



**«ТУРИЗМ ЖӘНЕ ҚОНАҚЖАЙЛЫҚ САЛАСЫНДАҒЫ БІЛІМ БЕРУ  
ЖӘНЕ ЗЕРТТЕУЛЕР» атты ІХ халықаралық конференция  
МАТЕРИАЛДАРЫ**  
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**МАТЕРИАЛЫ  
ІХ Международной конференции  
«ОБРАЗОВАНИЕ И ИССЛЕДОВАНИЕ В СФЕРЕ ТУРИЗМА И  
ГОСТЕПРИИМСТВА»**  
18-19 ноября, 2021 г., г. Алматы, Казахстан

**MATERIALS OF  
IX INTERNATIONAL CONFERENCE ON EDUCATION AND RESEARCH  
IN TOURISM AND HOSPITALITY**  
November 18-19, 2019, Almaty, Kazakhstan

Әл-Фараби атындағы Қазақ ұлттық университеті  
Казахский национальный университет имени аль-Фараби  
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«Туризм және қонақжайлылық саласындағы білім беру және зерттеулер» атты ІХ халықаралық конференция материалдары 18-19 қараша, 2021 ж., Алматы қ., Қазақстан. – Алматы: Қазақ университеті, 2022. – 108 б.

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Жинақта ғылыми-тәжірибелік конференцияға қатысушылардың баяндамалары негізінде дайындалған туризм және қонақжайлылық саласындағы білім беру мен зерттеулерге арналған мақалалар ұсынылған. Туризм мен қонақжайлылықты зерттеудің теориялық-әдіснамалық аспектілерімен қатар, әртүрлі өңірлерде туризм мен қонақжайлылықты тұрақты дамытуды қамтамасыз ету тәжірибесі қарастырылған. Бірқатар материалдарда Қазақстандағы туризм және қонақжайлылық саласындағы ғылыми зерттеулердің нәтижелері және шетелдік тәжірибелер берілген. COVID-19 пандемиясына байланысты карантиндік шаралардың салдарын қоса алғанда, қазіргі заманғы сын-қатерлер мен тәуекелдерді ескере отырып бәсекеге қабілеттілікті қамтамасыз ету және туристік дестинацияларды басқару стратегиялары, туризм және қонақжайлылық саласындағы кәсіби білім беру қызметінің тәжірибесі, Ұлы Жібек жолында туризмді дамыту және цифрлық технологияларды қолдану тәжірибесі қарастырылды.

Конференция «Ғылым қоры» АҚ бағытты бойынша № 0358-18-ГК «Цифрлық туристік контентті жаңғырту: мобильді қосымшалар, панорамалық 3D турлар, интерактивті карталар және QR кодтары» жобасын жүзеге асыру аясында өтті.

В сборнике представлены статьи по образованию и исследованиям в сфере туризма и гостеприимства, подготовленные участниками научно-практической конференции на основе представленных докладов. Наряду с теоретико-методологическими аспектами изучения туризма и гостеприимства, рассмотрен опыт обеспечения устойчивого развития туризма и гостеприимства в разных регионах. Ряд материалов представляет результаты научных исследований туризма и гостеприимства в Казахстане и зарубежный опыт. Рассмотрены стратегии обеспечения конкурентоспособности и управления туристскими дестинациями, опыт профессиональной образовательной деятельности в туризме и гостеприимстве, опыт по применению цифровых технологий и развитию туризма на Великом Шелковом пути с учетом современных вызовов и рисков, включая последствия карантинных мер в связи с пандемией COVID-19.

Конференция проведена в рамках реализации Проекта: №0358-18-ГК по проекту «Модернизация цифрового контента туризма: мобильные приложения, панорамные 3D туры, интерактивные карты и QR коды» по линии АО «Фонда науки».

