

# Changing Geographies and the Measurement of Spatial Access to Health Care

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## ABSTRACT

Traditional techniques for analysis of accessibility often rely on a static view of the facility and both a static and an aggregated view of the clients who seek to access it. The classic situation is assuming a census-night distribution of people and an expression of their location through some form of small area zoning. While the facility is in truth usually static, clients can be far more mobile in their location over time and are not, in the way they function, easily aggregated. This paper focuses on the issues raised by acknowledging the specifics of circumstance, and the dynamics of population presence. It particularly it addresses two issues. One is the sampling frame used to calculate surfaces of accessibility. Such exercises are frequently based around mesh block centroids or similar artefacts, both for computational simplicity and for compatibility with census data. The significance of the limitations and inherent error of this are discussed, and alternative strategies, which can still be compatible with mesh-block reporting, are evaluated. The effects of the common phenomenon of zoning systems change over time is also considered here. Second, the location of the client base is not constant over time and is significantly perturbed on a daily and seasonal basis. The fluctuations inherent in this dynamism are described, particularly with respect to tourist and recreational displacement.