

DESIGNING TRANSPORTATION SYSTEMS FOR SMART CITIES

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Annotation: *This article analyzes modern approaches to design transport systems in the context of smart towns. The development of smart cities is related to the increase in the requirements for urbanization, environmental stability and economic efficiency, and transport systems play an important role in these processes. The article will consider smart transport systems (intelligent transport systems, ITS), for example, data analysis, autonomous vehicles and integrated mobility platforms. Advantages and problems of artificial intelligence, IOT (Internet of the Things) and large data (Big DATA) are analyzed in the design of urban transport infrastructure. The opportunities and shortcomings of the cities of Uzbekistan, especially in the example of Tashkent, will discuss these technologies. The article provides recommendations for stability, security and social equality in designing transport systems for smart cities.*

Keywords: *Smart cities, smart transportations, smart transportation, artificial intelligence, Iot, large data, sustainable mobilization, transport security, urbanization.*

Smart cities are based on integration of modern technologies in order to improve the quality of life, efficient use of life, efficient use of resources and environmental balance. Transport systems are important to ensure cities, as a heart of smart cities, reducing traffic, and solve environmental problems. This article analyzes the main principles, technological approaches of transport systems for smart cities, technological approaches and practical opportunities for cities of Uzbekistan.

The following components include smart transport systems (ITS) optimize:

Data Analysis Real Time: Use sensors and cameras to monitor and predict traffic flows. For example, smart traffic lights are effective in reducing traffic.

Autonomous vehicles: without drunk cars and drones cause the city logistics and revolutionary changes in public transport.

Integrated mobility platforms: apps that unite services such as public transport, cycling and car partnership (Car-mating) facilitate the use of transportation.

Integration with public transport: smart transport systems are inextricably linked with public transport systems, providing users favorable and efficient transport services. For example, through a single app, the opportunity to use the bus, metro and cycling rent services.

Road safety: smart systems support automated safety measures to reduce road traffic accidents.

The following technologies are important in the design of intelligent cities transport systems:

Artificial Intention (AI): Prophecating traffic flows is used in the optimization of vehicles and improving the security.

Internets of the internets (iot): Sensors and devices improve transport systems through collection and transmission of data data.

Large data (Big Data): Processing a large amount of data to analyze traffic currency, user requirements and infrastructure.

Blockbain: Used to ensure transparency and security in logistics and transport services.

There are the following problems in the introduction of smart transportation systems:

High cost: The introduction of smart technologies requires a large financial investment.

Data security: IOT and large data leads to cybergavity.

Infrastructure Adaptation: The integration of new technologies in the existing city infrastructure develops difficulties.

Social acceptance: The confidence in new technologies and skills of them can be limited.

The major cities of Uzbekistan, in particular Tashkent have a great potential for the introduction of smart transport systems:

Testing of wise traffic lights in Tashkent and real-time public transport monitoring systems.

□ Implementation of IOTBOBOBOCK AND PAYMENT SYSTEMS in metro and bus systems.

□ Develop smart cycling systems and pedestrian zones.

□ Financing of smart transport projects based on international experience (e.g., Singapore, Dubai).

Conclusion

Designing of transport systems for smart cities is important in increasing urban mobility, improving environmental sustainability and improving economic efficiency. Cooperation and international experience play an important role in the introduction of smart transport systems for cities of Uzbekistan. By wider use of technologies such as artificial intelligence, IOT and large data, cities can have stable and effective transport systems.

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