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CURRENT STATUS OF ROAD SAFETY In rural areas

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The article deals with factors affecting the occurrence of traffic accidents in rural areas.

Accident rate, accident, pavement, road signs, traffic.

Problem. Quantitative growth of the car park in the country and consequently increase road

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movement leads to an increase in the number of road traffic accidents. As noted in the Strategy for Improving Road Safety in Ukraine for the period until 2015 in Ukraine over the past five years registered 293 thousand. Accidents, which killed nearly 35 thousand. And injured more than 286 thousand. People. The majority of accidents committed the fault of drivers (77 per cent of the total). The level of fatal road accidents in Ukraine (102 persons per 1 million. Inhabitants) is much higher than in countries such as Switzerland (49 persons), Germany (62 persons). The main reason for this is the insufficient level of road safety; providing improper vehicle maintenance; low discipline of road users; discrepancy state road network traffic intensity level; lack of implementation of new technologies and technical means of traffic management [2].

Analysis of recent research. The problem of road safety dedicated work of many domestic and foreign scholars: Babkov VF Badalyan AM, Gavrilova OA, OP Dziuba, Dyvochkyna OA, D. Drew, Derech 'west longitude ., Yeresova VI, Klinkovshteyna GI Lanovyy OT, Lobanov EM, Lukyanov VV, Polishchuk VP, VV Sil'yanova, Fishelsona M .S., C. Hulbert, Chetveruhin BM, Sheshtokasa VV Yuden K.

The purpose of research. Identification and analysis of factors influencing the occurrence of traffic accidents in rural areas.

Results. One of the causes of accidents are insufficient investigation of the circumstances in which accidents occur and their timely removal. For the analysis in order to identify those that significantly affect the commission of an accident, a large amount of information. The challenge requires a large number of observations to produce solid conclusions.

For research we engaged to collect the necessary information, including the status of incidents of students preparing for defense of bachelor and master. During the analysis we have processed the results of research students in the villages of Kyiv (Yahotynckyy, Boryspil, Kiev Svyatoshinsky, Fastovsky, Zgurovsky rayony), Khmelnytsky (Novoushitskiy, Starokonstantinovsky areas), Vinnitsa (Illinetsky, Sharhorodckyy Rayon), Zhytomyr (Luginsky region), Chernigov (Prilutsky area) regions.

The analysis of accident revealed that the maximum number of accidents in every village throughout the year, ranging from one to three.

However, there are times when no accidents during the year was not. The main types of accidents are - collision, hit a pedestrian, hit a barrier, hit a vehicle behind, hit a cyclist.

According to research we analyzed the main areas of residential streets and rural areas in terms of determining compliance performance parameters of cross sections state building codes.

Based on the analysis, we concluded that the width of the bands and their numbers tend to meet regulatory value, but there are no sidewalks available from only one side of the street or move them impossible, which affects the safety of pedestrians and vehicles (Fig. 1) .

Road clothing roadway in most localities slowly eroded (Fig. 1, 2).

In accordance with the law of Ukraine "On traffic" Traffic Rules establish a unified procedure for movement in Ukraine in order to ensure safety for all participants.

Road signs are the most common and one of the main means of organization and management of traffic and are designed to inform participants about the conditions, modes and directions etc [1].

Drivers who are not familiar with the road signs are obtained by using the information about road conditions. Therefore unsubstantiated installation of traffic signs or their absence leads to accidents.

Road signs in conjunction with roadway markings driver focus on the road environment and forced to perform the correct action to select the mode of the vehicle.

Be careful - it means to be active in relation to a range of facilities.

The lack of attention of the driver is the cause of a significant number of accidents.

Based on the analysis we concluded that in most areas of streets and roads in rural areas are missing, damaged or installed selectively road signs.

Road markings or missing, or not renewed for a considerable period of time resulting in her barely visible (Fig. 3, Fig. 4).



Fig. 1. The section of road on the street. Ivan Franko in the village. Malkivka (no sidewalks, roads ruined clothes).



