

ISSN: 2692-5206, Impact Factor: 12,23

American Academic publishers, volume 05, issue 03,2025



Journal: https://www.academicpublishers.org/journals/index.php/ijai

THE ROLE OF TRANSPORT INFRASTRUCTURE IN THE ECONOMY OF THE REPUBLIC OF KARAKALPAKSTAN

Khalmuratov K.P.

Associate Professor, Department of Economics, Karakalpak State University

Annotatsiya:Bu maqolada Qoraqalpog'iston respublikasi iqtisodiyotida transport infratuzilmasining o'rni haqida so'z yuritiladi.

Tayanch so'zlar:Transport, innovatsiya, yo'lovchi tashish, transport xızmatlari, mintaqa, transport infratuzilmasi.

Аннотация:В этой статье речь идет о роли транспортной инфраструктуры в экономике Республики Каракалпакстан.

Ключевые слова:Транспорт, инновация, пассажирские перевозки, транспортные услуги, регион, транспортная инфраструктура.

Abstract: This article discusses the role of transport infrastructure in the economy of the Republic of Karakalpakstan.

Keywords: Transport, innovation, passenger transportation, transport services, region, transport infrastructure.

Transport and infrastructure play an important role in the economy of Uzbekistan. Carrying out an open economic policy requires entering new markets. Uzbekistan is striving to diversify exports. In addition to traditional markets such as Central Asia and Russia, the country is increasing its supplies to China, European countries and Turkey. Specifically, the transportation system of the Republic of Karakalpakstan (KR) is represented by a network of all modes of transport: automobile, railway, air, internal waterways, pipelines, automobile and railways. The city of Nukus has an international airport that meets modern requirements. Geography largely determines the country's development potential. More than forty countries around the world do not have direct access to maritime transportation, thus cutting off from the cheapest transportation routes. Their trade relations largely depend on the level of development, transit opportunities and openness of neighboring countries, and most importantly, on their political will. In Uzbekistan, special attention is paid to this issue. [1]

Currently, transportation has a significant impact on the development of the entire country. The transport of our country serves to solve such important tasks as eliminating the economic backwardness in remote areas, raising the socio-economic and cultural level and well-being of the population, developing productive forces in the regions, and achieving a positive integration effect. Transportation also creates conditions for the formation of local and national markets.

Table 1

Key performance indicators of vehicles



ISSN: 2692-5206, Impact Factor: 12,23

American Academic publishers, volume 05, issue 03,2025

Journal: https://www.academicpublishers.org/journals/index.php/ijai



Indicators	2020	2021	2022	2023
Cargo transported, thousand tons	32 411,2	33 262,5	36 762,4	38 334,3
Freight turnover, million t-km	732,1	861,9	849,5	897,6
Passengers transported, thousand people	131 343,6	137 468,8	144 597,5	149 917,4
Passenger turnover, million	3 611,2	3 985,4	4 209,3	4 391,5

This table presents the key performance indicators of vehicles from 2020 to 2023, highlighting their annual dynamics.

The volume of cargo transported increased steadily from 32,411.2 thousand tons in 2020 to 38,334.3 thousand tons in 2023, showing a total growth of 5,923.1 thousand tons over the period.

Freight turnover grew from 732.1 million t-km in 2020 to 861.9 million t-km in 2021. However, a slight decline was observed in 2022 (849.5 million t-km), followed by an increase to 897.6 million t-km in 2023.

The number of passengers transported also showed consistent growth, rising from 131,343.6 thousand in 2020 to 149,917.4 thousand in 2023, reflecting a total increase of 18,573.8 thousand people.

Passenger turnover increased from 3,611.2 million passenger-km in 2020 to 4,391.5 million passenger-km in 2023, showing a growth of 780.3 million passenger-km over the years.

The indicators demonstrate a steady growth in both cargo and passenger transportation efficiency and volume, likely driven by economic activity, infrastructure development, and increased demand for transportation services.

