



## **Progressive Areas of Developing Transforming Factors of Tourism and Recreational Cluster of the Volgograd Region**

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### **ABSTRACT**

The goal of this article is to estimate the current state of transforming factors of the Volgograd Region as a basic driver of the development of tourism and recreational cluster (TRC) of the region. In order to achieve the set goal, the work develops the methodology on scoring estimation of the region's resources state. This methodology is applied in the practical estimation of the current state of human, technical and technological, and natural factors of the TRC of the Volgograd Region. Researching the state of transforming factors of the region, the authors revealed considerable problems, which restrain the formation and development of the TRC of the Volgograd Region. They include problems related to provision of drinking water, deficit of professional personnel, and insufficient level of the development of the transportation infrastructure of the region. Systemizing the obtained results enabled the authors to define top-priority areas of the progressive development of the TRC of the Volgograd Region.

**Keywords:** Tourism and Recreational Cluster, Clustering, Transforming Factors, Natural and Recreational Factor, Tourism Industry

**JEL Classifications:** L83, R11, R49, O14, J24, Q59

### **1. INTRODUCTION**

The development of tourism has a considerable multiplicative effect on the economic activity of the country and regions generating additional budget profits. That is why it is an urgent task on the federal and regional levels. In this context increasing the competitiveness of the tourism industry and formation of its development strategy are among key problems of regional management.

The Volgograd Region has an extremely powerful potential for the efficient development of this area (Riabova and Vypritskaya, 2014). Clustering is one of the promising areas of the development of the tourism branch of the region. This is a concept related to creating and strengthening tight cooperation of various organizations that allow the consumer to offer a comprehensive tourist service.

The idea to form clusters becomes more and more popular in the area of tourism. Closer cooperation and strengthening of relations between various subjects of this area prove it (Speth, 2009).

Although at the present time traditional clusters are less and less related to geographical nearness of subjects due to the development of technical progress, world digitalization, online cooperation, etc., the territorial aspect remains to be determining in the creation and development of tourism clusters (Kim and Wicks, 2010).

The benchmark for the cooperation between various organizations of the tourism and recreational complex is strong attraction of the territory that is measured by the number of natural resources (landscape, climate, natural monuments, etc.) and the availability of anthropogenic places of interest (architecture, folklore, cuisine, lifestyle of the local community, etc.) (Svorad et al., 2015).

The competitiveness of the tourism sector can be described as a result of the rational interrelation of natural and anthropogenic factors of the tourism areas attractiveness (Fetisova et al., 2015a).

The best form of such cooperation is the cluster approach. The tourism and recreational cluster (TRC) is geographic concentration

of the interrelated enterprises, suppliers and associated institutions that perform the activity related to providing tourism and recreational services. Clustering allows participants to use the synergetic effect and create firm competitive advantages (Fetisova et al., 2015).

The availability of competitive advantages defines the possibility to form and develop TRC of the region.

The natural factor is the basis of the construction of the TRC of the Volgograd Region. However, functioning and developing of this cluster also depend on other factors: Technical and technological, human, etc.

Ineffective or inefficiently rational use of one of the factors has negative impact on the tourism area of the region. Hence, the research of the areas related to progressive development of factors that are necessary for the organization of the activity of subjects of the TRC of Volgograd acquires special urgency.

The goal of this article is to research the contemporary state of transforming factors of the tourism and recreational complex of the Volgograd Region and to reveal areas of their further development.

In accordance with the defined goal, the researchers set a number of tasks:

- To define the methodology of scoring estimation of the state of transforming factors related to forming and developing the TRC of the Volgograd Region
- To estimate the current state of the human, technical and technological, and natural (ecological) factors of the TRC of the Volgograd Region, and
- To systemize the obtained results and to define the priority areas of the progressive development of the TRC of the Volgograd Region.

## **2. METHODOLOGY OF ESTIMATING TRANSFORMING FACTORS RELATED TO DEVELOPING THE TRC OF THE REGION**

The dynamics and efficiency of the development of the tourism industry directly depend on the efficiency of using the resource base of the region. In terms of economy, the resource base of the tourism and recreational complex is a combination of factors that have quantitative and qualitative parameters that define the possibility of their involvement in programs of the region development.