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# THE ROLE OF TRANSPORT INFRASTRUCTURE IN TOURISM DEVELOPMENT: THE NEW SILK ROAD CASE

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**Аннотация.** Статья посвящена анализу роли транспортной инфраструктуры в развитии туризма в контексте реализации транспортного проекта «Новый Шелковый Путь». Излагается авторская идея о необходимости развития не только транспортных коридоров, но и уделения большего внимания на развитие транспортной инфраструктуры с целью формирования туристской среды и доступности для туристов определенных аттракций. Показывается, что с появлением новой транспортной инфраструктуры модифицируется представление о пространстве, что способствует повышению миграционной подвижности населения между странами вдоль транспортной магистрали и является предпосылкой экономического и туристского развития Центральной Азии. Это в свою очередь, напрямую влияет и на развитие туристской индустрии. Выявляется, что реализация целого ряда инвестиционных проектов, в том числе туристских, сдерживается, именно из-за транспортной недоступности. Рассматриваются конкретные фокусы – интенсивное развитие транспортных инфраструктур, поток товаров и грузов, потенциал Казахстана по преобразованию в транзитное пространство между китайским и европейским рынками и сопряжение с идеей «Нового Шёлкового Пути». Проводится экспертная оценка уровня развития транспортной инфраструктуры туризма по ее компонентам на основе проведения опроса.

**Ключевые слова:** транспортная инфраструктура, туризм, Новый шелковый путь, Западная Европа-Западный Китай, туристические потоки, Центральная Азия.

**Аңдатпа.** Мақала «Жаңа Жібек Жолы» көлік жобасын жүзеге асыру аясында туризмді дамытудағы көлік инфрақұрылымының рөлін талдауға арналған. Көлік дәліздерін ғана емес, сонымен қатар туристік ортаны қалыптастыру және туристер үшін белгілі бір аттракциялардың қол жетімділігі мақсатында көлік инфрақұрылымын дамытуға көп көңіл бөлу қажеттілігі туралы авторлық идея ұсынылған. Жаңа көлік инфрақұрылымының пайда болуымен кеңістік туралы түсінік өзгертілетіні көрсетіледі, бұл көлік магистралі бойындағы елдер арасындағы халықтың көші-қон ұтқырлығын арттыруға ықпал етеді және Орталық Азияның экономикалық және туристік дамуының алғышарты болып табылады. Бұл өз кезегінде туристік индустрияның дамуына тікелей әсер етеді. Бірқатар инвестициялық жобаларды, соның ішінде туристік жобаларды іске асыру көлік қолжетімсіздігіне байланысты тежелетіні анықталды. Көлік инфрақұрылымдарын қарқынды дамыту, тауарлар мен жүктер ағыны, Қытай және Еуропа нарықтары арасындағы транзиттік кеңістікке айналдыру және «Жаңа Жібек жолы» идеясымен ұштасу сияқты нақты бағыттар қарастырылуда. Сауалнама жүргізу негізінде туризмнің көлік инфрақұрылымының компоненттері бойынша даму деңгейіне сараптамалық бағалау жүргізіледі.

**Түйінді сөздер:** көлік инфрақұрылымы, туризм, Жаңа Жібек жолы, Батыс Еуропа-Батыс Қытай, туристік ағындар, Орталық Азия.

**Abstract.** The article is devoted to the analysis of transport infrastructure role in tourism development in the context of implementation of the transport project “New Silk Road”. The author's idea is stated about the need to develop not only transport corridors, but also to pay more attention to the development of transport infrastructure in order to form a tourist environment and the availability of certain attractions for tourists. It is shown that with the advent of a new transport infrastructure, the concept of space is modified, which contributes to an increase in the migration mobility of the population between countries along the transport route and is a prerequisite for the economic and tourism development of Central Asia. This, in turn, directly affects the development of the tourism industry. It turns out that the implementation of a number of investment projects, including tourism ones, is being held back, precisely because of transport inaccessibility. Specific focuses are considered – the intensive development of transport infrastructures, the flow of goods and cargo, the potential of Kazakhstan to transform into a transit space between the Chinese and European markets and pairing with the idea of the “New Silk Road”. An expert assessment of the level of development of the transport infrastructure of tourism in terms of its components is carried out on the basis of a survey.

**Keywords:** transport infrastructure, tourism, New Silk Road, Western Europe-Western China, tourist flows, Central Asia.

