Travel speed changes along the European core road network for the period 1960-2030: an application of octilinear cartograms

Abstract:
This study presents the evolution of travel speeds in the European Core road network, between 1960 and 2030. Speeds are represented in octilinear cartograms which constitutes one of the novelties of this study. Octilinear cartograms have the advantage of simplifying the geographical representation of transport networks, while emphasizing the connections (nodes) and the links between those nodes. The geographical accurateness is no longer important in this type of map; thus, the actual length of links does not correspond to the link’s real value, directions are roughly preserved and scale factor is not constant for the entire map. Results show a general improvement of speeds in the Core Network. During the first years of the analysed period, speeds increased in Western European countries, while in the latest years, this improvement was extended to peripheral countries. By 2012, travel speeds presented a more homogeneous pattern all over Europe, generally ranging between 100 and 110 km/h. This evolution goes all along with a strong EU investment in the trans-European transport road network. In 2030, travel speeds are expected to continue increasing due to the foreseen investments planned by the European Commission.

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