where can we find an area for new houses?

First variant – building in maladjusted place, that violates the standards of building. In the result we can have, for example, building collapses, flooding, sediment into the ground etc. This results can do harm to people's health or even take a person's life.

Second variant – cutting trees in parks or in forests for building at this place. But, this again leads us to ecological problem, shortage of air and other negative results.

So, if we have a problem, we must find the way to solve it.

Cities have to grow, because their population is growing too. Instead of small cottages and private houses, it is useful to build big houses with a lot of floors and with hundreds of apartments.

Also, we have to find the way how to decide economic problems, because building of houses requires a lot of money. This is business. To take down old unusable buildings and to create a new modern city needs large sums of money.

But, in my honest opinion, the easiest way to solve the problems of growing cities is creation of well paid work places in village's. Therefore, they will not even have a reason to move from their home.

In our time urbanization problem is incredibly important. But I strongly believe that all the problems can be solved. Not only by our desire to provide better future for next generations, just to save nature, that is being ruined by humanity.

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## **RESEARCH OF CHOICE FACTORS OF TRANSPORT MODE WHILE TRANSPORTING BUILDING MATERIALS BY ROAD AND RAIL**

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The absence of effective interaction between different transport modes for cargo transportation has a negative impact on the logistics systems development and it increases the transportation cost and time. There is a large range of interchangeability between road and rail. Global trends of these transport modes confirm the need for an integrated approach to a transport choice. The issue of interchangeability between road and rail delivery systems, particularly for transportation building materials is an important one for Ukraine. Thus, there is a necessity for scientific justification of the choice factors of transport modeconsidering the requirements put forward by customer and current logistics principles.

The factors importance assessment influencing the transport mode choice in the main cargo transportation were applied via expert method. A questionnaire was developed to assess factors of road and rail transport mode choice in the main cargo traffic. Experts were surveyed of 12 largest companies in Kharkiv that directly related to the road and rail transport use. As the result of the survey it was found that the most significant criterion is transport costs (Fig. 1).

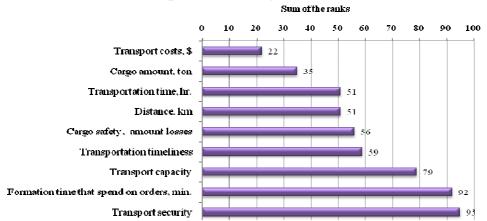


Fig. 1. Histogram of the significance criteria for selecting road and rail transport modes as the main transport

The following criteria are also significant: transportation time, cargo amount, distance, cargo safety, transportation timeliness. According to the experts, the factor "transport capacity" has received a high correlation with the "cargo amount" factor. This may be explained by a low significance of this factor. Besides, the factors like "formation time spent on orders" and "transport security" have received a slight importance.

It is proposed to use customer's expenditures as enterprise efficiency criteria while choosing a transport mode. It takes into account immobilization cost.

The results of the calculation of the proposed model with the traffic cargo amount of 40 tons and 60 tons for road and rail transport modes are shown below (Fig. 2, 3).

The experimental conditions were adopted by the following: transportation is provided within Ukraine, cargo transported into universal vehicles and wagons, the road and rail vehicles' capacity are 20 tons and 40 (60) tons in accordance. The rail wagons are owned by rail enterprises. The developed model is an analogue of the real existing building enterprise operation.

The intersection point of two lines indicates the same expenditures for the customer. This point can be called an equivalent distance point, it means that it is the same for enterprises either to use road or rail transport.

When transporting 40 tons of cargo over the distance of no more than 800 km it is appropriate to use road transport, but when transporting 60 tons of cargo it is

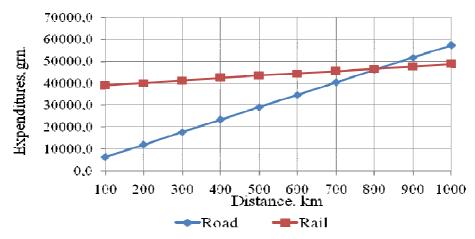


Fig. 2.Graph of the customer's expenditures and transport distance while transporting cargo by road (A) and rail (Z) in Ukraine without consignees' rail siding (cargo amount is 40 tons)

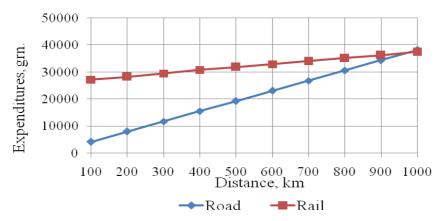


Fig. 3.Graph of the customer's expenditures and transport distance while transporting cargo by road (A) and rail (Z) in Ukraine without consignees' rail siding (cargo amount is 60 tons)

better to use rail transport for building materials' transportation in Ukraine without consignees' rail siding.

## CURRENT STAGE OF THE ORGANIZATION OF FREIGHT MOTOR TRANSPORT ENTERPRISES

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In general organizational and planning activity of freight motor transport enterprise encompasses a wide range of planning, economic, organizational and technical tasks including the development of scientifically proven promising operational plans, the optimal way of selection of their realization and the regular monitoring organization of plans implementation.

Particularly, operational planning is the final planning element of the company planning system. It means the long, medium and short - term plans and it is one of the