



THE ROLE OF TECHNICAL MEANS IN THE PROCESS OF ORGANIZING ROAD TRAFFIC

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Annotation; *The use of technical tools for traffic organization and regulation is an important topic in today's rapidly interconnected world. With rapid development, population growth, and the growing demand for efficient transport systems, the need for efficient vehicle management has never been more important, and technological advancements have revolutionized the way we approach and regulate many aspects of our daily lives. One of the areas where technical means play a decisive role is the organization and regulation of movement. Technological solutions ranging from traffic management systems to logistics and transport management have significantly increased the efficiency, safety, and overall efficiency of traffic management. In accordance with the Strategy for the Development of the Public Safety System in the Republic of Uzbekistan for 2022-2025, and in order to guarantee the protection of human life and health from any road accidents under the conditions of New Uzbekistan:*

Keywords; *transport, road, event, system, geometric analysis, driver, pedestrian, employee, statistics.*

Analysis and results; Road signs must be installed in such a way that their visibility during the daytime is at least 150 m, while the distance at which a driver can see the sign installed in a specific area must be equal to or greater than twice the speed in that area. At the same time, on newly constructed roads, the speed will be 70% of the design speed, while on existing roads, the speed will not exceed 85% of the vehicle speed.

In some cases, when it is necessary to determine the distance between the installed sign and the hazardous zone, it can be determined using the following diagrams and formulas.

Depending on the speed of fast-moving vehicles in the area, it changes according to the formula given in the table below.



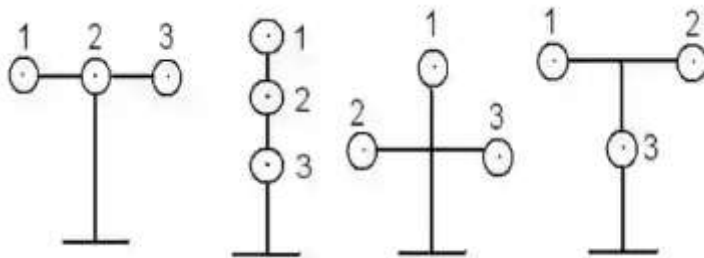
Table 1

Average speed of fast cars						
V_{yp}	km/h	120	100	80	60	40
l	m	254	200	147	99	56

Figure 1. A road sign placed before a dangerous section distance determination scheme

$$l = 0,66V_{yp} + \frac{(0,9V_{yp} - V_2)^2}{25,8(0,0112V_{yp} + 1,24)}$$

Traffic officers must regularly clear road signs and cut down trees that obstruct visibility. Single-row road signs must be installed at a distance of at least 50 m on non-residential road sections and 25 m in populated areas. This does not include road signs at intersections.



2-images. How to install multiple road signs sequentially on a single pole

When placing road signs in cross-sections, the following must be taken into account. The installation of more than three road signs on a single road section is not permitted. Additional information and returned characters are not taken into account. In such cases, signs should be installed either horizontally (which is more convenient) or vertically.

Road signs are installed on the right side of the roadway and beyond the shoulder (except in exceptional cases).

It is permitted to install road signs on the road (for example, on streets around

the Pakhtakor Stadium) during repair or repair work or in an operational (operational) state, or temporary signs prohibiting the movement of these vehicles or their movement at all).

In settlements, road signs may be placed on the edge of the road above the edge, in the upper part of the road (Fig. 3). In cases where traffic islands are located on the dividing line, the placement of the traffic sign is shown in Figure 3.

