






Implementation of the National Project "Safe and High-Quality Roads in the Regions of the Russian Federation (using the Volgograd Region as an example)"

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Keywords : National project, efficiency, safe roads, transport infrastructure, quality characteristics, regional features, economic space, road surface, personnel, project structure.

Abstract : The article was prepared based on the results of the national project "Safe and High-Quality Roads". Relevance topics conditioned by The formation and development of the road system as an important structural component of the state's territorial organization occurs under the influence of a complex set of interdependent economic, political, and geographic factors. This process is not instantaneous, but rather a gradual and lengthy process of qualitative and quantitative improvement of the existing industry. Today, the road system serves as a strategically important component of national economic growth, as highways enable the transportation of various types of cargo both within the country and in interactions with interested foreign entities. Furthermore, the provision and maintenance of highways plays a significant role in providing residents with access to social services, employment, business trips, and leisure travel. The condition of the transport infrastructure, its qualitative and quantitative characteristics, can be used to assess the quality and development of the territory as a whole.


“Safe and High-Quality Roads in the Regions of the Russian Federation.”


The national project's activities are primarily focused on achieving the fundamental and strategically important goals laid down in the Decree of the President of the Russian Federation, which includes preserving the life and health of citizens, as well as ensuring a high standard of life and health, and at the same time improving the regulatory status of the regional road network.


In this regard, it is important to analyze the theory and practice of implementing the national project


Many authors have studied the functioning and development of the road industry. The economic aspect was studied in the works of E.O. Bryazgina (Bryazgina , 2022), O.R. Medvedeva (Medvedeva , 2023), I.N. Pugachev (Pugachev , 2020), E.A. Fedchenko (Fedchenko , 2022), G. Yakushevsky (YAKushevskij , 2024), and others.

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Legal aspects of the functioning of the road industry are addressed in the studies of Yu.N. Rozov (Rozov , 2022) and E.A. Shemshura (SHemshura , 2023).

The scientific development of the road industry is ensured by such authors as E.N. Kurkina (Kurkina , 2021) and F.N. Zeynalov (Zejnalov , 2020).

For example, O.R. Medvedeva believes that highways are among the most important components of the transport infrastructure of the constituent entities of the Russian Federation and the Federation as a whole. Freedom of movement is a constitutional right of citizens of the Russian Federation, and highways ensure the implementation of the provisions of this article. A high level of highways, both in quality and quantity, creates a unified economic space for the vast country and ensures road safety (Medvedeva , 2023).

According to I.N. Pugachev, highways are one of the fundamental elements of the country's and its regions' transport infrastructure. They also ensure the exercise of citizens' constitutional rights to freedom of movement and the movement of goods and services. The presence and condition of the road network largely determines the connectivity of the country's vast economic space, as well as road safety and the incidence of injuries and fatalities in road accidents (Pugachev , 2020).

Thus, the analyzed sources and scientific research allow us to speak about a high level of study of the process of implementing the national project "Safe and High-Quality Roads." However, today it is necessary to continue studying this topic due to constant external changes in the conditions of a rapidly changing world.

The purpose of the study is to develop recommendations for improving the effectiveness of the implementation of the national project "Safe and High-Quality Roads" in the Volgograd region.

To achieve this goal, it is necessary to solve the following tasks:

To study the regulatory framework of state policy in the field of ensuring safe and high-quality road traffic in the country and to consider the mechanisms and state of implementation of state policy in the field of ensuring safe and high-quality road traffic in the regions of the country;

Describe the structure and directions of implementation of the national project in the Volgograd region;

To identify challenges in the implementation of the national project "Safe and High-Quality Roads" in the Volgograd Region and identify areas for

improving the effectiveness of the national project in the region.

The object of the study is the state policy for the implementation of the national project "Safe and High-Quality Roads".

The subject of the study is the implementation of the national project "Safe and High-Quality Roads" in the Volgograd region.

The article's information sources included periodical publications, including general and industry-specific ones: "Economy and Society," "Modern Scientific Research and Innovation," "Issues of Improving the System of Public Administration in Modern Russia," "Young Scientist," "State and Municipal Administration. Scientific Notes," " Socis, " and "Paradigms of Management, Economics, and Law."

