Proceedings of International Conference on Modern Science and Scientific Studies
Hosted online from Paris, France.
Date: 19th August, 2023
ISSN: 2835-3730 **Website:** econferenceseries.com

PROCEDURE FOR CREATION OF STATE CADASTRAS OF MOTOR ROADS AND STAGES OF MANAGEMENT

Ergashev M. M.
Senior teacher of Namangan Engineering-Construction Institute

Abstract

In this article, the existing highways in the Republic of Uzbekistan and their classification, distribution by road categories, the status and processes of formation in the geodatabase are reflected. At the same time, the classification of highways according to the amount of future traffic, the state registration of highways and their share in the importance of their use are described.

Keywords: highways, object, scale, scheme, geodatabase, artificial structures.

Enter

Today, in the Republic of Uzbekistan, a number of practical works are being carried out to carry out geodetic and cartographic support and to implement complex measures aimed at creating cadastral maps and periodically updating them.

The formation of a competitive environment in the state management system and the attraction of investments in the road network serve as an important step in the modularization of the state cadastre of highways (SCH) and the automated system of highways.

As we know, the development of countries is also seen in the systematization of communication routes. Communication routes are roads in water basins, railways, air routes and of course highways. Motorways are the most convenient for our country. Therefore, raising the design of highways to the level of state policy, their high-quality construction and operation cannot fail to have a positive effect on the development of the state today.

During the years of independence of the Republic of Uzbekistan, significant changes were observed in the field of highways, and it began to develop rapidly. Great importance was attached to providing services to the population. The role of the state cadastre of highways in the further development of this field is incomparable.

Studies. Today, there are a total of 209,496 km of highways in our country, of which 42,869 km or 21% are public, 141,882 km or 68% are domestic (inter-farm rural highways, cities, urban settlements, village and village streets) and 24 745 km or 11% are departmental and inspectorate highways (Figure 1).