## Introduction

Before the pandemic, the travel and tourism industry (including its direct, indirect and induced impacts) accounted for 1 in 4 of all new jobs in the world, 10.6% of all jobs (334 million) and 10.4% of global GDP (9.2 trillion US dollars). Meanwhile, international visitor spending in 2019 was US \$1.7 trillion (6.8% of total exports, 27.4% of global service exports). This mobility has an impact on almost all sectors of the economy. For example, WTTC publishes reports on over 200 countries, most of which both receive tourists and send them in huge numbers. However, WTTC's latest annual study shows that the travel and tourism sector has lost nearly \$4.5 trillion to hit \$4.7 trillion in 2020, with a staggering 49.1% contribution to GDP down from 2019; compared to a 3.7% drop in the global economy in 2020 [1].

In the modern world, the scale and pace of tourist mobility has increased significantly due to the development of transport infrastructure in general. Compared with 1970, when just over 310.4 million people flew into airports, in 2019 this figure increased by 14 times (4.4 billion

people)<sup>1</sup> [2]; in 1995, over 2.0 billion passengers were transported by rail, and 2.3 billion in 2007 [3]<sup>2</sup>. In 1800 they moved an average of 50 meters per day – now they travel 50 kilometers per day [4-6]. Today, collectively, the citizens of the world travel 23 billion kilometers a year; predict that by 2050 this figure will quadruple, reaching 106 billion [7].

Nevertheless, people did not spend more time wandering, it remains the same, about an hour a day, although depending on the type of society, the figure can vary greatly [8-9]. It is important that people travel faster and farther, and not at all more often and no longer being “on the road” [10], given the digital transformation of human life, we are wondering how modern transport technologies have influenced the development of tourism and tourist mobility.

As you know, high transportation costs force producers to locate closer to valuable resources and markets. Availability of skilled labour, natural resources and economies of scale make large markets more attractive. Moreover, today, transport is becoming not only a means of transportation, ensuring the availability of tourist resources, a factor in the development of the industry, but also acquiring properties, functions of a tourist resource, an attractor [11]. According to Stephen J. Page [12], the development of tourism requires the transport infrastructure to create conditions for the free movement of tourist flows. However, most research on the topic, both in Kazakhstan and abroad, is devoted to the types and forms of transport travel, and only a limited number of research papers highlight transport infrastructure with specific examples. At the same time, the greatest attention is paid to air travel, and in infrastructure research, the leadership is behind airports. The role of other transport infrastructure facilities remains underestimated.

All of the above predetermines the relevance of the study on the place and role of transport infrastructure in the development of tourism, in particular on the example of the international mega transport project New Silk Road (NSR), initiated by the PRC.

### **Object of study: The New Silk Road from the perspective of its impact on tourism**

The main goal of the New Silk Road (NSR) project is to build the basis of a transit automobile corridor through Kazakhstan, which contributes to the formation of reliable supply lines that allow the country to integrate with world markets for goods and services, including the tourism market, in the West and in the East. In essence, the creation of the NSR is essentially a safe, cost-effective, high-capacity transport route between China and the European Union, which will be of great importance to the entire global economy, thereby contributing to the accelerated development of the tourism industry.

Currently, 98% of the volume of goods in trade between West and East is transported by sea. It is expected that the trend due to the interdependence of regional transport systems cannot continue for so long. In many respects, the increase in the share of other modes of transport - road transport and rail transport to reduce the number of traffic depends on the interest of the project participants. Several countries have bid on this project, including Kazakhstan, Russia and other Central Asian countries. It is known that the countries that make the main and special emphasis on this project also compete with each other. While the planned transport corridors are still at the planning stage, each participating country has an interest in having the largest section of the road built on its territory. On the other hand, the construction of new roads and railways will cost a lot of money, so it will put a lot of pressure on the budget of countries with weak economies.

In order not to be on the periphery of the world economy, it is necessary to form a network of transport communications and create the necessary conditions for launching the mechanisms for self-development of the economy of the Central Asian countries.

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<sup>1</sup> P.S. Air passengers carried include both domestic and international aircraft passengers of air carriers registered in the country.

<sup>2</sup> P.S. Passengers carried by railway are the number of passengers transported by rail times kilometers traveled.

## Literature Review

The extended literature review allowed us to determine the importance and role of transport infrastructure in tourism development. Table 1 below presents a systematic list of research papers that studied the problems of transport infrastructure and tourism and their relationship.

