https://cejsr.academicjournal.io

Study of the Negative Impact of Motor Vehicles on the Speed of Movement of Buses

Nazirov Nodirbek Jamoliddin o'g'li
Intern-teacher "transport logistics" of Andijan Institute of Mechanical Engineering

Abdurasulov Mirzoanvar Shavkatbek o'g'li
A student of the 4th stage of the direction "transport logistics" of the Andijan Institute of Mechanical Engineering

ABSTRACT

in this article, through the method of observation, cars and public transport are mixed-traffic on the main streets of our country's cities, and the results of a study carried out on the current main main streets of the city showed that the amount of traffic on these streets depends on the importance of the road, the composition of vehicles, It has been analyzed that changes in the amount and composition of movement affect changes in the rate of impact and traffic patterns.

KEYWORDS: *road network, bus, minibus, road traffic accident, driver, pedestrian, environment, car, road, collision.*

INTRODUCTION

After the independence of the Republic of Uzbekistan, socio-economic changes began to be introduced into life in our country. For example, the automobile manufacturing industry was established, there were extensive changes in road construction, at the same time trade relations with foreign countries began to be introduced. It is also worth mentioning that with the increase in the population of the country from year to year, the urban area is expanding, and the population's need for road transport is even more increasing. This naturally led to a year-to-year increase in the amount of traffic on Republican highways, including city highway streets. One of the main problems and issues facing us now and next consists in ensuring the safe movement of vehicles on the central main streets of the city, that is, the Prevention of road traffic accidents that occur, reducing the number of fatalities and body injuries, the total socio-economic damage suffered in them, as well as, it is necessary to focus on a number of issues that must be resolved regarding the development of preferential movement of passenger transport and improving the quality of transport service provided to the population.

MAIN PART

The study of the negative impact of motor vehicles on bus speed can be useful for optimizing urban transport and improving its efficiency. Below are aspects that can be studied in this area;

1. Traffic and congestion: studying the impact of traffic and traffic on bus speed can optimize the route or change the time. For example, analyzing data on arrival times and bus schedules makes it possible to identify the busiest areas and build more efficient routes so that buses do not get stuck in traffic jams.
2. Un-upgraded roads and poor infrastructure: poor road conditions can significantly slow the speed of buses. Studying road conditions and identifying areas in need of maintenance will help prioritize infrastructure upgrades and improve bus travel times.

3. Construction work and temporary restrictions: construction work or temporary road restrictions can lead to significant delays for buses. The study of work schedules and time constraints helps coordinate bus movements and reduce the negative impact on bus speed.
4. Non-rational organization of stops and traffic lights: the irrational Organization of stops and traffic lights can lead to bus delays. Analyzing the stops and identifying the busiest or most inconvenient places for buses can help to optimize them to make changes to the routes or increase the speed of the bus.
5. Suspension of vehicles in bus lanes: improper parking of vehicles in bus lanes can impede bus traffic and slow down speed. Studying such problems and proposing measures to eliminate congestion in these areas will help improve the speed of buses.

The study of the negative impact of motor vehicles on bus speed is an important task, since buses are one of the main means of public transport in cities and on intercity routes. The increase in traffic and the accompanying congestion problems can seriously affect the speed and efficiency of bus services. Studies show that vehicles can negatively affect bus speed for several reasons. First, congestion and congestion can slow down bus traffic, causing buses to arrive at stations late. Second, congested roads can reduce the average speed of buses as they are forced to stop and turn to prevent collisions with other vehicles. Finally, an increase in pollutants from cars can also negatively affect air quality and, consequently, the health of bus passengers and drivers. Research methods can be used to track bus speeds in different directions at different times of the day and compare these data with the level of car traffic. Requests can also be made between bus passengers and drivers to identify problems associated with the negative impact of vehicles on bus speed. Through such research, it is possible to identify the main problems and potential solutions to increasing the speed and efficiency of bus services. The study may identify the need to change traffic management, such as creating additional lanes for public transport, developing an alarm system used to prioritize buses, as well as improving bus traffic planning and coordination between different modes. public transport.