Numerous materials from the scientific and periodical press, data from Internet resources and the author's own research were also used.

The scientific novelty of the study is as follows:

The modern mechanisms and current state of implementation of state policy in the field of ensuring safe and high-quality road traffic in the regions of the country were examined;

The legislation and implementation directions of the national project in the Volgograd region and four regional projects implemented in the region were analyzed, the current specifics of the activities and current problems of implementing the national project "Safe and High-Quality Roads" in the Volgograd region were identified.

Directions for improving the effectiveness of the implementation of the national project "Safe and High-Quality Roads" in the region have been developed, consisting of revising the project implementation roadmaps, project financing, and strengthening the authorities responsible for the implementation of the project in the region.

3 RESULTS

Today, several key areas for providing the region with high-quality and safe roads can be identified:

- reducing the number of road accidents, especially on long-distance routes between populated areas in the region, by addressing the problem of lighting on long stretches, as well as increasing the number of patrols to encourage drivers to remain focused;

- improving the quality of road surfaces by complying with road surface laying conditions, as

well as purchasing high-quality materials through improving contacts with friendly exporting countries;

- compliance with the asphalt paving of roads near certain populated areas of the region by strengthening control over the activities of contractors and the conclusion of state contracts for work in this area, as well as the activities of regional executive authorities (the Committee for Transport and Road Facilities of the Volgograd Region) in the direction of implementing work to provide the region with high-quality roads;

- strengthening control over the quality of road repair work and asphalt paving work (strengthening control over the sequence of work carried out and preventing work from being carried out in unsuitable weather conditions), which will improve the quality of the road surface;

- expansion of platforms for informing the public about ongoing repair work (for example, in the format of a Telegram chat with the publication of road sections where repair work is being carried out, as well as statistics on traffic jams due to road works);

- an increase in the volume of funding, especially from the federal budget, since it is the financial issue that influences the increase in the number of roads in the region that meet regulatory requirements;

- strengthening the staff of regional executive authorities and local governments, since the effectiveness and quality of the national project being implemented in the area of ensuring high-quality and safe road traffic in the region depends on this;

- strengthening control over contractors and tenders for government contracts, in order to prevent the selection of contractors who lack sufficient experience and necessary resources because their proposal turned out to be the most cost-effective.

The practical implementation of the national project is supported by the following statistical data. As part of the "Safe High-Quality Roads" national project, repairs were completed at 104 sites in 2024, totaling 342 km. Thirty-eight regional or inter-municipal roads, totaling 342 km, were commissioned.

In Volgograd, 40 streets with a total length of 37.7 km have been repaired, and reconstruction work continues on Latoshinskaya Street. In Volzhsky, work was completed on 14 streets with a total length of 26.3 km.

recording traffic violations are operational; 197 traffic lights and over 28 km of barriers have been installed, and approximately 7,000 road signs have been updated. As a result of systematic measures to improve road conditions and road safety, the region is expected to see a 1.1% increase in the number of

registered road accidents in 2024 (compared to 2023) and a 9.1% increase in the number of fatalities. In most cases, accidents are caused by human error, as well as poor driver and pedestrian discipline (violations of traffic rules). Failure to comply with the speed limit and driving into oncoming traffic lead to increased severity of accidents.

An important aspect is improving the quality of road surfaces by adhering to road paving regulations and sourcing high-quality materials through improved contacts with friendly exporting countries. Sanction restrictions have significantly impacted the entire materials market, as well as the availability and use of certain technologies. However, in this regard, it is essential to consider Russia's domestic experience in ensuring road quality, as well as the possibility of closer cooperation with friendly countries that have extensive and successful experience in road construction and repair.

A necessary area for improving the implementation of the national project to provide the region with safe and high-quality roads is ensuring adequate asphalt paving near individual settlements in the region by strengthening oversight of contractors and state contracts for work in this area, as well as by ensuring that regional executive authorities (the Volgograd Region Committee for Transport and Road Management) are implementing efforts to provide the region with high-quality roads. Currently, some settlements still lack asphalt pavement, which hinders local residents' mobility and prevents emergency services from reaching local residents during periods of inclement weather (snow, rain). This leads to situations where ambulances are unable to respond to calls to individual settlements or villages. Many such road areas were included in planned implementation activities back in the 2020s. However, even today, most of these road areas remain unstarted, and the completion date for them has been postponed to 2026.

