A spatial pattern of housing and transport costs in Bordeaux Metropolitan Area

This research focus on sustainable city by developing a methodology of housing and transport costs assessment in order to understand the vulnerability level of households and land in Bordeaux Metropolitan area. It appears necessary to articulate better, in the analysis of urban durability, environmental dimension and socioeconomic dimension. Too often focalized on the only environmental footprint of urban growth, approaches in terms of urban durability neglect most often stakes of social sustainability of housing and transport linked to urban forms. However, the housing issue is essential for understand space inequality. The low-income families is broadly led to move away from urban centers to find a place to live and particularly to achieve ownership. This urban phenomenon of relegation leads to negative effects on mobility of these households: lengthening of travel time and distance and consequently travel costs owing to automobile dependency. In this way, households are confronted with a vulnerability defines itself with regard to the risk of social isolation and on the other hand to the risk of poverty directly linked to housing and transport costs.

Exploiting data of notarial real estate transactions and tax level, supplemented by inquiries will allow to assess the vulnerability level and residential mobility of housings.

The sustainable mobility of persons concerns notably the outlying suburbs because it raises a certain number of stakes both on environmental, economic and social plan and on space organization of these areas.

As a result, this research has as ambition to understand better the practices of mobility and travel behaviors in the perspective of a growing pressure on the number of travels by car in these areas. Indeed, there is a lack of knowledge about mobility. Travels are more and more complex, they spread in the space and in time in reason, on one hand, of pressures linked to the urban sprawl of housing and of jobs, and on the other hand, of a heterogeneity of the travels timetables.

So, as underlines it the report of Network Action Climate, FNH, of March, 2014, motive and mode of travels differ broadly from a space and from an individual to the other one and there is not miracle resolution which can answer the needs mobility in a uniform way on all area. The knowledge of the regular practices of travels and area appears necessary to provide an answer adapted to needs.

This paper is also based on a methodology of mobility costs assessment already developed by the author (Deymier et al., 2013), at an intra-urban level: the Travel Account Passenger Spatialized. This method put forward a relatively accurate estimate of the whole passenger costs trip for all transport mode (public and individual) and for all type of payer (households, firms, local authority, etc.). Besides, the quantitative transport surveys do not lead to information on activities accomplished during travel, nor on the perception of the quality of this time. In this way, to gather information on these scope of travel time would give opportunity to consolidate the significance of the perception of the travel time on mobility behaviors.

This empirical analysis allows to bring perspectives on policies and public actions in transport and land planning by a methodological improvement in the spatialized transport and housing expenditure across the production of different indicators on housing, energy, vulnerability and congestion.

Elsewhere, this paper allows to have a better understanding of the level of vulnerability of household and land, notably not very dense land, being under the influence of the metropolitan Bordeaux area.