the transportation of goods, the loss of potential profits and the deterioration of the socio-economic conditions of hard-to-reach settlements, including in the Arctic zone of the Russian Federation. High-quality modernization of the railway system of the Arkhangelsk region will ensure the communication unity of the north of the European part of the Russian Federation and the Urals.

Construction of the railway line "Belkomur" (on the territory of the Arkhangelsk region from the Karpogory railway station to the border with the Komi Republic).

Reconstruction of the railway section Konosha - Obozerskaya (reconstruction of the superstructure of the track, strengthening of power supply devices).

Reconstruction of the railway section Obozerskaya - Malenga (reconstruction of the superstructure of the track, strengthening of power supply devices, lengthening of the receiving and departing tracks at the stations to the standard of 1050 m).

Strengthening of the railway section Konosha - Kotlas - Mikun in connection with the construction of the Salekhard - Nadym railway line and the creation of the Northern Latitudinal Railway (construction of the second main tracks, bridge crossings, lengthening of the receiving and departing tracks at the stations to the standard of 1050 m).

There will be a reduction in time and cost of transport costs due to the functioning of new highways and the reconstruction of existing tracks.

By 2035, there will be an increase in the capacity of the infrastructure of the railway sections of the Arkhangelsk region and, as a result, a reduction in the “bottlenecks” that limit their throughput.

The economic efficiency of the activities of railway carriers will increase due to an increase in passenger and cargo flows.

There will be an increase in the efficiency and intensity of interaction between the Arkhangelsk region and neighboring regions of the Russian Federation.

The implementation of Belkomur will become a driver for the development of the eastern part of the territory of the Arkhangelsk region.

Transportation of goods along Belkomur will

contribute to the development and increase in the traffic of the Northern Sea Route.

The rejection of the project will limit the volume of cargo deliveries both within the Arkhangelsk region and beyond. Refusal to build Belkomur will not allow to realize the potential of interaction of the Arkhangelsk agglomeration with the eastern part of the territory of the Arkhangelsk region, the constituent entities of the Russian Federation, the territories of which are part of the Arctic zone of the Russian Federation, and the Urals, and will also limit the cargo turnover of the Northern Sea Route, which will lead to economic lagging behind these territories. Refusal of electrification and reorganization of passenger routes will hinder the economic convergence of the cities of the Arkhangelsk region.

The implementation of the project contributes to unlocking the transport potential of natural highways, namely the use of inland waterways as an alternative to overland ones. In addition, for certain territories of the Arkhangelsk region, river transport is the most accessible type of communication, which helps to increase the transport accessibility of other settlements of the Arkhangelsk region.

Carrying out track works (including dredging) in the North Dvina basin of inland waterways in order to maintain the established dimensions of the track.

Reconstruction and construction of berths.

Facilitate the organization of freight ferry transportation.

Organization of passenger ferry service, including the formation of cruise routes.

The established dimensions of ship passages in the North Dvina basin of inland waterways within the boundaries of the Arkhangelsk region will be maintained.

By 2024, the capacity of inland waterways will increase.

The cargo flows of the enterprises of the timber industry complex of the Arkhangelsk region and the construction industry to inland water transport will increase.

The number of passenger transportation by inland water transport will increase both in terms of passenger traffic and the number of routes.

Accessibility will be ensured during the navigation period of settlements where water transport is the only mode of communication.

Tourist routes will be implemented.

Project abandonment risks

The abandonment of the project will lead to an increase in the pressure on the land transport infrastructure, as well as additional costs due to the fact that the land mode of transport is a more expensive mode of transport. Failure to implement the project will contribute to maintaining the transport isolation of hard-to-reach settlements of the Arkhangelsk region, located along the rivers, and will intensify the negative socio-economic processes in them. The potential for the use of forest and recreational resources in hard-to-reach settlements of the Arkhangelsk region will remain unrealized. The project is aimed at the implementation of an affordable and high-quality system of urban and intercity passenger traffic.

Organization of regular bus routes on the territory of the Arkhangelsk region, including in the eastern part of the territory of the Arkhangelsk region, for communication between the city of Arkhangelsk and the village of Leshukonskoye, the city of Arkhangelsk and the city of Mezen.

Assistance in the renewal of the bus fleet.

Creation of conditions at bus stations, bus stops and buses for comfortable movement of people with limited mobility.

Stimulating the activities of local governments for the development of passenger transport within municipal districts and large settlements of the Arkhangelsk region.

Organization of bus service within the municipal districts of the Arkhangelsk region with a low density of the road network.

The spatial connectivity of the entire territory of the Arkhangelsk region with the cities of Arkhangelsk and Kotlas will increase.

The number of intercity bus routes will increase.

By 2035, the share of the rolling stock of automobile and urban public transport, equipped for the transportation of people with limited mobility, in the total number of rolling stock of automobile and urban public transport will be 55 percent.

The satisfaction of the population with the quality and availability of passenger traffic will increase.

The abandonment of the project will limit the spatial mobility of the population, as well as the socio-economic development of the eastern part of the territory of the Arkhangelsk region.

Improving the quality and comfort of the urban and rural environment of the Arkhangelsk region and creating conditions for their further development.

The quality of the environment is a complex characteristic of territories and their parts, which determines the level of comfort in the everyday life of the population. This characteristic is formed through improvement measures that provide not only aesthetic and engineering training, but also integrated sustainable development at the intersection of social, economic and environmental aspects.

Low quality index of the urban environment. The average indicator for the Arkhangelsk region remains low with decreasing rates and varies from 123 to 154 out of 300 points maximum.

The uneven level of quality of the environment for life in urban and rural settlements of the Arkhangelsk region due to urbanization, as well as due to the territorial isolation of individual settlements and the lack of minimal infrastructure.

Low rates of improvement of the environment due to the adoption of insufficient measures to transform the territories without a common vision and a systematic approach.

The lack of a unified concept for the development of outdoor advertising and advertising in urban passenger transport, as well as the presence of visual noise due to the high level of wear and dilapidation of facades.

Significant deterioration of a large number of public areas, characterized by the lack of utilities, insufficient lighting, and poorly developed infrastructure. On the territory of the Arkhangelsk region, there are 284 undeveloped public areas with a total area of 381.2 hectares, or 77.2 percent of the total number of public areas, of which 20 are presented in the form of city parks.

The unfavorable state of yard areas is an important problem. At present, there are 11,219 yard areas in the Arkhangelsk region in need of improvement, with a total area of 6,286.8 hectares, or 85.4 percent of the total number of yard areas.

Preservation of the traditional wooden architecture of the Russian North as a cultural heritage.

High potential for the renovation of unused or obsolete territories of former factories and plants, in particular, the territories of the Arkhangelsk brewery built in 1884 and the Arkhangelsk State Circus built in 1905, located in the center of the city of Arkhangelsk.

Low level of public participation in the territorial development of the urban and rural environment of the Arkhangelsk region.

The widespread use of the institution of territorial public self-government in the Arkhangelsk region, which is characterized by low efficiency due to the lack of active management strategies.

Low budget opportunities of the municipalities of the Arkhangelsk region for the modernization of urban and rural settlements of the Arkhangelsk region.

The quality and comfort of the urban and rural environment will increase. The ecological state and appearance of urban and rural settlements in the Arkhangelsk region will improve. Public and courtyard areas will be landscaped. The development of the urban and rural environment will be carried out with the participation of residents and taking into account physical, spatial and information accessibility.

Implementation of modern approaches to improve the urban and rural environment: from the improvement of individual territories to the creation of an integrated vision of their development with public participation and flexible opportunities for revitalizing spaces and investments.

To form the urban and rural environment, a systematic approach should be applied, which is a way of organizing the process of a comprehensive study of the relationships and patterns of development. For the purpose of strategic planning, a number of interrelated projects are proposed, the implementation of which should be carried out in parallel.