This situation necessitates strengthening oversight of road paving contractors and ensuring that government contracts are awarded to reputable suppliers and contractors for these types of work. Since current measures are insufficient (including identifying unscrupulous contractors), it is necessary to engage the public in this area to publicize the actual work and to monitor the contractor's performance. This will allow both government agencies and the public to have up-to-date information on the status of new road construction and the reconstruction of deteriorated roads.

Regional executive authorities are also now required to strengthen control over the quality of road

repair and asphalt paving work (by strengthening control over the sequence of work performed and preventing work from being carried out in unsuitable weather conditions), which will improve the quality of the road surface.

Another important aspect is the expansion of platforms for informing the public about ongoing road repairs (for example, through a Telegram chat featuring road sections undergoing repairs, as well as traffic statistics due to roadwork). This will allow the public to stay informed about road conditions and choose the most optimal travel routes.

A separate area of improvement is strengthening the staffing of regional executive authorities and local governments, as this is crucial to the effectiveness and quality of the national project to ensure high-quality and safe road traffic in the region. Regional executive authorities are responsible for ensuring the effective implementation of the national project to ensure road safety and quality in the region.

While noting the feasibility of implementing the proposed areas of improvement, it can be noted that only comprehensive work by regional executive authorities, the public, and the media will enable high results to be achieved and ensure the achievement of the target indicators of the national project "Safe and High-Quality Roads."

In summary, we note that the main areas for improving the effectiveness of the national project to provide the region with safe and high-quality roads currently revolve around strengthening oversight of suppliers and contractors, as well as the awarding of government contracts to unscrupulous contractors due to the increasing number of cases of suppliers with little experience failing to perform work but offering low-cost bids. At the same time, strengthening the staffing of regional executive authorities is also becoming an important area, as the effectiveness of regional policy depends on this.

Conclusion. Providing the region with safe and high-quality roads is a priority for regional authorities. However, this area faces challenges related to the high number of accidents, particularly on long-distance routes between populated areas; poor road surface quality in urban and suburban areas; lack of paved roads in some populated areas of the region; delays in paving roads near some populated areas; desynchronization of work and violations of asphalt paving technology, leading to a decrease in road surface quality; use of low-quality materials; insufficient information for road users about ongoing repair work; insufficient funding; insufficient provision of regional executive

authorities and local governments with qualified personnel, etc.

Today, it is important to identify areas for improving the effectiveness of the "Safe and High-Quality Roads" national project in the region, as well as overall improvements to the effectiveness of ongoing efforts to provide the region with safe and high-quality roads. The most promising areas for improving the situation today include measures to reduce the number of road accidents by addressing lighting issues along long stretches and increasing the number of patrols to encourage drivers to maintain focus; improving road surface quality by ensuring compliance with paving regulations; strengthening quality control over road repairs and asphalt paving, which will improve road surface quality; increasing funding, particularly from the federal budget, since finances are crucial to increasing the number of roads in the region that meet regulatory requirements; and strengthening the staffing of regional government bodies.

In general, today the following problems can be identified related to the implementation of the national project "Safe and High-Quality Roads in the Volgograd Region".

The identified problems are important for their resolution in order to improve the implemented regional policy to provide the region with safe and high-quality roads.

The main causes of road accidents in the region, especially on federal highways, are speeding and driving into oncoming traffic due to violation of overtaking rules.

Table 1: Problems associated with the implementation of the national project Safe and high-quality roads in the Volgograd region.

