

ENVIRONMENTAL IMPACT OF VEHICLES BEING USED WITHIN THE CITY

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Annotation: Air pollution is a serious problem, since it is not only increases Environmental, but also economic and health risks. Environmental air pollution is a global problem, especially a local one. Released in one country pollutants can travel in the atmosphere of other countries and thus contributes to the deterioration of air quality. A lot of motor vehicles within the city its use leads to an increase in fuel consumption and a negative impact on the environment. This the process is associated with several factors, it is necessary to dig deeper into them.

Keywords: car, environment, tires, brake, ecology, road, pollution, harmful waste, rubber, transport, Traffic Light, City, fuel consumption.

Introduction.

Air pollution is a serious problem, since it is not only environmental, but also economic and also increases the risks to health. Environmental air pollution is around the world is a global problem. Pollutants released in one place into the atmosphere of another can move and thus lead to a deterioration in air quality. Man among the pollutants that most affect health are PM particles known solid particles are also present in the atmosphere. These pollutants are human negative impact on health, causing problems in the respiratory system and premature death can lead. In this article, we will talk about a variety of solutions in the field of transport that require we distinguish two types of transport problems:

- in intra-city transportation;
- intercity transportation.

Inside the city, which is one of the main factors of pollution in modern urban areas we focus on transportation. In intra-city transportation, we see an increase in fuel consumption, compared to intercity transportation due to tire wear and brake system wear we encounter emissions of environmental contaminants from more vehicles. In the process of acceleration and stocking in cars, brakes and tires are rubbed the process of eating increases.

Transportation to facilitate the transportation of goods and beggars in different areas of the city through the plays a decisive role in the economic hanging of urban centers. In recent years Many major intersections and various junctions of Andijan City face significant traffic jams giving, as a result, the beggars are wasting their precious time. Morning and evening during peak hours, traffic jams reach a high level, resulting in the disappointment of beggars intensifies. Congestion affects the productivity of employees, economic hanging, human health, directly and indirectly affects the environment and other social activities. Road congestion is a constant problem for the stability of traffic development. Traffic jams on roads are huge in most cities around the world, especially in developing regions remains a problem, resulting in large delays, fuel waste and money losses increasing. Traffic congestion is a delay for drivers, inconvenience and economic causes losses, as well as air pollution.

Traffic congestion and determining the amount of stability of the overall transport system for decision makers it is essential to start reduction strategies to improve. This traffic jam in most cities of the world, there are great difficulties in creating a stable transport system gives birth.

This is due to an increase in travel costs, a longer travel time to reduce comfort and noise, environmental pollution, drivers come to the state of stress various negative, such as leakage, obstruction of economic growth and time pressure for passengers leads to tastes. In addition, traffic jams are associated with an increase in fuel consumption and air leads to environmental problems such as pollution, which is both urban and Rural on a global scale affects their location. Table 1.

The main causes of traffic jams in Andijan

	Traffic causative factors	Rated reasons
1	Socioeconomic factors	<ul style="list-style-type: none"> •With the increase in the population of rural cities Migration •Unplanned land use, especially gathering leads to one-way traffic flow during hours * Employment to University, College, School and other organizations, to go to study at the same time, a traffic flow is created coming •To cars according to improved standard of living increased ownership
2	Path factors	<ul style="list-style-type: none"> •Narrow path with a small number of rows * Pedestrian occupation of traffic lanes lack of roads as a result •Leading to a decrease in the speed of movement path of resentment •Uncontrolled traffic intersections
3	Car factors	<ul style="list-style-type: none"> * Car size •Age of vehicles
4	Human factor	<ul style="list-style-type: none"> * Driver perception * Infantry perception
5	Accident	<ul style="list-style-type: none"> •The weight, number and location of an accident

Result

The driver's ability to move in traffic jams is significantly limited and changing the corridor requires caution. As traffic increases in Andijan the speed begins to decrease slightly, and the density begins to exceed at a faster pace. Transport systems widely used for transportation of people and goods. When calculating fuel consumption, we assume that the vehicles are managed according to the rules we guessed-their speed does not exceed 50 km / h.

For each type of vehicle average consumption data was measured or obtained. The table below (see Table 2) shows the acceleration time from 0 to 50 km/h measured for each vehicle type. Consumption for personal vehicles during acceleration from 0 to 50 km/h an increase in fuel consumption was taken into account. Subsequently, further information has been obtained from then, this growth factor in consumption during acceleration also leads to trucks and buses we found that it is possible to apply, but the acceleration time (and as a result, the vehicle distance made by) longer.

Table 2.

Average acceleration times up to 50 km / h are the desired speed and pressing during acceleration distances covered

Vehicle type	Average acceleration time from 0 to 50 km/h (SEC)	Distances covered during acceleration (m)
Automobiles	10.4	72
Light cargo vehicles (< 3.5 t)	12	83
Medium cargo vehicles (3.5 t-7t)	14	97
Heavy freight vehicles (More than 7t)	16	111
Trailer vehicles	18.5	128
Bus	15	104
Motorcycles	8.2	57

Often in traffic lights and traffic jams, cars accelerate several times and slows down. In such cases, the fuel consumption of cars increases. Of course, brake, tires as a result of the overall shocks of the car due to wear and tear and braking the damage caused must also be taken into account. Direct due to increased fuel consumption in addition to the correct costs, noise increases and CO₂ and PM₁₀ (also, PM_{2.5} and PM₁) to significantly increased environmental pollution of their particles leads. So, during the acceleration of the car with an average consumption of 8.13 liters/100 km, 21.8 liters / 100 km reach consumption. Speed acceleration of 50 km/h will continue for 10.4 seconds the car walks 72 m. Average consumption is 0.0000813 liters / m, consumption during acceleration 0.0002158 liters/m. fuel due to the frequent parking of cars in traffic jams and traffic lights the amount of waste increased by consumption increases. Carbon and other harmful emissions from cars substances are considered one of the global environmental problems. Vehicles, especially domestic cars running on combustion engines, carbon dioxide (CO₂) and other greenhouse gases releases into the atmosphere. It contributes to global warming and environmental cleanup. CO₂ in the atmosphere being one of the main heat-retaining gases, it leads to an increase in global temperature and harm human health.

Conclusion

In addition to direct costs due to increased fuel consumption, we note the increase in noise and CO₂ and PM₁₀ (also includes PM_{2.5} and PM₁) it is also necessary to take into account the pollution that manifests itself in the significant spread of its particles. Thus, we can see —gray and black PM particles and the PM caused by braking we distinguish the particles.

Typical of gray particles, they spread much more evenly in the atmosphere, and their moves away from the origin. Black particles burn fuel mainly in internal combustion engines obtained as a result. As for the PM particles formed as byproducts of braking, they are due to its composition, we know for sure that it is especially dangerous for health. Motor transport within the city as a result of the use of the means, the fuel consumption increases and the environment becomes polluted.

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