Public areas are centers of social gravity, recreation and communication. They are open spaces (streets, squares, parks, squares, embankments and beaches), as well as public buildings and premises. Public spaces play an important role in ensuring the productivity of human interaction with the environment. At the moment, the public areas of the Arkhangelsk region are characterized by significant wear and tear and poor infrastructure. According to the methodological recommendations for the integrated development of single-industry towns, the improvement of everyday spaces should go through 5 main steps that are included in the project.

Improving the physical condition of public territories with the help of rational functional zoning of territories and their filling with landscaping elements.

Creation of a pastime infrastructure for different age categories of the population.

Revival of local attractions.

Renovation of social infrastructure facilities and adjacent territories.

Transformation of abandoned buildings and territories.

The quality of public areas will improve.

An algorithm for the improvement of public territories with the participation of the population will be developed, allowing to take into account the strategic development of individual settlements.

By 2022, 284 public areas of the Arkhangelsk region (including city parks) will be landscaped, which will account for 77 percent of their total number, in accordance with the state program of the Arkhangelsk region "Formation of a modern urban environment in the Arkhangelsk region (2021-2025)". Thus, within the framework of the Strategy, the following forecast, given in Table 6, is relevant.

Table 6. Forecast for the improvement of public areas

Year	2025	2030	2035
Number of well-maintained public areas	296	333	370
Percentage of total (%)	80	90	91-100

The rejection of the project will lead to a deterioration in the ecological state and appearance of the settlements of the Arkhangelsk region. The low level of improvement of public territories and settlements in general will have a negative impact on the environmental quality index.

Yard territories are spaces where local communities are formed, which are a necessary element of harmonious development. At present, the state of yards in the Arkhangelsk region is a serious problem. In order to determine the tasks and prioritize in relation to courtyard areas, it is necessary to improve them together with the residents, making a joint choice of a solution in each specific case.

Ensuring safety and psychological comfort by defining the boundaries of private and public space.

Formation of the frame of pedestrian and transport links.

Formation of the main functional areas (entrance, parking, quiet rest, noisy rest, technical maintenance) and their rational location in each yard improvement project.

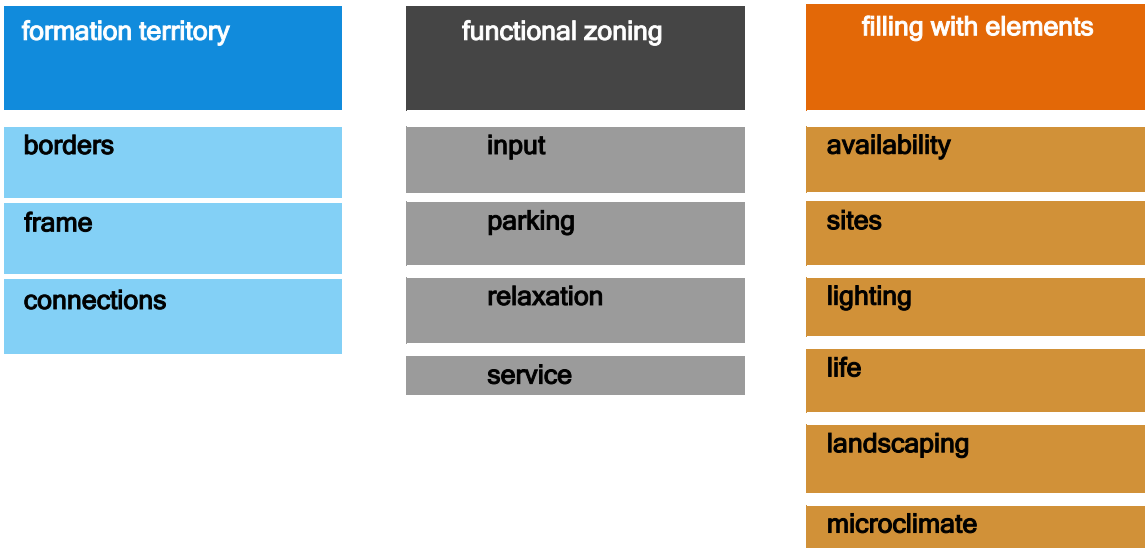
Creation of accessibility infrastructure for people with limited mobility.

Increasing the functional diversity of recreation areas, including playgrounds for children and adults, as well as walking pets.

Optimization and reorganization of existing parking spaces. Improving the lighting of yard areas.

Ensuring the availability of household equipment. Landscaping and reducing the number of neglected areas.

Increasing the level of microclimatic comfort of courtyard areas with the help of green spaces and additional infrastructure.



Picture. 16. Factors affecting the improvement of courtyard areas

The quality of yard areas will improve. An algorithm for the improvement of yard areas with the participation of local residents will be developed (Figure 16).

By 2022, 11,219 yard territories of the Arkhangelsk region will be landscaped, which will account for 85 percent of their total number, in accordance with the state program of the Arkhangelsk region "Formation of a modern urban environment in the Arkhangelsk region (2021-2025)". Thus, within the framework of the Strategy, the following forecast, given in Table 7, is relevant.

Table 7. Forecast for the improvement of yard areas

Year	2025	2030	2035
Number of well-maintained yard areas	11 880	12 540	13 200
Percentage of total (%)	90	95	96-100

Refusal of the project will lead to a low rate of improvement of yard areas, which will lead to dissatisfaction of local residents with the quality of the urban and rural environment.

Public participation and real consideration of opinions in solving issues of urban and rural

development increase the satisfaction of the population with the environment and quality of life due to the realization of the need to influence what is happening. It is important to define common and individual responsibilities, creating opportunities and incentives for cooperation in the formation of territories. Participation in planning reduces the number of conflicts and increases trust between public authorities and local residents with the prospect of joint management.

Development of a public participation regulation with accessible mechanisms of interaction and a determined level of public involvement at all stages.

Identification of all stakeholders and their inclusion in the processes of landscaping.

Initiation and moderation of joint interactive design and implementation of projects, taking into account relevant public information.

Creating a platform for feedback and evaluating the result of joint activities.

Involvement of the public in the management of the territory and participation in socially significant events.

A high level of responsibility will be achieved due to the emergence of the opportunity for the population to influence the formation of the urban and rural environment.

An effective process of communication with residents will be organized.

An understanding of the hidden problems and needs of the territories in each case will be achieved.

The quality and efficiency of design solutions will improve. The social significance and sustainability of projects will increase.

The efficiency of the public institute for the development of territories will increase.

The number of projects aimed at the improvement of territories implemented with the participation of citizens will increase from 10 percent in 2018 to 20 percent in 2022 in accordance with the state program of the Arkhangelsk region "Formation of a modern urban environment in the Arkhangelsk region (2021 - 2025)". Thus, within the framework of the Strategy, the following forecast is relevant (Table 8):

Table 8. Forecast of improvement projects with the participation of citizens

Year	2025	2030	2035
Percentage of land improvement projects with citizen participation (%)	30	40	50

Refusal of the project increases the risks of dissatisfaction of the population with new projects for the improvement of territories.

The use of the urban concept of "new urbanism" revives compact settlements, based on the functional differentiation of the territory and existing local traditions to develop an effective environment aimed at meeting the needs of residents. The principles of such a compact development can be used at different levels: from the strategic policy of the Arkhangelsk region to the development of a vision for a particular settlement and the improvement of its individual territories. The project allows to form and control the state of the urban and rural environment with an integrated approach to quality, where the main priority is the comfort of residents.

Increasing pedestrian accessibility and increasing the number of routes between the main objects of everyday life with the creation of comfortable and safe conditions.

The interconnection of territories through the organization of networks and hierarchies of streets that will ensure the redistribution of transport, convenient walking, peace in courtyards and the possibility of protecting private land.

Creation of conditions for a diverse development that attracts investments of different levels and creates a multifunctional environment.

Mixed use (multifunctionality) of buildings and territories for self-sufficient life on a local scale.

Development and observance of general rules and norms for the quality of architecture and urban planning.

Creation of a local community by stimulating relationships between various social groups of the population and their joint participation in the improvement of the territory.

Formation of the optimal building density using various types of buildings and plots for the efficient use of territories and resources.