No. p-p	Problems	Sources of uncertainty
1	A large number of accidents	On long-distance routes between populated areas;
2	Poor quality of road surfaces in urban and suburban areas	Requires constant updating or elimination of deformations after the winter period
3	Lack of paved roads in some populated areas of the region	Delays in paving roads near certain populated areas in the region
4	De-synchronization of work and violation of asphalt laying technology	Road surface repair activities may be carried out in an illogical sequence or at the wrong time (for example, in

		snow or rain), which leads to a decrease in the quality of the road surface.
5	Use of low-quality materials	Due to sanctions restrictions, the quality of the materials used has declined, leading to the rapid decommissioning of certain road sections.
6	Insufficient information to road users about ongoing repair work	Insufficient number of warning signs, which may result in collisions with barriers
7	Insufficient funding	The number of roads that meet regulatory requirements is decreasing, and repair times for certain road sections are increasing.
8	Insufficient provision of regional executive authorities and local governments with qualified personnel	Decrease in management efficiency
9	Dishonesty of contractors	Some companies that carry out government contracts for road repairs lack sufficient experience and the necessary resources.

A related problem is the poor quality of road surfaces in urban and suburban areas, requiring constant renewal or correction of deformations after the winter. Road surface deformations, on both federal and regional highways, often also cause traffic accidents. The region's freeze-thaw cycles annually cause potholes, ruts, and deep ruts in the roads, which are exacerbated by heavy-duty truck traffic. While this problem can be prevented within urban areas by restricting heavy-duty vehicle traffic during certain hours to prevent road congestion, it persists outside the city limits.

At the same time, one cannot help but note the ongoing lack of paved roads in certain populated areas of the region, and the delay in paving roads near certain populated areas of the region.

Certain activities implemented within the national project in the region, carried out within established timeframes, are also fraught with problems related to work synchronization and disruptions in asphalt paving practices. According to the 2024 study, only 15.7% of roads in the region meet regulatory requirements, with the Volgograd Region ranking

83rd out of 85 regions of the Russian Federation in this regard (Table 2).

Table 2: Road quality rating by constituent entities of the Russian Federation.

	Subject of the Russian Federation	Percentage, % of the number of roads that meet regulatory requirements
1	Moscow	97.6
2	Khanty-Mansi Autonomous Okrug	88.4
3	Krasnodar Krai	84.4
4	Chelyabinsk Oblast	84.1
5	Republic of Ingushetia	82.8
	...	
3	Volgograd Oblast	29.7
4	Kirov Oblast	26.3
5	Arkhangelsk Oblast	15.7

At the same time, in their rush to meet deadlines, contractors often lay or repair pavement in unfavorable weather conditions, which generates widespread public outcry among local residents and the media. Since videos of these actions quickly appear online, this confirms that the quality of the laid asphalt is deteriorating and rapidly deforming over time.

According to the 2022 ranking by the Financial University under the Government of the Russian Federation, Volgograd was among the top 10 cities where local residents are most dissatisfied with road conditions. Meanwhile, along with Volgograd, the top cities in this indicator included Yaroslavl, Ryazan, Samara, Novorossiysk, Voronezh, and other cities.

The problem described is often linked to contractors using cheap, low-quality materials. This has become especially evident since 2022 due to sanctions restrictions. The quality of the materials used has significantly declined as contractors rely on cheaper materials, leading to the rapid decommissioning of certain road sections. For example, one of the contractors responsible for road repairs in the region under a state contract for a long time was Dorstroyservis LLC. Following violations, it was added to the register of unscrupulous suppliers. It should also be noted that current contractors awarded state contracts for road repair and construction in the region are primarily from out of town, due to current legislation and the ability of all suppliers to participate in tenders. At the same time, the regional public has noted the large number of purchases from a single supplier, creating the perception that tenders are being tailored to a specific

supplier. This is especially serious given the Volgograd Region's low road quality rankings.

Another problem, which also impacts citizen satisfaction with the measures taken to ensure safe and high-quality roads in the region, is the public's lack of awareness of ongoing road repairs. This leads to situations where citizens are stuck in prolonged traffic jams due to a lack of information about road repairs on certain sections. Information about these measures is generally posted on the official websites of regional government bodies, but is either not posted or is delayed on social media and official Telegram channels. This poses a significant challenge, as it fuels citizen dissatisfaction with the situation and the resulting congestion within and outside the city limits.

Growing public discontent is also fueling a negative attitude toward the activities of regional executive authorities, as they are responsible for ensuring the timely completion of work in this area, as well as for monitoring the activities carried out by suppliers and contractors.

