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METHOD OF AIR-CLIMATIC CONDITIONS FOGGING OF REGIONS FOR THE MAINTENANCE OF HIGHWAYS IN UNFAVORABLE CLIMATIC CONDITIONS

O`roqov Aslidin Khushvaqtovich
c.t.s., professor, Tashkent state transport university;
Ibroimov Husan Ibodullayevich
intern researcher, Samarkand state Architecture and Construction Institute
ibroimovhusan77@gmail.com.

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Abstract:

The article considers the issues of taking into account the influence of air-climatic factors in the maintenance, repair and operation of highways, air-climatic conditions of the regions of the Republic of Uzbekistan, taking into account the winter season. It was recognized that road zoning is an important and powerful method of systematization of information.

Keywords: Separation, climate, natural and climatic, highways, storage, repair.

INTRODUCTION:

Highways in Uzbekistan are important for the country being rich, it is the base of the economy of the Republic and one of the main priorities of its development. Today in the Republic of Uzbekistan, about 98% of passengers and more than 88% of cargo are transported by Highways.

One of the main priorities of the development of the Republic today is the development and improvement of the highway network, the improvement of their quality bays. To date, increasing the service life of highways, introduction of innovative road building materials in road structures and improvement of construction technologies are one of the urgent tasks.

JUSTIFICATION OF WORK ON THE CONSERVATION OF ROADS IN UNFAVORABLE CLIMATIC CONDITIONS:

The effective operation of the motor vehicle is largely determined by the state of the roads and the level of development, therefore, the increase in the quantitative and qualitative indicators of the use of vehicles can not be achieved without the development and improvement of the road network, ensuring their reliability at any time of the year and in any weather conditions.

At present, there are problematic situations with the fact that the current quality indicators of the road network in general use do not comply with the normative requirements. The reason for this situation can be concluded that there are problems associated with financing the road industry. To this end, the transition to the financing of highways is determined in accordance with the standards for maintaining the road network. The road network is a complex dynamic system consisting of interacting elements, which depends on the factors of damage (transport, climate, external environment), the factors of combating spoilage (storage, repair, maintenance) and the factors of regeneration (new construction, reconstruction). In any dynamic system, the planning process is completed by the formation of working programs, that is, it is connected with the integrated model of the process of future actions. The winter period of work on road maintenance is different; here the unfavorable climate influences the conditions for safe movement of vehicles, the volume of work, their elimination and Prevention. Winter season is characterized by a stop of vehicles: a decrease in speed, snowfall, storm and ice phenomena that lead to the occurrence of road traffic accidents. Anti-ice materials used to eliminate the slip worsen the environmental situation around the road [2].

Therefore, when assessing the conditions for the development of road maintenance measures, it is recommended to consider the Complex effect of economic, technical and technological factors. G.D. Dubelira, A. K. Birol had conducted a separate study on the development of a classification of works on road maintenance, taking into account the basics of road maintenance, resource expenditure. In addition to the deterioration of the conditions of movement of vehicles in the winter season of roads, the need for material and technical and labor resources is increasing, which leads to ineffectiveness of the work performed.

Research on the calculation of weather and climate factors during the winter storage of the road network was carried out by many scientists, especially those who did work in this direction. It can be seen in

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the scientific sources of V.Bialobjeski [4], A.P. Vasiliev [5-6] and others.

The seasonal effect of air-climate on the conditions of movement of cars, using the Pmav indicator, suggested that the scientists of the industry organize storage work [1]. According to the classification of repair and maintenance work on highways of general use, storage works are divided into the following types.

1. The car is an extraordinary pearl.

l_a) work on the road safety and waterproofing system;

$l_б$) work to be done on the road junction;

l_v)work on artificial structures;

l_g) works carried out to equip highways and ensure safety of movement;

2.Storage in winter;

3.Landscaping.

Due to the conditions of use of roads identified in the districts in terms of all conditions of movement, the sequence of work on maintenance of highways and road structures during the year was determined according to the importance and safety, as well as measures for effective organization of works were developed (Table 1.1)

Schedule of effective organization of maintenance work on highways
1.1. Table

Regions and districts according to the conditions of movement								
I		II		III		IV		
I_a	$I_б$	II_a	$II_б$	III_a	$III_б$	IV_a	$IV_б$	$IV_т$
$l_б$ 2 l_a $l_г$ $l_в$ 3	$l_б$ 2 l_a $l_в$ $l_г$ 3	$l_б$ $l_г$ 2 $l_в$ 3 $l_в$	$l_б$ l_a 2 $l_г$ $l_в$ 3	2 l_a $l_б$ $l_г$ 3 $l_в$	2 $l_б$ 3 l_a $l_г$ $l_в$	2 $l_б$ 3 l_a $l_г$ $l_в$	$l_б$ 2 3 l_a $l_г$ $l_в$	2 $l_б$ l_a $l_в$ $l_г$ 3

It provides links between the main types of work regulated by [3] on the winter composition of the highway network and meteorological factors.

