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Perfection of the Backbone Network of the Central Zone of in Samarkand

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Annotation: before starting to develop measures to improve and improve the trunk network of the central zone of Samarkand, the main network of the center throughout the city should determine the necessary capabilities of the street and road network of the central zone. The road network of the central zone is not able to cope with the traffic load unless measures are taken to redirect transit traffic from the center. the improvement of the conditions for the circulation of automobile flows in the central zone is associated with the redirection of transit transport from it. For the purposes of design and practical application on other densely populated, busy streets of our Republic, the above practical recommendations can be achieved through their implementation.

Keywords: M-39 highway, overpass, overpasses.

Before proceeding to the development of improvement measures

The main network of the citywide center, it is necessary to determine the necessary capacity of the street and road network of the central zone.

Wud =[(pl Ll+pt Lt)kn]/UsT,

Where WDS is the required capacity of the street-road complains:

nk-nn is the number of passenger cars (personal and taxi). Making a run

Within the districts during the period of maximum traffic load:

Sl and Lt -the average mileage of passenger cars (personal and taxi) within the district km;

Kn=1.2.....1.4 is the coefficient of uneven distribution of Traffic flows on the street of the road network of the central zone and in time:

Uc is the speed of communication when driving cars, km'h:

T is the period of maximum traffic intensity, hour.

To determine the tl and so on , you can use the equalities

Rl=Ul kl′ kl′ kl″

RT″=Ut Ct CT′ CT″

where Rl Rt is the number of trips by cash cars and taxis per 1000 residents in

The central zone during the period of maximum traffic load;

- number of cars and taxis per 1000 inhabitants:

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Kl=0.5, Kt=0.85 -coefficients of departure from the garage of personal cars and taxis (according to the survey):

Kl =0.27, Kt =1 – coefficients of gravitation to the center of personal cars and taxis (according to the survey):

K′l= 0.453, K″t=1.1 – coefficients of arrival at the center of passenger cars and taxis during the period of maximum gravity (according to the survey):

The speed of vehicle communication (m/s) on the road network depends on the distance between intersections (network density) and the mode of foot traffic control.Approximately this value can be determined by the formula.

Uc=103/(0.48Umax bm +103/Umax+0.5t bm)

where Umax is the maximum speed of movement in the burnout m/s

t is the average delay before the traffic light, sec:

Table -1

Indicators	Values of indicators at the level of motorization, auth /1000 inhabitants				
	private cars				
	50	75	100	125	150
	taxi drivers				
	2	2,5	3	3,5	4
Cars gravitating towards the central To the district during the day .The number of central trips during rush hour. Number of transit trips per hour <<peak>> Total number of trips in the central Area per hour <<rush>>	Personal cars (thousand)				
The number of central trips during the hour <<peak>>. The number of transit trips in the central area during rush hour Total number of trips in the central district<<rush hour>>	Taxi companies(thousand)				
The number of trips during rush hour, including transit	Total(thousand)				

As the calculations showed.at a certain level of automobilization, the street and road network of the central zone is not able to cope with the traffic load if measures are not taken to divert transit traffic flows from the center. Table 6.4. provides data on Samarkand, showing what a significant additional load arises on the master network of the dental zone as a result of the circulation of transit machine flows. The share of transport trips by private cars is 33%, and by taxi 20% of the total number of trips within the central zone. table.6.4

Obviously, the improvement of the conditions of circulation of automobile flows, tending to

The central zone is connected with the diversion of transit traffic from it. In turn, this

It involves the creation of a continuous traffic bypass magstrale by the office of the central district.the main purpose of which is to divert the traffic flow.

It is very important that the bypass highway is characterized by the ability to ensure the continuity of the movement of motor transport because only an increased speed of communication and continuity of movement can compensate for the inevitable re-run when using a bypass main street in transit directions.

The calculations carried out have shown that the potency in the transport territories for the central zone will increase somewhat compared to ordinary residential areas .If transport territories in a residential area occupy 8.....10% of the district area. then in the central zone, this share increases to 25.....35% due to the increase in the density of the road network and the creation of a developed network of parking lots.