Table 1 – Opinions of researchers regarding the role of transport and transport infrastructure for tourism [compiled by the authors based on a literature review]

Kaul, Raghu Nath (1985) [13]	Transport plays an important role in the successful creation and development of new attractions as well as the healthy growth of existing ones. Provision of suitable transport has transformed dead centers of tourist interest into active and prosperous places attracting multitudes of people
Prideaux (2000) [14]	If the ability of tourists to travel to preferred destinations is inhibited by inefficiencies in the transport system there is some likelihood that they will seek alternative destinations
Stephen J. Page (2009) [12]	Tourism development requires the transportation infrastructure to create conditions for the free movement of tourist flows
Nguyen, Quang Hai (2021) [15]	The transport system performs the task of connecting areas with each other, as well as with tourist attractions, and becomes a factor in the competitiveness of the destination. International visitors often go to destinations where transportation systems are available and well developed
Pearce and Wu (2015) [16]	Transportation, tourism facilities, and communications are the main components of hard infrastructure
Raina (2005) [17]	Traffic and communications are elements in the physical components of tourism infrastructure, along with hotels, motels, and restaurants
Khadaroo & Seetana (2007) [18]	Transport infrastructure and communications infrastructure proving to be important factors affecting the number of tourists visiting
Ghaderi et al. (2018) [19]	Infrastructure and transportation are important components of the tourism supply chain
Ouariti & Jebrane (2020) [20]	Developing transport infrastructures such as highways, airports, and railway stations, has a positive impact on overnight stays in all types of accommodation
Tang (2020) [21]	Improving transport infrastructure is an important component of trade facilitation and “trade facilitation has improved the efficiency of the inbound tourism market, especially the indicator of infrastructure”
Kotelnikova, Valeria (2012) [22]	The tourism transport infrastructure plays an important role in shaping the image of tourist centers, regions and countries
Khadaroo & Seetana (2008) [23]	Transport infrastructure is a significant determinant of tourism inflows into a destination
Seetana & Khadaroo (2009) [24]	Transport capital having contributed positively to the number of tourist arrivals in both the short-run and the long-run
Yu (2016) [25]	The construction of transportation infrastructure promotes to the tourism industry

Although scientists approach the elements of tourism infrastructure from different points of view, it cannot be denied that transport infrastructure is an important representative of tourism infrastructure and directly affects the tourism infrastructure that attracts visitors.

Many recent empirical studies have demonstrated the role of transport and communications infrastructure in attracting tourists, with the result that transportation and communications infrastructure have been found to be important factors in influencing the number of tourists visiting.

## Results and discussion

### *International transport corridor “Western Europe-Western China”*

With the advent of new transport initiatives in the world, the intensity and volume of cargo and passenger transportation have increased. It is known that the development of transport infrastructure contributes to the development of the tourism industry in this area. One of such transport projects, which contributes to the accelerated development of tourism, is the International Transport Corridor (ITC) “Western Europe-Western China”, which passes through the territory of Kazakhstan. There are 9 routes in this transport corridor, of which the shortest distance from China to Europe is along the Chongqing-Duisburg route, the length of which is 6010 km, and the most optimal travel time is the “Lianyungang-Dostyk-Petropavlovsk-Brest-Hamburg route” (11-13 days). Table 2 below presents data on all main routes of the ITC “Western Europe-Western China”.

Table 2 – Data on distance and travel time along the ITC “Western Europe-Western China” [26-29]

Routes	Distance, km	Travel time, days
Northern Corridor of the Trans-Asian Railway (TAR): Lianyungang-Dostyk-Petropavlovsk-Brest-Hamburg	11,516	11-13
Central corridor of TAR: Lianyungang-Dostyk-Nur-Sultan-Ozinki-Brest	9,654	12-14
Southern TAR: Lianyungang-Dostyk-Serakhs-Razi-Istanbul	10,989	20-23
North-South: St. Petersburg-Aktau-Amirabad-Bender-Abbas	6,191	13-15
TRACECA: Lianyungang-Dostyk-Aktau-Baku-Poti-Istanbul	10,769	15
Trans-Siberian: Nakhodka-Petropavlovsk-Helsinki	10,648	20-23
Kashgar (China)-Osh (Kyrgyzstan)-Herat (Afghanistan)	11,060	18-20
Southern Sea Route	23,000	45-60
Chongqing-Duisburg	6,010	17-20

As can be seen from Table 2, the length of the Kashgar-Osh-Herat route is 11,060 km. This is the shortest road that will connect Kyrgyzstan, Afghanistan and China. According to experts, the transport corridor is important for the development of relations between the three countries. He is able to play a significant role in bringing together Bishkek, which is experiencing discomfort in the EAEU.

