

IMPACT OF ROAD SAFETY ON ACCIDENTS

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Анотація

Розглянули основні засоби безпеки дорожнього руху, які відіграють надзвичайно важливу роль у безпеці дорожнього руху, що забезпечить безперебійну роботу транспортних систем міста, а також вплине на ймовірність зменшення виникнення дорожньо-транспортних пригод.

Ключові слова: засоби безпеки, безпека дорожнього руху, автомобільні дороги, транспортні системи міста, дорожньо-транспортні пригоди.

Abstract

The main means of road safety, which play an extremely important role in road safety, which will ensure the smooth operation of the city's transport systems, as well as affect the likelihood of reducing the incidence of road accidents.

Keywords: safety equipment, road safety, highways, city transport systems, road accidents.

Introduction

Road traffic safety facilities play an extremely critical role in road traffic safety, which will affect the normal use of the road, and also affect the occurrence probability of traffic accidents[1].

The necessity of setting up road traffic safety facilities. Road traffic safety-related facilities are extremely critical to the occurrence of road traffic safety accidents. High-quality and efficient road traffic safety facilities have a very significant reminder and warning function for drivers, which can effectively avoid traffic accidents [2, 3]. Reasonable and scientific traffic safety facilities can alleviate the work pressure of the traffic management department and give full play to its active role. It can not only reduce the cost and capital investment in traffic safety, but also improve the safety performance of road traffic [4, 5].

The aim of the work is to review the main means of road safety to reduce the likelihood of accidents.

Results of the research

There are highways an important component of the transport system of countries around the world. They provide the most accessible transportation for a wide range consumers by road and allow delivery cargo and passengers in a variety of directions [6 - 9].

The impact of traffic signs on traffic safety. The purpose of setting road traffic signs is to provide accurate and reliable traffic information for the drivers on the road, realize the driver's mastery of the road conditions and ensure the driving safety. Traffic signs mainly include prohibition signs, indicator signs, road guidance signs, construction safety signs and auxiliary signs. The production of traffic signs is very important, if the production method is not reasonable, the visual effect is not good, it is easy to cause the driver to misjudge the traffic signs, leading to the occurrence of accidents. Therefore, when choosing the material of traffic signs, the light impact of the location, the reflective effect and functionality of the material, etc. must be fully considered, to ensure the visual effect of the traffic signs, and ensure that drivers can clearly see the traffic signs.

In addition, the support structure is also an important part of traffic signs, which needs to ensure its scientificity and rationality. It can not only achieve environmental beautification, but also reduce the driver's long-term visual fatigue and improve the driver's observation ability. At the same time, the font, color, size, etc. of traffic signs should be designed to be scientific and reasonable, so as to realize the eye-catching prompt function, so that drivers can make timely response according to the signs. After a long period of use, traffic signs

may be damaged, twisted, and pitted. After the light irradiation, traffic signs will appear irregular light, which may cause drivers to see the wrong sign information and then affect driving safety. Therefore, in order to ensure driving safety, traffic signs should be checked regularly to ensure the smoothness and clarity of traffic signs.

The impact of guardrails on traffic safety. The main functions of guardrails include blocking vehicles from going out of the road during driving, preventing vehicles from crossing the central partition and entering the opposite lane, preventing vehicles from running out of control, reducing the risk of drivers, and guiding the driver's sight. At the present stage, safety guardrails in road traffic are mainly divided into four types: flexible guardrail, rigid guardrail, semi-rigid guardrail and anti-collision guardrail. Flexible guardrails are generally used in lines with fewer traffic vehicles and fewer large vehicles. The protective structure of the flexible guardrail has good buffering capacity and a strong visual comfort, which can relieve the pressure and urgency of drivers during driving, and improve the safety of driving.

The main structure of the rigid guardrail is concrete, so when it is impacted by a vehicle, it can be blocked with the strength of the concrete itself to prevent traffic accidents. Rigid guardrails are less likely to be deformed and damaged, which can effectively improve driving safety. Semi-rigid guardrails are the most widely used in traffic roads now, and semi-rigid guardrails have the function of splicing. Semi-rigid guardrails minimize vehicle accidents through their own cushioning force. When setting the anti-collision guardrail, it is necessary to ensure its line-type coordination, and the center line of the road should be used as the reference line to improve the driver's visual experience and reduce the occurrence of safety accidents.

The impact of anti-dazzle facilities on traffic safety. Anti-dazzle facilities mainly include anti-dazzle board, anti-dazzle net and trees (shrubs), etc. Anti-dazzle facilities can block the glare of the vehicle in the process of driving, ensure the clarity and accuracy of the driver, to avoid accidents. In road traffic, the singleness and irrationality of anti-dazzle facilities affect the road driving safety, the anti-dazzle height, shading angle, the width and spacing of the anti-dazzle plate lack a certain degree of scientificity, which affects the driver's line of sight, the driver cannot observe the road conditions comprehensively, and it is easy to cause safety accidents. Therefore, when installing anti-dazzle facilities, the type of anti-dazzling facilities should be selected scientifically and reasonably according to the actual situation of drivers and road traffic to fully meet the driving needs of drivers.

The impact of isolation barriers on traffic safety. The setting of isolation barriers can not only effectively improve the driving safety of drivers, but also improve the beauty of traffic road, which is an important project in isolation facilities. Isolation barrier mainly includes isolation net, barbed wire isolation wall, etc., if the isolation facility is not scientific, it will largely affect the visual effect, easy to make drivers to make the wrong driving judgment, affecting driving safety. When installing isolation barriers, it is necessary to ensure the rationality and smoothness of the linearity, and coordinate with the surrounding environment to alleviate visual fatigue.

Principles for the design of road traffic safety facilities normative principles, principle of visibility and principle of appropriation. The design of road traffic safety facilities needs to strictly follow the relevant work specifications and meet the needs of the society. In the overall design, whether it is the choice of color or the design of signs, it is necessary to refer to relevant opinions, scientifically and reasonably design related content, and conform to people's daily work habits.

The design of road traffic facilities needs to ensure that pedestrians and drivers can see them in time, so that they can perform operations in compliance with the corresponding instructions. During the driving of the vehicle, drivers usually rely on vision to obtain relevant information and react in time. In the setting of road traffic safety, the principle of visibility needs to be met to guide drivers and pedestrians.

In road driving, appropriate slogans can improve people's awareness, which is necessary to guide traffic safety. The staff should do a good job in comprehensive management to ensure that the number of road safety facilities is within a certain range, in line with the needs of the overall design, and will not have a negative impact on the drivers. At the same time, the design of road traffic fully takes into account the natural environment to avoid damage to the surrounding environment and affect road safety construction.

Conclusions

Through the setting of road traffic safety facilities, not only can reduce the occurrence of safety accidents, protect the safety of people's lives and property, but also can maintain the overall order of urban traffic, and promote the construction of urbanization. The reasonable setting of road traffic safety facilities must be

based on the specific road conditions, follow relevant regulations, and use methods that meet the actual needs of the region. Thereby comprehensively improving the role of road traffic safety facilities, making them more eye-catching and having more significant practicability, ensuring that the actual settings of traffic safety-related facilities meet relevant safety requirements.

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