WEB OF SCIENTIST: INTERNATIONAL SCIENTIFIC RESEARCH JOURNAL
ISSN: 2776-0979, Volume 4, Issue 9, Sep., 2023

MEASURES TO PREVENT TRAFFIC ACCIDENTS THAT OCCURRED DURING THE MOVEMENT OF VEHICLES

Ilhom Iskandarovich Umirov
Senior Teacher of Jizzakh Polytechnic Institute
e-mail: umirov-i@mail.ru

Shukurov Shokhzod Aslam o'g'li
Student of TVM Group 103-20 of Jizzakh Polytechnic Institute
e-mail:iamssa010@gmail.com

Abstract:
This article discusses different types of traffic conditions, the need to identify areas with the same conditions and divide them into areas, zoning according to traffic conditions, the main purpose of this is to identify areas where safe and comfortable traffic is not ensured, as well as recommendations for the effective use roads in these areas.

Keywords: road network, bus, minibus, traffic accident, driver, pedestrian, environment, car, road, collision.

INTRODUCTION

It is extremely important for us to speed up the construction and reconstruction projects of roads that are part of the Uzbek national highway. For this purpose, in 2012, it is planned to construct and reconstruct 517 kilometers of highways, two large transport links, 544 meters of bridges and overpasses. For this, it is planned to allocate more than 360 million US dollars from the Republican Road Fund, which is 12.5% more than last year. The transport system plays a crucial role in the political life of Uzbekistan. The share of vehicles in the transportation of goods and passengers in the republic is 85% [3,4].

Our capital, Tashkent, is a socio-economic and political center. The city is also distinguished by its size and large population. In such urban conditions, the provision of traffic safety in the regions of access to the city takes a special place.

LITERATURE ANALYSIS AND METHODOLOGY

The different traffic conditions of cars on the territory of the republic creates the need to identify areas with the same conditions and divide them into districts. The main goal of fogging according to traffic conditions is to identify areas where comfortable

and safe driving conditions for cars are not provided and to ensure comfortable and safe driving speed of cars by developing recommendations for effective use of roads in these areas. The analysis of the conducted studies shows that road fogging works Bliznichenko S.S., Vasiliev A.P., Vinogradsky A.K., Vorku A.T., Kupin P.P., Ilyasov N., Kartanbaev R.S., Lebedikhin V.A., Magomedov M.M., Mirakhmedov M.M., Rasnikov V.P., Sidenko V.M., Sitnikov Yu.M., Treskinsky S.A. and other studies. In the mountainous region of the Republic of Dagestan, roads are classified according to their height above sea level. The main criterion for fogging is the traffic safety index of cars. In the studies, the factors affecting the traffic conditions were not systematically approached and analyzed, the theoretical foundations of the traffic conditions were improved, and the criteria for the evaluation of the traffic conditions were not included.

RESULTS

In the conditions of Uzbekistan, road fogging can be found in the work of N. Ilyasov. In this, the road structure's moisture conditions and sources were studied, and the territory of the Republic was divided based on this. Road fogging works are carried out for the purpose of engineering evaluation of the natural and climatic conditions of the area where the road is located, and this direction is one of the complex and understudied areas of road science. Road fogging is divided into two interrelated directions:

The work of fogging according to the conditions of car traffic includes, first of all, the identification of areas that are unfavorable for car traffic in terms of weather and climate conditions. This allows planning of the most appropriate road maintenance activities[14].

A-373 "Toshkent-O'sh" Avtomobil yo'lini 108-208 km uchastkasi

WEB OF SCIENTIST: INTERNATIONAL SCIENTIFIC RESEARCH JOURNAL
ISSN: 2776-0979, Volume 4, Issue 9, Sep., 2023

Regionalization of the territory of the republic depending on the conditions of use of highways. To evaluate the degree of provision of traffic conditions, the index of provision of calculated speed is used. The calculated speed guarantee coefficient is calculated in the form of the ratio of the actual maximum speed of the flow, which is determined based on the state of the traffic flow, weather and road conditions in different seasons of the year, to the calculated speed of traffic under reference (model) conditions, including:

$$K_{r.s.}=V_{fak.max}/V_{ras} \quad (1)$$

Here:

$V_{fak.max}$ – the actual maximum speed of the traffic flow;

V_{ras} – calculated speed of movement in standard (model) road conditions Vras=120 km/h.