Although the sea route is considered the cheapest mode of transportation with a cost of \$390/TEU<sup>3</sup>, it is necessary to develop the land area, for example, the territory of the XUAR, the countries of Central Asia, which do not have access to the world's oceans. Since the construction of highways gives a positive multiplier effect to the development of the territory, including tourist destinations.

Table 3 below presents data on a comparative analysis of the effectiveness of transportation costs by modes of transport from China to Europe. Transportation costs by road and rail to and from the Silk Road region are quite high compared to maritime modes of transport by 7 times and 3 times respectively.

Table 3 – Comparative analysis of transportation from China to the EU by modes of transport [26, 30]

Route	Type of transportation	Shipping costs
Shenzhen – Antwerp	Railway	1 300 \$ / TEU
	Road	3 000 \$ / TEU
	Nautical	390 \$ / TEU

The International Transport Route (ITR) “Western Europe-Western China” is one of the main projects of the “Silk Road Economic Belt”. The car route with a length of 8500 km will take about ten days. At the same time, the length of the railway route along the Trans-Siberian Railway is 11.5 thousand km and takes fourteen days, the sea route through the Suez Canal is 24 thousand km and takes forty-five days.

For example, Uzbekistan is the only country in the world that is doubly closed from access to the sea. Urumqi, the center of the Xinjiang Uyghur Autonomous Region, is the largest city farthest from a seaport. This will give a high impetus to the development of remote territories.

According to the calculations of the Ministry of Industry and Infrastructure Development of the Republic of Kazakhstan, 6.6 billion US dollars will be spent on the construction of the Kazakhstan section of the road, while the cost of construction of each kilometer of the road will amount to 2.4 million US dollars. According to Kazavtozhol's calculations, the approximate annual income from the operation of the international transport corridor “Western Europe-

<sup>3</sup> TEU – twenty-foot equivalent unit – conventional unit of measurement of the capacity of freight vehicles.



Western China” will be about 300 million dollars (see table 4). According to preliminary calculations, at a given level of annual income, the cost of building a transport corridor will be justified in 22 years.

Table 4 – Financial profitability of the international transport corridor “Western Europe-Western China” [authors' calculations based on ADB [26, 30]

Financial indicators	Monetary equivalent
Planned profit (for 1 year)	\$300 million
Planned expenses (total)	\$6.6 billion
Planned expenses (per 1 km)	\$2.4 million

The data on financial profitability in table 4 confirm that the operation of the ITC "Western Europe-Western China" will have a positive multiplier effect on the economy of Kazakhstan, including the tourism sector.

The international transport corridor “Western Europe-Western China” will connect Europe with Asia through such Russian cities as St. Petersburg, Moscow, Nizhny Novgorod, Kazan and Orenburg, as well as the Kazakhstani cities of Aktobe, Kyzylorda, Shymkent, Taraz, Korday and Almaty. The corridor will become one of the most technologically advanced trade routes with vehicle and roadside infrastructure and technological innovations such as internet access, video surveillance and weather forecast access throughout the route. The length of the road is expected to be about 8,445 km (2.2 thousand km will pass through Russia, 2.8 thousand km through Kazakhstan and 3.4 thousand km through China).

Highways are of particular importance. Even in ancient times, many large cities were located along the Great Silk Road. At present, all life is concentrated along such main roads. Therefore, the development of roadside services and infrastructure facilities (gas stations, shops, cafes, motels, etc.) that meet international standards will increase the influx of tourists.

Kazakhstan is the center of regional distribution; Trans-Kazakhstan routes allow delivering goods from China to different European countries in an unprecedentedly short time. Until now, the transportation of goods from China to Europe is carried out by sea. This takes 40-60 days. Using the transport corridor passing through Kazakhstan, it is possible to greatly speed up the process of delivering goods, which can be considered in Table 5.