Overall, identifying one of the main problematic aspects affecting the effectiveness of regional policy to provide the region with safe and high-quality roads, it can be noted that financial issues also impact the success of ongoing efforts in this area. Insufficient funding reduces the number of roads that meet regulatory requirements and increases repair times for certain road sections. This lack of sufficient funding for these projects leads to contractors being hired to perform road construction and repair work in the region based on low bids compared to other offers. This leads to these contractors using low-quality materials, violating established deadlines, and failing to complete assigned tasks (for example, Aval-Stroy LLC failed to complete the repair of the Komsomolsky overpass in Volgograd, resulting in its inclusion in the register of unscrupulous suppliers). The selection of road construction and repair service providers should be based on the organizations' backgrounds, their track record of successfully completing orders, and the actual average market prices for similar work, not on underpricing. The level of funding for road repairs in the region fluctuates from year to year.

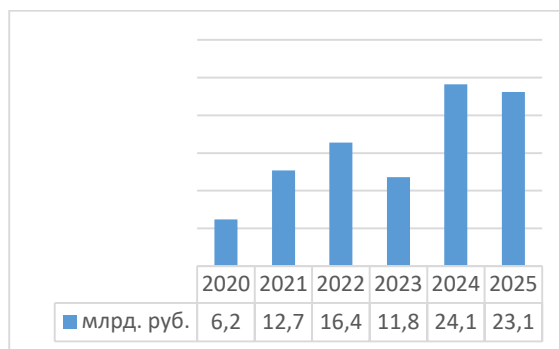


Figure 1: Volume of funding for road repairs in the Volgograd region.

A related problem in this area is the insufficient supply of qualified personnel to regional executive authorities and local governments. This is crucial for implementing regional policy to ensure safe and high-quality roads. This also ensures that planned activities are completed on time and that the project targets are met.

A lack of knowledge and awareness of the details and specifics of road paving, as well as the causes, consequences, and repair of roadway defects, means that most efforts to ensure safe and high-quality roads in the region are currently incomplete. This means it's not always possible to immediately identify unscrupulous contractors in the region who are performing work in violation of regulations, leading to delays and the rapid decommissioning of certain road sections.

Overall, it can be noted that this problem is characteristic not only of the Volgograd Region but also of neighboring regions of the Southern Federal District. A related issue is the lack of coordination between regional and local efforts. Regional executive authorities often fail to consider the current situation in individual municipalities when establishing and implementing measures in this area. This means that local problems persist until the next reporting period, when a list of new road construction and repair projects is compiled. This leads to an increase in local population and dissatisfaction with the quality and safety of roads in the region as a whole, and with the performance of government agencies in particular.

Overall, it can be noted that the identified problems are quite critical, as roads are a vital part of the urban environment, used 24/7. Therefore, close attention must be paid to road safety and quality, as the lack of necessary roads leads to traffic jams and congestion, while poor road quality leads to accidents on certain sections of the road. The actions of executive authorities in this area are a crucial element

of regional policy, implemented both within and outside the city limits.

In summary, we note that the region is currently experiencing certain challenges in ensuring the safety and quality of regional roads. These primarily focus on repairing existing road deformities or constructing new roads near populated areas, as well as delays in the implementation of certain projects, including long delays. Particularly pressing today are the poor quality of road surfaces in urban and suburban areas, which require constant renewal due to laying in unfavorable weather conditions and the use of cheap resources by suppliers. These situations are also due to gaps in the necessary knowledge in road construction and maintenance and insufficient oversight by regional executive authorities. Therefore, it is crucial to identify areas for improving the effectiveness of the "Safe and High-Quality Roads" national project in the region, as well as overall improvements to the effectiveness of ongoing efforts to provide the region with safe and high-quality roads.

In developing the national project, a project-based approach was adopted. This approach allows for the most accurate, detailed, and up-to-date development plan for the road transport sector over the long term, specifically through 2030, in line with national security principles. The choice of this approach was also driven by the scale of this goal and the corresponding development objectives for the country's road system, taking into account compliance with statutory standards, as well as the new realities of the modern world, accompanied by social and economic changes.

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