The Psez indicator of the influence of seasonal weather and climatic conditions on the driving conditions of vehicles is determined as follows:

$$P_{sez}=((1-K_{sezr.s.})T_{sez}K_n)/365 \quad (2)$$

Here:

$K_{sezr.s.}$ - the seasonal coefficient of ensuring the calculation speed of movement;

T_{sez} – duration of the season per day, year;

K_n - coefficient of unevenness of traffic speed throughout the year.

The territory of the republic is divided into 4 zones and 9 districts on the basis of the indicator of the influence of traffic flow, road and weather climatic conditions on the conditions of use of highways (Fig. 1). The regions that make up the districts are listed in Table 1.

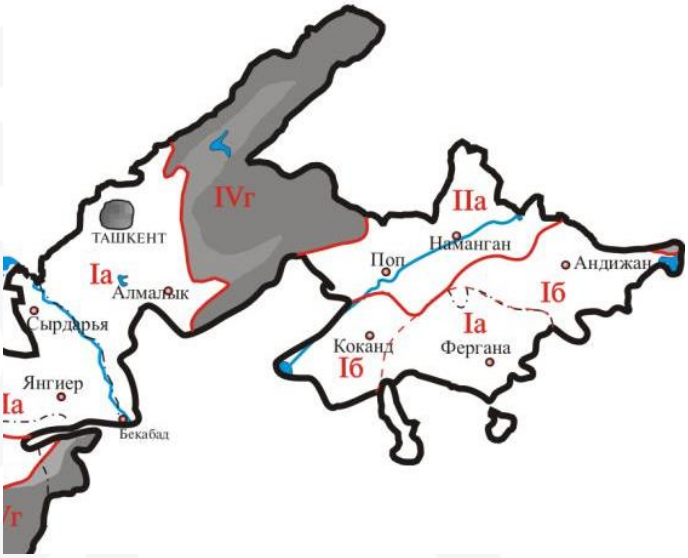

Figure 1. Districting on the operation of the Kamchik highway of the Republic of Uzbekistan.

In order to study the conditions of road use and to ensure the comfort and safety of the traffic conditions of cars, we conduct regional engineering fogging and develop the method of systematic analysis of components [7, 8, 9]. In fogging, we divide areas with different road conditions, traffic flow conditions, and air-climate conditions into regions and districts on the map. The level of data systematization in regional districting consists of assigning a number to each specified road condition and engineering assessment of its basic condition.

DISCUSSION

When road districting works are carried out in a territorial direction, taxonometric units such as territory, region and district are mainly used. In order to determine the areas where road conditions, traffic flow conditions and traffic safety differ, districting works are carried out according to the following indicators: density of the road network; number of vehicles per 1 km of road; Number of traffic accidents per 1 km of road; number of intersections per 100 km of road network. Duration of the most comfortable air temperature; the number of days when the air temperature is higher than +270C; the number of days when the air temperature is below 00C; the number of days when the air temperature is below +50C; the number of days when the air temperature is from +50C to +200C; the number of days when the air temperature is above +200C; the number of days when the air temperature is from +200C to +50C; the number of days of fog; the number of days that the ground is covered with snow in a year; the number of days during the year when snow is observed; the number of days on which micro-film is observed on the coating; the number of days during which moisture is observed on the coating; number of rainy days; number of snow days; duration of snowfall; duration of rain; total amount of precipitation.

In order to determine the boundaries of regions and districts in fogging, the values of the indicators are listed and graphed from the largest to the smallest. The line in the graph breaks at the border of districts with different conditions. Borders of regions and districts were determined from the breaks in the graph. This method is called the largest-to-smallest method of determining the boundaries of districts in districting.