Within the resource and factor approach to researching the tourism and recreational complex of the region two groups of factors are singled out:

1. Factors that directly influence transforming processes in the tourism industry of the region were called transforming (differentiating) factors (Fetisova et al., 2015b). Natural, labor and technological factors act as basic transforming factors of the tourism and recreational potential of the region. This group of factors is focused on natural differentiation of

all components of the tourism and recreational complex in accordance with the tourists' needs.

2. Factors focused on supporting the integrity of subjects of the tourism and recreational complex of the region, their combination on the basis of common standards, contracts, organizational forms and informational flows were called transactional (combining) factors. Such factors include institutional, organizational, and informational factors.

In order to define promising areas in the development of these factors within the concept of clustering the tourism area of the Volgograd Region, it is reasonable to, above all, estimate the state of transforming factors, i.e. natural and resource, technical and technological, and human (labor) potential of the region.

At the present time there are several various methodologies based on applying quantitative and qualitative indicators of the analysis of the resource and factor potential of the regional tourism and recreational complex. According to the authors, methodologies that allow to make a comprehensive estimation of the resource base of the region based on the integral indicator of transforming factors of the tourism and recreational potential are of the greatest interest.

The offered methodology of the comprehensive estimation of the current state of transforming factors was based on the general methodology related to estimating the tourism potential of the territory. The novelty lies in the offered set of criteria related to estimating the natural and resource, technical and technological, and human potential of the Volgograd Region by using the scale of estimation with negative values.

The informational basis is statistical and reporting documents of the Tourism Development Agency of the Volgograd Region, Ministry of Sports and Tourism of the Volgograd Region. Polls and expert estimates were used as basic methods of collecting and processing information.

In order to form parameters of estimating transforming factors of the tourism and recreational complex of the Volgograd Region, 5-point scale of estimation was applied. In accordance with it, every criterion is assigned a definite number of points based on the level of opportuneness to use a specific resource of the tourism activity:

- The most favorable conditions for creating the tourism product – 5 points;
- Rather favorable conditions for creating the tourism product – 4 points;
- Favorable conditions for creating the tourism product – 3 points;
- Partially favorable conditions for creating the tourism product – 2 points;
- Unfavorable conditions for creating the tourism product – 1 point;
- Lack of conditions for creating the tourism product – 0 points;
- Availability of appalling repellent factors – (-1) point.

Then criteria for estimating transforming factors were defined.

Five parameters for estimation were defined for the natural factor: Availability of specially protected natural territories, the level of comfort of the natural and climate zone for an individual, the level of the air pollution, type of space (forestry area), and quality of drinking water.

According to the group of estimating the human potential of the TRC development, four estimation criteria were defined: The level of unemployment in the region, the level of education of the population of the region, the level of average profit of the population of the region per capita, and provision of the TRC enterprises with labor resources.

According to the group of estimating the technical and technological potential of developing the TRC of the Volgograd region, four criteria were defined: General productive capacity of the accommodation means, availability of regional tourism and informational center, the level of development of the road-side infrastructure, and transport accessibility of the territory.

Table 1 shows the general scale of estimates of all transforming factors of the tourism and recreational complex of the region.

The total estimation of indicators is made on the basis of the points and value method.

The total number of points received as a result of estimating a separate group of transforming factors is defined according to the following formula:

$$V_p = \sum_{i=1}^N w_i P_i \quad (1)$$

Where,

$V_p$  - is a total number of points received as a result of estimating the state of transforming factors of the TRC of the region,

$P_i$  - is a number of points according to every  $i$  factor, and,

$w_i$  - is a ration of the  $i$  factor importance in the development of the TRC.

According to the total number of points in accordance with Table 2, the general estimate of the state of transforming factors of the TRC of the region is defined.

The above methodology to estimate transforming factors of the development of the region's TRC is based on applying simply calculations by using statistical data that are publicly available.

