



**TAKING MEASURES TO ENSURE THE SAFETY OF PEDESTRIAN TRAFFIC  
AROUND THE SHOPPING MARKETS LOCATED IN THE CITY OF NAMANGAN.**

***Ikrom Ovlakulov***

*student of the Department of Road Safety and*

*Engineering, Namangan engineering-construction institute.*

***Murotbek Boydadaev***

*associate professor of the Department of Road Safety*

*and Engineering, Namangan engineering-construction institute.*

*murotboy@mail.ru*

**Abstract:** This article presents an analysis and recommendations for improving the safety of road users at pedestrian crossings.

**Keywords:** Pedestrian crossing, transport, pedestrian, road, traffic safety, driver, region, traffic accident.

Analysis of regulatory documents and scientific studies on the placement of pedestrian ncrossings has shown that the decisive factor in the placement of pedestrian crossings is the road category, which will determine the recommended distance between pedestrian crossings, their width and type. Pedestrians cross the road on average two to three times during the journey. Ensuring ease and safety of movement when crossing roads in their movement is one of the main tasks. For this reason, the proper

design, construction and reconstruction of appropriate crosswalks should be the main consideration when designing walking routes.

The most vulnerable category of road users is pedestrians, as evidenced by data on road accidents. The occurrence of road accidents is usually preceded by conflicts at pedestrian crossings, which are expressed in drivers ignoring the rules for crossing pedestrian crossings, so there are collisions "transport-pedestrian".

Road accidents involving pedestrians are most common in cities and localities, but they have more

serious consequences outside of them. For the Mayor's office and traffic police, an important issue is the placement of pedestrian attraction objects in the most optimal zone.

Indicators that assess the quality of traffic in retail outlets and on the periphery of the market are bandwidth and speed. Capacity depends on many and various factors: road conditions, vehicle characteristics, quality of traffic management, behavior of road users, environmental conditions, etc. The overall effect of these factors can be determined only by experimental observation of the traffic flow regime.

Studies by many experts show that the capacity of urban transport routes should correspond to the minimum allowable number of pedestrian crossings and their most effective arrangement to ensure pedestrian safety.

This requires sound recommendations for optimal placement and arrangement of pedestrian

crosswalks. The main factors taken into account when placing a pedestrian crossing are the intensity of pedestrian traffic and the production capacity of objects adjacent to retail outlets and markets. This does not take into account such factors as the width of the roadway, traffic intensity, and the arrangement of the pedestrian crossing. Analysis of traffic conditions is used to identify the causes and conditions of road accidents at a particular pedestrian crossing and develop measures to prevent them. It includes the following stages:

- assessment of the presence of serious obstacles to traffic and their impact on road safety;
- assessment of the availability and compliance with the current technical means of traffic management required for this scheme of traffic management at a pedestrian crossing in accordance with regulatory documents.

To apply organizational and technical measures on the street-road network, it is necessary to know their expected effectiveness. There are two approaches to evaluating traffic efficiency:

- based on the final results.
- by the degree of achievement of the goal.

Recommendations for placing pedestrian crosswalks are based on two goals:

- the number of conflicts between" vehicles and pedestrians";
- the speed of vehicles on main streets.

The condition for the first indicator is a decrease in such collisions, and for the second indicator, an increase in the speed of vehicles on main streets. Taking into account these goals and based on the results of experimental studies, recommendations can be formulated as follows: the distance between consecutive regulated pedestrian crossings should be from 600 to 900 m,

- main streets of regulated traffic and having regional significance for transport and pedestrians;
- the distance between the above-ground pedestrian crossing and the adjacent underground passage must be set within 1000-1500m
- main streets of regulated transport and transport and pedestrian zones of regional significance (pedestrian flow rate is 600-800 people / hour, the distance to a passenger transport stop is up to 130 meters).
- the nearest distance to a public transport stop and pedestrian crossing must be between 200 and 400 meters
- for regional streets (the roadway width is 7-14 m).

However, the width of the pedestrian crosswalk has the greatest impact on the speed of traffic flow . If the width of the crosswalk increases by 1 m , the speed of traffic flow decreases by an average of 2.5 km/h.



**figure 1. Project of an above-ground pedestrian crossing.**

Since there are many conflict situations at the pedestrian crossing in the market area, the pedestrian crossing here should be above ground. This means that conflicts between vehicles and pedestrians on the roadway are virtually eliminated.

Due to the fact that there are a large number of conflict situations at the pedestrian crossing near the market, you can organize a pedestrian crossing here by organizing a pedestrian route with the indication 1.14.2, in order to ensure that pedestrians briefly exceed the roadway. This offer is an alternative to the above-mentioned offer and is economically low.

It is necessary to restrict the movement of pedestrians on the roadway in order to redirect pedestrian traffic around the Chorsu market to underground passages, and it is advisable to install a manually controlled traffic light in an unregulated pedestrian crossing near the Green Market.

To prevent pedestrians from entering the roadway, it is recommended to install pedestrian barriers at pedestrian crosswalks.

#### **Referencess**

1. Q. Kh. Azizov. Fundamentals of traffic safety. - T., "Science and Technology", 2009, p-44.
2. Imomnazarov S.K. et al. Public participation in ensuring traffic safety // Economy and Society. - 2021. - No. 5-1. - P. 939-942.
3. Imomnazarov S.K., Nasriddinov A.Sh., Razokov A.Ya. Avtomobillarda aqlli tizimlarni qo'llash // Research of innovation and technological progress jurnali. 2021 ISSN: 2319-7064-P. 78-80
4. "On approval of the regulation on the procedure for conducting briefings by a motor carrier to drivers on road safety issues. [Registered by the Ministry of Justice of the Republic of Uzbekistan on May 13, 2014. Registration No. 2582]