Creation of an efficient ecological network of public and individual transport, providing for the daily use of non-motorized vehicles and walking to move. Sustainable urban planning aimed at preserving the environment, green areas and reducing the impact on them with the help of environmentally friendly materials and technologies.

Comprehensive observance of the above development principles leads to an increase in the quality of life of local communities and residents in general. General plans and integrated schemes for the development of territories will be updated. Equal comfortable conditions for urban and rural environments will be created for residents of different settlements. A unified concept for the development of outdoor advertising and advertising in urban

passenger transport will be developed, as well as unified rules for the maintenance and repair of building facades in cities.

The quality index of the urban environment will increase by 2035 to the state of "good" (201 - 250 points out of 300) in all cities of the Arkhangelsk region, which are monitored.

The rejection of the project will become an obstacle to the formation of a common vision in planning and will lead to uneven development of individual territories and the settlements themselves as a whole. This will significantly reduce the effect of the implementation of major projects for the improvement of territories, the success of which directly depends on an integrated systematic approach in the general context of development.

Revitalization involves the functional change of obsolete or unused territories to recreate and revitalize the environment while maintaining their historical appearance and value. Such transformations serve cultural, recreational, commercial and economic purposes, and support for their implementation can be initiated by both local governments and business communities, and residents of the Arkhangelsk region. According to the guidelines for the implementation of projects to improve the quality of the environment of single-industry towns, the revitalization of territories is a strategic sequential process that includes 3 stages: preparation, activation and development.

Development of a vision concept for obsolete or unused territories with a set of new functions based on research and analysis of priority areas for the development of such territories.

The use of territories based on their individual characteristics with the involvement of residents to participate in socially significant events. An active information campaign, openness to interaction and stimulation of feedback are important principles in the dynamics of the process.

Systematic development of territories through their improvement and integration with the city, as well as improving the fund of premises and spaces. This process is designed taking into account the available investments and strategic spatial solutions.

The quality of the environment will improve in terms of its functionality and satisfaction of local needs.

Entrepreneurial and investment opportunities will develop.

New social spaces and creative clusters will be created. There will be an activation of awareness of local identity.

By 2035, the quality index of the urban environment will increase to the state of "good" (201 - 250 points out of 300) in all cities of the Arkhangelsk region, which are monitored.

The abandonment of the project will become an obstacle to the transformation of obsolete or unused spaces, which will affect the dynamics of territorial renewal.

Improving the quality of the environment and creating the prerequisites for creating an environmentally oriented growth model for the economy of the Arkhangelsk region, which ensures the preservation of a favorable environment to achieve a high quality of life for each person.

High risk of anthropogenic impact. The presence on the territory of the Arkhangelsk region of objects of accumulated harm to the environment; high concentration of technogenic and natural-anthropogenic complexes around the large industrial centers of the Arkhangelsk region.

Regulatory inefficiency. The absence of regional environmental quality standards, which does not allow assessing the potential for industrial development in terms of environmental impact.

The problem of providing high-quality drinking water. An increase in the gap in the level of provision with high-quality drinking water in urban and rural settlements. Low rates of development and approval of projects for the organization of sanitary protection zones for sources of domestic and drinking water supply.

On the territory of the Arkhangelsk region there are 102 wastewater treatment facilities, most of which do not provide wastewater treatment up to standard indicators. The main reasons are high physical deterioration (by 74.7 percent on average), the use of outdated wastewater treatment technologies, a significant overload of treatment facilities both in terms of volume and concentrations of pollutants.

Lack of an effective waste management system. Growth in production and consumption waste volumes in the absence of an effective waste management system.

In 2035, the environment will be perceived in society as a guarantee of ensuring individual and public health of the population. Reducing the negative impact of current economic activity and the elimination of the results of past economic activity will affect a significant improvement in the environmental situation. The population will be provided with access to high-quality drinking water and health-promoting facilities. By creating a highly efficient waste management system, a significant reduction in the impact of waste on the health of residents and the environment will be achieved.

The project involves increasing the efficiency of regional environmental supervision, improving the environmental monitoring system, as well as developing mechanisms for public environmental control. The implementation of the project is aimed at reducing the overall anthropogenic load on the environment by increasing the environmental efficiency of the economy of the Arkhangelsk region.

Improving the efficiency of state environmental supervision, industrial and public control in the field

of environmental protection and state environmental monitoring.

Ensuring rational nature management, including minimizing the damage caused to the environment during the exploration and production of minerals.

Reducing pollution and reducing the level of air pollution in cities and other settlements of the Arkhangelsk region.

Creation of conditions for reducing the negative impact on the environment.

Increasing the efficiency of protecting forests from harmful organisms and the adverse effects of the environment, creating conditions for the rational, multi-purpose, sustainable and efficient use of forests. Organization of state forest pathological monitoring by ground methods by 2020.

Ensuring compliance with the requirements of legislation in the field of forest relations, including the prevention of illegal logging, increasing the efficiency of restoring dead and cut down forests, and the quality of breeding and genetic properties of planting material.

The development and modernization of the existing automated observational network will be ensured. Regional environmental quality standards for the Arkhangelsk region will be determined.

By 2025, a radical reduction in the level of atmospheric air pollution in large industrial centers will be ensured, including a reduction of at least 20 percent of the total volume of pollutant emissions into the atmospheric air in the most polluted cities.

The ratio of the area of forests where sanitary and recreational measures were carried out to the area of dead and damaged forests will be 0.2 percent.

By 2021, the volume of payments to the budget system of the Russian Federation from the use of forests located on forest fund lands, per 1 hectare of forest fund lands, will amount to 79.9 rubles. The forest cover of the territory of the Arkhangelsk region will be kept at the level of 54 percent.

There will be an introduction of an intelligent system for monitoring and controlling the state of the environment for the purpose of modeling the consequences of the impact of anthropogenic factors.

Widespread use of environmental audit will be ensured when creating new industrial facilities in the Arkhangelsk region.

There will be an increase in investments for the purposes of technological re-equipment of enterprises in the Arkhangelsk region.

The specific indicators of emissions and discharges of pollutants into the environment will decrease.

The rejection of the project entails the risk of negative consequences of environmental degradation, including a negative impact on the quality of life and health of the population, the state of flora and fauna.

The project is aimed at eliminating the consequences of the negative impact on the environment of past economic activities, as well as minimizing damage from current economic activities. The implementation of the project will improve the environmental situation in the municipal districts of the Arkhangelsk region, which are subject to the influence of objects of accumulated harm on the environment, and will also increase the investment attractiveness of territories that previously experienced a negative impact.

Elimination of the negative consequences of the impact of anthropogenic factors on the environment.

Rehabilitation of territories and water areas contaminated as a result of economic and other activities.

By 2025, measures will be taken to eliminate the accumulated environmental damage in the specially protected natural area of federal significance - the Franz Josef Land archipelago.

An annual increase in the area of land rehabilitated as a result of the elimination of oil pollution and damage from economic activities will be ensured.

The number of residents living in unfavorable environmental conditions will be reduced by at least 4 times.

The involvement of ecologically rehabilitated territories, restored habitats of objects of the animal and plant world into economic circulation and an increase in their investment attractiveness will be ensured.

The rejection of the project entails the risk of pollutants entering the groundwater, pollution of surface and underground water bodies, including water supply sources.

The project is aimed at preserving and restoring the protective and environment-forming functions of the natural ecological systems of the Arkhangelsk region, as well as ecological systems associated with providing the population with water and contributing to health protection. The implementation of the project will ensure environmental rehabilitation and conservation of water bodies, reproduction and conservation of biological diversity, and improvement of the environmental conditions of human life.

Prevention of pollution of surface and ground waters, improvement of water quality in polluted water bodies, restoration of water ecological systems.

Improving the efficiency of the activities of the territorial bodies of the Federal Service for Supervision of Consumer Rights Protection and Human Welfare in the field of organizing sanitary protection zones for sources of drinking and domestic water supply.

