

To Study the Effect Large Infrastructures Impose on Urban Development and to Generate a Model using the Example of the Canton of Geneva

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ABSTRACT

Procedure:

The periphery of Geneva, where a section of the city bypass opened in 1993, was studied on three different levels :

- firstly, an analysis of the region's dynamics as a whole;
- secondly, an analysis of the demographic evolution and employment market at a comunal level; and
- thirdly, an analysis of the evolution of the man-made environment at a district level.

The afore-mentioned studies permitted the computation of a model (multiple linear regression) that discribes the relationship between the changes in the man-made environment of a certain area and its accessibility.

Results:

The study showed that the relationship between the freeway and the urban development of the canton of Geneva was not obvious. The demographic redistribution from the city centre towards suburbea seems to have no apparent relationship with the new infrastructure. The influence of accessibility manifests on the employment location; this was observed by an increase in employment figures, higher than average, for the areas near the new bypass and city centre.

These phenomena were not directly translated into building activity, as two neighbouring sectors can develop totally differently. The relationship with accessibility is not obvious.

The model confirmed the perceived trends and revealed the importance of vacant land for building activity to exist. In other words, urban development is hampered by the shortage of available land and the other location factors become insignificant.

Key Words: accessibility, location, building activity