Table 5 – Shipping: access to distant markets [authors' calculations based on ADB [26]

Sea route – departure point Nur-Sultan	
Delivery point	Delivery speed
Marseilles	12 days
Mumbai	11 days

As can be seen from Table 6, the speed of cargo delivery from one of the 25 largest ports in the world along the Nur-Sultan-Lianyungang land route will be only six days. Lianyungang has a very developed transport infrastructure (air, rail, river routes and roads).

Table 6 – Overland transport: access to nearby markets [authors' calculations based on ADB [26]

Point of shipment	Delivery point	Delivery speed	Distance
Nur-Sultan	Moscow	2.8 days	2,250 km
	Novorossiysk	2.8 days	2,500 km
	Klaipeda	4 days	3,100 km
	Bandar Abbas	6 days	2,900 km
	Lianyungang	6 days	4,300 km
	Duisburg	6.2 days	4,350 km

Another transport corridor of the NSR is the Trans-Caspian International Transport Route (TMTR or Middle Corridor). According to the Union of Transport Workers of Kazakhstan and Kazlogistics, the potential of the Trans-Caspian international transport route is estimated at more than 15 million tons of cargo per year. According to the “Union of Transport Workers of Kazakhstan” and “Kazlogistics”, the international transport corridor “Western Europe-Western China” through the territory of Russia, Kazakhstan and China is only 8,445 km. Of these, on the territory of Russia – “border of the EU-St. Petersburg-Kazan-border of the Republic of Kazakhstan” length of 2,233 km. On the territory of Kazakhstan, the length of the route “border of the Russian Federation-Aktobe-Kyzylorda-Shymkent-Taraz-Almaty-Khorgos” is 2,787 km. The length of the Khorgos-Urumqi-Lianyungang transit corridor through China is 3,425 km.

It is well known that during its dawn, the Silk Road connected China, Central Asia and beyond and promoted the development of business, trade, technology and entrepreneurship. In the modern world, the New Silk Road can become a source of meeting the world's energy needs. Kazakhstan and Uzbekistan are leaders in terms of oil and natural gas reserves. Kyrgyzstan and Tajikistan have a huge potential for the development of hydropower. The Xinjiang Uygur Autonomous Region holds the largest reserves of oil, natural gas and coal in China.

Railways show great promise for long distance transportation, some of the Silk Road countries are gradually privatizing some parts of the railway lines. The lack of multimodal transport hubs that will connect key infrastructure networks along the region is a major problem.

The Central Asian economies are largely based on services, which account for 43% to 55% of the total GDP of the four countries. The agricultural sector accounts for 32% of GDP in Kyrgyzstan and 22-24% respectively in Tajikistan and Uzbekistan, but in Kazakhstan this figure is about 6%. These facts testify to the heterogeneity of the structure of the regional economy. The structure of the economy of the four Chinese provinces is similar, despite the differences in the size of primary production in the amount of 17-21% of the provincial GDP. Secondary industries in the four provinces range from 43% to 45%, tertiary industries from 35% to 39% [26].

Modern borders have complicated the flow of goods along the New Silk Road due to customs border inspections, visas and other requirements. Many of these issues are being addressed by the World Trade Organization (WTO), simplifying world trade, Kyrgyzstan (1998), China (2001), Kazakhstan (2015) are members of the WTO. Uzbekistan and Tajikistan have the status of observers in the WTO. The Silk Road countries have not yet begun to use the existing potential for interregional trade. It is important to note that about 80% of China's trade along the Silk Road is conducted only with Kazakhstan. The share of inter-regional exports of the five countries was only 1.1% of their total global exports.