Improving conservation and management measures natural resources, including forest, hunting and aquatic biological resources, to preserve the ecological potential of forests.

Expansion of measures for the conservation of biological diversity, including the development of a

system of specially protected natural areas.

The time for development and approval of projects for the organization of zones of sanitary protection of sources of drinking and domestic water supply as part of a water intake unit will be reduced.

By 2025, the quality of drinking water for the population will be improved, including for residents of settlements that are not equipped with modern centralized water supply systems.

By 2035, 90 percent of drinking and domestic water supply sources will meet hygienic standards for sanitary-chemical, microbiological, parasitological and radiological indicators.

The share of contaminated wastewater in the total volume of wastewater discharged into water bodies to be treated will be reduced to 36 percent.

The physical wear and tear of wastewater treatment facilities in the Arkhangelsk Region will be reduced to a level not exceeding 40 percent.

By 2035, 75 percent of the population will be provided with high-quality drinking water.

Non-state mechanisms for the conservation of natural ecological systems will be developed - voluntary certification.

An increase in the environmental and social responsibility of business in the Arkhangelsk region will be ensured.

The active participation of the population in the discussion of environmental problems, as well as the promotion of environmentally responsible behavior will be ensured.

By 2035, an inventory of all specially protected natural areas located in the Arkhangelsk region will be carried out.

The abandonment of the project will lead to risks of deterioration in the quality of the environment, which is necessary for favorable human life and sustainable economic development. The project involves the creation on the territory of the Arkhangelsk region of a qualitatively new strategy and system for handling production and consumption waste, which will ensure the prevention and reduction of waste generation, organize the re-engagement of recyclable waste components as raw materials into the economic circulation, minimize the amount of waste to be disposed of, create incentives for innovations in the field of waste processing, and ensure the responsible attitude of the population and businesses to waste management. The implementation of the project will ensure the creation and development of infrastructure for environmentally friendly waste disposal, their neutralization and disposal,

Creation of an effective system for handling production and consumption waste, as well as the formation of a responsible approach to waste management among the population.

An integrated system for handling waste and secondary material resources will be created.

Economic incentives will be formed for enterprises engaged in the field of waste recycling.

In all municipalities of the Arkhangelsk region, an infrastructure for the separate collection, sorting, neutralization and disposal of waste will be created.

Economic incentives for the introduction and use of low-waste and resource-saving technologies and equipment will be formed.

The prerequisites for the transition to the "Zero waste disposal" model will be formed.

By 2025, efficient production and consumption waste management will be ensured, including the elimination of all unauthorized dumps identified as of January 1, 2018 within the boundaries of the cities of the Arkhangelsk region.

The abandonment of the project entails the emergence of serious risks for the environmental safety of the Arkhangelsk region, reduces the economic effect of the use of waste as a resource.

The project is aimed at the development of green building in the Arkhangelsk region, which involves the formation of experience in implementing the best available technologies in the design, construction, development and operation of real estate. As a result of the project implementation, norms and rules will be formed to ensure the minimization of the negative impact of real estate on the environment.

Implementation of a green building system, which includes minimizing the negative impact of a property on the environment, rational use of natural resources required during the construction and operation of real estate, the use of advanced energy efficient and energy-saving solutions.

There will be an increase in the volume of construction of buildings and structures certified in the system of voluntary environmental certification of real estate objects.

The abandonment of the project entails a decrease in the environmental efficiency of buildings and structures being put into operation, and also prevents a decrease in the level of consumption of energy resources.

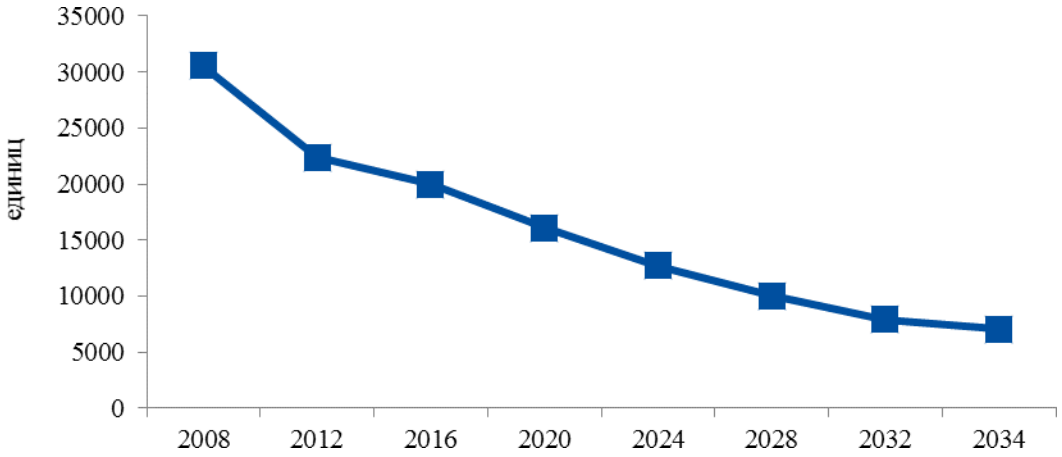
Conclusion

The long-term development of the Arkhangelsk region will be carried out within the framework of the general federal socio-economic policy, taking into account regional specifics. First of all, this implies participation in the implementation of federal sectoral strategies, long-term programs, and priority national projects.

In accordance with the forecast for the socio-economic development of the Arkhangelsk region for the period up to 2035, the average annual index of investments in fixed assets during 2020-2035 will be 105.39 percent.

Taking into account the projected level of the investment deflator index, comparable to the inflation rate forecast by the Ministry of Economic Development of the Russian Federation for the long

term, in current prices, the annual volume of investments should increase from 108.92 billion rubles in 2021 to 486.83 billion rubles in 2035 year. Thus, the amount of financial resources required for the implementation of the Strategy will be about 4.4 trillion. rubles from 2021 to 2035 (Figure 17).



Picture 17. Forecast of the number of registered crimes, units

The mechanisms for resource provision of the Strategy, in addition to government programs, are:

intensification of activities to submit applications for financing of planned investment projects of capital construction in all existing and developing federal programs;

wide use of funds from the federal targeted investment program, the Investment Fund of the Russian Federation; federal budget subsidies, subsidies and other intergovernmental transfers;

activation of participation in priority national projects;

inclusion of investment projects of the Arkhangelsk region in projects of federal long-term sectoral strategies, concepts, programs, including priority national projects;

attraction of funds from the regional and federal budgets, as well as extra-budgetary sources to finance programs and projects within the framework of comprehensive investment plans for the modernization of single-industry towns;

strengthening financial discipline and ensuring strict observance of the undertaken obligations for the intended use of attracted budgetary funds;

interaction of the Arkhangelsk region with Russian and foreign financial organizations, including for the purposes of issuing debt financial instruments aimed at raising funds;

implementation of direct and portfolio private investments;

cooperation with specialized development institutions and participation in projects of both international and macro-regional levels.

Directions for increasing budgetary self-sufficiency include: privatization and use of state and municipal property;

stimulating the transition of agricultural entities, leading personal subsidiary plots, to entrepreneurial forms;

optimization of budget expenditures in the social sphere through the formation of a targeted principle for the provision of social services;

transfer of non-core functions of state and municipal institutions to outsourcing;

development of municipal-private partnerships, mainly in areas requiring budgetary support (housing and communal services, transport);

consolidation of municipalities of the Arkhangelsk region, optimization of the system of local governments;

optimization of the system of benefits;

increasing the tax base for property tax by bringing the cadastral value of real estate to the market level. The system of 7 strategic directions is linked to 7 long-term strategic goals and is generally aimed at creating conditions for the integrated development of human potential and the consolidation of the population in the republic through providing basic needs in education, healthcare, infrastructure, a favorable environment, jobs, including highly qualified, concomitant development of services and institutions (table 9).

