



THE PROCESS OF TRANSPORTING CONSTRUCTION GOODS USING TRUCKS

Tursunov Tulkin Maxamadiyevich¹

¹Master's student, Termiz State University;

Abobakr Kholikberdievich Muratov²

²Termez State University Teacher, Uzbekistan,

abubakr.muratov@mail.ru

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Abstract: In the article, the main indicator that determines the efficiency of the process of sending and receiving goods of the general service system is the time of stopping vehicles at checkpoints. The distribution of time intervals between the times of arrival of road transport at the point of departure by the indicative law is given.

Keywords: vehicle, freight, efficiency, traffic flow, service, inefficient waiting time, shipping cost.

Introduction. In a modern market economy, it is important to ensure the prompt delivery of goods to consumers. In practice, when assessing the quality of delivery of goods to consumers, consumers mainly pay attention to transportation costs. At the same time, production costs usually include other costs determined by the quality of delivery. Improving the quality and efficiency of delivery of goods to consumers will be of interest not only in the overall cost of production, but also in a significant part of the cost of transport services. The effectiveness of various options for delivering goods to consumers is primarily determined by the price of the transport service. Since the reduction in the cost of transporting consumers is one of the important requirements for its spending, in this case, the option of transport service within the minimum cost or the cost does not exceed a certain level is considered desirable. The price of the service for the delivery of goods to consumers can be determined by the sum of the costs spent on the performance of all transport operations. To fully meet the needs of consumers and manage the volume of goods, it is also important to rationalize the values of indicators that affect the efficiency of the transport enterprise. In particular, it is desirable to reduce unproductive waiting times for loading and unloading vehicles and vehicles and loading vehicles by improving the efficiency of the loading and unloading points of the consignor and consumers. At the same time, the number of vehicles that must operate in each direction, their operational performance, i.e. loading and unloading times, parking time in points, travel time, average daily number of trips, productivity in tons and tonkilometers, and so on, are determined. In many cases, daily acceptance and delivery capabilities and needs are not taken into account, due to the internal conditions of shipping points and consumers, the uneven distribution of the cargo transportation capabilities of motor transport enterprises. over time are not taken into account. If transportation planning is carried out over relatively long periods, then it is almost impossible to take into account the daily real conditions of transportation, the possibilities and changing needs of consumers in traffic volumes. For this reason, there is a need for operational planning of the operation of vehicles, taking into account the daily, real conditions of transportation, the needs for traffic volumes, the number of vehicles and their carrying capacity, as well as their carrying capacity. transport. In a market economy, the main goal is not to meet the planned transport indicators

in the period of the former planned economy, but to fully satisfy the changing needs of consumers in the volume and duration of transportation in various transport conditions. It is important to fully meet the real demand of shipping and receiving points in traffic volumes. The volumes of goods reflected in the contract for the carriage of goods, that is, the planned volumes of goods, may not correspond to the exact period for one period. For example, for a number of reasons, as a result of a decrease in the volume of cargo consumption of a cargo consumer, an increase in the amount of raw materials that has not yet reached consumption in its warehouses requires a reduction in the planned volumes of transportation [1,2].

One of the main problems of road transport is to increase the efficiency of transportation, and the growing demand for the delivery of goods requires a radical change in the activities of road transport enterprises. Consumers have the opportunity to choose a carrier, which is done in favor of those who are willing to provide a wide range of road services, high quality and affordable prices [3].

The structure, content and sequence of operations performed at shipping and receiving points are not the same. The structure of operations is formed depending on the type of transport routes, vehicles and loading and unloading vehicles, the system of sending and receiving, the routes of goods sent or received at the points. As the content and sequence of operations differ, they need to be grouped according to certain principles.

One of the main indicators of the efficiency of the process of sending and receiving cargo is the time of parking of vehicles at these points.

In the process of transportation, the service intensity of the points of departure (acceptance) should correspond to the time intervals of their entry into the service system, which is formed depending on the number of allocated vehicles. Otherwise, the inefficient waiting time of either points or vehicles will increase [4]. The process of sending and receiving goods by road has certain technical, technological and organizational features.

There are two main types of work performed at shipping points:

-technical and technological works, loading and unloading of the car, opening (closing) the sides, fastening the cargo to the body, weighing the car with or without cargo, moving the car at the point of departure (acceptance), etc.;

-organizational and administrative work - the preparation of documents for the shipment or receipt of goods, the organization of rest or meals for drivers for a certain period of time, etc [5, 6].

The processes of sending and receiving cargo at points consist of a set of various elementary operations. Such operations that occur in the practice of transportation include:

- waiting in line to start various tasks;
- measuring the weight of the vehicle itself or its load;
- preparation of cargo for shipment and their separation, determination of quantity (quantity);
- preparing the car for receiving cargo: opening the sides, preparing awnings for closing the cargo, etc.;
- loading (unloading) of goods on the car, closing of boards and awnings, etc.;
- Completion of documents - waybill, freight document, various accounting journals, making certain entries and indicators.

The service system serves the incoming traffic flow in the form of various operations. Every vehicle included in the service system is a service applicant. Cars entering the point are

treated as an influx of incoming applicants. In solving practical problems related to the analysis of incoming traffic, it may be more convenient and effective to study the distribution of intervals between the number of vehicles in the interval instead of the interval in the interval of subsequent vehicles [7, 8, 9].

In a normal incoming flow, we find the law of distribution of the interval time between the entry times of two vehicles entering in series.

Hence, the time interval (interval) between the entry of any two adjacent vehicles in a normal flow is represented by the law of distribution of the parameter. This exponential law is given in the differential form. The results show that the situation in which the flow of vehicles under analysis is close to the normal flow is the frequency and the frequency of the time interval between the arrival of the next vehicle (integral) or differential. Is the distribution according to the indicative laws given in the views.

Thus, in the analysis of the input current, it is necessary to observe and determine the time interval between the entry times of motor vehicles, to determine the amplitude of oscillation of its values, to divide this amplitude into intervals and group the intervals between them. If the distribution of the repetition frequencies of the intervals determined on this basis is represented by the exponential law; in which the incoming flow being analyzed is a normal flow.

The effectiveness of the overall service system is assessed on the basis of various criteria. In most cases, the criteria of practical importance are the sum of the costs per ton of cargo transported (sent or received) or the hourly working hours of service points and vehicles.

Conclusion. Approaches and models of gross service theory can only be applied when the flow of vehicles entering the system is manifested as a simple Poisson flow. It is necessary to adjust the indicators of access flow to the service system of vehicles and the serviceability of points. As a result, the time spent on vehicles and service points will be reduced and the volume of freight will increase.

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