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**TEXNIKA FANLARINING
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METHODS OF STUDYING MODERN TECHNOLOGIES IN PASSENGER TRANSPORTATION

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Annotation. The primary goal of transportation nowadays is to increase the economic efficiency of its operation by promptly, completely, and high-quality meeting the demands of the populace and the national economy. As the most popular form of passenger transportation, road transport plays a significant role in supplying the population's transportation demands. It is important to focus on improving working procedures and technical equipment when developing passenger motor transportation. Simultaneously, the primary objective is to completely meet the nation's transportation needs. The rolling stock's technical and financial capabilities do not align with its quantitative and qualitative indicators. More sophisticated organizational structures are needed for transportation.

Keywords: transportation systems, public transportation, modeling, sustainable development, transportation, and population.

YO'LOVCHI TRANSPORTIDA ZAMONAVIY TEXNOLOGIYALARDAN FOYDALANISH USULLARI

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Annotatsiya. Hozirgi kunda transportning asosiy maqsadi aholi va milliy iqtisodiyot ehtiyojlarini tezkor, to'liq va yuqori sifatda qondirish orqali uning iqtisodiy samaradorligini oshirishdan iborat. Yo'lovchi tashishning eng ommabop turi sifatida avtomobil transporti aholining transport ehtiyojlarini ta'minlashda muhim rol o'ynaydi. Yo'lovchi avtomobil transportini rivojlantirishda ish jarayonlari va texnik jihozlarni takomillashtirishga e'tibor qaratish muhimdir. Shu bilan birga, asosiy maqsad mamlakatning transport ehtiyojlarini to'liq qondirishdir. Harakatlanuvchi tarkibning texnik va moliyaviy imkoniyatlari uning miqdoriy va sifatli ko'rsatkichlariga mos kelmaydi. Transport tashkiloti uchun yanada murakkab tashkiliy tuzilmalar talab qilinadi.

Kalit so'zlar: transport tizimlari, jamoat transporti, modellashtirish, barqaror rivojlanish, transport, aholi.

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Introduction.

Characteristics and state of the passenger system in road transport.

The high rates of urbanization, the social, scientific, and technical development of cities, the creation of new urban planning systems, combined with the introduction of new technologies in all areas, predetermine the significant development of transport service systems. These systems should ensure the viability and effectiveness of the city agglomeration's activities, creating the possibility of consolidating territorial disagreements in all spheres of public life [1].

In the unified transport system of a large city, consisting of an external highway, local, suburban, and urban transport complex for servicing goods and passengers, the urban passenger transport system occupies a special functional place.

Currently, the processes occurring in the work of this system are similar in different cities of Uzbekistan and are represented by similar problems of an economic, social, regulatory, organizational-technical, and environmental nature [2]. The solution to many of them requires a review of the traditional forms and approaches of the management system at the stage of market formation to improve the efficiency and quality of transport operations. Objectively, the existing problems of organizing and managing passenger transport activities can be divided quite conditionally according to the following criteria [3].

Methodology. Transport Problems of forming a rational transport structure, i.e., the redistribution of transport volumes between competing enterprises or modes of transport, carried out under existing market conditions, acceptable to consumers [4];

problems of developing new markets, the emergence of which is associated with the objective development process of the urban metropolis, both topographically and as a result of increased transport mobility of the population;

- carries out independent control over the problems of ensuring transportation safety, compliance with the requirements necessary for the organization and implementation of transport in the conditions of a sufficiently large number of small enterprises and entrepreneurs operating in the market. Here, it is possible to distinguish an increase in the accident rate under conditions of heterogeneous composition of the traffic flow and unevenness of its concentration;

- problems related to the social aspect of the city

transport, which significantly affects the standard of living of certain categories of the urban population;

Result and discussion. A group of problems related to urban planning features, land use policy, and the environmental situation in the context of motor vehicle rates and environmental pollution.

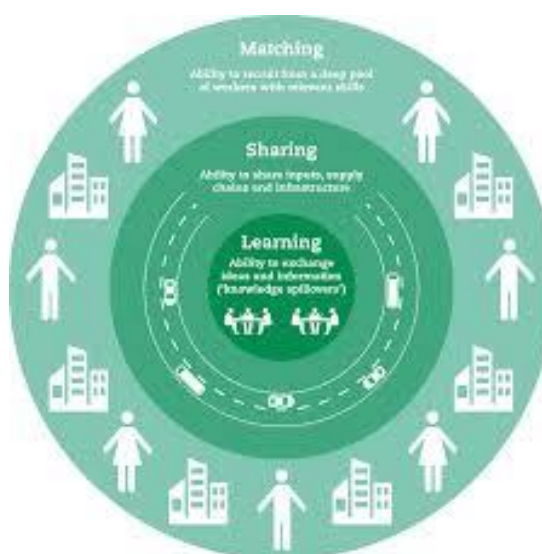


Fig 1. The impact of agglomeration on the economy | Centre for Cities.