Table 9. Priority areas and strategic goals of the Strategy

Strategic Direction	Strategic goal
Infrastructure for life	Improvement of transport, engineering, housing and communal infrastructure as a

	necessary condition for the development of the economy and the social sphere
Development of the economy and entrepreneurship	creating new jobs, increasing investment attractiveness, pursuing a cluster policy, developing traditional industries and services, creating conditions for the development of new industrial clusters
Development of tourism and hospitality industry	preservation of the cultural and historical heritage of the Arctic regions: Yamal - Nenets Autonomous Okrug, Krasnoyarsk Territory, Republic of Sakha (Yakutia), Chukotka Autonomous Okrug, Komi Republic, creation of a modern hospitality industry in the Arctic regions: Yamal - Nenets Autonomous Okrug, Krasnoyarsk Territory, Republic of Sakha (Yakutia), Chukotka Autonomous Okrug, Komi Republic.
Sustainable spatial development	expansion of international cooperation, implementation of a balanced spatial policy aimed at strengthening the economies of municipalities in the regions of the Russian Arctic: the Murmansk region, the Republic of Karelia, the Arkhangelsk region, the Nenets Autonomous Okrug, the creation of a comfortable urban environment, the introduction of new technologies
Enhancing environmental sustainability and safety	implementation of the value system of sustainable development, green economy, ensuring the reproduction of a healthy population, as well as the growth of life expectancy and quality by solving environmental problems to pass on to future generations for subsequent multiplication of the opportunities that the region currently has
social development	ensuring a high quality of life for the population by increasing the availability of high-quality social services, the implementation of spiritual and cultural development, interethnic harmony
Effective Governance: Implementation Tools	creation of a modern development management system, introduction of advanced practices of public participation, new instruments of tax, budget and investment policy

The implementation of the Strategy is designed to respond to the main demographic challenge of the long-term development of the Russian Arctic regions. In conditions of rather high mobility of the population, people choose to live in those regions where they can realize their potential. The answer to this should be an appeal to the needs and capabilities of each inhabitant of the regions of the Russian Arctic and positioning the state as an assistant, the role of civil society in governance should be radically changed, mechanisms for effective feedback from residents should be established. Therefore, at the center of the Strategy are people and their well-being.

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Issue Article

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DESIGN ETHNOGRAPHY METHODS IN COSTUME DESIGN

Abstract: *The article discusses the methods of design ethnography, which allow designing clothing collections in ethnic regional style. Preserving the relationship with their community will not allow cultural traditions to collapse. The aim of the work is the formation of new aesthetic standards of clothing design, their use in design practice.*

Key words: *costume design, design ethnography, cultural heritage, Russian costume.*

Language: *Russian*

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МЕТОДЫ ДИЗАЙН-ЭТНОГРАФИИ В ПРОЕКТИРОВАНИИ КОСТЮМА

Аннотация: *В статье рассмотрены методы дизайн-этнографии, позволяющие проектировать коллекции одежды в этническом региональном стиле. Сохранение взаимосвязи со своей общностью не позволит разрушиться культурным традициям. Целью работы является формирование новых эстетических норм проектирования одежды, использование их в практике дизайна.*

Ключевые слова: *проектирование костюма, дизайн-этнография, культурное наследие, русский костюм.*

Введение

С одной стороны в самом модном костюме как объекте художественной деятельности заключен источник теоретических обоснований и практических действий, нравственных подходов, композиционно обоснованных правил гармонии.

С другой стороны, внесение в теорию и практику проектирования костюма передовых идей современного научного знания позволяет обновить систему понятий и тем самым обогатить профессиональное мировоззрение.

В современном обществе культурная картина мира представляет собой лоскутное одеяло, состоящее из множества фрагментов. Одним из мировых трендов является тренд на многообразие, и задача дизайнера состоит в том, чтобы попытаться отыскать то, чем мы (русские, сибиряки) отличаемся от других в этом глобальном мире.

Актуальность темы проектирования коллекции одежды в этническом региональном сибирском стиле состоит в том, чтобы найти уникальный локальный язык, понятный миру и потребителям.

Мир, в котором мы живем, заставляет искать четкие ориентиры, преодолевать разноречивость многих представлений и знаний, образующихся в результате потока информации. В поисках

цельности, в стремлении упорядочить свои знания, человек обращает свой взор к истории, стремится осмыслить себя в сложных связях не только с настоящим, но и с прошлым. Здесь внимание его устремляется на все, что рождает ощущение непреходящих ценностей. Именно к таким ценностям относит он нестареющее, никогда не утрачивающее своей привлекательности художественное мышление своих предков. Не случайно сегодня выходит изрядное количество книг и материалов по народному и декоративно-прикладному искусству. Народное искусство воспитывает чуткое отношение к прекрасному, способствует формированию гармонично развитой личности. Основанное на глубоких художественных традициях, народное искусство входит в жизнь, благотворно влияет на формирование человека будущего. Все чаще произведения народного и декоративно-прикладного искусства проникают в быт людей, формируя художественный вкус, создавая эстетически полноценную среду, определяющую творческий потенциал личности [1].

Коммуникативная функция моды сегодня способна раскрывать большие возможности общения с помощью набора элементов различных стилей одежды. Анализируя использование традиционных конструкций, форм, фактур, декора в современных коллекциях, представленных в последние сезоны на мировых подиумах, можно отметить, что на сегодняшний день самым многоликим и актуальным является фольклорный стиль. Через призму моды можно представить полную панораму становления и развития национальных традиций, показать их многообразие, самобытность, неисчерпаемый потенциал. Этномода — это пространство современного мифа, легенды, сказки, нарисованное красками древнего орнамента и новой мифологии, которое смешивает в своей зоне большое количество современных тенденций. Каждая культура имеет характерные черты своего фольклорного стиля, который можно считать с цветовых сочетаний, силуэтных форм, расположения рисунка орнамента, с эмоциональной «метки» внешнего облика этноса. Начинающие дизайнеры ориентируются в представлении национальных стилей в моде через свой внутренний код, своё чутье, свою интуицию. Идентификация себя, как частицы большого многомиллионного города, философия отношений традиций и современности в одежде — это картина мира современного человека, городского или сельского жителя, желающего держать связь со своими корнями. Именно эта тенденция сохранения взаимосвязи со своей общностью не дает разрушаться культурным традициям. В то же время существует потребность ускорения синтезированных, абсолютно созвучных времени культурных ценностей. Существующее противоречие между традициями и инновациями довольно легко уживается в современном костюме, совмещая модные тренды, ультрасовременные технологии и самобытные источники. Ускорение темпов социального развития сопровождается периодической «переоценкой ценностей личности», трансформацией культурных образцов, сменой модных стандартов [2].

Становление новых социокультурных связей и отношений неразрывно связано с процессами всеобщей глобализации. И в этот период особенно острым становится вопрос самоидентификации как отдельной личности, так и групп людей, объединяющихся в сообщества и выражающих общие интересы и взгляды на разные аспекты жизни. Эти процессы становятся объектом внимания дизайнеров, использующих объекты культуры, которые являются результатом смещения социокультурной парадигмы, как ресурс для разработки различных проектов. В статье рассматриваются вопросы актуальности обращения дизайнеров к этническим источникам, как к эффективному инструменту проектирования современной одежды. Обозначены причины и предпосылки интереса к этническим направлениям в дизайне костюма. Понятие «национальная культура», недавно казавшееся незыблемым, трансформируется. Глобализация, определившая основные векторы культурных трансформаций начала XXI в., стала причиной активного взаимодействия национальных культур, как конструктивного, так и деструктивного. Следствием «деформации культур», оказался «маргинальный человек», принадлежащий одновременно двум или нескольким культурам и не принадлежащий целиком ни к одной, способный ощутить многообразие способов жизни, преодолеть ограниченность этнической односторонности, но утративший чувство целостности и исключительности этнического мировосприятия. Возникла потребность в социальной интеграции, в формировании общих культурных идей и ценностей, преобладающих над частными, национальными, религиозными или субкультурными. Процессы коммуникации между культурами с одной стороны, и процессы национальной самоидентификации с другой стороны, стали важными культурными детерминантами современной моды [3].

