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THE ROLE OF UZBEKISTAN'S TRANSPORT SYSTEM IN THE DEVELOPMENT OF TOURISM INFRASTRUCTURE

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Transport is an important element of the tourist infrastructure and constitutes the main integrated services included in the tourist product. The transport system of the Republic of Uzbekistan is under the jurisdiction of the Ministry of Transport. The Ministry is a public administration body for the development and implementation of a single state policy in the development of road, rail, air, river transport, subway, as well as road facilities.

Railway transport makes a significant contribution to the development of tourism in Uzbekistan. Rail transport provides tourists for over medium and long distances with fast and convenient transportation at affordable prices.

JSC Uzbekistan railways carries out railway transport activities in the Republic of Uzbekistan. The main activities of the company are: freight forwarding and delivery by rail; repair and maintenance of railway cars; passenger, tourist transportation; maintenance, renewal of locomotive and wagon fleet.

Since 1993, JSC Uzbekistan railways is a member of the Organization of Commonwealth of Railways (OSJD). The company has close ties with the International Union of Railways (UIC) and the UN Economic Commission for Asia and the Pacific (ESCAP). JSC Uzbekistan railways carries out joint work with the TRACECA project (Transport Corridor Europe-Caucasus-Asia) of the TACIS program of the European Commission.

Statistical data on the volume of passenger traffic and passenger turnover on rail transport are shown in the diagram below (Fig.1).

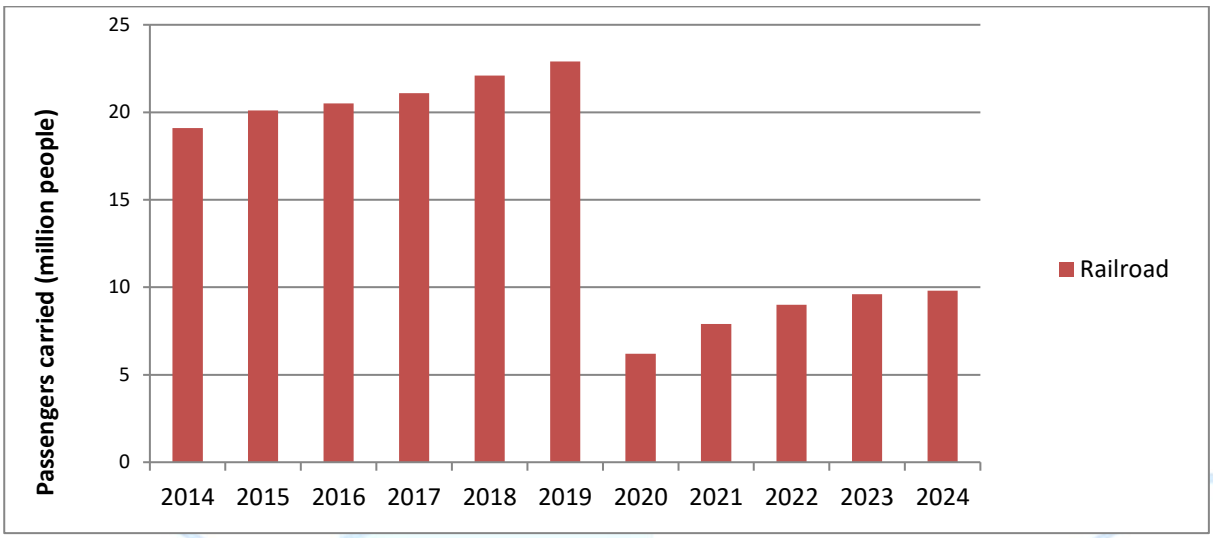

Fig.1. Dynamics of passenger transportation and passenger turnover in JSC Uzbekistan railways for 2014-2024.

The chart illustrates the dynamics of the number of passengers transported by rail over the period from 2014 to 2024, measured in million people. Overall, the data demonstrate three clearly distinguishable stages: steady growth before 2020, a sharp decline in 2020, and gradual recovery in the post-pandemic period.

During **2014–2019**, rail passenger transportation showed a **stable upward trend**. The number of passengers increased from approximately **19 million in 2014** to nearly **23 million in 2019**. This growth can be attributed to several factors, including population growth, rising mobility of the population, improvements in railway infrastructure, and the development of intercity and high-speed rail services. The consistent increase indicates growing demand for rail transport as a reliable and affordable mode of passenger movement.