### 3. RESULTS

#### 3.1. Results of Estimating the Natural Factor of the TRC of the Volgograd Region

The Volgograd Region is located in the southern European part of Russia between two largest rivers – Volga and Don. The climate of the region is moderately continental and rather comfortable for the development of tourism: Short winter with little snow

**Table 1: General scale of estimates of transforming factors of the TRC of the region**

Factors	Points
Natural factor	
Availability of SPNT	
Availability of SPNT of the international and federal importance	5
Availability of SPNT of regional and local importance	3
Unavailable	0
Level of comfort of the natural and climate zone	
Maximum climatic comfort	5
Moderately comfortable conditions	4
Little comfortable conditions	3
Moderately uncomfortable conditions	2
Uncomfortable conditions	1
Level of air pollution	
Share of samples with the excess of the TLVAE of the chemical agent in the air of the populated area is on the level and does not exceed the average all-Russian indicator	5
TLVAE exceeds the average all-Russian indicator from 1 to 1.4 times	3
TLVAE exceeds the average all-Russian indicator by 1.5 times	1
Type of space (forestry area)	
Half open (forestry area 20-60%)	2
Open (forestry area <20%)	3
Closed (forestry area above 60%)	1
Provision with drinking water that complies with the safety requirements (%)	
Above 95	5
From 90 to 95	4
From 85 to 90	3
From 80 to 85	2
<80	1
Human factor	
Level of unemployment	
Lower than the average all-Russian indicator and positive dynamics for the last 3 years	5
Lower than the average all-Russian indicator but there is negative dynamics	4
Higher than the average all-Russian indicator but there is positive dynamics of its decrease	3
Higher than the average all-Russian indicator and negative dynamics of its increase	1
Level of education of the region's population	
Education index above 0.98	5
0.94-0.97	4
0.9-0.93	3
0.86-0.89	2
0.82-0.85	1
Level of average profit per capita	
Higher than the average all-Russian indicator, the tempo of growth exceeds the average all-Russian one	5
Higher than the average all-Russian indicator, the tempo of growth is lower than the average all-Russian one	4
Lower than the average all-Russian indicator, the tempo of growth coincides with the average all-Russian one	3
Lower than the average all-Russian indicator, the tempo of growth exceeds the average all-Russian one	2
Lower than the average all-Russian indicator, the tempo of growth is lower than the average all-Russian one	1
Provision of TRC enterprises with labor resources (%)	
Above 90	5

Contd...

**Table 1: Continued**

Factors	Points
From 80 to 90	4
From 70 to 80	3
From 60 to 70	2
<60	1
Technical and technological factor	
Provision of tourists with accommodation means	
Excess of the average all-Russian indicator and positive dynamics for the last 3 years	5
Excess of the average all-Russian indicator but there is negative dynamics	4
The indicator is lower than the average all-Russian but there is positive dynamics	3
The indicator is lower than the average all-Russian one but there is positive dynamics	1
Availability of regional tourism and informational center	
Yes	5
No	0
Transportation accessibility of the region	
High (the density of railways and hard-surface roads exceeds similar indicators in Russia)	5
Medium (the density of railways exceeds the average all-Russian indicator, the density of hard-surface roads is lower than the indicator in Russia)	3
Low (the density of railways and hard-surface roads is lower than the average all-Russian indicator)	1
Provision with facilities of the road-side structure	
High	5
Medium	3
Low	1

SPNT: Specially protected natural territories, TLVAE: Threshold level value acute exposure, TRC: Tourism and recreational cluster

**Table 2: Scale to estimate state of transforming factors of the TRC of the region**

Indicator of the state of transforming factors of the TRC of the region	Natural factor	Human factor	Technical and technological factor
Excellent	From 4.3 to 4.74	From 4.1 to 5	From 4.1 to 5
Good	2.57 to 4.29	From 3.1 to 4	From 3.1 to 4
Satisfactory	1.91 to 2.56	From 2.1 to 3	From 2.1 to 3
Unsatisfactory	<1.9	<2	<2

TRC: Tourism and recreational cluster

and long, hot summer. As a rule, spring is short and dynamic. It comes in the middle of March. Dry and hot weather is observed in May already. The average temperature in July is +22°C. Autumn is bright and warm. It comes in September and lasts till the first days of December.