Within the framework of macrologistics, urban transport management can be formed on the basis of the following types of management systems, generally recognized in the world

economy: administrative - planned; market; regulated - market. The first type is based on strict centralization of management and is characterized by a state form of ownership.

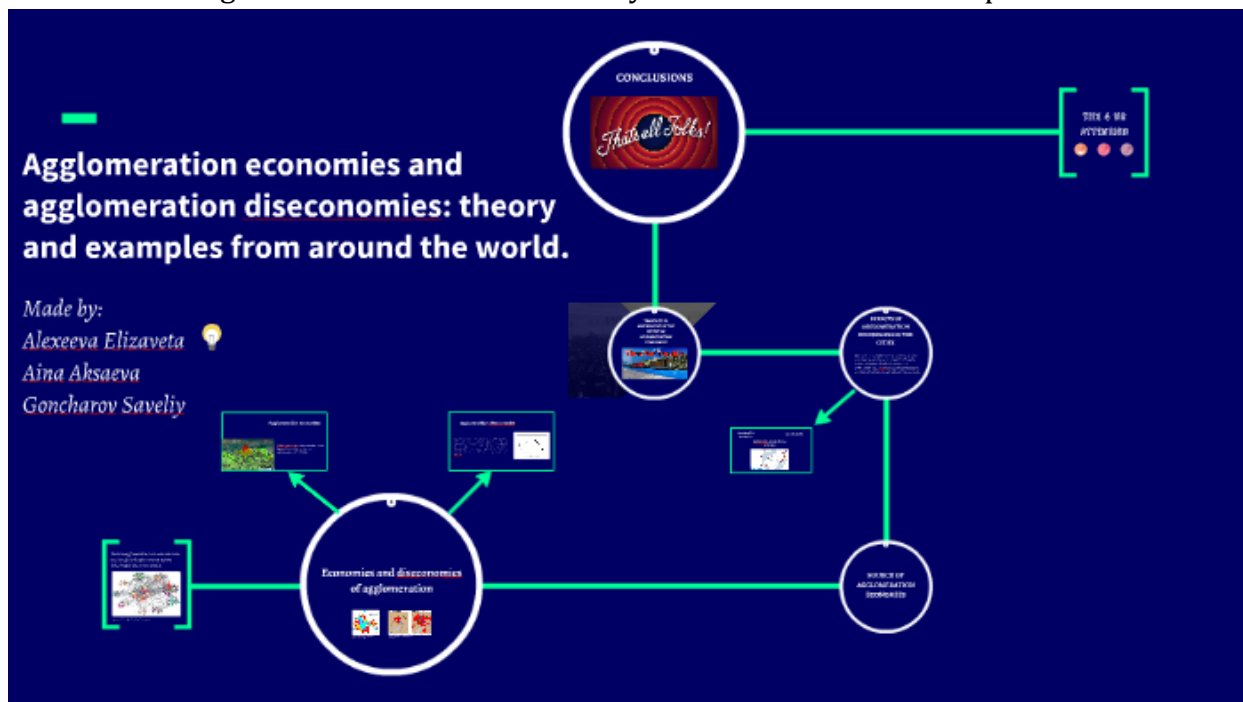


Fig 2. Agglomeration economies and agglomeration diseconomies: theo by Artem Toporov on Prezi

The economic mechanism of urban passenger transport "before reconstruction" was based on the principles of planning the volume of passenger transportation and the planned unprofitability of enterprises. Further steps towards the transition to self-financing of transport, the introduction of a system of calculated tariffs, have changed not the main content, but the form of the economic mechanism. It is known that under a planned management system, the demand for transport is expressed in the volume of transport services provided to passengers, the consumer cannot interest producers in increasing the volume and quality of services, and tariffs cannot regulate a certain level of quality, there is a unified tariff policy and a fixed amount of subsidies. (subsidies). Thus, the main performance indicators of transport services are determined by the internal conditions of production enterprises [5].