In **2020**, a **dramatic decline** in passenger volumes is observed, with the indicator dropping to around **6 million passengers**. This sharp reduction is primarily associated with the **COVID-19 pandemic**, which led to the suspension of passenger train services, strict quarantine measures, travel restrictions, and a significant decrease in domestic and international mobility. The year 2020 represents an exceptional shock to the railway transport system.

From **2021 onward**, the data reflect a **gradual recovery** of passenger transportation. Passenger numbers increased to about **7.8 million in 2021**, continued

to rise to nearly **9 million in 2022**, and reached approximately **9.5–9.8 million in 2023–2024**. This recovery trend indicates the progressive easing of restrictions, restoration of railway services, and renewed demand for passenger travel. However, despite positive growth dynamics, passenger volumes in 2024 remain **significantly below pre-pandemic levels**, suggesting that full recovery has not yet been achieved.

In general, the analysis shows that railway passenger transportation is highly sensitive to external shocks such as public health crises. At the same time, the post-2020 period confirms the **resilience of the railway sector** and its capacity for gradual adaptation and recovery. For sustainable growth in the future, further investments in service quality, safety, digitalization, and integration with other modes of transport are essential.

In the Republic of Uzbekistan, the organization of regular high-speed traffic of passenger electric train "Afrosiob" was launched in September 2011. "Afrosiob" moves at an average speed of 178 km/h, and the maximum speed reaches 250 km/h. Currently, the high-speed electric train "Afrosiob" consists of 11 sections (2 locomotives, 1 bistro car and 8 passenger cars).

High-speed rail passenger transportation is carried out in the directions Tashkent - Samarkand, Tashkent - Bukhara - Misken, Tashkent - Karshi.

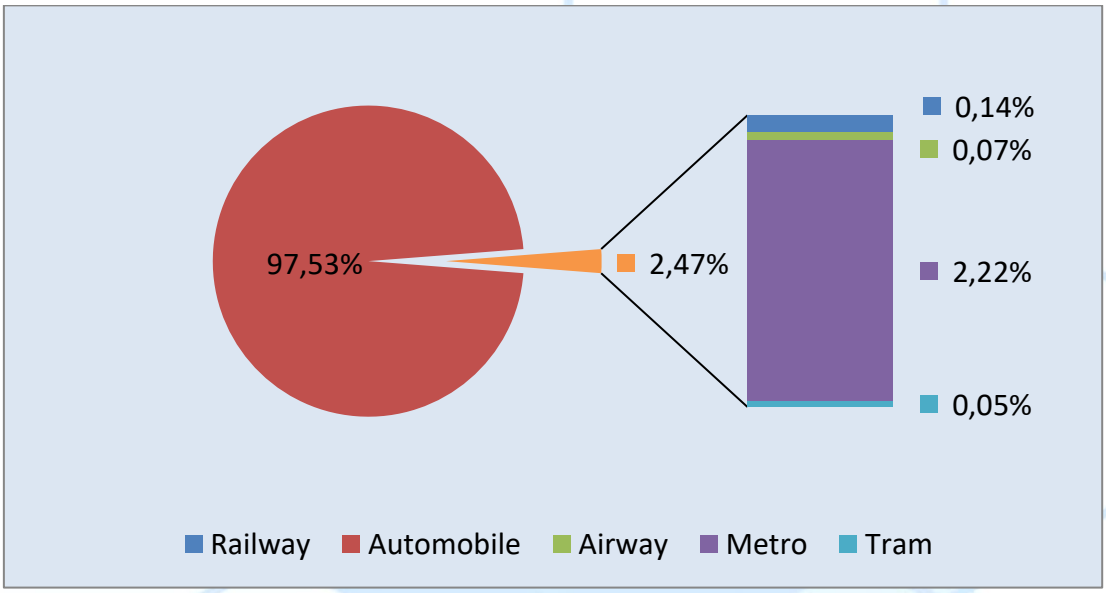

Fig.2. Structure of passenger transportation by modes of transport in Uzbekistan for 2024y.

The diagram illustrates the structure of passenger transportation by different modes of transport, expressed as a percentage of the total passenger volume. The data reveal a highly uneven distribution, with a clear dominance of automobile transport.

Automobile transport accounts for an overwhelming 97.53% of total passenger transportation. This dominant share indicates that road transport is the primary mode of mobility for the population. The reasons for this include the wide availability of road infrastructure, flexibility of routes, high frequency of services, and accessibility of private and public road transport for short- and medium-distance travel.