Road transport, as the foundation of the transport complex, is one of the most important components of small business and private entrepreneurship in the Republic of Karakalpakstan. Its effective functioning is, on the one hand, a necessary condition for the vital activities of the economic and social spheres. On the other hand, the economy and society form a "public order" for the development of the automotive transportation system, which must develop the market according to its characteristics. Meeting the needs of consumers of transportation services for these services. Providing high-quality transport services to the population, including workers working in all sectors of the economy, students and students studying in educational institutions, is the most important issue facing automobile transport. Today, it is impossible to imagine any citizen movement (transfer from one destination to another) without transport. Cars carry out the entire transportation process from the manufacturer to the consumer, or in collaboration with other modes of transport, carry out its initial, intermediate, or final stage.

Table 2 Number of passengers transported by road

Regions	2020	2021	2022	2023
The Republic of Karakalpakstan	131 343,7	137 468,7	144 597,5	149 917,4



ISSN: 2692-5206, Impact Factor: 12,23

American Academic publishers, volume 05, issue 03,2025



Journal: https://www.academicpublishers.org/journals/index.php/ijai

Nukus	46 217,7	49 287,4	53 215,8	55 187,4
Amudarya	9 271,8	9 515,0	9 656,6	10 067,6
Beruniy	12 627,2	12 896,2	12 938,7	13 151,2
Bozataw	1 293,2	1 354,5	1 518,1	1 591,7
Karauzyak	1 620,5	1 726,2	1 838,2	1 893,4
Kegeyli	4 371,7	4 467,3	4 812,0	4 890,1
Kungrad	6 961,2	7 310,1	7 606,7	7 716,1
Kanlikul	1 104,6	1 105,6	1 142,5	1 168,4
Muynak	1 106,4	1 280,0	1 530,6	1 538,1
Nukus district	2 354,0	2 451,4	2 504,8	2 556,9
Takhiatash	2 741,4	2 898,4	3 084,0	3 231,5
Takhtakupir	2 066,1	2 074,5	2 243,3	2 379,2
Turtkul	13 860,6	14 086,2	14 470,8	14 886,6
Xadjeli	8 204,8	8 734,5	9 079,7	9 284,2
Chimbay	4 727,5	4 825,5	5 267,9	6 440,8
Shumanay	1 723,3	1 752,5	1 819,1	1 845,2
Ellikkala	11 091,6	11 703,3	11 868,5	12 089,0

This table shows passenger transportation indicators by road across the Republic of Karakalpakstan during 2020–2023 by regions. In 2020, the total number of passengers transported was 131,343.7 thousand, while in 2023, this figure increased to 149,917.4 thousand, representing an approximate growth of 14%. The city of Nukus consistently recorded the highest passenger transportation figures each year. In 2020, it was 46,217.7 thousand people, which grew to 51,586.5 thousand by 2023. The district of Bozataw recorded the lowest passenger transportation figures, with 1,293.2 thousand people in 2020 and 1,591.7 thousand in 2023. Significant growth was observed in Takhiatash, where the number of passengers increased from 2,714.4 thousand in 2020 to 3,312.5 thousand in 2023. Some regions, such as Kegeyli and Kanlikul, showed stable and slower growth compared to other areas.

Automobile transport is of great importance for the life of the country's population. Passenger road transport fulfills not only production tasks for transporting the working-age population, but also social tasks related to domestic and cultural travel; In the Republic of Karakalpakstan, road transport is the most flexible and mass type of transport. The main reasons for the active use of motor vehicles are its characteristic high speed, regularity and flexibility of cargo delivery, as well as the necessary level of urgency. Greater mobility and the ability to respond quickly to changes in passenger transportation increase the competitiveness of motor vehicles in organizing domestic passenger transportation.

Passenger transportation by road has increased across all regions of Karakalpakstan. The city of Nukus remains the central hub for transportation, reflecting its economic and social



ISSN: 2692-5206, Impact Factor: 12,23

American Academic publishers, volume 05, issue 03,2025



Journal: https://www.academicpublishers.org/journals/index.php/ijai

activity. Other districts also show growth in infrastructure development and passenger flows, with Takhiatash and Ellikqala experiencing more pronounced increases.