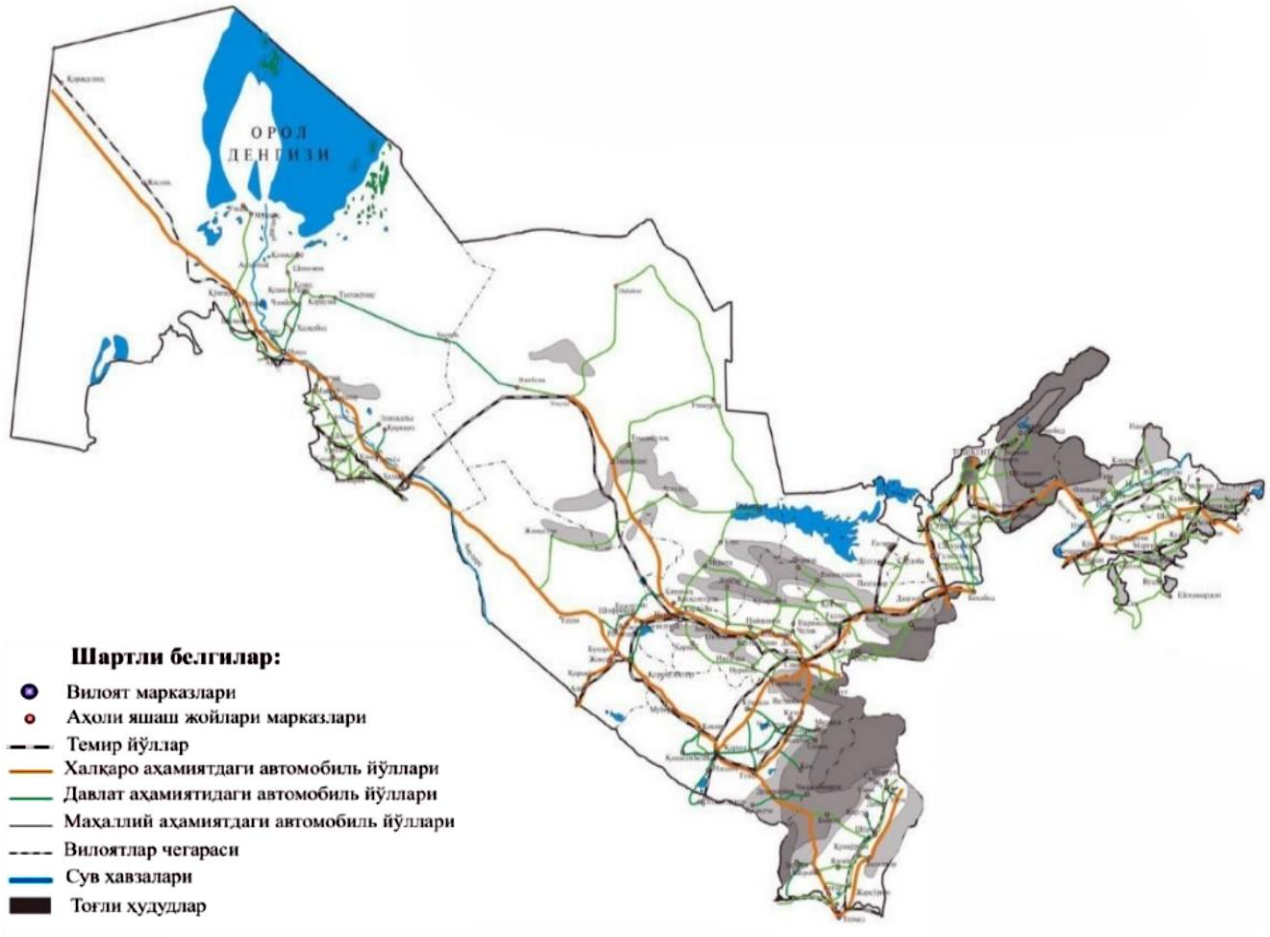

Figure 1. Map of the public highway network of the Republic of Uzbekistan

The density of the highway network in the republic is 41km/100km ^{2}. The uniqueness of the public highway network is that 51.7% are local roads, 52.9% are perfectly paved roads, 76.4% are two-lane roads, and 63.8% are IV and V-category roads.

As we noted above, the length of existing highways is 42,869 km, of which 3,993 km are international, 14,203 km. the state, 24,673 km are local highways. Motorways are defined according to their administrative significance as follows:

- International
- State
- Local

Motorways are divided into the following categories depending on the amount of future traffic (Table 1):

We will comment on the description of roads according to their administrative importance:

- highways of international importance are the roads connecting the centers of the Republics, as well as connecting large industrial centers and large cultural centers, providing transport and travel connections with neighboring countries.

- state highways - connecting the centers of the Republic with cities with a population of 100,000 to 500,000.

- highways of local importance - serve regional and district centers, villages and cities (with a population of 10,000 to 50,000), state and republican roads and internal district centers, population centers, community gatherings with each other.

Classification table of highways according to the amount of future traffic

(Table 1)

Economic importance of roads	Road category	Amount of future accounting movement, units/milk	
		Auto/sut in the transport unit	Introduced in a car grains/milk
Roads of international and national importance	Ia (highway)	Above 7000	Above 14000
	Ib (highway)	Above 7000	Above 14000
	II	3000-7000	6000 - 14000
	III	1000-3000	2000 - 6000
Roads of local importance	IV	100-1000	200 - 2000
	V	Less than 100	up to 200

Modernization of the technical parameters of the roads and for this purpose in the current projects construction of cement-concrete paved roads, expansion of vehicle circulation areas, i.e. above-ground or underground, is carried out by creating excellent projects. At this point, it is intended to increase the safety and convenience of driving cars on the roads.

In recent years, more precisely, in 2022, a total of 7,546 trillion soums of adjustment and maintenance of highways have been completed, 23,040.7 km. highways were rebuilt and repaired and put into use .

When designing highways, it is necessary to analyze activities that do not harm natural conditions. In the development of such measures, it is required to take into account the location of agricultural lands, mosques, graves and other structures of state importance.

At this point, it should be noted that SCH has a special place in the planning and construction of the highway. In this case, SCH is conducted for the purpose of keeping track of road objects and constantly monitoring and evaluating their condition.

SCH includes:

Registration of existing objects in SCH and technical characteristics of the main objects; Evaluation of existing objects in SCH; organizing the institution's cadastral book, creating a cadastral card, creating an annual report, entering automated databases, etc. At the same time, the information in the cadastral book of the enterprise is provided for the structure of specially adopted forms for asphalt concrete plants, quarries, repair plants, construction departments, reinforced concrete plant, and auto depots.

The objects (buildings and constructions, artificial structures) belonging to SCH are registered by the following from the legal point of view. Regional highway administration and departments, quarry, car factory, repair plant, asphalt-concrete plant, reinforced concrete plants.

highways are also related to land cadastre. It is required to register legal entities of land plots through the land cadastre. Roads must be registered in the state cadastre, and land cadastre must be registered through geo-information systems when entering the road cadastre.

