

MOBILITY AND TRANSPORT IN UKRAINE

The military aggression of the Russian Federation against Ukraine on February 24, 2022 caused a severe impact on the mobility situation in Ukraine as it provoked a mass exodus of Ukrainian population to the neighbouring countries and further to EU and beyond. On the other hand, due to the objects of transport infrastructure being [seriously damaged](#) in the territories around the frontline and the transport connection with occupied territories approaching zero, millions of people have been disconnected from the free territories.

Urban Mobility: Public transport. The transport infrastructure of embattled Kharkiv, Chernihiv, Mariupol, Okhtyrka, Hostomel, Irpin, Bucha, and other cities was considerably damaged. Temporary restorations of infrastructure are performed where possible. Sister cities from the EU are sending buses and trolleys to Ukrainian cities to help restore public transport services. Unfortunately, it is not enough. Even non-embattled cities in Western and Central Ukraine are facing challenges due to a significant influx of internally displaced persons combined with rising expenses, dwindling revenues due to reduced economic activities, unreliable supply of spare parts, need for industrial re-orientation, and business instability. Many vehicles previously used for municipal passenger transportation are currently redirected to serve the transport needs of the Armed Forces of Ukraine and the Territorial Defence Forces. Not to mention that this struggling public transport system is frequently disrupted by air-raid warnings.

Urban Mobility: Cycling and Micromobility. Bicycles became a very in-demand means of transport in all regions of Ukraine in the light of a fuel crisis, public transport operation disruptions, and internal displacement of the population. Several NGOs launched campaigns [BikesForUkraine](#) and [Bikes4Ukraine](#) to provide bicycles to internally displaced people, municipalities and volunteers that use bicycles to deliver necessary goods to people in need.

Automobile transportation. The role of private cars rapidly increased during the war (evacuation of people by private car and buses, transportation of goods—becoming even more necessary due to closed seaports—and supply of the army with weapons and goods, etc.). But the sector faces a number of essential issues: lack of drivers (some of them are conscripted into the army), lack of cars (due to increased demand) and fuel crisis (almost all petrol plants and oil depots are fully destroyed by missiles, and the supply of fuel from EU before the war was just a tiny percentage of the total). Ukrainians have [lost](#) almost 105 000 passenger cars valued at a total of \$968 million (the initial estimate was \$1.6 billion). These calculations do not take into account the quantity and cost of cars imported from Europe but not registered that are covering some of the losses, so the actual number may be higher. Logistics at the western border crossings is rapidly developing, leading to a 2.6-fold increase in cargo traffic at the road border crossings. As of June 2022, a total of 24 700 km of roads, 309 bridges and bridge crossings are damaged or destroyed.

Railway. Since the beginning of war, the railway has played an indispensable role in the evacuation of population and passenger flows around the country, taking into account the complete halt of passenger flights. All the leaders that visited Kyiv used the railway to reach the capital from the west of Ukraine. State railway enterprise Ukrzaliznytsia showed unprecedented durability, effectiveness and resilience during the war, quickly adapting to the changing circumstances. In spite of frequent infrastructure damages, the enterprise still manages to rehabilitate impacted infrastructure. Train depots, bridges and hubs have become the priority targets for Russian rocket attacks. Since February 24, Ukraine has lost 23% of its railway network – 6500 kilometres of major railways. Railway is also important for cargo transportation to the EU, but there is low capacity at border crossings due to different widths of rail tracks.

Aviation. All civil aviation flights have been cancelled in Ukraine. Moreover, 12 civil airfields have been destroyed or damaged by Russian missiles.

Water transport. Transportation of cargo by sea through Ukrainian seaports halted due to blockade of the seaways by the Russian navy and their sea mines. The ports of Mariupol, Berdyansk, Skadovsk, and Kherson are closed until further notice – the entry/exit of ships is temporarily impossible; ports of Mykolaiv, Olbia, Pivdenny, Odesa, Chornomorsk partially carry out the processing of the docked ships to redirect their cargo by rail and road. Entry/exit of vessels is temporarily impossible. Several sea and river ports were attacked by missiles. This situation entails a food security crisis and risks of famine in the countries that rely on Ukrainian grain, because the capacity of railways and road transport is many times smaller. Almost 95% of agricultural products used to be exported through the commercial sea ports of Ukraine. Currently, only two of Ukraine's ports – Izmail and Reni – are able to load cargo for export, though only in small quantities.

The cost of infrastructure damage already [amounts](#) to \$95 billion as of June 5, 2022. The government of Ukraine is working on the development of the transport infrastructure reconstruction plan with the support of the Delegation of the EU in Ukraine. The future [plan](#) includes: renovation and new construction of 51.2 thousand km of roads; construction of over 1.4 thousand bridges (based on NATO standards); purchase, repair and modernisation of over 7000 units of railway rolling stock; renovation/construction of 5 new airports; modernisation of 3 ports on the Danube. The Reconstruction Plan defines the strategic objectives of post-war reconstruction, including the full rehabilitation of all infrastructure, integration of Ukrainian transport into the EU network and harmonisation of the legal and institutional aspects of the Ukrainian transport sector's functioning.