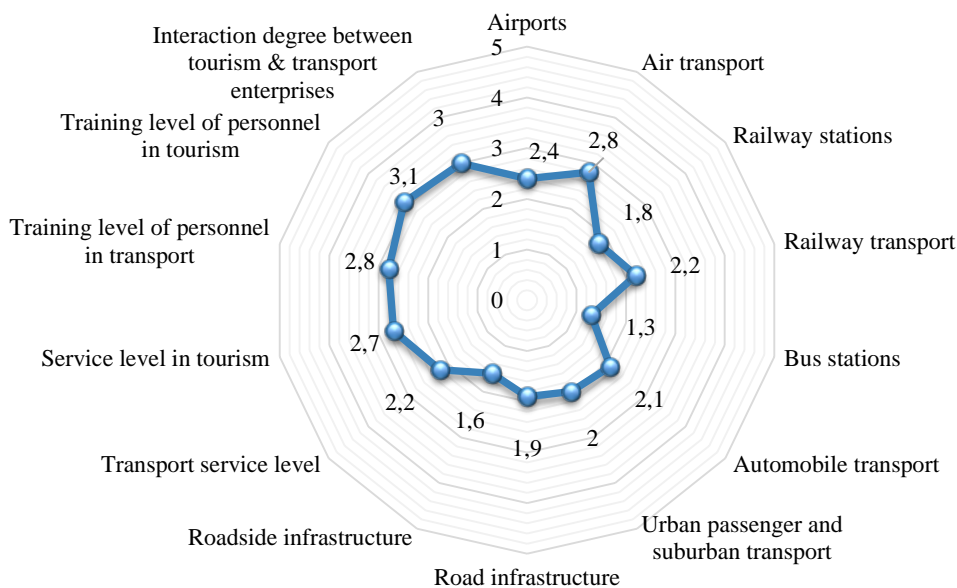
“Western China-Western Europe” ITC will have a multiplier effect not only on the economy of Kazakhstan. Almaty will cover a zone of influence of 53 million people, Tashkent of 44 million people, Atyrau of 14 million people, Aktobe of 12 million people and Uralsk of 28 million people [26].

Taking into account the geographical location of Kazakhstan, the structure of the transport system and passing transport routes, key areas were selected as potential export niches: China-Russia; Russia-China; European Union-China; China-European Union; China-Countries of Central Asia. The data on distance and travel time along the ITC “Western Europe–Western China”, presented in tables 2-6 above, allow us to conclude that Kazakhstan can occupy a central position as a transit country in the Central Asian region.

*Survey results: Expert assessments of the level of development of tourism transport infrastructure by its components*

To determine the role, we carried out an expert assessment based on various variables through a survey. As for the level of development of the transport infrastructure of tourism, the lowest marks were given to bus stations, roadside infrastructure, then – road infrastructure and urban passenger transport (equal number of points), rail transport, road transport, railway

stations, and the level of service in transport. It is characteristic that the experts assessed the level of training of personnel in transport and the level of training of specialists in tourism equally and not very high – 2.8 points (figure 1). Airports and air transport, the interaction of transport and tourism enterprises (approximately 3 points each) received equal and relatively satisfactory marks. The highest, but far from the highest possible indicator of the quality of service in tourism (2.7 points). The general low level of assessments indicates the insufficient development of the transport infrastructure of tourism in Kazakhstan and the unfavorable situation in all its sectors.



1 – very low; 2 – low; 3 – medium; 4 – above average; 5 – high

Figure 1 – Results of expert assessments of the level of development of tourism transport infrastructure by its components [compiled by the authors]

Among the main factors in the development of the transport infrastructure of tourism, most respondents noted the attraction of more skilled personnel, government regulation, the importance of private business with public funding. At the same time, the need for competent management of the transport industry, low quality of service in transport, and the lack of interaction between different types of transport were also mentioned.

### Conclusion

Thus, within the framework of this study, we examined the role and importance of transport infrastructure in tourism development on the example of the New Silk Road transport project. It has been proven that transport infrastructure has a significant impact on tourism development.

In particular, it was determined that a developed transport infrastructure is a factor in attracting tourist flows. In this context, the implementation of the New Silk Road mega-transport project and its sub-projects play an important role in the development of tourism on the Kazakhstani section of the Western Europe – Western China transport corridor.

### Limitations and future direction

There are some limitations to this research study, which would help conduct future research studies. Initially, the present research has only emphasized the potential path of the New Silk Road tourism infrastructure plan. In contrast, there must be noted the undesirable influence of tourism on the residents in the context of New Silk Road, such as economic, social, and cultural, environmental concerns.

The experience of road and transport infrastructure development, taking into account the principle of sustainability, may be relevant to sustainable tourism development strategies. Accordingly, a more in-

depth study of this area will make a significant contribution to tourism research and will ensure an understanding of tourism practices.

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**«ТУРИЗМ ЖӘНЕ ҚОНАҚЖАЙЛЫЛЫҚ САЛАСЫНДАҒЫ БІЛІМ БЕРУ ЖӘНЕ  
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