Districts with the same conditions in terms of air and climate conditions will be identified and maps of districting will be developed. The maps of the determined districts were summarized in the superimposition method and the territory of the Republic was divided according to the complexity of air and climate conditions. The combined influence of traffic flow and road conditions on the traffic conditions of cars was regionalized according to the Pto.ysh indicator. The influence of air-climate

conditions on the conditions of the movement of cars was divided into regions of the republic according to the Ph.iq indicator and its organizers by the year's themes.
As a result of a comprehensive assessment of vehicle traffic conditions, the territory of the republic was divided according to the indicator of the combined effect of traffic flow conditions, road and air-climate conditions on vehicle traffic conditions (Ph.sh. coefficient) based on the coefficient of provision of calculated speed. The boundaries of regions and districts were determined on the basis of the following graph.
Districts with the same conditions were determined from the graph, and districting was carried out by reflecting their borders on the map.

CONCLUSION

In conclusion, the indicator of the joint influence of air-climate, traffic flow and road conditions on the traffic conditions of cars for each district (Ph.sh. coefficient) and the regions that make up the districts are presented. A map of regionalization of the territory of the republic according to traffic conditions is presented.
Based on the differences between the actual traffic conditions of the vehicles compared to the standard traffic conditions, the district coefficients are determined by the traffic conditions. The determined district coefficients are used in the development of recommendations to ensure the comfort and safety of vehicle traffic conditions on the territory of the Republic.

REFERENCES

1. “Ўзавтойўл” Давлат акциадорлик компаниясининг Ўзбекистон Республикаси Умумий фойдаланишдаги автомобил йўллари 2009 йил 1-январ ҳолатига тайёрлаган ҳисоботи. Тошкент-2009й.
2. Автомобиль йуллари ривожлантиришнинг долзарб муамолари: «Узавтойул» ДАК 2002 йил хисоботи. – Тошкент, 2003.- 256 б.
3. Q.X.Azizov. Harakat xavfsizligini tashkil etish asoslari. – T.: “Fan va texnologiya”, 2009. - 244 bet.
4. Abduraxmanov R.A., Azizov S.Z. Shahar yo’lovchi transportlarining imtiyozli harakatlanishini tadqiq qilish (Jizzax shahri misolida) // TAYI “O’zbekiston avtomobil-yo’l kompleksining dolzarb vazifalari” Respublika ilmiy-amaliy anjuman materiallari to’plami II-qism. Jizzax-2008, 165-166 bet.
5. Бабков В.Ф. Дорожные условия и безопасност движения. М.: Транспорт. 1982. - 286 с.

6. Нуруллаев, У., Умиров, И., & Исоков, Г. (2021). Методика определения деталей, критических по надежности автомобилей. *Academic research in educational sciences*, *2*(5), 678-684.
7. Umirov, I., Turushev, S., & Ravshanov, F. (2021). Йўл бўлакларининг ҳаракатланиш хавфсизлигига таъсирини таҳлил қилиш. *Academic research in educational sciences*, *2*(2).
8. Karimovich, A. A., & Abdukarimovich, U. B. (2021). Method of ensuring traffic safety on slippery roads.
9. Адилов, О. К., Умиров, И. И., & Абдурахманов, М. М. (2021). Анализ существующих работ, посвященных проблемам экологии автомобильного транспорта. *Вестник науки*, *2*(2), 74-82.
10. Нуруллаев, У., Отақулов, З., & Эгамназаров, Н. (2021). Қиш мавсумида автомобиль йўлларининг ўтказиш даражасига қўйиладиган талаблар. Academic research in educational sciences, 2(2).
11. Agzamov, J., Hamraqulov, Y., & Baratov, I. (2021). Jizzax shaxrining magistral kochalarida harakat xavsizligini tahlil qilish. Academic research in educational sciences, 2(6), 363-368.
12. Murtazakulovich, H. Y., & Qo'Chqorovna, Y. M. (2021). Yer usti transport tizimlarida tashishni tashkil etishda yuksiz qatnovlarni optimal rejalashtirish. Oriental renaissance: Innovative, educational, natural and social sciences, 1(1).
13. Хамракулов, Ё. М., & Абдукаримов, Ш. У. (2022). Норматив на капитальный и текущий ремонт карьерных автосамосвалов. вестник науки Учредители: Индивидуальный предприниматель Рассказова Любовь Федоровна, 1(1), 141-146.
14. Mansurovna, M. L., & Eshquvvatovich, I. S. (2021). Study of the influence of operating factors of a vehicle on accident by the method of expert evaluation. Journal of Academic Research and Trends in Educational Sciences, 1(1), 10-17.