

## FUNDAMENTALS OF URBAN CONSTRUCTION OF BIKE TRACKS IN THE URBAN ENVIRONMENT

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### Annotation

One of the priority tasks of the state is to improve the level and quality of life of the population. The state of the transport infrastructure of large cities has a number of serious problems, the main of which are the environment and lack of funding. A well-developed cycling infrastructure can form into one of the ways to solve environmental problems.

**Key words:** *living comfort, transport infrastructure, sources of financing for infrastructure projects, bicycle infrastructure, bicycle station.*

Every year in our country the number of cars is becoming more and more, which negatively affects the environment, and traffic jams are created on the roads. The background pollution based on monitoring data exceeds the norm by 2 times. People are more likely to get sick because, as a rule, car fumes can cause dementia, asthma, heart attacks, cancer and even diabetes. Noxious emissions are associated with a variety of health problems. The percentage of the population that does not follow a healthy lifestyle is growing. And due to the underdeveloped network of bike paths, those who want to ride are often not able to make a quiet bike ride in a special place for this.

Today, the global interest in relation to cycling is growing rapidly, European trends in the quality of the environment "vote" towards various environmental transformations through the integration of cycling infrastructure. Such aspirations are absolutely justified, because cycling is an environmentally friendly, comfortable, healthy mode of transport, which has certain advantages over other modes of transportation.

Cycling trips are special trips, referring to the commute from work to home or, for example, a weeklong camping trip. Traveling on a bicycle has a low speed, moreover, the comfort of travel allows you to travel over long distances. European experience confirms that cycling has become more enjoyable and rewarding than car travel in terms of saving money on gas, time in traffic jams and physical activity.

The cycle path is either part of a public road or an independent road primarily intended for bicycle traffic. Cycle paths, separated from the main carriageway, can be used for quiet cycling and cycling, which is a significant advantage in the city.

The advantage of cycling infrastructure is not only in the obvious environmental and health factors for humans. Cycling unites a person with the environment around him: with nature, urban or cultural environment; it has a positive psychological effect. The low speed of the bicycle opens up not only tourism opportunities, but also educational and social functions for cycling. The huge advantage of cycling infrastructure is the economic development of the environment: new routes open new paths for new people, which creates favorable conditions for business development; in addition, the costs of the population for health care and gasoline consumption are reduced; the importance of public transport in combination with cycling infrastructure is increasing. It gives the environment a special status, improves the quality of life and territory. Cycling infrastructure influences people in a peculiar way, influencing their mentality: improving the streets taking into account the cycling infrastructure will be pleasant not only for cyclists, but also inspire other people to use the bike.

Cycling in Europe has been developing for decades and is at a stage of development where in some cities, such as Copenhagen, the percentage of people who prefer cycling exceeds the percentage of people who choose a car. In Russia, the bicycle is used by many people, but the infrastructure is almost lacking, which makes it difficult for many cyclists to use the bicycle as the main mode of transport.

Cycle paths and sidewalks with special markings for blind people are being actively built on several central streets of Tashkent. At first glance, it seems that the capital of Uzbekistan has followed the example of many countries, where, amid the coronavirus pandemic, the authorities are rethinking the design and purpose of streets, expanding sidewalks and laying bike paths, creating opportunities for people to social distancing and safe movement around the city.

The press service of the capital's khokimiyat (i.e. local government representative) published a short message stating that the improvement service specialists and builders are working on the creation of sidewalks 1.5 meters wide along a number of streets, special paths for the blind with a width of 80 cm and bike paths 1 meter wide

Considering that the permissible speed of traffic on most of the capital's streets is 70 km / h, cycle paths should be physically fenced off from the roadway. It is the only safe option for a city if the goal is to provide convenience for cyclists of all ages. At the same time, cyclists whose average speed is five times that of a pedestrian should not pose a threat to pedestrians.

Many streets of Tashkent are wide enough and even excessively wide to allocate part of the lane or the entire lane to cyclists without prejudice to vehicles. Safe and unimpeded cycling would encourage people to move away from vehicles. But, apparently, the city administration went its own way, without asking cyclists if they needed such paths.

The existing cycle paths have a specific purpose: to remove cyclists from the road when various delegations and high-ranking motorcade pass along it. At other times, people using a bicycle for transportation do not ride these cycle lanes because they are unsafe. Cycle paths along sidewalks run into waste bins and other barriers, and they are often interrupted. Because of the narrow pedestrian area, bike paths are usually occupied by pedestrians.

The entrances from the carriageway to the courtyards of apartment yards are below the level of



*Pic.1 Shahrizabz st. Tashkent*



*Pic.2 Alisher Navoi st. Tashkent*

the sidewalk. This means that pedestrians, parents with strollers, people in wheelchairs and cyclists will have to constantly overcome inconvenient descents and ascents. The priority is again given to motor transport. If the pavement continued at the same level, drivers would slow down and cross carefully.

Having organized the visit of German experts from Planungsbüro VAR +, the Tashkent city administration noted that in the world practice, cycling communities help city administrations to develop a cycling culture. That is why Jonas Eberlin and Uwe Petri met with the cycling community of Uzbekistan.

The road network of Tashkent needs more than just endless asphaltting and updating of primitive markings. The introduction of a new transport concept should involve street reconstruction, allocation of lanes for public transport and cyclists, widening of sidewalks, relocation of stops, reduction of the number of car lanes and revision of markings.

To popularize the bicycle, it is necessary to create conditions. World experience shows that if a city offers its residents a comfortable and safe cycling infrastructure, then 5-10% of all road users are ready to switch to a bicycle. If the number of cars in the city is halved, the carrying capacity of the streets will increase sevenfold.

According to experts, the city administration intends to build bicycle paths with a width of at least 2.75 m. This is the standard size of bicycle paths in many countries. German experts supported Tashkent's initiative, saying wide bike lanes allow cyclists to communicate with each other while riding.

It should be noted that the development of cycling infrastructure can serve as an impetus for the development of urban areas and creates a capacious demand in the market for services: sports shops; technical service; construction of parking lots and bike rentals; storage of bicycle equipment as a service in the housing sector; guarded parking service; cafes and grocery stores; production of bicycle components.

To harness the useful potential of cycling, cycling infrastructure must be attractive and safe, allowing cyclists to reach their destination comfortably and quickly. In addition, in order to move from a car to a bicycle in the desired volume, it is necessary to form a positive attitude towards bicycle transport in society, to raise its social status and prestige.



*Pic. 3 Navoi avenue Bukhara*

## ЛИТЕРАТУРА

1. Зубайдуллина Д.В. // Управление экономическими системами. – 2014. – № 12. – url:
2. Козикова А.А. Велокультура в крупных мегаполисах зарубежья // Молодой ученый. – 2016. – № 29. – с. 93-95.

