

4. Ronald F. Zollo. Fiber-reinforced Concrete : an overview after 30 years of Development' Department of Civil and Architectural Engineering. University of Miami, Coral Gables, Florida, USA; accepted 21 October 1996.

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## ANALYSIS OF ROAD TRANSPORTATION NETWORK INFRASTRUCTURE FACILITIES

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**Problem statement.** Developed road and transport infrastructure is the result of an increase in the quality of life of local residents, the volume of business and economic activity, and effective employment and social protection policies. The road transport infrastructure is of particular importance in the process of expanding the scope of labor and increasing the level of income of the population. In the context of imperfect road and transport infrastructure, lack of paved roads and regular transport links, the level of local accessibility decreases. As a result, business development is slowing down, and incentives for locating new light, food, and other industries, service organizations, etc. are deteriorating. The level of development of Ukraine's road transport infrastructure is insufficient.

**The purpose of the article** is to identify the problematic aspects and obstacles to the development of the road transport network infrastructure in Ukraine. It is important to assess the level of development of territories in the context of the existing road transport infrastructure.

**Presentation of the basic material.** Today, roadside infrastructure (motels, cafes, rest stops) is underdeveloped in Ukraine [1–3]. However, the low threshold for entering the business and the almost complete lack of competition make this business attractive to entrepreneurs. But today, roadside cafes and restaurants are found on Ukrainian roads on average every 15 to 20 km, and hotels every 70 km. We expected that the issue of roadside service facilities would be resolved, but in fact, there have been no significant changes, and entrepreneurs are in no hurry to invest in such businesses. Therefore, there is every reason to believe that this market niche is still unfilled.

The level of roadside facilities in Ukraine today is very different: canteens, restaurants, café bars, stylized multifunctional establishments for different target

consumer groups. In general, all roadside facilities can be divided into two groups:

- establishments located in the suburbs of large regional centers and district centers;
- establishments located near major highways and international highways.

Cafes and restaurants located near large cities are more likely to be targeted at residents who go on vacation on weekends than at transit road tourists, although they are also the target audience for such establishments. Increasing the number of roadside infrastructure facilities (Fig. 1) that provide a package of quality tourist services will lead to an increase in the intensity of tourist flows on these highways. In particular, the construction and arrangement of architectural and historical monuments, national parks, etc.

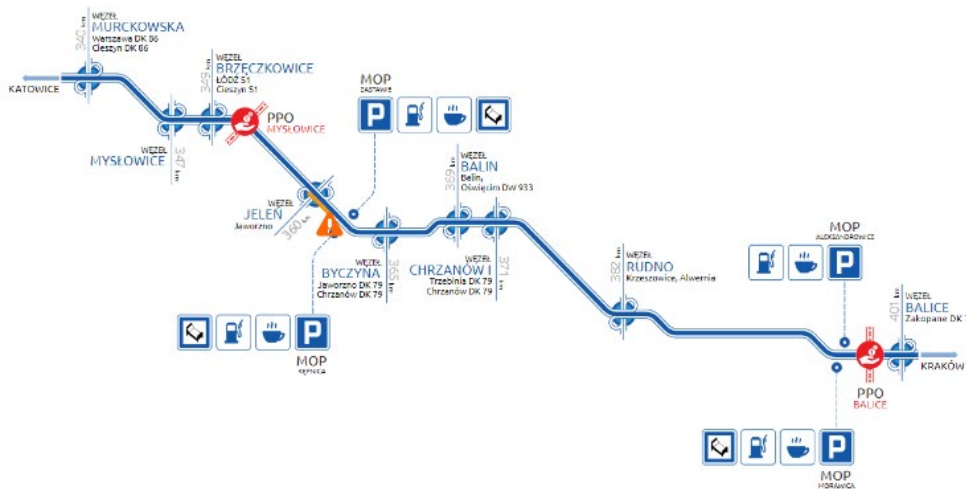


Fig. 1. An example of road infrastructure in Poland

In the United States, for example, the service of car tourists has transformed into a separate industry involving thousands of cafes, motels, gas stations and service stations. In addition to service areas, there are so-called rest areas on U.S. highways, where you can use a parking space, telephone and toilet for a fee; such places are also equipped with tables and beverage machines. However, such places are not intended for overnight stays - to spend the night on the road, there are motels where the driver gets a parking space and a room equipped with a bed, shower, toilet, TV and air conditioning.

