Geotechnologies applied to business location studies in urban expansion areas. The case of Augusto Montenegro Ave. in Belém – PA – Brazil.

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Abstract

The accelerated and disorderly urban growth in large cities has brought various problems to society such as the misuse of available land and social and spatial segregation, which occur because of the better structure areas being in the city centers and inhabited by people of higher income and the most remote, destined to the poorest population. In this context, rapid urbanization, associated with the lack of planning, causes total disorganization in land use, which gives rise to neighborhoods with little or no infrastructure, which destroy green areas and rivers, as well as cause saturation of public services and private enterprises installed without previous feasibility studies.

Santos (2008) sees this dynamic in order to define the so-called Circuits of Urban Economy. The Upper Circuit is "made up of banks, trade and export industry, modern urban industry, modern services, wholesalers and transportation". On the other hand, the Lower Circuit consists essentially of forms of non-capital-intensive manufacturing.

Such phenomena can be seen on Augusto Montenegro Avenue, in Belém. Urbanization (considering that the area initially had rural characteristics) and urban sprawl in its surroundings are notable problems with a necessary research. In the specific case of the avenue, this has been one of the main points for the installation of real estate projects, which evidences the population growth of the upper and middle classes. With the arrival of these, the demand for services is modified, presenting great potential, given the inexistence of specific ventures.

Mendes' (2014) research demonstrates that the implementation of higher circuit ventures had a major boost from 2009, when several private real estate developments were launched and / or inaugurated on the avenue. Following the trend of real estate investment, between 2010 and 2012 there were the largest number of inaugurations of developments in the upper circuit on the avenue, there were 21 in the most diverse commercial segments.

In situations such as this, the investors seek techniques, tools and methods that may assist in previous studies for the installation of ventures. There is a need to carry out these studies for other investments within the Upper Circuit of Economy because they are the main modifiers of the space, trying to understand how they can help in the success of the installation of an enterprise, how to represent it in maps and how to perform such researches. In this context, geotechnologies appear as important tools to diagnose the main characteristics of a given area. The possibility of visualizing several situations from a spatial perspective facilitates the perception of the phenomena, because in this way, several scales can be established, generalizing or specifying what one intends to analyze with the creation of geographic information systems.

The work of Neves, Pereira and Portugal (2013), when analyzing the literature on the subject locational factors, can list: local demography; transportation, accessibility; competition; real estate market; capital market; economic and social environment; policies and interventions of the public power and the characteristics of the point as some of the locational factors analyzed for the implementation of retail

ventures.

Based on these assumptions, the research in question had as its objective to apply a spatial analysis methodology in the area of urban expansion around Augusto Montenegro Avenue, in Belém-PA, to identify areas for installation of enterprises of the Upper Circuit of the Economy, identifying and mapping the essential locational factors and performing spatial analyzes in this space.

The methodology included bibliographical surveys for the selection of locational factors, characterization of the study area, data collection in field works and virtual form, processing and tabulation of the data and the accomplishment of spatial and qualitative analyzes under them, besides the execution of a diagnosis to find a region in the avenue with potential for the installation of some type of commercial enterprise of greater demand. It is important to note that the results of the 2010 Census were used as a basis for several locational factors such as demography in general and census sections as the smallest statistical unit of the research.

As results were obtained the maps containing the locational factors represented for spatial analysis, and the possibility to use it as a starter basis for searching now the businesses of greater demand.

Figures 1 and 2 – Some of the locational factors
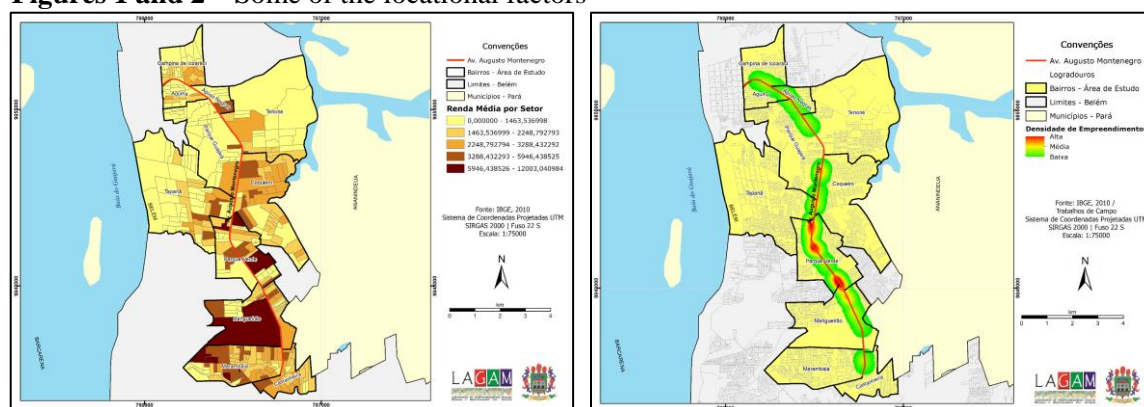
Suggestions have also been made for analyzes of the other regions located in the surroundings of the avenue. Finally, it was concluded that the suggested methodology presented primary satisfactory results, with adequacy of the chosen locational factors and their great adherence, together with the qualitative analyzes, it can be used for the selection of the region with the highest potential. It is also proposed to execute the same methodology for specific studies or carried out in areas with characteristics similar to this avenue.

References

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