GALAXY INTERNATIONAL INTERDISCIPLINARY RESEARCH JOURNAL (GIIRJ)
ISSN (E): 2347-6915
Vol. 9, Issue 12, Dec. (2021)

DETERMINATION OF VEHICLE EFFICIENCY OF VEHICLES

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ABSTARCT

The purpose of transport is to fully and qualitatively meet the demand for transport services based on the formation and operation of a system of efficient freight and passenger services. To achieve this goal, the following tasks need to be addressed: the formation of a market of transport services based on competition and cooperation of transport enterprises of all forms of ownership, the introduction of efficient transport technologies, the integration of domestic transport into world transport. The system requires the creation of a legislative and regulatory framework that guarantees the provision of transport services to all those in need on mutually beneficial terms.

The basic principles of public transport management in modern conditions are as follows.

1. Transport is one of the most important sectors of economic infrastructure and is considered a priority by the state, as its activities have a significant impact on the economic development of the country.

2. To provide all transport enterprises of all forms of ownership with equal conditions and legal guarantees for their operation.

3. State economic regulation in the organization of the market of transport services and control over the entry of enterprises into the market, regulation of pricing rules, investment and tax regulation in order to stimulate the development of the industry.

4. The state shall exercise general control over transport rules and technologies in terms of transport safety and fairness for users.

Features of transport management are:

- Location and uninterrupted operation of interacting transport facilities over a large area;
- The need for clear implementation of technological functions related to transport safety;
- Close connection and interconnection of all joints of the transport conveyor.

- Coordination and cooperation in multimodal transport, transport hubs and international transport corridors;
- Formation and regulation of investment projects for the development of transport;
- Determining the volume and composition of traffic in real street and road conditions using the method of observation.

Based on these features, organizational and regulatory, economic and socio-psychological methods of transport management are used. In addition, it is necessary to skillfully combine management methods with economic and psychological methods, to ensure labor motivation, work efficiency, corporate solidarity, initiative and entrepreneurship.

The volume and composition of traffic on the streets of K. Murtazaev and A. Navoi in Bukhara, Republic of Uzbekistan were determined using the method of tracking. Watches and custom tables were used.

The experiments were recognized by the method of visual observation of the volume and composition of traffic. The method of calculating the amount of visual movement is performed in the following order.

To do this, we determined the number and type of vehicles passing by and recorded the data in Table 1.

Table 2

Account time	Cars	Trucks for lifting				Bus	total
		2t	2-5t	5-8t	More than 8 tons		
8^{00}-8^{05}	337	12	15	4	1	8	377
8^{05}-8^{10}	342	8	12	3	0	7	372
8^{10}-8^{15}	325	4	17	4	2	7	359
8^{15}-8^{20}	334	9	13	5	1	6	368
8^{20}-8^{25}	331	3	14	6	0	8	362
8^{25}-8^{30}	340	7	12	1	1	6	367
8^{30}-8^{35}	336	6	9	6	4	7	368
8^{35}-8^{40}	337	8	4	3	3	4	359
8^{40}-8^{45}	334	4	6	2	2	6	354
8^{45}-8^{50}	341	6	8	1	1	5	362
8^{50}-8^{55}	329	1	11	1	2	4	348
8^{55}-9^{00}	342	5	7	4	4	4	366
8^{00}-9^{00}	**4028**	**73**	**128**	**40**	**21**	**72**	**4362**
Max	342	12	17	6	4	8	377
Min	325	1	4	1	0	4	348
R= avto/soat	17	11	13	5	4	4	29
N= avto/soat	402,8	7,3	12,8	4	2,1	7,2	436,2
Δ=	0,9	0,9	0,9	0,9	0,9	0,9	0,9

In a continuous test to determine the amount of movement, an hour of time was recorded in Table 1 at 12 intervals every 5 minutes. After processing the data obtained, the values of the traffic volume for 10 minutes are recorded in the form of Table 2 to calculate the selected traffic volume per hour.

Table 2

Options		Cars	Trucks for lifting				Bus	total
			2t	2-5t	5-8t	More than 8 tons		
10 minute intervals of time	1	679	20	27	7	1	15	749
	2	659	13	29	9	3	13	727
	3	671	10	26	7	1	14	729
	4	673	14	13	9	7	11	727
	5	675	10	14	3	3	11	716
	6	671	6	18	5	6	8	714
8^{00}-9^{00}	6	4028	73	128	40	21	72	4362
Extra-candles	Max	679	20	29	9	7	15	749
	Min	659	6	13	3	1	8	714
R=	avto/soat	20	14	16	6	6	7	35
$\bar{N}$=	avto/soat	671,34	12,2	21,3	6,67	3,5	12	727
Δ=		0,83	0,83	0,83	0,83	0,83	0,83	0,83

The statistical characteristics of the selected values of the hourly movement volume were calculated in the following order:

1. Determining the scale of variation:

$$R = N^i_{soat}(\max) - N^i_{soat}(\min);\ \text{avto/soat}$$

where: N_hour ^ i (max), N_hour ^ i (min) - the maximum and minimum values of the hourly movement, which are the selected variants in the time interval;

i is a time interval of 5.10 minutes.

2. Find the average value of an hour's movement over time:

$$\bar{N} = \frac{\sum_1^K N_{soat}}{K};\ \text{avto/soat}$$

For example, cars:

$$\bar{N} = \frac{\sum_1^{10} 4028}{6} = 671{,}34\ \text{avto/soat}$$

When the time of continuous observation of the amount of motion in an hour is 5, 10, 15, 20, 30 minutes, the value of K is equal to 12, 6, 4, 3 and 2, respectively.

3. We have determined the error of the calculations

$$\Delta = \frac{N_{soat} - \bar{N}_{soat}}{N_{soat}};$$

For example, Cars:

$$\Delta = \frac{4028 - 671{,}34}{4028} = 0{,}83$$

The following conclusions can be drawn from the study:

1. Roads need to be widened;
2. Construction of overpasses is required;
3. Install road signs and lines and arrange the drawing.
4. Extending the duration of traffic lights at traffic lights at the main and secondary intersections.

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