Transport is an integral part of our daily life, allowing us to travel quickly and comfortably from one place to another. However, certain aspects of transportation, such as high-speed buses, can negatively affect people and society as a whole. This research is aimed at studying the negative effects of vehicles and high-speed buses;

1. Environmental impact: vehicles, especially buses, contribute significantly to environmental degradation. High-speed buses consume large amounts of fuel, resulting in increased greenhouse gas emissions, air pollution, and noise pollution. These emissions adversely affect air quality and contribute to climate change.
2. Traffic Safety: fast buses are designed to run at high speeds to ensure faster transportation. However, this can lead to an increase in the risk of accidents and a decrease in road safety. Speeding buses are more susceptible to accidents due to shrinking control, longer braking distance, and increased difficulty in crossing obstacles.
3. Pedestrian and cyclist safety: speeding buses pose a major threat to pedestrians and road-sharing cyclists. High speeds increase the likelihood and severity of accidents involving unprotected road users. This can stop people from walking or cycling and lead to a sedentary lifestyle and negatively affect their health.
4. Recovery and travel time: high-speed buses can disrupt traffic flow and increase congestion. Speed buses often have to slow down or drastically change the route, leading to delays and inconveniences for other road users. This can increase the longer travel time and frustration for all passengers.
5. Social inequalities: high-speed buses often prioritize efficiency and speed over accessibility and

affordability. As a result, these vehicles may not be used by everyone, especially low-income individuals who commute on public transport. This can expand existing socio-economic inequalities by limiting mobility opportunities for certain segments of society.

6. Ignoring alternative modes of Transportation: high-speed buses tend to encourage car-oriented communities, ignoring alternative modes of transportation such as walking, cycling, and lower-speed public transit. This will strengthen car addiction and undermine efforts to promote sustainable and environmentally friendly transportation opportunities.

In general, the study of the negative impact of vehicles on the speed of buses makes it possible to identify problem areas and propose measures to solve them. This can lead to improved efficiency of urban transport and improved quality of public transport. To date, the total number of cars in our Republic is more than 1.3 million. Including over 66,392 in the public sector, over 280,229 in legal entities, and over 1,057,687 in the private sector. In accordance with the planning solution of urban street-road networks, the level of motorization per 1000 people for the city is a critical amount of 170-180 cars. In conclusion, vehicles, in particular high-speed buses, have several negative effects on Man, society and the environment. From environmental degradation to road safety issues and social inequalities, it is essential to take into account and mitigate these negative impacts in the design and implementation of transport systems. Public policy should be aimed at promoting sustainable and inclusive transportation opportunities that prioritize safety, ease of Use and environmental sustainability.In the coming years, the level of motorization in the city of Jizzakh exceeds the normative indicators, since at present there are 125 cars per 1000 people. It can be seen from this that the amount of movement of vehicles is increasing rapidly. One of the main indicators that characterize the movement of vehicles and pedestrians in the organization of safe movement of cars and public transport on urban highway streets is the amount of movement. By now, the movement of cars, a lot of bus stops are also damaging the environmental environment.

Motor Transport played a large role in the formation of the modern nature of the settlement, in the prevalence of intercity tourism, in the territorial decentralization of the industrial and service sector. One of the main sources of environmental pollution, the parking lot is concentrated mainly in cities. If on average in the world there are five cars per 1 km2 of territory, then in large cities of developed countries their density is 200-300 times higher. In all countries of the world, the concentration of the population in large urban agglomerations continues. With the development of cities and the increase in urban agglomeration, it is increasingly important to provide timely and high-quality services to the population and protect the environment from the negative effects of urban, especially automobile, transport. There are currently 300 million light cars, 80 million trucks and about 1 million city buses in the world.

The problem of urban transport in many large cities of the world is very acute. Due to spontaneous, irrational planning of the placement of residential and industrial zones, traffic flows are growing along with the growth of cities. The increase in the number of personal cars and their flows greatly slow down the movement through the city during traffic jams. Highways are being built to speed travel. But high-speed roads only solve the traffic problem of a temporary city. Nevertheless, cars also occupied residential areas, recreation areas, cultural and domestic service centers. Major streets in cities account for about 20-30% of the total length of all streets and sidewalks. 60-80% of all vehicle traffic is concentrated in them, which means that the highways are loaded on average 10-15 times more than on other streets and roads.