When registering the rights of road cadastral subjects, the main real estate objects are registered through the cadastre of state structures and buildings.

The state cadastre of highways also includes land plots in the road protection and protection zone. Information about roads is obtained from the geodatabase of the state land cadastre.

The following basic information is required to enter the list of the road cadastre:

Name of the object, ownership of the register, time of establishment, full name, name of the state enterprise, on the basis of which documents the facility was established, by whom the plot of land was put to use, the time when the plot of land was taken into account and the state ICT number, information about the validity or invalidity of the plot of land, land the number of land plots, the total area of the land plot, the scheme of the district land plot, the land plot plan of objects, who approved when, when and by whom the boundaries of the land plot were recorded, the structure of land types on the plot of land, the contract between the land plot and the land user, the owner of the plot of land and it is necessary to determine the user subject, the second time use area, the information on its correct orientation.

It is necessary to register highways in the cadastral book of the organization in the section "State registration of objects and subjects of the state cadastre of highways". is required for state registration of highways and their facilities :

-type of facilities, name, cadastral number, location, category, time of commissioning, service area, capacity, area of land plot.

- the cadastral list and information are included in the state highway registration book. First of all, when registering an object of highways, data and commissioning, the status of the cadastral object at the last time are checked and information is obtained.

highways will also be related to the land cadastre. It is necessary to register subjects of the right to land plots through the land cadastre. Roads must be registered in the state cadastre, land cadastre must be registered through the geo-information system when entering the road cadastre.

- the registration of the rights of subjects of the state cadastre of highways is carried out through the cadastre of the main real estate objects and buildings.

According to the information of the Namangan Regional Highway Department of the "Automobile Roads Committee" under the Ministry of Transport of the Republic of Uzbekistan, as of January 1, 2023, there are 14,163 km of highways in Namangan Region, of which 3,529 km are public highways and 10,634 km are internal roads (2- picture).

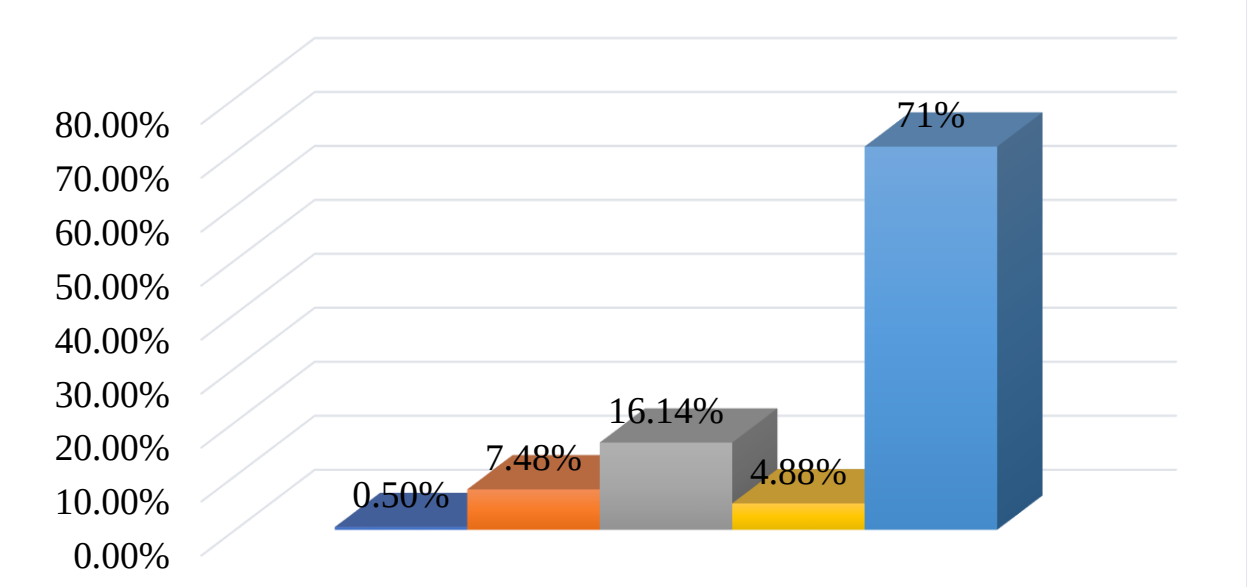

Figure 2. The share of highways in Namangan region in terms of their importance, in %

The cadastral plan of a total of 14,163 km of highways was created in Namangan region, and the cadastral plan of highway objects is currently being updated. The cadastral plan of highways and objects belonging to it, like regulatory documents, is considered the main document and is stored in the state cadastre of highways under a special regime, and written information is entered into it .

