



Organization of Safe and Convenient Traffic at Intersections

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Annotation: In this article, a scientific study was conducted on the example of traffic congestion at the intersection of Islam Karimov and Galaba streets in the city of Namangan, as well as measures to reduce the level of danger in this area. Based on the research results, scientific and practical solutions to the problem are highlighted through the development and construction of additional sidewalk projects in the intersection area using innovative approaches and analysis of their shortcomings and advantages.

Keywords: Traffic jam, side road, hazard level, roadway, traffic speed, hazardous points, loads, fuel consumption, passengers, hazardous situations, disorder, intersection, asphalt concrete pavement, island, deformation, vehicles, semi-shrub, pavement service life.



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Login. Currently, as a result of the sharp increase in the number of vehicles, the number of traffic jams and road accidents on our roads is rapidly increasing. As of January 1, 2023, the number of passenger cars owned by individuals in our republic increased by 344,786 compared to 2022. Currently, there are 562,100 passenger vehicles in Tashkent city, 38,7611 in Samarkand region, 346,956 in Tashkent region, 329,409 in Fergana region, 273,020 in Kashkadarya region, 229,609 in Andijan region, 228,745 in Namangan region, 218,054 in Bukhara region, 213,139 in Khorezm region, 205,455 in Surkhandarya region, 138,876 in the Republic of Karakalpakstan, 100,238 in Navoi region, 96,338 in Jizzakh region, and 66,979 in Syrdarya region.

Main Part. As can be seen from the above data, the number of vehicles in the Namangan region is also increasing year by year. As a result of the increase in the number of vehicles, the level of traffic congestion at intersections in the city and the danger of dangerous points at intersections is increasing. Currently, one of the urgent problems is the prevention of traffic jams at intersections in the city and the reduction of the level of danger of dangerous points, which requires the use of innovative methods to eliminate these problems [2].

Traffic jams occur at the intersection of Islam Karimov and Galaba streets in the Namangan region in the morning and evening hours. At this intersection, congestion occurs in the morning on the roadway from the Turakurgan district to the city entrance, and in the evening on the roadway from the city exit [3]. As a result of traffic jams, the weather in this area is deteriorating. The increase in traffic congestion at the intersection leads to a decrease in the speed of vehicles. An increase in fuel consumption occurs as a result of a decrease in the speed of vehicles [4].

As a result of traffic jams at the intersection of Islam Karimov and Galaba streets, passengers arrive late, and ambulances and special service vehicles get stuck in traffic jams. The intersection of Islam Karimov and Galaba streets is one of the main streets of the city of Namangan.



Figure 1. Traffic jam at the intersection of Islam Karimov and Galaba streets.

Due to traffic jams at the intersection of "Islam Karimov" and "Galaba" streets, disorder and dangerous situations are arising at the intersection. The danger level of critical points at the intersection is increasing [5].



Figure 2. Intersection of Islam Karimov and Galaba streets.

In order to prevent traffic jams at the intersection of Islam Karimov and Galaba streets and create convenience for drivers, it is necessary to design a road adjacent to this intersection. With the help of the side road we offer at the intersection, it will be possible to turn right without reaching the intersection. We will prevent traffic jams at the intersection as a result of vehicles turning right at the intersection turning right from the side road without entering the intersection. By building an adjacent road at the intersection, we eliminate a right turn [6]. By constructing this side road at the intersection, we will reduce loads and, as a result, extend the service life of the asphalt concrete pavement at the intersection. As a result of the decrease in the number of vehicles moving at the intersection, the deformations and displacements occurring on the asphalt concrete pavement at the intersection are reduced to a certain extent [7].

By ensuring that vehicles turning right at the intersection turn without stopping at the intersection, we will reduce harmful emissions from vehicles. As a result, we will be able to improve the weather in the area where the intersection is located.[8]

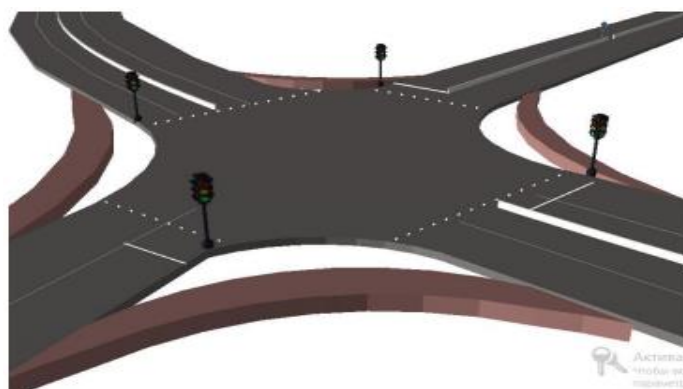


Figure 3. View of the proposed side road at the intersection of Islam Karimov and Galaba streets.

We will carry out landscaping work on the islands formed as a result of the construction of a side road at the intersection. To ensure traffic safety, we plant various ornamental flowers and semi-shrub trees on these islands.

Conclusion By constructing this proposed project, we will prevent traffic jams at the intersection of "Islam Karimov" and "Galaba" streets in Namangan region. As a result, we will ensure that drivers traveling at this intersection arrive at their destination without being late. In addition, we will ensure that the ambulance and fire trucks that can travel at this intersection arrive at their destination on time. The implementation of the project we are proposing will be economically justified. By implementing this project, we will prevent landslides on the pavement, that is, damage to the pavement at the intersection. By preventing the accumulation of vehicles in traffic jams at the intersection of Islam Karimov and Galaba streets in the Namangan region, we will reduce the amount of harmful gases emitted by vehicles into this area. Reducing the amount of harmful gases will improve the weather in this area.

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