On the territory of the region there are 40 protected natural objects of the regional importance. They include 7 natural parks, 15 natural monuments, 1 protected landscape, 8 nature-sanctuaries and as many territories that are of special importance to preserve objects included in the Red Book of the Volgograd Region.

The Volgograd Region is referred to the sparsely forested regions of the Russian Federation. The area of forests on the territory of the region is 683 thousand ha. The forest cover of the region

territory is 4.3% (Federal Service of State Statistics of the Russian Federation). Among six entities of the Southern Federal District, the area holds position 2 in terms of the area of forests and position 3 in terms of the indicator related to the forest cover of the territory. Along with this, in terms of the area of forests the region holds only position 64 in the Russian Federation, and position 77 according to the indicator related to the forest cover.

In spite of considerable concentration of industrial enterprises and plants on the territory of the Volgograd Region, the level of pollution of natural air is 0.5% and does not exceed the average indicator in the Russian Federation (1.1%) (On State of Sanitary and Epidemiological Wellbeing of the Population of the Russian Federation).

In spite of the fact that the Volgograd Region is referred to the territories with the most favorable indicators of the sanitation-and-epidemiological situation, the region has got a number of ecological problems that restrain the process of forming and developing the TRC.

1. Shortage of water in reservoirs of the Volzhski-Kamsk Cascade leads to the decrease in the provision of the region with drinking water.

According to the results of 2014, the provision of the population of the Volgograd Region with the centralized water supply was 74.7%, 5.9% - with non-centralized water supply, and 0.4% - with imported water.

Historically water is supplied to large cities of the Volgograd Region (Volgograd, Volzhskiy, Kamyshin and Mikhailovka) from the surface sources whose state is not stable and depends on a number of factors including anthropogenic ones. At the present time the share of sources of the centralized water supply that do not comply with sanitary-and-epidemiologic requirements is 20.1% in total for the region. It exceeds the average all-Russian indicator (15.8%) (On State of Sanitary and Epidemiological Wellbeing of the Population of the Volgograd Region in 2014).

In 2014 the share of population provided with drinking water that complies with the requirements of safety was 88.99% of the total amount of the population of the Volgograd Region. This is lower than the indicator in the Russian Federation (89.39%) and in the Southern Federal District (90.57%) (Data of State Statistics of the Unified Interdepartmental Statistical Information System).

The researches related to the quality of drinking water on the territory of the Volgograd Region conducted in 2014 showed that 4.67% of the water objects of Category 1 (water supply sources) and 22% of the water objects of Category 2 (recreation zones) did not comply with hygienic standards. Basic reasons of the current unsatisfactory situation related to polluting water of the water objects is the state and volumes of discharge waters disposed to the water objects. For example, only in Volgograd there are 2 orderly effluent discharge outlets for the water disposed from the Volga River without cleaning with the total volume of 12,659 thousands m<sup>3</sup>/year and above 30 disorderly outlets of urban runoff.

2. One of the ecological problems of Volgograd is related to disorderly and irrational utilization of household wastes.

A great number of them are dangerous for a person and the nature as a whole.

Today wastes facilities of the Volgograd Region do not comply with the required standards. There are 689 facilities registered officially. Only six of them comply with all the required standards.

Besides, it is possible to observe the number of official waste deposits and dirtiness of territories. While in 2011 759 unsanctioned waste deposits with the total volume of 108.4 thousands m<sup>3</sup> were revealed, in 2013 this indicator was 1,147 waste deposits with the total volume of 124.3 thousands m<sup>3</sup> (Comprehensive Strategy of Development of the Area of Treating Solid Everyday [Utility] Wastes on the Territory of the Volgograd Region for the Period up to 2020).

The annual increase in wastes per capita is 6%. It exceeds the speed of the population growth 3 times. Taking into account that annual growth is above 4.0 million tons of wastes, the problem related to worsening of the quality of environment because of irrational placement of wastes becomes critical.

Table 3 shows the estimation of the natural factor of the development of the TRC of the Volgograd Region.

So, the state of the natural factor is estimated as good and positively influencing the development of the TRC of the Volgograd Region.