The length of roads and highways in the Republic of Karakalpakstan is 11,061 thousand kilometers, including international, republican and regional roads. The national highway, built according to international standards, passes through the territory of the republic with access to neighboring countries (Russia and Kazakhstan). It should be noted that the level of development of roads in the Republic of Karakalpakstan is more than 4 times lower than the national average. In some districts (except for the cities of Shumanay, Chimbay, and Nukus), roads are poorly developed due to the distance and difficulty of reaching rural areas. Over time, the role of road transport increases, as it is faster and more reliable, as well as associated with a lower risk of loss or damage to certain types of cargo. Therefore, automobile transportation is the only real mode of transportation for a number of perishable goods and urgent goods. Therefore, road transport is a priority for transporting agricultural products, textiles, and other non-commercial goods exported from the Republic of Karakalpakstan [2].

Most highways, as exemplified by the Kungrad-Beineu highway, need to be reconstructed and rehabilitated in accordance with the European E-40 highway standard. Together with Kazakhstan, it is necessary to implement a project for the reconstruction of the Beineu-Akzhigit-Nukus highway, which will allow for an increase in average speed from 50 to 100 km/h and freight traffic from one to 6,000 per day. Beineu is today a major crossing point for rail and road roads[3]. The reconstruction of the Beineu-Akzhigit-Nukus road will open a corridor to the countries of the Caspian Sea, Central Asian countries, Russia and Europe, as the road section is part of the international transit transport corridor "Tashkent - Samarkand - Bukhara - Nukus - Beineu - Atyrau." Astrakhan," with access to the Caspian region and European Union countries. It is also necessary to open new regular international destinations for passenger transportation, which can stimulate tourism development. [3]

Poor road condition leads to reduced traffic speed and accelerates physical deterioration of the vehicle fleet. This ultimately leads to longer shipping times and shipping interruptions. Most inter-farm rural roads, city streets, urban settlements, villages and auls do not meet the established quality and traffic safety requirements. It is necessary to improve the technological and technical base for the construction and maintenance of roads, as well as to accelerate the development of road infrastructure within the framework of public-private partnership. The country's government is implementing systemic measures to improve the road management system.

Various forwarding companies from Russia, Kazakhstan, Germany, Switzerland, Korea, and China operate in Uzbekistan. Analysis of the structure of economic development of the Republic of Karakalpakstan shows that the market for logistics services in the region is growing rapidly due to the improvement and development of transport infrastructure, the growth of transit volumes and regional trade. [4]

In the region, there has been a strong demand for an increase in the range of services for organizing freight transportation - this is the organization of intermodal transportation, door-to-door delivery, customs clearance, packaging, packaging, goods storage, etc. In this regard, it is necessary to institutionally develop the logistics network in the region, improve the quality of services provided in the fields of industry, trade, information, transport, warehousing, management, and other types of logistics.

In conclusion, it can be said that despite the financial difficulties and difficult economic situation in the republic, large funds were allocated for reforming the transport system from the

ORIGINAL ARTICLE

INTERNATIONAL JOURNAL OF ARTIFICIAL INTELLIGENCE

ISSN: 2692-5206, Impact Factor: 12,23

American Academic publishers, volume 05, issue 03,2025

Journal: https://www.academicpublishers.org/journals/index.php/ijai



first years of independence. Overall, during the years of independence, numerous strategic developmental works have been carried out to develop the transport and communication system. The republic has ensured transport independence and created a national system that connects all regions of the republic. The effective transport system created in our country serves as a factor in the development of foreign economic relations and integration with other countries.

REFERENCES:

- 1. Henézi, Diana & Winkler, Ágoston. (2023). The Role of Public Transport in Transport Safety and Public Safety. The Eurasia Proceedings of Science Technology Engineering and Mathematics. V. 23. -P. 505-512.
- 2. G'iyosidinov, B. (2022). Shaharlarda yo'lovchilarni jamoat transporti xizmatidan foydalanish afzalliklari. Oriental renaissance: Innovative, educational, natural and social sciences, 2(1), 177-188.
- 3. Копылова, Е.В. Пассажиропотоки городских агломераций // Транспорт: наука, техника управление. Научный информационный сборник. 2021. №5. С. 50–57.
- 4. Копылова, Е.В. Принципы организации мультимодальных пассажирских перевозок с участием железнодорожного транспорта// Соискатель приложение к журналу Мир транспорта. 2015. №2. С. 56-59.