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DEVELOP A BICYCLE AND PEDESTRIAN MOVING INFRASTRUCTURE IN CITIES

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Annotation: This article analyzes topical issues of developing cycens and pedestrian movement infrastructure in cities. Cycling and pedestrian on the background of urbanization and the increase in traffic requirements are recognized as an important part of stable transport systems. The article discusses the design features of bicycle corridors and pedestrian zones, the social, economic and environmental impact in the urban environment. Issues of the development of urban infrastructure, in particular, funding, security and integration are analyzed. At the same time, advanced international practices and the opportunities in this area in Uzbekistan will be discussed. The article provides recommendations for the development of cycles and developing the population in the sustainable development of the population and improving the quality of life.

Keywords: Bike infrastructure, infrastructure, stable transport, city mobilization, transport safety, environmental stability, city design, economic efficiency.

Urbanization process in cities puts new requirements for transport systems. The increase in road transport is causing problems such as traffic, air pollution and noise. Bicycles and pedestrian traffic infrastructure is being considered an important tool in softening these problems, improving the quality of life of urban population and the formation of a stable urban environment. This article analyzes the features, advantages and problems of the development, advantages and problems of the development of cycling and infrastructure in cities and provides practical recommendations for cities of Uzbekistan.

Bike and walking movement has the following advantages in the sustainable development of cities:

Environmental profits: Bicycles and pedestrian transport equates the carbon emission zero, which improves air quality.

Social Affect: These modes of transport increase the physical activity of the population, which reduces health costs.

Economic efficiency: construction and maintaining cycling and infrastructure is cheaper than highways.

City Mobility: Bicycles and pedestrian zones help reduce traffic and integrate with public transport.

The following aspects are important in the design of cycling and pedestrian infrastructure:

Bicycle corridors: Separate bicycles corridors, safe intersections and bicycles stops are an integral part of the city transport system. For example, bicycles of bicycles in Europe (amterdam, copenhagen) are successfully integrated into general transport networks.

Infantry Zones: The establishment of cars in urban centers ensures safe movement of the population and increases social activism.

Security Means: Road signs, lighting systems and safe crossings are important for cyclists and pedestrians.

Integration: Bicycle and infrastructure Must be linked to public transport (bus, subway), which will address the issue of "last mile".

There are the following problems in the development of cycling and footfacillers in cities:

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Financing restrictions: infrastructure projects require great investment, but state budgets often provide dominance of highways.

Cultural and social barriers: Bicycles are not widespread in some countries, such as Uzbekistan and low interests of the population in this type of transport.

Safety Problems: Failure to Failure to Traffic Rules and Insufficient Infrasize poses a threat to cyclists and pedestrians.

City planning problems: Adding cycles of city infrastructure often causes difficulty.

There are many successful examples of the development of cycling and pedestrian infrastructure in international experience. For example, bicycling in the Netherlands is 27% of total transport. There are opportunities to expand the cities of Uzbekistan, especially in Tashkent, and to establish pedestrian zones. The following measures are recommended:

Public Policy: Development of special state programs for the development of cycling and infants.

Involvement of the public: to carry out advocacy campaigns to increase the interest of the population in cycling and walking.

Cooperation with the private sector: attracting private companies in financing cycling systems and infrastructure projects.

Pilot projects: implementation of test projects in small cities or in some districts of Tashkent.

The development of cycling and pedestria infrastructure is important in forming a stable urban environment, softening environmental problems and improving the quality of life. The development of this direction for cities of Uzbekistan should be carried out taking into account state policy, international experience and local conditions. In the future, it can become an important part of smart technologies, safe infrastructure, and bicycles and pedigree mobility.

Referenses:

- 1. Pucher, J., & Bees, R. (2014). Cycling for Sustainable Cities. MIT Press.
- 2. Un-Habitat (2022). Urban Mobile: Plant's Non-Motorized Transport. United Nationals.
- 3. Gehl, J. (2010). CITIES FOR PEOPLE. Island press.
- 4. Ministry of Urban Production and Construction (2023). A road map for the development of urban transport systems.