### 3.2. Results of Estimating the Human Factor of the TRC of the Volgograd Region

Over the recent 20 years on the territory of the Volgograd Region it has been possible to observe the decrease in the number of population based on natural loss. As on January 1, 2015 the number of the region's permanent population decreased by 11.7 thousands (-0.5%) as to the previous year and was 2557.4 thousand people (Volgograd Region in Figures 2014: Brief collection).

Positive factors of the demographic situation include the increase in the expected length of life and slowing of the process of the natural loss of the population of the region. It is necessary to note not only the quantitative decrease in the population but also changes in its age and gender structure. While as on the beginning of 2011 per 1,000 people of employable age 656 people were older and younger than the employable age, at the beginning of 2015 the coefficient of the demographic load increased by 12.8% and was as many as 740 people.

The number of economically active population is 1.31 million people including 1.22 million people involved in various sectors of economy. For 2012-2014 the level of unemployment in the region increased from 6% to 6.6%. It exceeds the average all-Russian indicator (5.5%).

As on the end of December 2015 the tension coefficient (the correlation of the number of unemployed citizens registered in the Employment Agency to the number of registered vacancies) was 0.5.

18.9 thousand people work in the area of hotel and restaurant business in the Volgograd Region, and 94.4 thousand people work in the area of transportation and communications.

The total need in employees as on the end of September, 2015 was 46.7 thousand vacancies. The demand for specialists of the tourism area remains rather high (21 vacancies with the average salary of 35,000 rubles).

In 2014 the provision of enterprises related to the hotel and restaurant complex of the Volgograd Region with specialists was 97.3%. The most demanded vacancies declared by the enterprises of the hotel and restaurant complex of the Volgograd Region include (Committee on Labor and Employment of the Population of the Volgograd Region):

- Vehicles drivers (4895 vacancies with the average salary of 15,289.2 rubles),
- Cooks (1373 vacancies with the average salary of 12,017.4 rubles),
- Waiters (446 vacancies with the average salary of 11,072.7 rubles),
- Chambermaids (109 vacancies with the average salary of 22,234.4 rubles).

At the present time there are 21 vacancies in the "Donskoy" Natural Park" State-Financed Institution and "Volgo-Akhtubinskaya Poyma" Natural Park" State-Financed Institution of the Volgograd Region.

The level of education of the population is one of the most important resources of the economic development of the region.

The system of higher education of the region includes 15 institutions of higher professional education and 39 branches. 10 higher education institutions and 5 secondary technical schools as well

**Table 3: Estimation of natural factor of developing the TRC of the Volgograd Region**

Indicator	Value	Point	Weight of the indicator	Windowed estimate
Availability of SPNT	40 regional objects	3	0.217	0.652
Level of comfort of the natural and climate zone	Moderately comfortable climate conditions	4	0.217	0.870
Level of air pollution	0.5%	5	0.217	1.087
Type of space (forestry area)	4.3%	2	0.130	0.261
Provision with drinking water that complies with the safety requirements	88.99%	3	0.217	0.652
Total amount of points in the estimation of natural and recreational factors		17	1	3.522

TRC: Tourism and recreational cluster, SPNT: Specially protected natural territories

as institutions of additional education, courses on training and improving skills of guides and other specialists of the tourism industry train specialists for the tourism industry.

According to the data from the report about human development in the Russian Federation, the index of education of the population of the Volgograd Region (0.896) lacks behind the average all-Russian indicator (0.91) (Grigoriev and Bobylev, 2014).

For the period of 2012-2014 the average profit of population per capita in the Volgograd Region increased from 16,010.6 rubles to 19,056 rubles. However, it remained lower than the average indicator in Russia and in the Southern Federal District (Statistical Yearbook, Volgograd Region, 2014).

The average accrued salary at the enterprises of the tourism industry of the Volgograd Region is considerably lower than the average all-Russian indicators. However, the tempos of their growth (excluding the activity of travel agencies) surpass analog indicators in average in the Russian Federation. At the same time it is necessary to note extremely low salary of travel agencies employees in the region (Data of State Statistics of the Unified Interdepartmental Statistical Information System) (Table 4).

Table 5 shows the estimation of the human factor of the development of the TRC of the Volgograd Region.