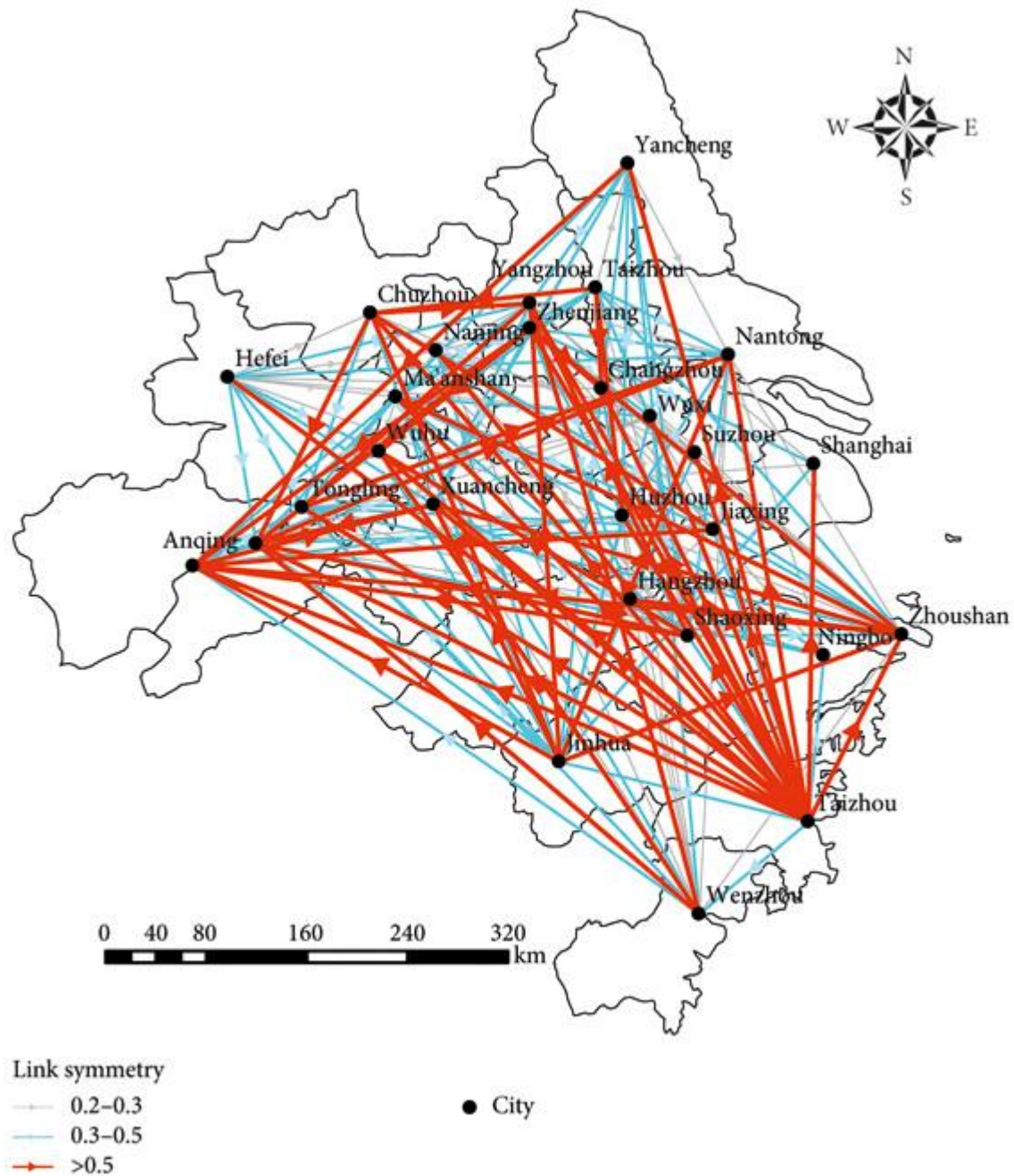


Fig 3. Spatial Network Structures of Urban Agglomeration Based on the Improved Gravity

The market system ensures minimal state intervention in the work of producers of various forms of ownership (mainly, its role is reduced to the legislative level). The main conditions for this system are the competitiveness of services, free pricing, guaranteed free access to the market, and market regulation of supply and demand. The most widespread in the world is the third intermediate type of management system. As a synthesis of planned and market advantages, it ensures a rational combination of the characteristics of both systems.

Types of passenger transport and its scale

Passenger road transport is an integral part of the country's unified transport system. A transport system is understood as a set of communication routes, vehicles, technical means, management and communication tools, combined by a system of technological, technical and

informational, legal and economic relations. The transport system combines rail, sea, air, road, and gas pipelines and modes of transport.

Communication routes - roads, highways, pipelines, structures, fittings, and equipment for the movement of substations.

Transportation means - substations, pipelines, containers, trays, returnable and disposable containers.

Technical means and mechanisms - PRS, bunkers, conveyors, sorting machines. Control and communication tools - a set of devices that ensure the collection, storage, processing, and transmission of data. Regulation of modes of transport - stations, railway stations, airports, yachts, parking lots, service stations. The unity of the transport system is achieved by:

conductivity of transport, as well as processing systems;

- technological sphere of interaction, provided by the unity of technology, transport schedules, combinations of senders and receivers, etc.;

- information sphere of mutual cooperation;

- legal sphere of relations;

- economic sphere of interaction - the basis of which is a unified system of planning the distribution of transport by modes of transport.