It is also advisable to determine the necessary total throughput capacity of the main entrances to the central zone, which should correspond to the even intensity of centripetal traffic flows.This indicator according to the study given by M.G.Krestmein can be used as a relative value:

Uc =

where Uc is a relative indicator of the capital capacity of the main inputs to the central zone (units/h)ha

Nm-the capacity of the magstralnaya street at the entrance to the central part of the city units / hour:

Ac-the area of the central zone, ha.

The results of the analysis conducted by M.G.Krestmein allowed us to recommend a system of indicators for evaluating the backbone network of the citywide center.

Not only existing, but also perspecting machine streams, is 2.....3km/km2

then in the central area of a large city it should be significantly higher:

=n /n:

where is the density of the magstral network in the established central area of a large city, km/km2:

-the same, when designing a new city or a newly built-up area,

km /km2:

n′- n″-the average weighted number of lanes of the carriageway of the main streets in the established and new area.

Significant effect in increasing the capacity of the street network.

The speed of communication and the level of traffic safety in the central zone of a large city can be achieved by introducing one-way traffic on the astral pores of streets. The high density of the street network in the citywide center can be used for the development of a one-way street system due to the availability of the necessary understudies.

As calculations and observations have shown, the capacity of one-way magstral streets is reduced by 30-35 compared to conventional ones%

The speed of movement increases by 25.....40% the number of road accidents is removed by 25....40% fuel consumption is reduced by 10%.A particularly significant effect in increasing the

capacity of astral streets (up to 50%) can be achieved on streets with an unreadable number of lanes of the carriageway.

The reasoned solution of the whole set of issues of transport reconstruction of the central zone of a large city requires serious scientific study, carrying out

Obeledovaniya. In conditions of a relatively low level of motorization, these issues in our cities have not yet been significantly acute, but the very near future forces us to take them seriously. It will be very useful to use progressive foreign experience here. A series of serious studies on the transport load of the central districts of various cities has been conducted in recent years by the Laboratory for the Study of Transport Issues at the University of London.

In particular, an indicator was derived that characterizes the permissible degree of this indicator with the message rate:

P=Q/FA′2 :

where P is an indicator of the saturation density of the center.(units/year)/m.

Q-the number of passenger cars crossing the border of the center in chaspik in the loaded direction:

A-area of the central zone,m2:

F is the proportion of the area of the central zone that falls on the roadways.

Investigating the speed of passenger car transport in the central area of London, I. Wardrop found that for each single main street it depends on the width of the carriageway, traffic intensity and frequency of regulated intersections. He proposed an empirical formula.

1/U=1/(31-140/VV-0.244q/VV)+F/(1000-q/

where U is the message speed, min/hour:

W-average width of the roadway, ft:

q is the average traffic intensity in the given units per foot of the width of the carriageway, units/h.

F is the average number of regulated intersections per mile:

- the average relative duration of the green phase from the total

The duration of the regulation cycle.

Observations and calculations have shown that an increase in the frequency of crossings leads to an equal decrease in the speed of communication, regardless of the intensity of traffic.

At the same time, in aisles of the usual width of the carriageway with a given number of intersections, the speed of communication directly depends on the intensity of traffic flow.

As noted above, when forming the communication routes of the central district, it is necessary to achieve a consistent separation of transport and pedestrian flows. It is desirable to comply with this requirement in any district of the city, but in the central zone it is put forward with particular urgency, given the high densities of conflicting flows and the special nature of pedestrian traffic in the citywide center. The separation of pedestrian and traffic flows can be achieved in space and time. Mutual isolation of flows in space can be provided at the same and different levels.

It should be emphasized that the separation of traffic and pedestrian flows, in addition to solving direct tasks-increasing the level of traffic safety and providing convenient access to the main points

of human gravity - simultaneously contributes to the improvement of the street and road network of the central zone, increasing the network capacity and increasing the speed of road transport.

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