Культурное многообразие современных народов увеличивается, и каждый из них стремится сохранить и развить свою целостность и культурный облик. Конкретный современный человек выступает носителем конкретной культуры своего сообщества. Культура этноса, как

совокупность культурных явлений, сегодня необходима народу для его жизнедеятельности и развития. Появилась необходимость идентификации себя в глобальном мультикультурном пространстве современного мира. Мода показывает, как культура определенного этноса, ассимилируя традиции и инновации, соединяет глобализацию социума и идентичность конкретного человека [4-6].

Целью работы является формирование новых эстетических норм проектирования одежды, использование их в практике дизайна.

Наиболее важные направления развития темы видятся в использовании богатейшего культурного наследия Сибирского региона. В работе рассматривается зодчество Сибири. Несомненно, зодчество как многоаспектное культурное явление сочетает профессиональные и “народные” компоненты. Для его понимания требуются специфические подходы различных наук, и немалую роль играет этнография. Остановимся на периоде освоения сибирского пространства русскими, семантике сооружений и их частей. Внешнее оформление крестьянского жилища в Сибири отличалось сдержанностью, прекрасным чувством меры, гармоничностью в украшении всех его частей, начиная от наличников, карнизов, причелин и кончая крыльцами, воротами, калитками.

Проблема сохранения этого наследия стоит очень остро, так как большинство построек выполнены из дерева, который, в отличии от камня, является недолговечным материалом. Запечатлеть наследие и перенести в коллекцию в виде орнаментики является очень важным этапом работы над будущей коллекцией в этническом стиле.

Ценность креативных идей и инноваций в современном мире все более возрастает. Для большинства предприятий они становятся решающим фактором в конкурентной борьбе. Предлагаемые продукты и услуги становятся все более похожи друг на друга. И все же поиск новых идей часто предоставляется случаю и ведется не целенаправленно.

Существует огромное количество способов дизайна и применение их в различных областях дизайна. Неотъемлемой частью современных методов и приемов дизайна являются разговоры, беседы с заинтересованными сторонами, членами команды, клиентами и самое главное с людьми, которые в конечном итоге используют разрабатываемые продукты, системы и услуги. Эти методы и приемы играют немаловажную роль в приобретении дизайнерами опыта и установлении доверительных взаимоотношений, потому что они помогают найти соответствующие слова в нужное время [7].

Из проанализированных методов наиболее подходящим является метод дизайн-этнографии. Этот метод позволяет за короткий промежуток времени получить достаточное количество информации с помощью методов выборочного описания опыта, изучения дневников и фотографий, использования культурного зондирования, контекстного исследования и различных форм наблюдения, включая модифицированные версии включенного наблюдения.

Целый ряд креативных техник, появившихся в 80-е годы прошлого века, может помочь в поисках новых идей. Дизайн-этнография в своем стремлении глубоко прочувствовать и осознать мир пользователя, по сути, приближается к иммерсионным методам традиционной этнографии.

Цель поискового исследования в области дизайна четко видна на примере следующего определения: этнография - изучение людей в их естественных средах; описательный отчет о социальной жизни и культуре в определенной социальной системе, основанный на качественных методах (например, подробных наблюдениях, неструктурированных интервью, анализе документов).

Дизайн-этнография представляет собой широкий подход, охватывающий несколько методов исследования, сфокусированных на всеобъемлющем и эмпатическом понимании пользователей, их жизни, языка, а также поведения.

Собрать наиболее полную информацию по теме – наиважнейшая задача. Заслуживает внимания метод «Персонажей». Персонажи позволяют объединить типичные описания поведенческих шаблонов пользователей в репрезентативные характеристики, чтобы смягчить фокус дизайна, протестировать сценарии и лучше передать дизайн. Персонажи, созданные на основе сведений, собранных у реальных пользователей во время полевых исследований, дают идеальное решение, интегрируя типичные шаблоны поведения в значимые и поддающиеся описанию характеристики. Методы и приемы дизайна являются очень важными, так как они ставят своей задачей установление доверительных взаимоотношений между дизайнерами и теми, кто будет в конечном итоге использовать разрабатываемые продукты.

Накоплен огромный опыт наблюдения за людьми, которые совершенно по разному относятся к существующему в современном мире феномену под названием «русский традиционный костюм». От преданных поклонников фольклора и этнографии, которые трепетно изучают и восстанавливают костюм, до неумелого подражания неоязычников, не лишенных

сочинительства. Предпочтения у этих категорий потребителей разные. Если первых интересует период, регион бытования костюма, вторых больше увлекает отсылка к обереговым, охранительным функциям, этнографические данные их мало интересуют. В Новосибирске большое количество людей, способных оценить одежду в этническом стиле, что говорит о перспективности направления.

Тесной и органичной является взаимосвязь костюма и архитектуры, что находит выражение в единстве образного решения, похожести силуэтов, закономерностях пропорционального внутреннего членения формы. Не случайно в древности одежду называли «домом человеческого тела», подчеркивая тем самым родство между двумя видами творчества - зодчеством и костюмом. В названиях деталей женского народного костюма и деталей оформления жилища прослеживается перекличка: кисть - кисть у пояса и выступающий нижний конец причелины, украшенный сквозной резьбой; кокошник - головной убор замужней женщины и верхняя декоративная деревянная часть обрамления наружного оконного проема; серьги - женское украшение и деталь оформления нижней части наличника[8-10].

Построенные из дерева дома, культовые сооружения поражают разнообразием форм, сплетением архитектурных стилей и высоким мастерством отделки. Но есть один минус: проблема сохранения этого наследия стоит очень остро, так как большинство построек выполнены и дерева, который, в отличии от камня, является недолговечным материалом.

Привлечь внимание к этой проблеме посредством создания коллекции одежды в этническом стиле явилось мотивирующим фактором в работе. Опрос потребителей и изучение покупательского спроса в Новосибирске показали, что большое количество людей способны оценить одежду в этническом стиле, что говорит о перспективности направления (рис.1).

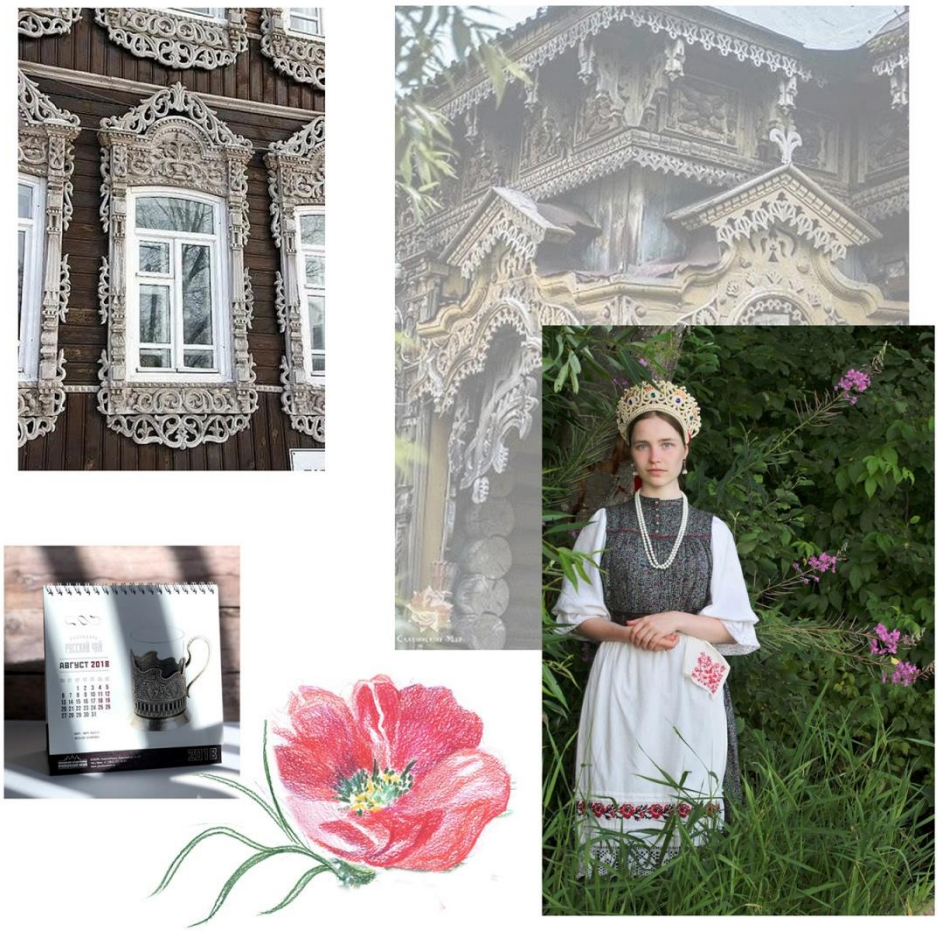

Рисунок 1 - Атмосферокарта будущей коллекции

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APPLICATION OF STATISTICAL METHODS TO ASSESS THE EFFECTIVENESS OF THE SALES PROCESS OF CARS AND SPARE PARTS IN THE «AVTOEXPRESS-VLADIMIR» DEALERSHIP