In terms of importance and scale, each type of transport is a separate branch of the national economy and is considered a complex dynamic system. The level of satisfaction of the population's needs for transportation by various modes of transport depends on a number of factors, in particular, the nature and level of development of the material and technical base of a particular mode of transport, the organization of the transportation process, the regularity of transportation, and the reliability of delivery. Each type of passenger transport has its own specific characteristics that determine and correspond to its use.

The effective functioning of the passenger motor transport system is achieved under conditions of coordinated development of all its components - rolling stock, motor vehicles, service production base, technical means of communication and management, transport and transport processes. Passenger road transport is the main type of transport for short and medium-distance travel. The work of passenger transport is determined as follows: number of passengers transported - transport volume. Passenger transportation distance - travel distance, level and level of transport service. The volume of traffic, taking into account the distances of their transportation, determines the work of transport - passenger turnover of this mode of transport. The level of transport service is characterized by the degree of satisfaction of transport needs. The quality of passenger service depends on the time spent on the trip, the comfort and convenience provided to passengers [6].

All completed work is subdivided according to a number of features:

- By type of substance: transportation of buses and vehicles

- By PS affiliation: public transport, departmental, individual vehicle owners, car on lease.

- By type of message: city, suburban. Local (village and intra-district), intercity and international. Urban transport is carried out by buses and passenger vehicles, taxis.

Suburban transport provides constant communication between the suburban population and the residents of the suburban city. They are characterized by a small number of passengers from urban transport, a significant increase in their number in the spring-summer

period, a significant increase in travel distances, fewer stops for boarding and boarding, and an increase in travel intervals. They also have relatively good road conditions.

Local (rural) passenger transportation is related to serving the rural population and is mainly carried out by buses. Domestic transport is characterized by a wide variety of road conditions, a small number of passengers, the availability of hand luggage or cargo, and a significant change in the volume of passenger traffic by days of the week and seasons.

Intercity passenger transportation is organized on highways at a distance of more than 50 km from the city limits for connecting cities within the region (interregional), between regions (interregional) and autonomous republics (inter-republican). They are distinguished by long distances, reaching distances of 1000 km and more, and good road conditions. For this transport, comfortable and high-speed buses are used, equipped with luggage and hand luggage storage areas, cabinets, a buffet, and restrooms.

Excursion transportation is related to excursion services and is carried out mainly by buses with passengers in cities on regular, pre-designed routes according to the theme of the excursion. Such transportation can be carried out on a pre-order basis.

Excursion transportation is related to excursion services and is carried out mainly by buses with passengers in cities on regular, pre-designed routes according to the theme of the excursion. Such transportation can be carried out on a pre-order basis.

Tourist transport is carried out both by public transport and by departments with trips outside settlements according to pre-designed routes. For such transportation, buses are provided with payment based on preliminary orders, both at current tariffs and on a contractual basis; with sufficient volumes of excursion and tourist transport, specialized motor transport enterprises or columns specializing in such transport may be allocated.

Official passenger transportation is associated with the transportation of workers and employees of a certain enterprise from their place of residence to work and back, as well as for one-time business trips during the working day. Both public and departmental transport are used for them.

School transport is usually organized in rural areas, where either there is no regular bus service, or there is one, but the movement is carried out over a long period of time and does not coincide with the start and end times of school. Special routes and schedules for transporting schoolchildren have been developed, and a corresponding type of bus with appropriate capacity has been determined.

Re-transportation is intended for the delivery of crews, oil workers, shifts, builders, etc. Often, such transportation is one-way, associated with the beginning and end of work shifts. Bus traffic on designated routes is carried out strictly in accordance with the schedule, both on public buses and in offices.

Special passenger transportation is carried out by registered buses and motor vehicles. They are mainly associated with the service organizations they organize.

- By form of organization:

Transportation of routes is organized according to a strictly defined schedule on approved routes with passenger boarding and disembarking at pre-agreed intermediate and final stops.

Adapted transport is carried out on the basis of contracts and one-time orders of enterprises, organizations, and the population. They are not routes, although routes are always agreed upon.

Bus transport carries out other multimodal transport together with other passenger transport.

Social:

Organizational and technical indicators: range of movement of rolling stock; speed; capacity and occupancy of rolling stock. These indicators can be assessed (measured) and planned to a certain extent. The organizational and technical level of transport services is considered normal when satisfactory indicators of the listed indicators (standard indicators) are achieved.

The quality of public transport services is assessed by a number of indicators and is the level of satisfaction of the population's needs for the public passenger transport system from the point of view of passengers. Any vehicle must meet the following four requirements.

- (industrial and domestic indicators): traffic safety; speed of movement; comfort and convenience of travel; low freight charges. The safety level of any mode of transport is assessed by statistical data on the number of accidents and incidents that occurred during a certain period (day, month, year) and the number of people affected (dead and injured) by buses belonging to individual entrepreneurs.

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