THE IMPORTANCE OF ORGANIZATIONAL EFFORTS TO PREVENT TRAFFIC CONGESTION AND ROAD ACCIDENTS

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Abstract. The article reflects scientific approaches to the importance of protecting the rights, freedoms, and legitimate interests of citizens, increasing the attractiveness of public transport in preventing road traffic accidents and combating related violations, digitalizing the industry, and addressing environmental problems.

Keywords: transport, road accident prevention, automobile, traffic congestion, ecology, violations, intelligent cameras, strategy, foreign experience.

For 23 years, the travel magazine "Wanderlust" has been conducting a poll for readers to vote for their favorite destinations in the world for the annual Reader Travel Awards. In 2024

168 thousand travelers voted in 22 different categories. Readers also voted for their favorite promising destinations and recognized Uzbekistan as the most promising developing destination. [1]

In the list of the 10 most promising new tourist destinations of the world, presented in the journal, Uzbekistan occupied the first place, while the rest were occupied by Albania, Qatar, Azerbaijan, Kazakhstan, Greenland, Armenia, Nicaragua, Moldova and Panama.

It is clear that tourists will definitely use transport services to get acquainted with the sights of our country.

In general, transport services should be characterized by high-quality, safe, reliable, and timely service not only for foreign tourists, but also for citizens of our country.

On December 13, 2022, during the visit of the President of the Republic of Uzbekistan to the branch of the bus depot No. 18 of JSC "Toshshahartransxizmat," in order to improve the efficiency of the public transport system, it was decided to radically improve the activities, provide high-quality services to passengers, and increase the attractiveness of public transport. to reduce the flow of passenger vehicles in the city of Tashkent, the infrastructure of the branch will be improved, and buses intended for transporting 1000 passengers to the city of Tashkent will be purchased on the basis of

These changes and reforms are not carried out in vain. Zero, in Uzbekistan in 2022, "Highening Human Values and an Active Mahalla,"

The declaration of 2023 as the Year of "Attention to the People and Quality Education" testifies to the fact that the main goal is to increase human well-being.

Today, Tashkent has a population of 5 million people, its number is increasing by 100,000 a year, 76,000 vehicles are available, and 76,000 a year.

The daily need of the population for movement is 9 million, of which 3 million people need to move on foot, and 6 million people need to move on transportation. [2]

25% of the traffic, i.e. 1.5 million, will be carried out in buses, subways and minibuses, the remaining 4.5 million - in one million (760 thousand regularly registered and 240 thousand daily arriving) vehicles that move in the city during the day.

The aforementioned reasons are the lack of an effective traffic management system and road repair work, as well as traffic congestion

7 km/h, the time spent by the population on the road

Economic losses and damage to the country's environment are also increasing as a result of an almost two-fold increase compared to 3-4 years ago, followed by excessive fuel consumption and emissions of harmful gases by slowly moving vehicles.

In recent years, large-scale work has been carried out to improve the provision of motor transport services to the population, expand the network of public transport routes, and update the rolling stock with modern, environmentally friendly buses.

With the participation of foreign experts, a network of new routes of public transport of the city of Tashkent was developed on the basis of new approaches. [3]

In particular, it is not uncommon in Sweden to use a car every day. Instead, everyone uses buses, trams, and subways, and cars are typically driven out of garages only at weekends to get out of town.

The problem of serious traffic jams in the city of Luxembourg arises due to the population of France, Germany, and Belgium, who come to work.

This is about 200,000 people every day. The Principality of Luxembourg alone has more than 600,000 inhabitants, of whom about 400,000 come to work in the capital with a population of almost 110,000. In order to solve the problem of traffic jams in the capital and improve the environmental situation, the city administration decided to make the movement of public transport as comfortable as possible.

In Seoul, one of the main ideas of this route was to connect bus routes with the metro system, and buses became the second most popular means of transport after the metro. Thanks to a convenient transfer system, more people use public transport. If in 2003 15 percent of the population of Seoul used buses, then in 2012 this figure reached 60 percent. Buses are preferred to personal vehicles and this rule is followed. Buses are completely independent of the overall traffic flow. [4]

In Paris, relying on passenger buses, they began to create special passages for buses at the expense of cars. Crossing the line of special sidewalks by vehicles is punishable by a fine. [5]

The five-year action program of the Cabinet of Ministers, developed on the basis of the "Uzbekistan-2030" Strategy and presented at the Oliy Majlis, covers 10 priority areas. In addition, within the framework of these areas, 400 measures have been specifically defined in the context of economic and social sectors, 30 of which will cover measures for the development of transport and communication infrastructure. [6]

The positive results of the measures being implemented can be felt through the following figures.

To improve the activities of JSC "Toshshahartransxizmat," the following work was carried out in 2024, and 1394 new buses and electric buses were purchased for the renewal of the rolling stock. [7]

Including:

- 190 large-capacity "MAN A22" buses;

- 200 "SAZ LE-60" buses;
- 302 large-capacity "Yutong ZK6126BEVG" buses;
- 500 large-capacity "Yutong ZK6852HG" buses;
- 200 extra-large capacity "King Long XMQ6180G" buses with a length of 18 meters;
- 2 extra-large capacity electric buses of the "King Long XMQ6180BGWBEV" type with a length of 18 meters were brought in.