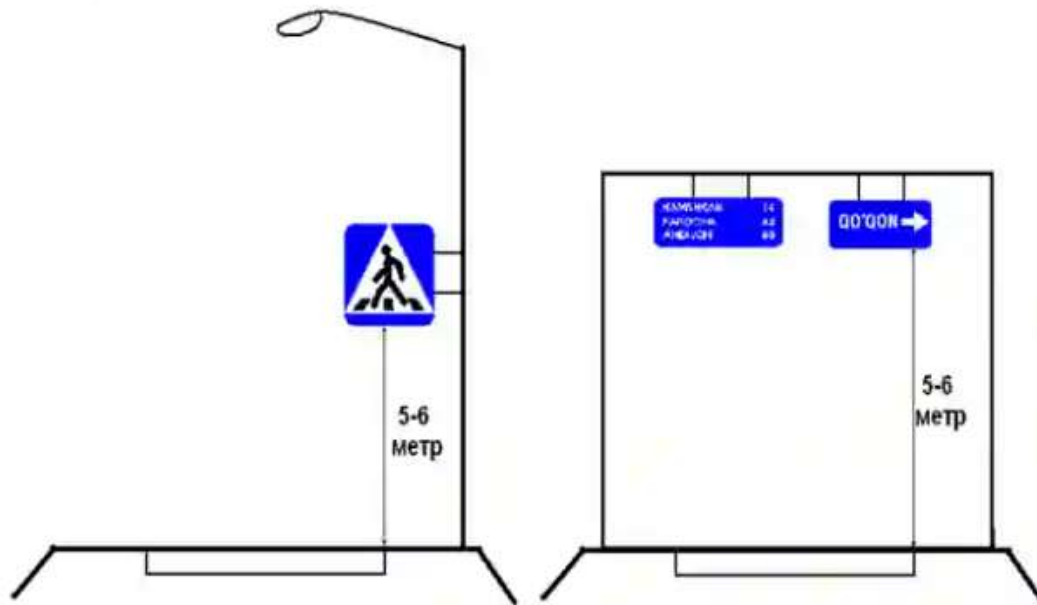


Figure 3. Cross road signs placement in the cross-section.

Dimensions of the first type of additional information signs = 600 mm; 900 mm is accepted. The full dimensions of all marks are given in GOST 10807-78.

The support of the sign is buried in the ground to a depth of at least 1.2 m; if this depth is less than 1.2 m, concrete is laid in a circle around the buried part of the support.

Warning road signs inform the driver about dangerous areas in front of the road.

Road sign coatings play an important role in improving road visibility, especially during inclement weather or at night. Reflective or aluminessent materials used in these coatings enhance visibility and make road signs stand out even in poor lighting conditions. This expanded view is necessary to guide drivers and warn them of approaching hazards, such as pedestrian crossings,

roundabouts, or merged lanes. Further improvement of the installation of road signs and markings outside settlements:

The paints used to ensure the good visibility of road signs and road markings must be of the highest quality. This will significantly improve visibility and enhance driver comfort. Visibility deteriorates significantly, especially at night outside of populated areas. The quality of the paint lasts a long time.

Along with the road sign, it is necessary to use improved instruments, that is, the use of electronic lights along with the sign makes it very convenient for the driver.

It is also proposed to reduce the brightness and color of advertising monitors installed at intersections. This creates inconvenience for the driver.

Coatings reflecting road signs not only benefit drivers but also make a significant contribution to the safety of



pedestrians and cyclists. Pedestrian crossings, zebra crossings, and bicycle paths are marked with durable and highly visible paths, providing appropriate supervision and protection for vulnerable road users.

Properly designated pedestrian crossings help pedestrians move safely on busy roads, reduce the risk of accidents, and contribute to a pedestrian-friendly urban environment. Bicycle lanes marked with unique pedestrian paths separate cyclists from motor traffic, enhance their safety, and encourage more people to use bicycles as an eco-friendly mode of transport.

Effective road sign coatings must possess high strength and durability, especially considering the constant impact of transport, severe weather conditions, and regular maintenance such as street sweeping and snow removal. With proper application and care, high-quality coatings can withstand heavy traffic, resist drop-off, and remain visible for a long time.

Long-lasting road sign coatings not only reduce the need for frequent painting but also help save costs for highway authorities and municipalities. By ensuring that road signs are clear and understandable over time, these surfaces play an important role in maintaining a safe and orderly road network.

The covering of road signs is an indispensable tool for improving road safety and efficiency. They provide clear visual guidance to drivers, improve road visibility, and create a safer environment

for all road users. By investing in high-quality, durable road signs, road authorities and municipalities can make a significant contribution to reducing accidents, improving traffic flow, and creating a safer and more user-friendly transport infrastructure.

As technology and materials continue to evolve, it's important to stay up to date on the latest advancements in gesture overlays. Ongoing research and development in this area will help find more efficient and sustainable solutions to meet the evolving needs of our constantly expanding road networks, ultimately making our roads safer for everyone.

Conclusions and suggestions; The use of technical means of traffic management and regulation is of great importance in solving problems related to traffic congestion and road safety. Using advanced technologies such as ITS, traffic light control systems, automated payment collection systems, and intelligent traffic management platforms, we can create a safer and more efficient road network for all road users.

Technological progress has fundamentally changed our approach to traffic management. Various technical solutions have been developed to improve road safety and efficiency: from smart traffic lights to automated payment collection systems. These technologies not only help reduce traffic volumes but also play a crucial role in preventing accidents and maintaining traffic flow.



Another important technical tool is the use of traffic light control systems. These systems are designed to adjust signal times according to transport conditions, helping to minimize delays and improve overall traffic flow. Adaptive traffic light control systems are capable of providing efficient vehicle movement through intersections and responding dynamically to changes in traffic patterns.

Having discussed international experience in road safety management, it

should be concluded that practical measures to ensure road safety in foreign countries are primarily aimed at the material liability of offenders.

In order to create convenience for drivers when organizing traffic on the roads, further improvements to road signs and markings will be developed. For this purpose, it is necessary to use road signs with electronic lighting or interchangeable signs, and it is recommended to paint the road markings with high-quality paints.

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