Result

The cadastral plan of the object is the main graphic form in which the cadastral geodata of the objects is stored. The cadastral plan or summary file is created after the object is commissioned and is formed based on the letter. The cadastral plan shows the special code of the plot of land and the object. All technical indicators of the object are stored in the plan. The cadastral plan is drawn up on different scales depending on the size of the objects. For example, it is made in 1:10000 - 1:50000 and 1:500 - 1:2000 scales. The cadastral plan shows the area to be collected for land tax.

The main types of cadastral card, cadastral folder, cadastral book are the documents confirming ownership and other rights to the SCH object in the preparation and use of highway cadastre documents.

SCH map is a graphic drawing document that shows the location of highway objects, protection limits, assessment, quantitative indicators and quality descriptions. The map shown in Figure 3 contains information on geographic location, legal status, quantitative and qualitative descriptions and evaluation of cadastral objects.

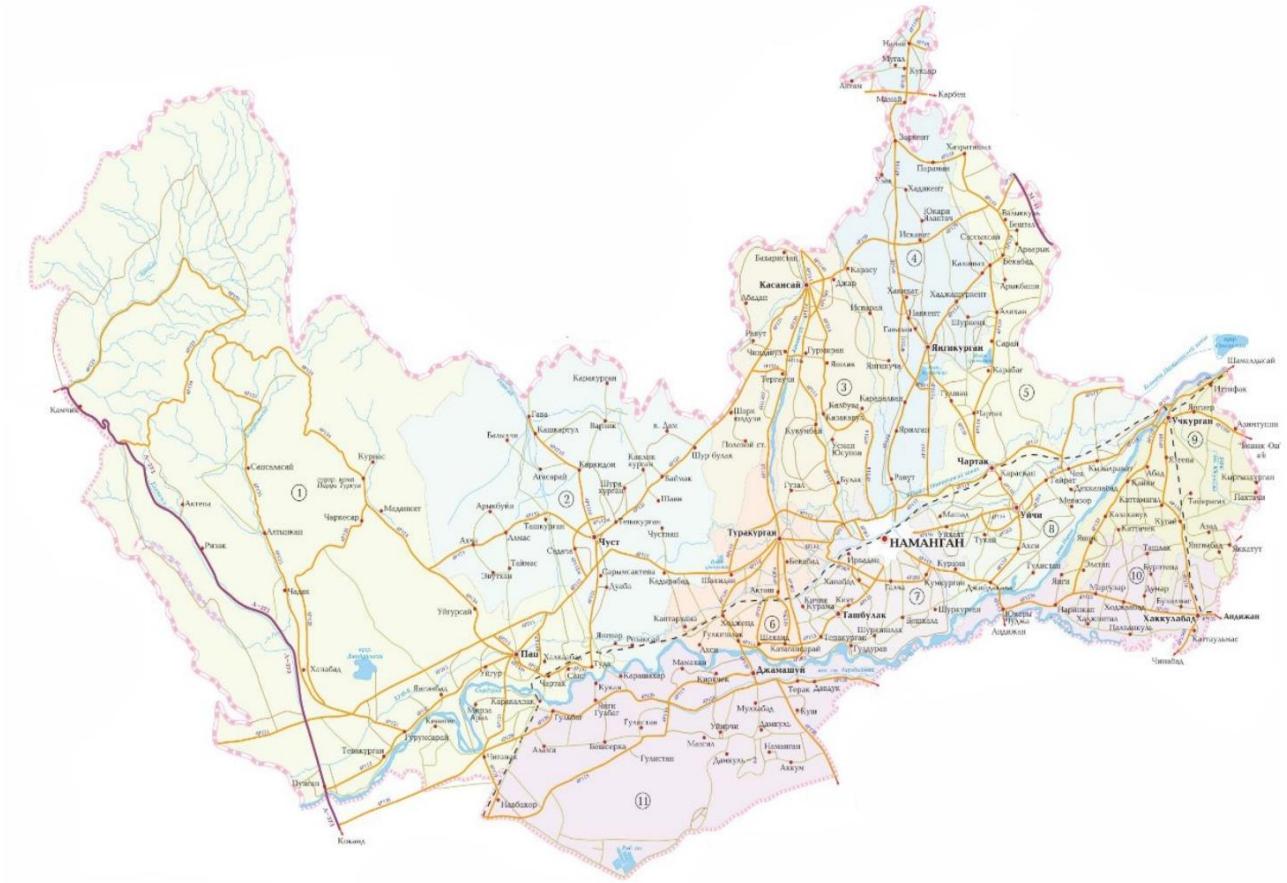

Figure 3. The diagram of existing highways and its artificial structures in Namangan region

Objects and artificial structures of the state cadastre of highways are collected, and a plan or topographic map of roads is created as a result of field work. In this order, the preliminary grounds for maintaining the state cadastre of highways are collected.