As part of the expansion of the route network, the number of bus routes increased from 147 to 163 (an additional 16 new routes were opened). Among them:

- 11 are main routes;
- 14 are circular routes;
- 92 are connecting routes;
- 46 are feeder routes.

To improve public transport movement, 70.6 km of "A" lanes were created on the city's 25 busiest streets, and the movement of other vehicles in these lanes was restricted. This, in turn, ensures the unobstructed movement of buses and serves as a factor in reducing travel intervals.

In addition, 224 intelligent cameras were installed on the "A" lanes intended for bus movement to identify drivers violating the rules and record infractions. 82 of these cameras were installed directly on specially allocated "A" lanes and bus stops, and 62,571 violations were recorded using these cameras.

To reconstruct and improve the infrastructure of bus depots, administrative buildings, technical service points, and bus washing facilities were reconstructed in 8 bus depots. New washing equipment was installed, and the territories of these enterprises were covered with asphalt.

Furthermore, shortcomings in road infrastructure were completely eliminated on 113 bus routes, and 615 additional road signs were installed.

Digitalization has been introduced in the sector to increase efficiency. Intelligent systems "IVMS," "ERP," and "BI QLIK SENSE" have been implemented for managing and controlling bus traffic.

As a result of remote control and monitoring of bus and driver activities through automated systems, the number of initial violations decreased from 5,716 to 3,766, amounting to 1,950 cases.

To further reduce and eliminate violations, JSC "Toshshahartransxizmat" has previously acquired

860 buses that will be equipped with technical means of the intelligent transport control system, and a system for photo-video recording of traffic violations in buses will be launched.

Of the 1,015 drivers assigned to the newly imported buses, 272 drivers were retrained to the "D" category at the Transport Institute. In addition, 2,763 drivers have been trained with the involvement of foreign specialists, particularly from China, and 100 drivers are taking "Safe Bus Management" courses every month.

200 driver-instructors were trained according to European standards with the involvement of specialists from "DEUTSCHE BAHN BUSS" company. As part of the joint program with "DEUTSCHE BAHN BUSS" company, it is planned to enhance the qualifications of 7,000 bus drivers in the future.

As a result of organizational measures implemented, the number of bus routes in Tashkent increased from 147 to 163, with 16 new routes established. The number of buses operating daily on routes increased by 667, from 890 to 1,557. The number of daily trips performed by buses increased by 7,801, from 14,997 to 22,798. Consequently, the service interval was reduced from 15-20 minutes to 10-12 minutes.

The number of passengers using public transport increased from 536,900 to 1,240,000 (+131%). By the end of December 2024, 65 percent of fares were paid electronically and 35 percent in cash. From January 1, 2025, to enhance convenience for passengers, measures were taken to eliminate cash payments and transition to full electronic payment.

To increase the attractiveness and efficiency of public transport, it is planned to purchase 200 electric buses in the first quarter of 2025, and to increase the number of daily operating buses in Tashkent from 1,567 to 1,620. Additionally, 5 new routes are planned to connect settlements recently incorporated into Tashkent city from Tashkent region, with the number of daily trips expected to increase from 22,798 to 23,434. As a result, the number of daily passengers will increase from 1.2 million to 1.3 million. The service interval of bus routes will be reduced from 10-12 minutes to 8-10 minutes.

To ensure comfortable, safe, and fast travel for passengers, 10 additional "A" lanes will be marked in Tashkent, bringing their total number to 35.

Modern medical rooms are being established to monitor drivers' health and conduct thorough medical examinations.

Furthermore, to create better conditions for bus depot employees, modern automated washing equipment is planned to be installed in 5 bus depots. Modern sanitary facilities for drivers and employees are also planned.

To enhance the appeal of public transport, several measures have been taken to address various issues, including preventing traffic accidents, reducing congestion, saving citizens' travel time, decreasing CO2 emissions by reducing personal car usage, and balancing the load on public transport. These measures include adjusting university class schedules and amending the Administrative Responsibility Code with Article 128-7, which legalizes fines for unauthorized use of "A" lanes designated for public transport.

In conclusion, we can say that the development of public transport serves as a factor in preventing traffic congestion in Tashkent city. Considering that the majority of the population uses it, its attractiveness creates conveniences such as low service costs, increased safety compared to private cars, time savings due to the creation of additional "A" lanes, and reduced emissions of harmful gases into the environment as the number of modern electric buses increases.

Furthermore, the installation of intelligent video surveillance devices on public transport can serve as a basis and evidence for identifying drivers who violate traffic rules and documenting their violations. The digitalization of the sector - detecting violations through a photo-video recording system - will alert individuals who violate traffic rules and lead to a decrease in the number of violations.

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