The creation of a network of high-speed roads in the city can significantly increase the speed of public transport and light cars, increase its permeability, reduce the number of road accidents, isolate residential and public centers from concentrated traffic flows, and limit the number of cars. access to the city centers. This is important because when you stop and then increase the speed again, the car releases several times more harmful substances into the air than when it moves evenly. In addition,

personal use of cars has increased significantly in recent decades. More than 10 million people have a personal car.

CONCLUSION

In conclusion, vehicles, in particular high-speed buses, have several negative effects on Man, society and the environment. From environmental degradation to road safety issues and social inequalities, it is essential to take into account and mitigate these negative impacts in the design and implementation of transport systems. Public policy should be aimed at promoting sustainable and inclusive transportation opportunities that prioritize safety, ease of Use and environmental sustainability.

List of literature used;

1. САРИМСАҚОВ, А. М., & НАЗИРОВ, Н. Ж. Ў. ОРГАНИЗАЦИЯ УПРАВЛЕНИЯ ДЕЯТЕЛЬНОСТИ ШАХРИХАНСКОГО АВТОВОКЗАЛА С ИНФОРМАЦИОННЫМИ ТЕХНОЛОГИЯМИ. UNIVERSUM, 52-54.
2. Саримсаков А.М., Хакимов М. ПРОЕКТИРОВАНИЕ СИСТЕМ ПОЖАРОТУШЕНИЯ, СКОРОСТНОГО ДВИЖЕНИЯ АВТОМОБИЛЕЙ СКОРОЙ ПОМОЩИ НА ПЕРЕКРЕСТКАХ // Universum: технические науки : электрон. научн. журн. 2022. 4(97). URL: https://7universum.com/ru/tech/archive/item/13416 (дата обращения:19.12.2022)
3. Nazirov, N. (2023). SHAHRIXON TUMANIDA JOYLASHGAN AVTOSHOXBEKATDA ZAMONAVIY TO'LOV TIZIMLARIDAN FOYDALANISH. Евразийский журнал технологий и инноваций, 1(5), 5-9.
4. Nazirov Nodirbek. (2023). ANDIJON VILOYATI SHAHRIXON TUMANIDA JOYLASHGAN AVTOSHOXBEKATDAGI AVTOBUSLAR VA MIKROAVTOBUSLAR FAOLIYATIDA GPS-NAZORATI MARKAZINI TASHKIL ETISH ORQALI FAOLIYATINI TAKOLADI. TA'LIMDAGI ZAMONAVIY MUAMMOLAR VA ULARNING ILMIY YECHLARI , 1 (1), 175-182. https://esiconf.com/index.php/mpe/article/view/102 dan olindi
5. Nazirov, N. (2023). SHAHRIXON TUMANIDA JOYLASHGAN AVTOSHOXBEKATDA ZAMONAVIY TO'LOV TIZIMLARIDAN FOYDALANISH. Евразийский журнал технологий и инноваций, 1(5), 5-9.
6. САРИМСАҚОВ, А. М., & НАЗИРОВ, Н. Ж. Ў. ОРГАНИЗАЦИЯ УПРАВЛЕНИЯ ДЕЯТЕЛЬНОСТИ ШАХРИХАНСКОГО АВТОВОКЗАЛА С ИНФОРМАЦИОННЫМИ ТЕХНОЛОГИЯМИ. UNIVERSUM, 52-54.
7. Nazirov, N. (2023). XARID LOGISTIKASINI TAKOMILLASHTIRISH Oriental Journal of Academic and Multidisciplinary Research 1(3) 303-306 https://scholar.google.com/citations?view_op=view_citation&hl=en&user=LPkCceIAAAAJ&citation_for_view=LPkCceIAAAAJ:LkGwnXOMwfcC
8. Nazirov Nodirbek Jamoliddin o'g'li, Omonov Sanjarbek Alijon o'g'li. (2023). Global logistika muammolari va uning rivojlanish istiqbollari: O'zbekiston misoli. Journal of Academic and Multidisciplinary Research https://scholar.google.com/scholar?oi=bibs&cluster=4553483516732840 52&btnI=1&hl=en