



Рис. 3. Загальна кількість маршрутів до місця виклику

Результати моделювання показали, що вибір оптимального маршруту слідування порівняно з найкоротшим по відстані, дозволяє скоротити час доїзду, а відповідно і час вільного розвитку пожежі на 60 с. Тому в майбутньому необхідно шукати напрямки для оптимізації маршрутів руху спецтранспорту.

Результати досліджень оптимізації маршруту будуть корисні для інших екстрених служб, для яких швидке прибуття до місця виклику може врятувати життя та здоров'я людей, в також матеріальні цінності.

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UDC 656.13

ENSURING COMPLIANCE WITH INTERNATIONAL REQUIREMENTS FOR EFFICIENT TRAFFIC MANAGEMENT IN INNER CITY AREAS

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The traffic organisation of the street and road network of Kiev and Rzeszów is analysed. The comparison criteria and parametric indicators of the road and transport network of the cities are given. Taking into account the directions of strategic territorial development of Kiev the main measures for development of the street and road network of the city are determined, taking into account the experience of the European analogue.

An increase in the number of vehicles in cities and an increase in traffic intensity has resulted in lower traffic speeds, delays at transport hubs, deteriorating traffic conditions, increased pollution and noise levels in urban areas, and increased accidents on the street and road network [1].

In order to find ways to ensure the efficient functioning of urban TDM, it is necessary to analyse the basic principles of improving the transport and operational qualities of urban streets and roads, ensuring road safety and increasing their traffic capacity. In order to improve the efficiency of vehicles in urban environments, speed of delivery of goods and transportation of passengers. It is known that about 75% of traffic accidents occur in cities, and more than half of them are concentrated in the intersection areas of highways [2].

Therefore, the problem of traffic organization and safety poses an important urban planning task, the correct solution of which determines the reliability and quality of the entire urban transport system and the possibility of implementing the necessary engineering and technical solutions, including those to reduce traffic accidents [3]. Researchers in different countries use far from the same methods to organize traffic flows, because there is no common, universal solution to this problem.

The main causes that reduce traffic safety, according to researchers [4, 5], are insufficient carriageway width; insufficient visibility; sudden unexpected changes in road direction; intersections with uncontrolled traffic flow; lack of acceleration and braking lanes; bus stop areas without smooth adjacencies to the carriageway; steep rises and descents, etc. Crash statistics provide a principled opportunity for a comparative assessment of the degree of safety for different parameters of roadway and traffic volumes on the road.

The above-mentioned parameters of the street and road network and road transport system were chosen as the main criteria for a comparative analysis of traffic organisation on the nodes of the urban road network in the city of Kiev and Rzeszow (Fig.1).

A) The intersection of J. Pilsudski Avenue and
A. Aznuka Street



B) The intersection of Chokolowskiy Boulevard and
Aviakonstruktora Antonova Street



Fig. 1. Schematic representation of the urban road network nodes

In quantifying the traffic flow, the presence or absence of traffic control, pedestrian crossings, safety islands, neighbouring buildings, parking spaces and degree of infrastructure development, location in relation to the city centre, and population density in the area were taken into account.

The constructive elements and parameters of the street and road network of the experimental sections and the condition of the carriageway clearly enabled the calculation results and their adequacy to be assessed and tested in practice.

It is impossible to completely prevent the occurrence of accidents, because the causes of accidents are not only unfavourable road conditions, but also the influence of many factors relating to both traffic conditions on the road and the impact of the traffic itself, the individual vehicle, the human factor (drivers and pedestrians), weather conditions, etc. [6].

Analysis of the causes of accidents, which are described in papers [1, 5] of statistical indicators we will obtain awareness of all categories of users of the street and road network through technical means of traffic organization and modernization of existing elements of VDM. It will reduce the accident rate, but it cannot completely exclude the human factor, both on the part of

drivers and pedestrians in real time. As practice shows, modernisation and reconstruction of the TDM is not always feasible and economically justified. It is more efficient to develop not the whole city network, but only the information component and communication between its other elements. Rational use of the existing transport network to improve safety of the TDM functioning (distribution of transport by lanes and adjacent streets and highways to optimise traffic congestion, prevention and avoidance of traffic jams, prompt notification of emergency and emergency situations on the transport and road network).

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УДК 656.13

БЕЗПЕКА ДОРОЖНЬОГО РУХУ ГРОМАДСЬКОГО ТРАНСПОРТУ МІСТА ДУБНО

ROAD SAFETY OF DUBNO CITY PUBLIC TRANSPORT

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The article describes the implemented road safety measures in the city of Dubno.

Система управління безпекою руху на автомобільному транспорті (перевезення пасажирів і вантажів) визначається законодавчим забезпеченням, директивами, стандартами та іншими документами.

Поява обставин з виникненням нештатних ситуацій характеризується транспортною подією (ризиком). Безпека дорожнього руху залежить від багатьох взаємодіючих чинників, таких як сам транспортний засіб, водій і дорога.

Основною ланкою системи звичайно є водій транспортного засобу, який слідкує за дорожньою ситуацією, опрацьовує великий обсяг постійно змінюваної інформації, приймає конкретні рішення. Власне від прийняття рішення буде залежати безпека переміщення пасажирів в міському транспорті до пункту призначення. Тривалість оцінки дорожньої