Conclusions

As a result of research It was determined and monitored that there are a total of 209,496 km of highways in the Republic of Uzbekistan, of which 21% are public, 68% are domestic, and 11% are departmental highways . At the same time , there are 14,163 km of highways in Namangan region, of which 3,529 km are public highways and 10,634 km are internal roads.

List of Used Literature

1. Ergashev M., Abdurakhimov V. The use of basic GNSS stations, which are located in Namangan, in the field of automobile roads // Economics and society. - 2020. - No. 5-1. - S. 28-33.
2. Ergashev M., Mamajonov M., Kholmirzayev M. Automation and modulation of highways in GIS software //Teoriya i praktika sovremennoy nauki. - 2020. - No. 5. - S. 9-14
3. Inamov, AN, Ergashev, MM, Nazirqulova, NB, & Saidazimov, NT (2020). The role of geo information technologies in management and design of the state cadastre of roads. ACADEMICIA: An International Multidisciplinary Research Journal , 10 (11), 154-160.
4. Dadakhodjayev, A., Mamajonov, M., Ergashev, M., & Mamajonov, M. (2020). Creating a road database using gis software. Internauka , (43-2), 30-32.
5. Dadakhodjayev, A., Mamajonov, M., Ergashv, M., & Mamajonov, M. (2020). Automated drawing of roads in credo complex program. Eco - friendly _ _ _ _ s o tsium , (11), 1673-1676.
6. Inamov, A., Ergashev, M., Nazirkulova, M., & Saydazimov, N. (2021). Creation of highway maps and maintenance of state cadastre based on geoinformation technologies. Obshchestvo and innovation , 2 (10/S), 84-90.
7. Dadakhodjayev A., Mamadjonov M., Ergashev M., Mamajonov M.. Creation of a highway database using GAT software. Academic research in educational sciences, VOLUME 2 | ISSUE 10 | 2021 2(10), 687-693.
8. Murodjon, Mamajonov, Kholmirzayev Mirzokhid, and Ergashev Muhammadyusuf. "Creating a highway database using GAT software" uzacademia scientific-methodical journal republican number 3 on the subject

"Increasing the innovative activity of youth, improving the spirituality and achievements in science" collection of materials August 31, 2020 part 12 pages 536-538." ISSN (E)–2181–1334.–2020 .

9. Ergashev M. et al. Use of permanent base GNSS stations in the field of highways //Academic research in educational sciences. - 2021. - T. 2. – no. 11. – S. 52-61.
10. Ergashev M. et al. ANALYSIS OF ROAD INFORMATION IN GEOINFORMATION SYSTEMS // T E XNICH E SKI E N A UKI : PRO O BL E MY I R E Sh E NIya . - 2021. - S. 90-94.
11. Inamov, A., Ergashev , M., Nazirkulova, M., & Saydazimov, N. (2021). Creation of road maps and management of state cadastre and basic geo-information technology. Obshchestvo and innovation , 2 (10/S), 84-90.
12. Inamov, AN, Ergashev, MM, Ruziev, IM, Lapasov, JO, & Egamberdiev, JA DIAGNOSIS OF SPATIAL PHOTO ERRORS IN GEOPHYSICAL CONNECTION.
13. Musaev I. M., Ergashev M. M. O'. Forming and maintaining the state cadastre of highways based on geo-innovative technologies // Mechanics and technology. – 2022. – no. Spetsvypusk 1. – C. 210-219.
14. Mukhtorov O'.B., Inamov AN, Lapasov JO, Geoinformation system and technologies. (Practical training) T., TIQXMMI, 2017, 208 p.
15. Mukhtorov O'.B., Inamov AN, Islamov O'.P., Geoinformation system and technologies. (For lecture) T., TIQXMMI, 2019, p. 202.
16. Ergashev MM, Inamov AN, Inoyatov QM, "Geoinformation systems on highways" training manual, Namangan, NamQI-2019 year, 142 p.