Thus, the state of the human factors is estimated as satisfactory. The development of the TRC of the Volgograd Region is restrained by the lack of qualified personnel for enterprises of the tourism and recreational complex.

### 3.3. Results of Estimating Technical and Technological Factor of Developing the TRC of the Volgograd Region

One of the basic indicators of the state of the development of the technical and technological factor of the tourism and recreational complex of the Volgograd Region include the volume and characteristics of the productive capacities of enterprises of this complex. In 2014 in the Volgograd Region the following activity was performed:

- 207 tourist companies,
- 238 collective accommodation means of various types including hotels and analogous accommodation means in the amount of 116 units and 55 specialized tourists accommodation means.
- 1174 enterprises of the restaurant business,
- 14 large theaters,
- 58 museums,
- 2 art galleries,

- 3 exhibition halls,
- 1164 historical objects.

Table 6 shows the comparative characteristics of the productive capacity and provision of the territory with accommodation means.

The average annual loading of hotels in the Volgograd Region is 57%. Such indicator is related to, above all, vivid seasonal nature of the internal tourism. The greatest number of tourists comes during vacations (school groups) and in summer time (recreational tourism).

According to the official data of the Territorial Body of the Federal State Service of Statistics in the Volgograd Region (Volgogradstat), as on January 01, 2015 in the region there were 171 collective accommodation means including hotels, camping sites and spa resorts as well as 5599 rooms with the total number of seats – 12,847.

Over the recent years on the territory of the Volgograd Region they have noted a considerable qualitative and quantitative development of collective accommodation means. To a great extent two factors contribute to it. Firstly, this is the inclusion of the region in the members for organizing the FIFA World Football Championship in the Russian Federation in 2018. Secondly, this is the compulsory classification of accommodation means according to the Federal Law of the Russian Federation “On Preparing and Conducting of FIFA 2018 World Football Championship, FIFA 2017 Confederations Cup in the Russian Federation, and Amending Separate Enactments of the Russian Federation” dated June 07, 2013 No. 108-FZ.

Transportation accessibility of the territory is another important factor of the development of the TRC.

The transportation network of the Volgograd Region is well-developed. The density of hard-surface public roads and the density of public railways surpass the analog indicator in the Russian Federation by 2.3 times and 2.86 times accordingly. Table 7 shows qualitative indicators of the state of the transportation infrastructure of the Volgograd Region.

It is necessary to note that under good quantitative indicators, the transportation infrastructure is the most problematic branch in the technical and technological potential of the tourism and recreational complex of the region that requires state support.

The state of transportation infrastructure in the region requires focus of efforts of state authorities and private business for all types

**Table 4: Average accrued salary at tourism enterprises in the Russian Federation and the Volgograd Region in 2013-2014**

Areas of activity	Territory	2013	2014	Tempo of growth/decrease (%)
Hotels and restaurants	Russian Federation	18,425.6	19,943.7	108.2
	Volgograd Region	12,406.2	14,518.4	117.0
Activity related to organizing rest and entertainments, culture and sports	Russian Federation	26,923.7	31,464.5	116.9
	Volgograd Region	15,128.9	17,808.1	117.7
Activity of travel agencies	Russian Federation	16,712.7	21,212.6	126.9
	Volgograd Region	8,599.6	2862.8	33.3

**Table 5: Estimation of human factor of the development of the TRC of the Volgograd Region**

Indicator	Value	Point	Weight of indicator	Windowed estimate
Level of unemployment, %	6.6%	1	0.25	0.25
Education index	0.896	3	0.25	0.75
Level of the average profit per capita, rubles/persons		3	0.25	0.75
Provision of TRC enterprises with labor resources	97.3%	5	0.25	1.25
Total		12	1	3

TRC: Tourism and recreational cluster

**Table 6: Characteristics of productive capacity and provision of territory with accommodation means in the Volgograd Region and the Russian Federation**

