UDC 656.022.42

THE MAIN RESULTS OF CHANGES IN THE ROUTE NETWORK OF PUBLIC PASSENGER TRANSPORT IN THE CITY OF VOLGOGRAD

ОСНОВНЫЕ РЕЗУЛЬТАТЫ ИЗМЕНЕНИЯ МАРШРУТНОЙ СЕТИ ОБЩЕСТВЕННОГО ПАССАЖИРСКОГО ТРАНСПОРТА Г. ВОЛГОГРАДА

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Abstract. The article describes the main results of changes in the route network of public passenger transport in Volgograd. The characteristics of the route network in 2006 were considered. The main transformations are shown in 2015-2016. The main problems that arose with the introduction of the new route network in 2017 are analyzed.

Keywords: passenger transport, route network, public passenger transport.

Introduction

Life of the modern person in the city, it is impossible to present without passenger transport which main objective is ensuring need of the population for transportations. The transport mobility of inhabitants increases in process of growth of population, his income every year, and the urban area. Respectively, also the average range of trips of residents grows. In this regard, the analysis of the periods of development of route network of public passenger transport in the city and its further development and improvement of passenger traffic is relevant.

The main text

Object of a research is functioning of route network of public passenger transport of the city of Volgograd.

In 2006 students and teachers of «Automobile Transportations» department conducted full examination of route network of the city. The plan of transformation complex transport schemes has been made up to 2025.

It was supposed to reduce the number of share taxis by 2025 and to increase the number of buses by networks of the city. Respectively to reduce length of route network of buses of small capacity, and high-capacity buses to increase. Forecast population transport mobility showed that by 2025, 1 resident will have 880 trips (figure 1).

In 2006 the total of routes made 190 units; total length of lines of public city transport – 598,4 km; the total amount of passenger traffic - more than 600 million grazed. / year; average speed of the movement of public transport was 30 - 35 km/h.

City public transport provided 74,6% of volume of passenger traffic. The volume of transportations of passengers by public transport has decreased by 25%.
Decrease in volume of transportations by public transport was caused by increase in transport mobility of the population against the background of decrease in a carrying possibility of public transport. As well as the competition of minibus taxi and personal transport.

Following the results of a research of functioning of transport network of public passenger transport in 2015 it is possible to note that about 64% of volume of passengers are the share of minibus taxi.

The quantity of routes in 2015 was 138 units; in 2016 – 134 pieces.

Figure 1 - Transport mobility of the population of the city of Volgograd

Figure 2 – Complex transport network of the city of Volgograd in 2016
Figure 3 – Complex transport network of the city of Volgograd in 2016
In 2016 the route network of public passenger transport has received the first serious changes (figure 2). Routes have been divided on basic and auxiliary. The basic network of the complex transport scheme of Volgograd has been presented by trams, trolleybuses and buses of big and average capacity. At the same time, bus auxiliary routes have connected the neighboring districts of the city and serve for transportation of passengers to basic routes of public transport. Seasonal routes carry out transportation of passengers on seasonal dachas.

In the spring of 2017 cardinal changes in route network of public passenger transport of Volgograd have been made (figure 3). More than 80 routes, to habitual citizens of share taxis and buses, have stopped the work from April to December in Volgograd.

With cancellation of share taxis of transportation of passengers in Volgograd have been assigned to buses: VPATP-7, LLC Volgogradsky avtobusny park and on the rolling stock of Metroelektrotrans Municipal Unitary Enterprise.

According to developers the new complex transport scheme, has to be sufficiently balanced. Data on specifics of the market of passenger traffic of Volgograd are in full considered and mechanisms on increase in efficiency of the organization of transportations are offered.

For the beginning of 2018 the route network of public passenger transport was made by bus routes: from them 15 social ("basic"), 11 social ("auxiliary"), 21 commercial ("auxiliary"), 12 social "seasonal" routes. The electric transport was presented by 13 tram and 9 trolleybus routes.

In the last 2 years on route network of public passenger transport big transformations which have reduced quantity of routes, minibus taxi, buses, trolleybuses have been made. It has resulted in inconvenience of passengers, increase of expenses of time for a trip, emergence of additional changes and transportation costs on necessary trips around the city. Dynamics of public discontent is excellently displayed by news reports (figure 4).

Summary and Conclusions.

Events for change of transport route network of public passenger transport have to be held with use of scientific logistic approach. Developments have to be approved on imitating models, with use modern computers, but not on the live social environment of the city. Creation of new route network of public route transport has to provide combination of interests of bodies of municipal management, carriers of all forms of ownership and passengers.

References:
Figure 4 – News reports


Аннотация. В статье рассмотрены основные результаты изменений в маршрутной сети общественного пассажирского транспорта в Волгограде. Рассмотрены характеристики маршрутных сетей в 2006 г. Основные трансформации маршрутной сети показаны в 2015-2016 гг. Проанализированы основные проблемы, возникшие с внедрением новой маршрутной сети в 2017 году.

Ключевые слова: маршрутный транспорт, маршрутная сеть, общественный пассажирский транспорт.