

Travel time map and accessibility model by Andrew Nelson. Agglomeration Index by Hirotugu Uchida (The World Bank, URI) and Andrew Nelson. Land cover data from the Global Land Cover 2000 Project, <http://www.gem.jrc.ec.europa.eu/glc2000>. UN urban population data from the United Nations World Urbanization Prospects, <http://esa.un.org/unup>.

Global Environment Monitoring Unit
Institute for Environment and Sustainability
Joint Research Centre of the European Commission
Via Enrico Fermi 2749, I-21027 Ispra (VA), Italy

<http://www.jrc.ec.europa.eu>
© European Communities, 2008. All rights reserved.

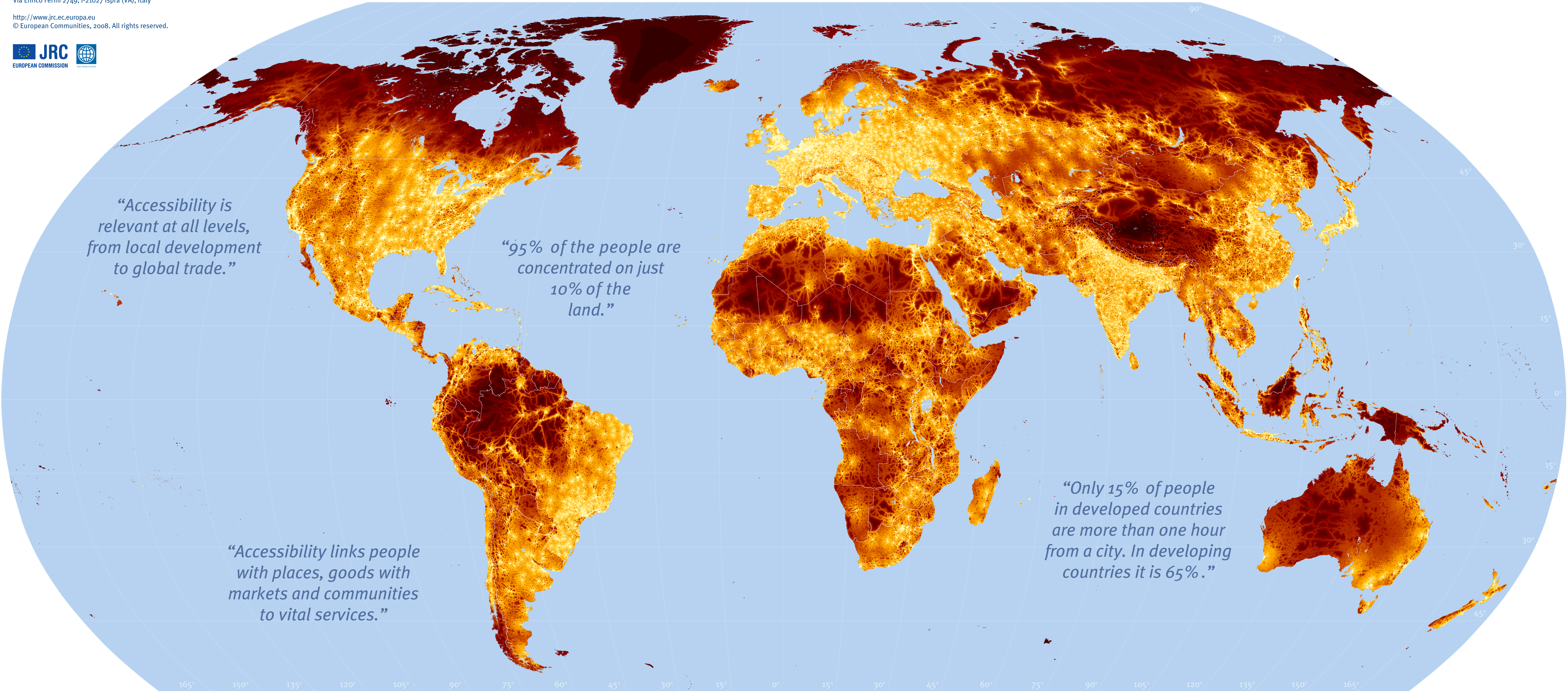


Travel time to major cities

Working title: Travel time to major cities: A global map of Accessibility

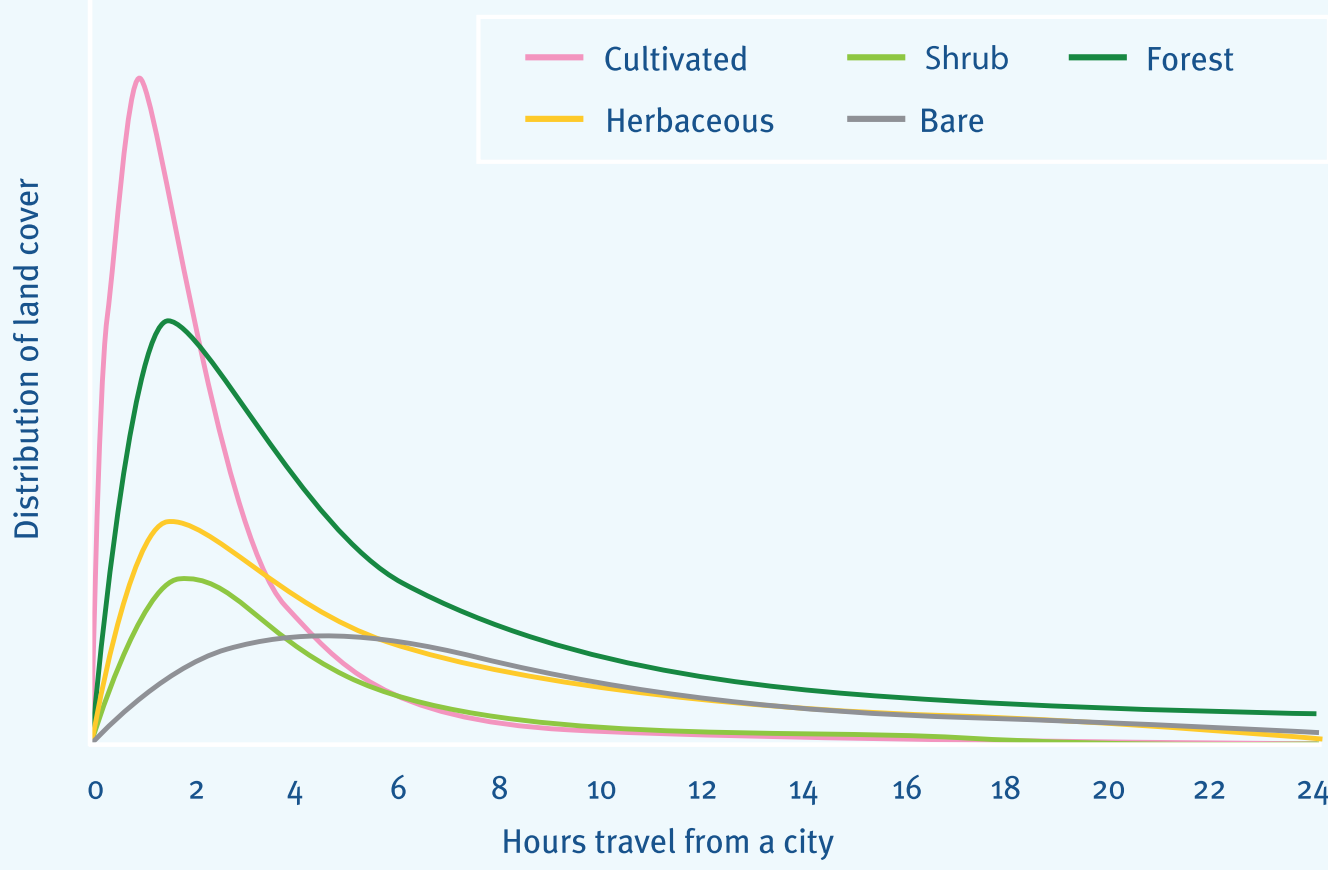
JRC47352
ISBN 978-92-79-09771-3
Catalogue number LB-30-08-671-EN-C

Language: EN
DOI: 10.2788/95835



Land cover patterns around cities

Travel time zones around a city can be used to define regions where particular economic activities are likely to take place. Almost 60% of all cultivated land is within two hours of a city. As urban areas expand, there is huge pressure to convert agricultural land to urban uses, and to convert more distant forests, grasslands and shrublands to agriculture. These patterns of land use around urban areas mirror one of the most important models of economic geography, Johann Heinrich von Thünen's model of The Isolated State, which links transport costs to land value.



Travel time in hours and days to the nearest city of 50,000 or more people



Travel time to major cities: A global map of Accessibility

Developed by the European Commission's Joint Research Centre for the World Bank's World Development Report 2009 "Reshaping Economic Geography".

Map colours represent travel time to the nearest city (8,518 cities with 50,000 or more people in the year 2000). Modes of travel are land and water based. The data resolution is 30 arc seconds. The map projection is Robinson. Digital datasets, the accessibility model, input data and more information at <http://gem.jrc.ec.europa.eu>. The World Development Report is available at <http://econ.worldbank.org>. The delineation of national boundaries must not be considered authoritative.

Agglomeration Index (AI): A new measure of urban concentration and a more urbanised world

There is no standard definition of 'urban'. A new Agglomeration Index (World Bank & JRC), based on this Accessibility map, suggests that the global urban population in 2000 was 3.21 billion compared to the UN's total of 2.85 billion (53%, compared to 47% of the world). Most of the difference is in the developing world. This alternative definition of urbanisation suggests that the world may have passed the urbanisation tipping point – more people living in urban areas than in rural areas – much earlier than the 2007/8 estimate.