Indicator	Volgograd Region	Russian Federation
Area of the hotel room capacity of collective accommodation means, m <sup>2</sup>	125,634.1	13,130,606
Number of collective accommodation means, units	238	15,590
One-time capacity of collective accommodation means, seats	16,711	1,573,342
Number of overnights, units	1,555,474	184,017,713
Number of the accommodated guests, persons	412,588	44,218,887
Duration of guests' stay, days	4.16	3.77
Average area of the hotel room capacity of 1 collective accommodation mean, m <sup>2</sup>	527.9	842.2
Number of constant population	2,569,126	143,666,931
Provision of the territory with accommodation means, seats per 1000 persons	6.50	10.95

**Table 7: Qualitative indicators of the state of the transportation infrastructure of the Russian Federation and the Volgograd Region**

Indicator	Russian Federation	Volgograd Region
Density of hard-surface public roads, km. of roads per 1000 m <sup>2</sup> of the territory	60	140
Number of petrol stations, units	29,942	516
Total length of roads, km	1,450,348.3	26,344
Provision with the roadside infrastructure, units per 1000 km of roads	20.64	19.59
Number of exploitation public buses per 100,000 people in the entities of the Russian Federation	51	49
Density of public railways per 10,000 km <sup>2</sup> of the territory in entities of the Russian Federation	50	143
Share of public roads that do not comply with standard requirements, %	43.4	21.3

of transportation, especially the one that provides the delivery of tourists from other regions and countries. So, the airport of Volgograd that has the status of international needs to solve the following problems:

1. Expansion of the acceptance rate. In 2014 the total passenger flow of the Volgograd airport was 750 thousand people. The real acceptance rate of the internal terminal is 200 passengers/h, and 100 passengers/h for the international one. It is necessary to increase the acceptance rate up to 1000 people/h.
2. Improvement of the quality of passengers' servicing on the territory of the airways terminal. In order to solve this problem, it is necessary to develop 24/7 retailing, food services, organization of placing passengers with children, etc.
3. Reconstruction of flight strips, modernization of navigation and other equipment.

At the present time the second flight strip is reconstructed, and a new terminal is built. It will allow to increase the general acceptance rate and to raise the level of safety service to international standards.

The Volgograd railway station receives up to 60 slow passenger trains per day and renders services to 4.5 thousand passengers. However, the building of the station must be modernized and improved, and in order to improve the quality of passengers servicing, it is necessary to develop the complex of associated services.

The buildings of two Volgograd bus stations also must be reconstructed. The passenger flows for 2015 in the central and southern bus stations were 666,119 and 29,494 people accordingly. The nominal project capacity of every station is 300 people/h. Now, under the current passenger flow the central bus station cannot provide all passengers with comfortable conditions (insufficient number of seats for waiting passengers). In case the passenger flow increases due to the arriving tourists, it is required to expand the current capacities and considerably reconstruct the buildings of the bus stations.

A serious restraining factor for developing tourism in the Volgograd Region is the state of roads and road infrastructure. According to the data of the "For Safety of Russian Roads" Interregional center, roads of the Volgograd Region were included in the list of the most dangerous roads of the country. According to the researches, in 2014 due to unsatisfactory state of roads, there were 874 car accidents in the region. 124 people died in them, and 1102 were injured. With such indicators in the rating of safety of Russian roads, the Volgograd Region hold position 38 of 45 possible and entered so called red zone - The group of regions with the low level of road safety.

It is necessary to expand the drive-up area for buses departure and parking, reconstruct the network of roads with high quality road pavement, create comfortable and safe places for eating and resting, etc.

The current problems of the road infrastructure of the tourism and recreational complex of the Volgograd Region together with other specified problems of this complex contribute to the fact that

quantitative indicators of the development of the tourism industry in the Volgograd Region over recent years have been to be improved. At the present time the share of the tourism industry in the internal regional product of the Volgograd Region fluctuates in the range of 0.5-0.6%, and qualitative indicators of the industry (number of days spent by the tourist in the region and the volume of funds spent by him/her) make up 3 days and about 7500-8000 rubles respectively. The dynamics of the growth of volumes of tourists' flows is low.

Estimating the level of the development of the technical and technological factor of the TRC of the region, it is necessary to note the availability of such object of the infrastructure as the tourism and informational center of the Volgograd Region. It was established in 2014 to promote the regional tourism product on the world and Russian tourism markets. Table 8 shows the estimation of the infrastructure of the tourism and recreational complex of the region.