Fig. 2. Plot Skvirsky way street in the village. Berezyanka Ruzhin region Zhitomir region (destroyed roads clothes).



Fig. 3. Crossroads in the village. Cherry Volyn region (no priority signs and markings).

In particular, in most rural road no: warning signs - "Dangerous turn right", "Dangerous turn left", "Direction of rotation", "rough road", "Children", "pedestrian crossing" signs priority - "Yield" "main road" prohibitive - "Limit maximum speed", Information Guide - "pedestrian crossing", "stopping the bus" and others. There are no road marking lines, such as those governing the location on the roadway vehicles represent unregulated pedestrian crossing boundaries, define the place where you want to stop the vehicle to provide benefits in motion and so on.

As part of traffic flow is dominated by bicycles, motorcycles and mopeds without carriages, cars, cargo carrying capacity ranging from 1 to 8 tons, trains carrying capacity to 12 tons wheeled tractors with trailers carrying capacity of 10 tonnes, buses. Depending on the economic activity within the settlement on the roads and streets as part of traffic flow may appear self-propelled machinery performing the move from field to field. Under the influence of trucks, trains, tractors, self-propelled machines contaminated roadway, road collapses clothing.



Fig. 4. Plot the main street of the village. Kytaihorod Vinnitsa region (there are no warning signs 1.1 "dangerous turn right" and 1.4.1 "Movement to the right" road markings hardly visible).

The maximum value of traffic within the 11-44 cars. / Hr. Given the characteristics of agricultural production and composition given flow, there are seasonal variations in the intensity and speed, low traffic transport stream "provokes" drivers of motorcycles, cars and trucks to increase in some areas permitted speed.

As a result of studies found that the current state of road safety in rural areas affects a number of factors, among which are the following: the discrepancy characteristics parameters of profile cross roads regulatory requirements, poor condition of the pavement, partial or complete absence of means of traffic regulation movement, no artificial light roadway or outdated and ineffective, the characteristics of the traffic flow, weak oversight by the relevant authorities of compliance with the requirements of traffic rules by drivers, resulting Roads appear defective vehicles or vehicles run by people who do not have driver's license, or are drunk.

Conclusion. The formation of road safety is diverse and multifactorial. Done Our analysis is based on a limited amount of information and points to the need for further research to more comprehensive and objective disclosure of factors that influence the occurrence of accidents in rural areas. Materials and conclusions of the study will be used in the educational process.

References

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In Article rassmatryvayutsya factors, которые vlyayut Appearance on Road transportnyh proysshestvyi a village populated areas.

Avaryynost, road transportnoe proysshestvye, dorozhnaya Clothing, dorozhnye signs transportnyy flow.

The factors which are the reason of car accidents in country are discussed in paper.

Accident rate, auto accident, pavement, traffic signs, traffic stream.

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TECHNOLOGY AND EQUIPMENT PRODUCTION BIODIESEL FROM VEGETABLE OILS AND ANIMAL FATS

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The article contains an overview of technologies and equipment for the production of biodiesel from vegetable oils and animal fats. The application of a process depending on production volumes.

Biodiesel, vegetable oil, animal fat, diesel, methyl ester process pereesteryfikatsiyi, methoxide.

Problem. Recently, more and more use as a fuel for engines are fuel

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produced from vegetable oils and animal fats [1]. This is due to the simplicity and low emissions synthesis process from raw materials of plant and animal origin, relatively low cost and acceptable performance.

Research on the use of plant and animal fats and fuel are carried out on the basis dvyhunobudivnymy largest firms: Allis Chalmers, Caterpillar, Cummins, General Motors, John Deere, Harvester (US), Perkins, Ricardo (England), Mercedes-Benz, Daimler-Benz, Deutz, Volkswagen, MAN, Hatz Diesel, Henkel-hauzen, Porsche (Germany), Volvo (Sweden), Isuzu, Toyota, Komatsu (Japan) [1].