All other modes of transport together represent only 2.47% of total passenger transportation, highlighting their secondary role in the overall transport system.

Within this smaller share:

Metro transport has the largest contribution at 2.22%, reflecting its significant importance in large urban areas, particularly in the capital city. Despite its limited geographical coverage, the metro plays a crucial role in reducing congestion and ensuring high-capacity passenger movement.

Railway transport accounts for 0.14%, indicating its relatively minor role in total passenger volumes. This can be explained by the focus of railways on intercity and long-distance travel rather than mass daily commuting.

Air transport represents 0.07%, which is typical due to its specialization in long-distance and international travel, higher costs, and limited accessibility for regular passenger movement.

Tram transport has the smallest share at 0.05%, reflecting its limited network coverage and gradual replacement by other urban transport modes.

Overall, the structure demonstrates a strong dependence on automobile transport, while environmentally friendly and high-capacity modes such as rail and urban electric transport remain underutilized. This situation highlights the need for balanced transport

policy measures aimed at developing public transport systems, expanding rail and metro networks, and encouraging modal shifts to achieve sustainable urban and national mobility.

The Tashkent Metro is a unitary enterprise under the Ministry of Transport of the Republic of Uzbekistan. Previously, the enterprise was part of the JSC Uzbekistan railways company. The enterprise manages the subway system, which is one of the types of public transport in Tashkent. As of May 2023, the total length of the Tashkent Metro is 67.55 kilometers, the number of lines is 4, and the number of stations is 48.

The Tashkent metro is also of great importance in the development of tourist infrastructure of the Republic of Uzbekistan. The construction of the only subway in Central Asia was started in July 1972. In accordance with the Decree of the President of the Republic of Uzbekistan No. PP-2979 dated May 19, 2017, the project "Construction of a circular elevated line of the subway in the city of Tashkent" is being implemented.

The development of the Tashkent metro is aimed at improving the culture of service for passengers and visitors to the capital. In the traditions of the domestic subway construction is the imaginative solution of the architecture of underground structures: all stations should have individuality. This tradition, declared from the first days of the design of our subway, remains to this day, despite the inevitability of the standard design.

The architectural image of each station is created with the maximum revealing of its constructive basis, using functionally necessary elements and details to organize the internal space of the interiors. The middle hall, depending on the type of station, has the most diverse shapes and outlines.

The variety of architectural plasticity of ceilings and wall surfaces, forms of columns and pylons, types of lighting fixtures and facing materials, structural schemes make it possible to give the stations an individual, imaginative expressiveness. Artificial lighting, ventilation, forms of structures, color scheme completely eliminate the unpleasant feeling of being underground. The originality, uniqueness, memorable

images of the Tashkent Metro stations that have gained recognition in our country and abroad are the result of creative work of architects, artists, engineers, builders and operators.

New structural, space planning solutions and a true synthesis of architecture and monumental art have contributed to the creation of an amazing underground palace, striking by its cheerful nature, originality of images, national coloring, the beauty of architectural compositions. Here engineering thought and inspiration of the artist have found a harmonious combination. The stations used a wide palette of natural stone - marble and granite, where most of the extracted from local deposits. Traditional national decoration was used: painting, ganch carving and especially artistic ceramics, which is known from the architectural monuments of Samarkand, Bukhara and Khiva. The "retro" style is used in the design of some stations, allowing to recreate the atmosphere of the 19th century by borrowing the architectural decor and some elements of culture of the past.

Nicholas Montagnon, a representative of a French company that supplies equipment and machinery to subways in dozens of countries, who visited Tashkent, was impressed with the stable operation of facilities, order, cleanliness and the magnificent design of the Tashkent metro stations. All the guests of the Uzbek capital say the same about the subway stations, comparing them to palaces or art galleries.

In order to develop tourism in the country, Uzbekistan Airways continues to expand its flight geography and after a three-year break restores its flights on the route Tashkent - Jakarta - Tashkent. Regular direct flights are operated once a week on Wednesdays.

The availability of a direct flight from Jakarta to Tashkent, as well as the Afrosiab high-speed train from Tashkent to historical and legendary cities embodying the architectural monuments of the past century - Samarkand, Bukhara, Khiva, Karshi, as well as the availability of beautiful urban and metro infrastructure of Tashkent are considered sufficient reason for Indonesian tourists to visit Uzbekistan.

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