Looking at the road infrastructure of Ukraine (Fig. 2), we see a small number of roadside service facilities such as campsites, service stations, rest areas, parking lots, car washes, motels, which should provide proper service to people and their vehicles. A large area is occupied by empty roads with no infrastructure. There is a lack of quality and safety of services as well as quality control. All this reduces the intensity, comfort and development of the road transport network.

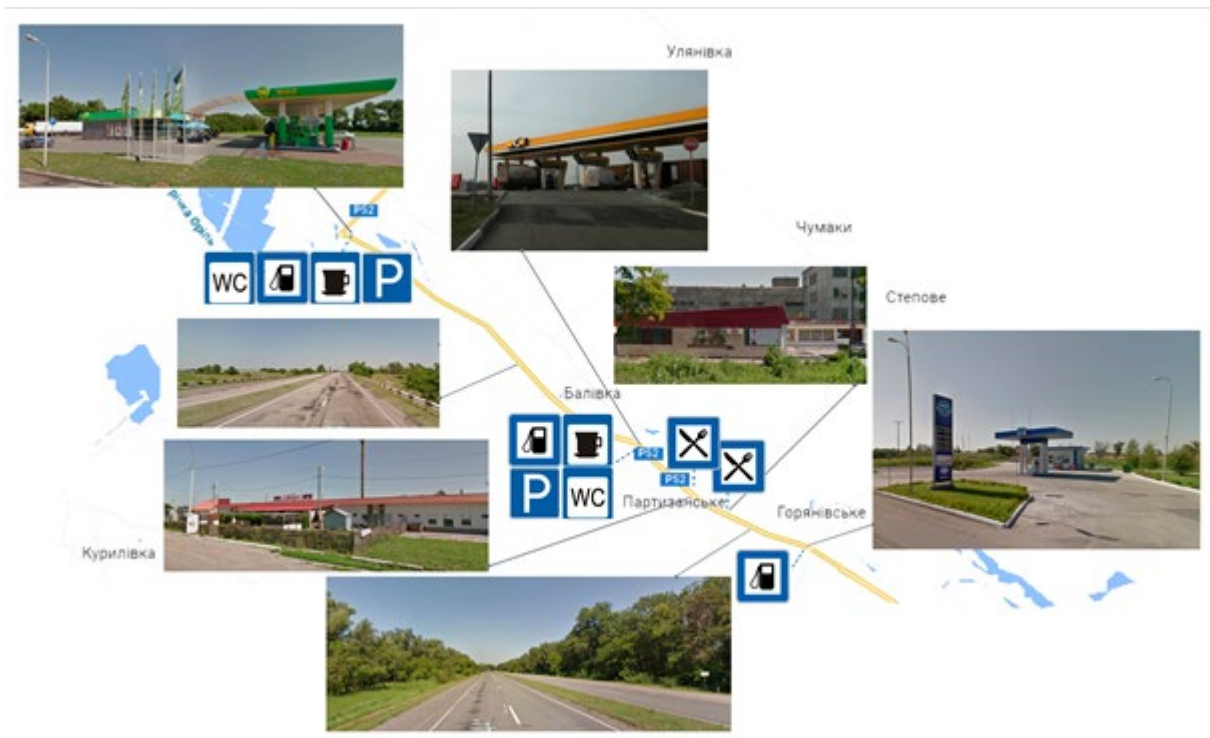


Fig. 2. Example of road infrastructure in Ukraine

In organizing roadside service in Ukraine, it is worthwhile to be guided by the experience of Western European countries and the United States, whose authorities have initiated the unification of private motels and restaurants, introduced mandatory certification and quality control of services.

**Conclusion.** The current state of the transport infrastructure of Ukraine and its regions requires the efficient development and effectiveness of future roadside facilities. Transportation routes must meet international requirements and provide fast, safe, and comfortable conditions for road tourists. They are the first link in the chain in successfully attracting foreign tourists to the country.

## References

1. Lupak R.L. Problematic aspects and obstacles to the development of road transport infrastructure in rural areas of the western regions of Ukraine. URL: [http://ird.gov.ua/sep/sep20136\(104\)/sep20136\(104\)\\_306\\_LupakRL.pdf](http://ird.gov.ua/sep/sep20136(104)/sep20136(104)_306_LupakRL.pdf)
2. Features of the development of roadside tourist infrastructure in Ukraine in modern conditions. URL: <file:///C:/Users/Aspire/Downloads/1866-4087-1-PB.pdf>
3. Infrastructure support for the development of the region's transportation system. URL: <http://www.iepd.kiev.ua/wp-content/uploads/2014/03/maket.pdf>