Abstract: *The analysis of Np-chart and U-chart based on statistical processing of the number of violations of technology and the quality level of supplied spare parts and components for pre-sale preparation of cars in the "Avtoexpress-Vladimir" dealership was performed in the article. The most rational version of the sales process of cars and spare parts in accordance with the normalized U-chart was proposed.*

Key words: *dealership, car, spare part.*

Language: *English*

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Introduction

The effectiveness of the sales process of cars and spare parts to them in the dealership is evaluated by a number of indicators. According to analytical formulas, the actual values of the effectiveness indicators of the sales process of products of automobile plants for a certain period of time are determined. However, it is possible to track the stability of the sales process by analyzing the statistical processing of the results of the experiment.

In this article, the analysis of the evaluation of the effectiveness of the sales process of cars and spare parts in the "Avtoexpress-Vladimir" dealership was carried out. The analysis of the activity and quality management system of the "Avtoexpress-Vladimir" dealership was presented by the authors in the works [1-2].

The effectiveness indicators of the sales process of cars and spare parts

The following indicators and their normative (basic) values are used to assess the effectiveness of the sales process of cars and spare parts in the "Avtoexpress-Vladimir" dealership:

1. Implementation of planned indicators for net profit (1)

$$P = (P_a/P_p) \times 100\%, \quad (1)$$

where P_a is the actual indicator of net profit received for the analyzed period of time; P_p is the planned indicator of net profit for the analyzed period of time. The base value is more than 100%.

2. Implementation of the sales plan in pieces

P_1 is the indicator of implementation of the sales plans for the current period (2)

$$P_1 = (N/P_{cur.}) \times 100\%, \quad (2)$$

where N is the total number of sales; $P_{cur.}$ is the sales plan for the current period. The base value is more than 100%.

3. Profitability of sales

It is calculated as the ratio of net income of the car dealership to the revenue of the car dealership multiplied by 100%. The base value is more than 4%.

4. Profitability of capital

It is calculated as the ratio of net income of the car dealership to the gross income of the car dealership multiplied by 100%. The base value is more than 50%.

5. The number of cars sold per seller

It is calculated as the ratio of the number of cars sold to the number of sellers. The base value is more than 12.

6. Net income per sales department employee

It is calculated as the ratio of the car dealership's net income to the number of sales department employees. The basic value is a set of statistical data.

7. The cost of additional equipment per car

It is calculated as the ratio of the cost of additional equipment to the number of cars sold. The basic value is a set of statistical data.

8. The number of consumer claims on official claims and in the book of complaints and suggestions. The base value is 0.

9. The number of consumer claims identified by calling. It is calculated by summing up the comments identified by calling customers. The base value is no more than 3%.

10. The level of compliance with the technology

It is calculated as the ratio of the number of inspections without comments to the total number of inspections. The base value is 1.

11. Satisfaction with the sales process (3)

$$Satisfaction = (N_{fully\ satisfied} + N_{satisfied}/2 - N_{unsatisfied} - N_{very\ dissatisfied})/N \times 100, \quad (3)$$

where $N_{fully\ satisfied}$ is the number of fully satisfied customers;

$N_{satisfied}$ is the number of satisfied customers;

$N_{unsatisfied}$ is the number of unsatisfied customers;

$N_{very\ dissatisfied}$ is the number of very dissatisfied customers;

N is the total number of responding customers.

12. Knowledge of products and services by the sales consultant.

13. Ability to answer questions and resolve complaints.

14. Explanation of the options and controls of the car during delivery to the customer.

15. A call from the dealer to the customer after issuing the new car.

The organization implements services and spare parts. Measurement in the implementation of the organization's activities are subject to:

1. Compliance of the "technology of presentation and sales of cars" with the requirements of customers.

2. Efficiency of the organization of the car dealerships.

3. The customer satisfaction.

4. The quality of pre-sale preparation.

5. Availability of the most demanded (by season) spare parts in warehouses.

6. Fulfillment of contractual obligations.

7. The quality of the repair performed and the performance of the car, compliance of its condition with the requirements of safety in road transport.

8. The condition and performance of the car before and after maintenance.

The measurement results are recorded in the process indicators in electronic form. Internal audits evaluate the quality management system and its compliance with the established requirements and parameters. The audit results, together with other input data, are analyzed by the top management in order to find areas for the development of the quality management system and improve its effectiveness.

Selection of indicators and statistical methods of the object of control

There is a wide variety of quality management methods, the most used of them are statistical methods of the quality management [3-10]. To solve problems related to the quality of products and services, 7 traditional methods ("tools" of the quality) are widely used: control charts, Pareto charts, checklists, scatter charts, histogram, stratification, and Ishikawa charts.

To evaluate the sales process of cars and spare parts in the "Avtoexpress-Vladimir" dealership it is proposed to use the following parameters:

1. The number of detected violations of the technology of pre-sale preparation of the car for a certain period of time.

2. The quality level of supplied spare parts and components for pre-sale preparation of cars.

Pre-sale preparation of the car consists in carrying out a complex of works to bring the car into proper condition and give it such a marketable appearance. Pre-sale preparation includes:

1. The complex of works on the restoration of the paintwork.

2. The complex of works to bring the interior and luggage compartment in the perfect condition.

3. Works on the engine compartment.

4. Concealment of defects in the bottom, wheel arches, wing rims, etc.

5. Elimination of defects on glasses, headlights, front lights, etc.

6. Updating bumpers, rims, tires.

The car pre-sale service is characterized by the rather laborious and technologically complex process. Logically, the process of providing services for pre-sale preparation of cars can be divided into three parts: technical training, control and diagnostic works and cosmetic training.

Cars supplied by the manufacturer arrive at the dealer in transport condition and several standard factory configurations. As a rule, the car delivery is carried out "on its own", as a result of which, in addition to significant contamination of the exterior and dusting of internal spaces, cars on the way acquire some minor damage to the paintwork in the form of scratches and chips. In view of the above, it is possible to specify the list of works performed during pre-sale preparation of cars in order to compile a detailed description of them and further analysis. The work on technical preparation should include the transfer of cars from the transport condition to the operational one, that is, the installation of mirrors, wiper blades, additional equipment, as well as the completion of cars with the necessary accessories. The list of control and diagnostic works includes checking the tightening torques of the joints of suspension elements, bodywork and power units, computer diagnostics of control systems, checking the functioning and efficiency of components, assemblies and equipment of cars, as well as checking the tightness of hydraulic and pneumatic systems, refilling to the maximum level of working fluids, tension of drive mechanisms and other works on bringing cars in operational condition.

It should be noted here that the list of control and diagnostic works alone significantly exceeds the volume of control studies during the annual state technical inspection of motor vehicles, which clearly indicates the technical complexity of service provided.

