Impact of urban form on daily travel: a comparative analysis (M. Cools, Jean Laterrasse, and Florent Le Néchet)

Abstract:
Along with the emergence of Mega City Regions (MCRs) in Europe, mobility patterns have become increasingly polycentric. Since urban planning issues are especially difficult at this scale, it is important to assess the impact of the different evolutions in Mega City Region on important indicators such as daily travel times and daily travel distances. Therefore, in this study the differences between monocentric and polycentric MCRs in terms of travel distances and travel times for constraint and unconstraint mobility are investigated. To this end, four different MCRs were selected for the study: the Paris and Rhine-Ruhr metropolitan areas and the Randstad and Belgian Mega-City Region. For these MCRs regions, the travel times and distances were derived from the national travel surveys. Special attention was paid to the harmonization exercise based, calculating the daily travel distances for 7 different purposes and 9 different transport modes. With respect to the socio-demographics, the least common denominator was used to define comparable socio-demographics. Results indicate clear differences between the monocentric and polycentric regions, especially with respect to shopping and leisure trips. In addition, some policy interventions could be defined based upon the results of the disaggregation based on the socio-demographics.