

Enabling a national road and street database in the population statistics: Commuting distances for every employed and other accessibility statistics

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Accessibility research is a highly relevant part of today's geographic information science and systems (GIS). Enabling a national road and street database, "Digiroad" in Finland, contributes in meeting new user needs in development of official statistics. It gives access to gain better information on service areas and distances to actual services such as public schools, or even to upgrade commuting statistics to distances between each home point and work point coordinates along the actual road network.

As one case example, commuting distances for employed Finnish population is given in the paper. The actual pairwise computations have been made for those 2,1 million employed persons. Naturally, the target is to estimate shortest paths. Besides final results from these also technical challenges are addressed in the paper.

However, travel time is even more actual topic in accessibility studies. Another case example is given on emergency coverage based on drive time.

Key Words: accessibility, route optimisation, pairwise distances, travel time.