

## SOME ISSUES OF THE USE OF GEOGRAPHY INFORMATION SYSTEMS IN INFRASTRUCTURE MANAGEMENT

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Accelerating the development of the state and society, creating favorable living conditions for the population, a comprehensive and in-depth study of the real situation in places, the use of new technologies in accordance with the demand of the time leads to an improvement in lifestyle. Taking into account the need to constantly analyze the indicators of social economic development of the regions of the Republic, timely eliminate the imbalances that arise in the economy and look for ways to effectively solve existing problems, as well as the current unstable development of the world economy, that is, factors that negatively affect many economies, the insufficient study of this topic, The widespread underdevelopment of the application of GIS technologies in the economy determines the relevance of the selected research work.

Today, as a result of the acceleration of social life, there is a need for reliable and complete information in science and practical life. In such problems, the task is set to provide cartographic, statistical data operationally. ArcGIS is an application designed to work with maps and geographic data created by ESRI, a company that operates in the United States Geographic Information System (GIS) area. This program is used to create, use maps, collect geographic data, analyze and share geographic data, and manage the database. The ArcGIS system also provides the use of maps and geographic information through its portal in the organization, public and on the internet.

Currently, the use of GIS technologies and the creation of some of the data is becoming decisive in the full automation of information necessary in all areas, as well as in economic life.

It is a more complex task to quickly provide science and practice with ststistic data, cartographic materials, including forecasting and recommendation cartographic documents, reflecting the results of a systematic analysis and synthesis of the current or future socio-economic situation. Especially convenient, fast and sophisticated technology is necessary in the analysis, synthesis of economic data. In solving such problems, of course, it is much more convenient to use modern technology. Also, social development is much more convenient to use GIS technologies even when analyzing indicators. In particular, a number of indicators can be cited in the work of registration of the population, the level of employment and others.

Transport is a branch of the economy that provides connections in the process of production and consumption of products, as well as serves population trips. The transportability of the region represents the level of its economic

development as well as the living conditions of the population. Transport is the basis of geographical division of Labor and has an active impact on the placement of production. As a result of the development of the territorial structure of society and Geographical Sciences, the tasks, purpose and subject of research of Transport Geography have changed. Traditional maps show traffic objects, traffic flows, where territorial differences in location have been identified. According to N.N.Baransky, the second language of geography was considered” on the map, transport phenomena supposedly lie on themselves.” This description emphasizes the importance of presenting transport phenomena by a cartographic method, since with more or less detail, the road grid is practically represented on every economic map.

The main task of mapping transport is to indicate a transport-geographical system. Along with the road network, it includes nodes, points and centers, traffic flows and transport-geographical links (transportability of the territory, distance, distance and proximity to roads). In addition, it is characteristic of complementarity-the compatibility and filling of all elements in the system.

Modern transport mapping tasks-display [1]:

- the role and importance of transport in the socio-economic development of the territory (country, etc.);
- development and modernization of transport infrastructure;
- formation of railway transport corridors;
- transportation work, transportation availability and transportation capacity, transportation tariffs;
- the impact of the negative and natural conditions of transport on the development of the transport system on the environment;
- construction of transport routes, including the main routes, etc.
- the main directions of construction of transport routes, etc.

The main aspects of mapping the transport of the desired area:

- 1) transport infrastructure (nets and nodes, communication facilities and businesses serving them) and
- 2) work that carries out transportation on cargo and passenger transport.

In general, these aspects can also be described in the Universal Transport Plan (for all types of transport at once) and in a network aspect (separately for each type of transport).

Transport maps with one or another completeness reflect the following.

- 1) material and technical base of transportation and transportation service of the territory and population;
- 2) shipping and freight turnover;
- 3) passenger traffic and passenger turnover;
- 4) the frequency of movement of vehicles;
- 5) transport and economic relations;
- 6) transport and economic regions.

Special (navigation and other) maps that serve the needs of water, Air, surface transport and the metropolitan provide only the information necessary to

organize and maintain the operation of a type of transport, normal, without interruptions and accidents, unlike transport and economic maps. To the indicators to be described, first of all, non-electrified technical characteristics of multi-track and single-track railways, stations and razezds; roads where highways and passenger traffic are constant movement; navigable parts of the sea, river, lake and canals, port and pristans; airport and aviation routes, etc.

In special highway atlases, highways are formed on the basis of a cartographic image. They show the following:

- road network by national classification;
- action bands by quantity;
- by category (public, private) ;
- by seasonality of use;
- in terms of coverage;
- by importance (basic, important, etc).

Depending on what approach is chosen to describe objects in the construction of transport maps, they are divided into general transport, network and narrow network maps.

General-transport maps describe all its types at once, showing the general state of transport in the mapping area, the interaction of its individual types, such as transport nets, transport-economic ties or transport-economic zoning.

Network maps provide a description of individual types of transport. They can be a comprehensive expressiveness of some type of private or transport, structured according to one or two indicators. These are maps of railways, road, sea, air, pipeline transport, inland waterways.

Narrow network maps provide a detailed description of paths, either technically or otherwise. These can be maps that indicate the exact type of cargo transportation in the rayon or the main type of communication. For example, a map of the regional bus connection.

Transport maps are often supplemented by graphs and diagrams of the length of communication roads, the increase in use, the dynamics of cargo turnover of various types of transport, the import and withdrawal of products, the composition of cargo transportation, external economic transportation, etc.

Description of the transport map according to the topic

1. Maps of communication routes, with roads and communication tools of the territory and population gives a quantitative or qualitative assessment of the minelayer.
2. Communication routes are maps of cargo flow or cargo turnover of transport points(railway stations, ports and consoles, airports).
3. Communication routes are maps of passenger flow or traffic points (railway nodes and stations, port and consoles, airports) passenger turnover.
4. Movement content (railway compositions, ships, aircraft, motor vehicles) maps of the intensity of the movement frequency.
5. Product import-withdrawal maps or transport-economic relations maps.
6. Maps of transport and economic zoning.

## 7. Maps of the interaction of transport and the environment.

A special group of transport maps can also include schematic plans in which countries publish periodicals of large cities. In them, urban transport (bus, trolleybus, tram) routes are lowered in the street grid, as well as metropolitan stations, railway stations and bus stations, gas stations and parking stations.

### **Conclusion**

In the current era, issues related to data processing are common in the activities of each field. All data is formed on the basis of the geofumadas database. Today, GIS economics is widely used in all sectors of industries. To use it, it will be necessary to collect large amounts of written and graphic, area-linked geographic information. That is why the geofumadas base is considered an integral part of any GIS. In order to create and effectively use geographical information systems projects, it is necessary to have knowledge of the geomastructure base. The purpose of providing comfort to the population is the digitization of settlements is widely used.

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## **EFFECTIVE USE OF NATURAL TOURISM RESOURCES IN THE DEVELOPMENT OF TOURISM IN UZBEKISTAN**

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Currently, the contribution of tourism to the world economy is increasing every year, and it has entered the ranks of the most important macroeconomic sectors. As a source of income for many industries, it plays a key role in the national economy. This network is considered one of the important issues in Uzbekistan.

According to the decree of the President of the Republic of Uzbekistan dated January 5, 2019 No. PF-5611 "On additional measures for the rapid development of tourism in the Republic of Uzbekistan", the goals of the development of the tourism sector of the Republic of Uzbekistan in 2019-2025 it is determined to turn tourism into a strategic sector of the national economy, to diversify and improve