The linkage of winter storage business types, taking into account the weather factors of the road network.

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1.2. Table

According to the classification of types of work on road maintenance in winter	Meteorological factors							
	Amount of precipitation	Duration of precipitation	Wind direction	Wind speed	Air humidity	Air temperature	Land area	Landscape factors
1	2	3	4	5	6	7	8	9
1. Cleaning the snow avalanche from the roads, cleaning and washing the snow avalanches along the roadside; laying and tightening the snow cover to the commuter part of the roads of the lower category.	+	+	+	+	+	+	+	+
2.Cleaning of snow and ice from the remains of snow and ice by bus stops, pavilions, resorts, etc.	+	+	+	+	+	+	+	-
3. In winter, the fight against the formation of a layer of ice on the road surface; when the road surface freezes, restore existing bases against it and create new bases.	+	-	-	-	+	+	+	+
4. To create and maintain automatic systems for the early detection and prediction of the formation of ice on the road surface in winter.	+	-	-	-	+	+	+	+
5. Fight against ice, build artificial structures clean and insulate channels near artificial structures; eliminate the formation of ice.	-	-	-	-	+	+	+	+
6. Conducting measures against landslides, cleaning landslides.	+	-	+	+	-	+	+	-
7. Production, installation, and repair of permanent snow-resistant structures.	-	-	+	+	-	-	+	+
8. Production, installation, demon age and restoration of temporary snow-retaining devices; the creation of snow piles and ditches to maintain and update snow on the roadside.	-	-	+	+	-	-	+	+

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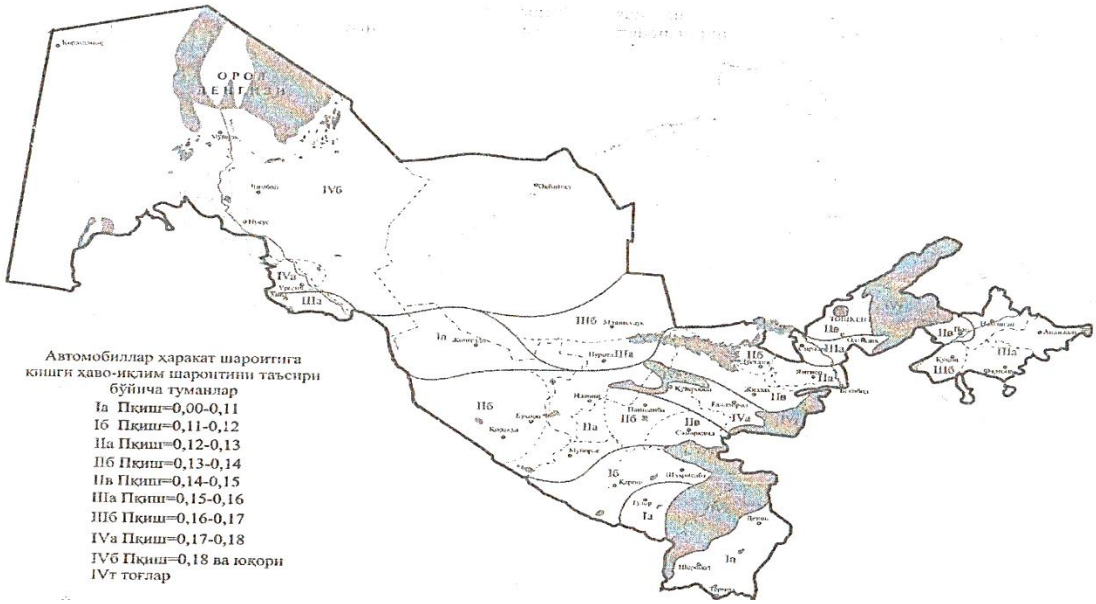
Note"+ " - indicates the link between the values under consideration

"-"- denotes the relationship between the values under consideration

1-picture: Map of the territory of the Republic of Uzbekistan on the influence of winter weather and climatic conditions on the conditions of movement of cars.



CONCLUSION.

Issues such as planning the maintenance work of highways in the xar-tion seasons and the effective organization of maintenance work, taking into account the impact of air-climate factors on road conditions, the correct choice of technology, the exploitation of roads, etc., will find their solution.

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