So, the state of the technical and technological factor of the tourism and recreational complex of the Volgograd region is estimated as average because of the above mention insufficient level of the development of the tourist infrastructure.

#### 4. DISCUSSION

Unique tourism resources allow to successfully develop the internal tourism by creating and developing competitive tourism products in the Volgograd Region. At the same time the tourism potential of the region is realized slightly and the available resources are not used efficiently.

The basic problems that restrain the development of TRCs on the territory of the Volgograd Region include the problem related to provision of high quality drinking water, deficit of professional personnel and bad state of the transportation infrastructure.

Provision of high quality drinking water is an important condition of the comfortable life on the territory of the Volgograd Region.

The basic reason of the current situation is the high level of the wear of the water supply and disposal systems, applying ineffective and old-fashioned technologies of cleaning and preparing water. It is possible to solve such problems only by using comprehensive program methods that involve measures of state support and coordination of inter-industry relations.

Since 2009 on the territory of the region "Clean Water" program has been implemented. Its main goals include the following: To increase the indicator related to providing the population with sufficient amounts of drinking water, to decrease the wear of basic funds of the water and sewage utilities and expenses of the

production. Within this program it is planned to perform a number of works on reconstructing and modernizing the existing and construction of new facilities of the water and sewage utilities, water intake facilities, as well as rational use of water resources (State Program of the Volgograd Region).

Under conditions of co-financing the implementation of investment projects on constructing, reconstructing water supply and disposal facilities from funds of budgets of all levels, it is assumed to provide state subsidies.

One of the basic problems that restrain the formation of TRCs in the region is the deficit of qualified specialists of the medium and low level. To a great degree the level of the provided service of enterprises of the tourism and recreational complex of the region and finally the competitiveness of enterprises depend on their competence.

The primary task of bodies of the regional power of the Volgograd Region together with secondary professional schools is to create conditions for improving the quality of preparing highly qualified specialists for the organization of the tourism and recreational complex. Top-priority areas to solve the HR problem of tourism clusters include the following:

- Formation of an efficient system of profession-focused work on regional and municipal levels. It will allow to meet the needs of the development of tourism clusters in professional personnel
- Formation and development of efficient cooperation of employers and the system of professional education in preparing specialists for the tourism industry
- Creation and development of the system of quick personnel consulting for travel companies.

Since the training personnel for the tourism complex is an inertial and rather long process, and the period of updating technologies related to producing tourist products is as a rule shorter than the term required for solving the HR problem, consulting can be extremely helpful in acquiring new tourism resources and promoting modern tourism products on markets.

On the regional level it is necessary to provide purposeful support for the system of consulting centers. In order to provide access to the existing consulting resources and expand the range of specialists, such consulting centers must be combined in a unified network within the cluster. According to the estimations, the number of consulting centers is optimal when there are up to five consulting centers per one tourism cluster (Ulianchenko et al., 2015).

It is necessary to increase the tourism attractiveness of the Volgograd Region simultaneously with the development of the transportation and roadside infrastructure by defining this area

**Table 8: Estimation of the infrastructure of the tourism and recreational complex of the Volgograd region**

Indicator	Value	Point	Weight of indicator	Windowed estimate
Provision with accommodation means	6.50%	3	0.25	0.75
Availability of the regional tourism and informational center	Yes	5	0.25	1.25
Transportation accessibility	High	3	0.25	0.75
Provision with objects of the road infrastructure	High	3	0.25	0.75
Total		14	1	3.5

as a top priority of the investment activity on the territory of the region. It is necessary to develop the measures of state support and preferences for investors that implement investment projects in this area.

Measures of state support may include preferences related to the income tax, opportunity to obtain state warranties and subsidies for compensating the percent rate on credits raised for implementing projects on constructing objects of the transportation and roadside infrastructure.

## 5. CONCLUSION

The conducted research allows to make the conclusion that the transforming factors, including natural, human, technical and technological resources, play the role of the catalyzer, activator of tourism. The preliminary research of the current state of transforming factors allowed to define the ways to improve the competitiveness and resources provision of TRCs on the territory of the Volgograd Region.

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