Application of statistical methods

The analysis of pre-sale preparation of the Lada cars is proposed to be conducted on the basis of statistical regulation of the following indicators:

1. The number of detected violations of the technology of pre-sale preparation of cars.

2. The quality level of supplied spare parts and components for pre-sale preparation of cars.

It is proposed to analyze the number of violations of the technology of pre-sale preparation of cars on the basis of periodic control of the indicator, taking into account the total number of inspections.

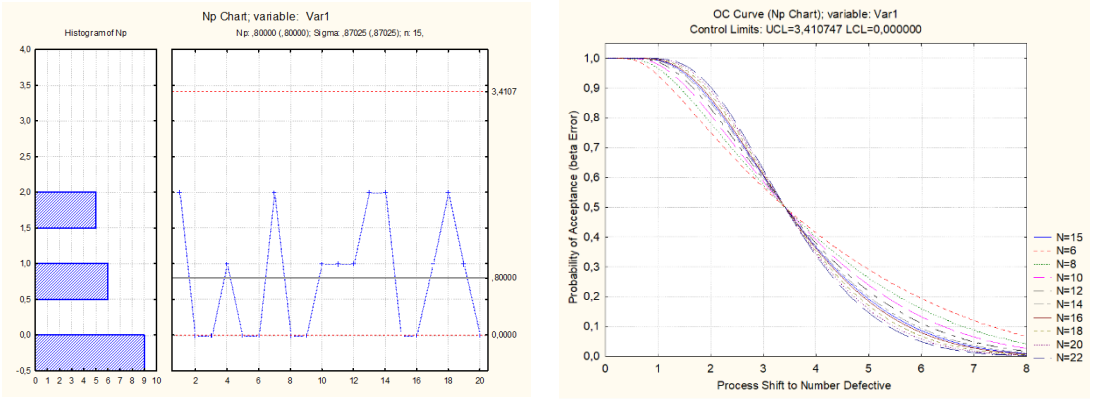
The number of violations was counted weekly. The results of the analysis for 20 weeks are presented in the Table 1.

Table 1. The analysis of the number of violations of the technology of pre-sale preparation of cars.

No. of the subgroup (week)	The number of violations of the technology of pre-sale preparation of cars	The total number of operations checked	The proportion of inconsistencies
1	2	15	0.1333
2	0	15	0
3	0	15	0
4	1	15	0.0667
5	0	15	0
6	0	15	0
7	2	15	0.1333
8	0	15	0
9	0	15	0
10	1	15	0.0667

11	1	15	0.0667
12	1	15	0.0667
13	2	15	0.1333
14	2	15	0.1333
15	0	15	0
16	0	15	0
17	1	15	0.0667
18	2	15	0.1333
19	1	15	0.0667
20	0	15	0
	Average 0.8	Average 15	Average 0.0556

To analyze the number of violations of the technology of pre-sale preparation of cars, it is proposed to use the Np-chart of the number of inconsistencies (the rejection rate is higher than 5%, the calculation of control boundaries based on the binomial distribution) (Figure 1).



A ***B***

Figure 1. ***A*** **– The Np-chart of the number of violations of the technology of pre-sale preparation of cars;** ***B*** **– Operational characteristics of the Np-chart.**

The analysis of the control chart shows that the process is in the statistically controlled state.

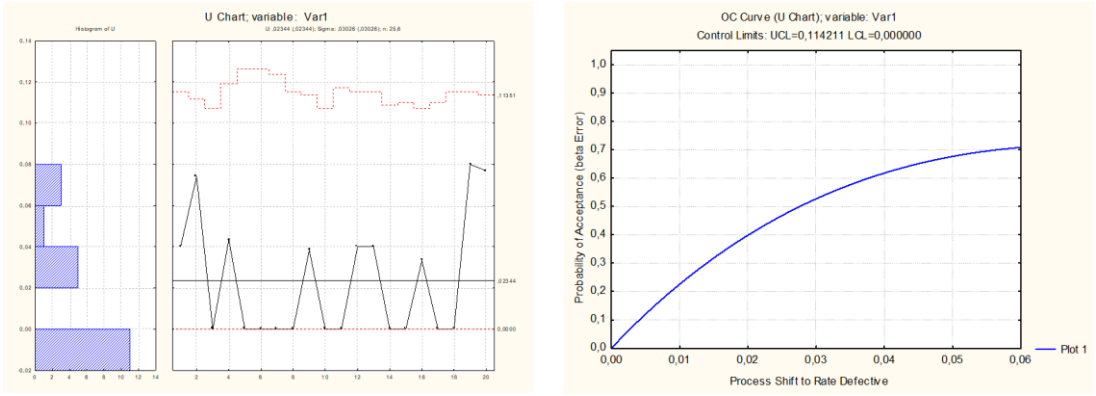
It is proposed to evaluate the quality of supplied spare parts and components for pre-sale preparation of cars on the basis of periodic control of supplied spare parts and components. The number of delivered batches of spare parts and components was counted weekly and the number of batches of the inappropriate quality was counted. The results of the analysis of the indicator for 20 weeks are presented in the Table 2.

Table 2. The analysis of the quality level of supplied spare parts and components for pre-sale preparation of cars.

No. of the subgroup (week)	The number of spare parts and components of the inadequate quality in the batch	The total number of spare parts and components in the batch	The proportion of spare parts and components of the inadequate quality
1	1	25	0.04
2	2	27	0.07407
3	0	30	0
4	1	23	0.04347
5	0	20	0
6	0	20	0
7	0	21	0
8	0	25	0
9	1	26	0.03846
10	0	30	0
11	0	24	0

12	1	25	0.04
13	1	25	0.04
14	0	29	0
15	0	28	0
16	1	30	0.03333
17	0	28	0
18	0	25	0
19	2	25	0.08
20	2	26	0.07692
	Average 0.6	Average 25.6	Average 0.0233

To analyze the quality level of supplied spare parts and components for pre-sale preparation of cars, it is proposed to use the U-chart (the rejection rate is less than 5%, the calculation of control boundaries based on the Poisson distribution) (Figures 2 and 3).



A ***B***

Figure 2. *A* – The U-chart of the proportion of spare parts and components of the inadequate quality; *B* – Operational characteristics of the U-chart.

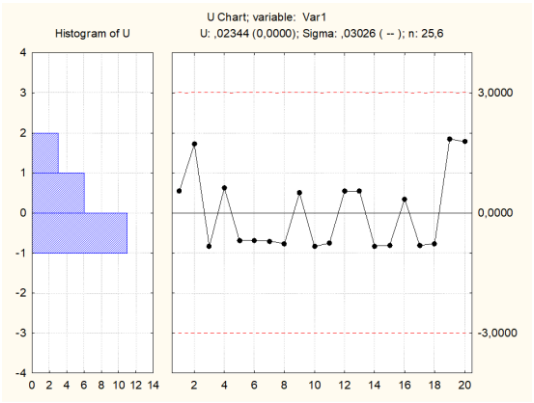


Figure 3. The normalized U-chart.

The analysis of the control chart shows that the process is in the statistically controlled state.

The use of the statistical control system will allow timely detection of misalignment of indicators of the car sales process in the car dealership, reduce the number of inconsistencies and increase the overall efficiency of the organization.

Discussion of the results

The indicators and their normative (basic) values for evaluating the effectiveness of the sales process of cars and spare parts in the "Avtoexpress-Vladimir" dealership were determined.

The analysis of pre-sale preparation of the Lada cars is proposed to be conducted on the basis of statistical regulation of the following indicators:

1. The number of detected violations of the technology of pre-sale preparation of cars.
2. The quality level of supplied spare parts and components for pre-sale preparation of cars.

Pre-sale preparation of the car consists in carrying out the complex of works to bring the car into proper condition and give it such the marketable appearance. The car pre-sale service is characterized by the rather labor-intensive and technologically complex process.

To analyze the number of violations of the technology of pre-sale preparation of cars, it is proposed to use the Np-chart of the number of inconsistencies. To analyze the quality level of supplied spare parts and components for pre-sale preparation of cars, it is proposed to use the U-chart.

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