

**Title:** THE PROFILE OF BYCICLE USER IN THE CITY OF JUIZ DE FORA - BRAZIL

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**Abstract:**

Juiz de Fora is a city located in Minas Gerais - Brazil, which has 513,348 inhabitants (2007), a fleet of 143,154 vehicles (2008) being considered the largest city in this region by the Brazilian Institute of Geography and Statistics - IBGE and comes facing problems related to transport, transit and land use. The city is mountainous, however, its main transit corridors are located in plain areas, as well as its center of activities.

This research aims to identify the bicycle user profile, knowing their socioeconomic characteristics and use of bicycles as means of transportation in order to use these data as a tool to aid in the development of public policy at the local level, encouraging the sustainable urban mobility, quality of life in the city and ensure a good quality of service to the user of public urban transportation system.

The number of trips made by bicycle between the junctions of the city is noticeably high, however, there are no studies to prove, through an appropriate methodology, such a situation. You can also see the volume of bicycles circling the city center, as a place of passage as on internal travel in the centre perimeter. Therefore, it is also objective of the research, conducting a survey of cycling trips in the city center, quantify and characterize these trips, to fit the user of this mode of transport as part of a significant demand for urban use, and understand the dynamics of relations between bicycles and other modes, motorized and non-motorized and the urban transportation structure.

We administered a questionnaire to users of bicycles with the ultimate goal to generate the necessary data as the condition of vehicles in circulation and the existence of security features, mandatory and provided by law, among others. The questionnaires application took place in a traditional approach, in the field, and via the Internet at website: <http://www.bicicletas.ufjf.br>, containing the same questionnaire applied in the field.

In addition, in the same website was available a poll for bike users or not, where the respondent should answer the question "Would you use a bicycle as his principal means of transport if there were in Juiz de Fora a secure infrastructure (bike lanes, bicycle parking, integration with public transport)?" We recorded 250 questionnaires, which were able to define some characteristics of current users. 89% of users are male, 89% have a monthly income equal to or less than US\$1355, 50% of the bicycles have no signaling equipment required by law and 65% of users do not use any safety equipment. It was concluded also that the means of transport used during the week by respondents is the bicycle (50% of respondents) and then the collective public transport by bus (26% of respondents).

The last step of the questionnaire was designed to a brief survey of the perceived risk of bicycle users, based on the work of Yang Ti I in his work on the risk perception of cyclists with respect to the urban traffic in Rio de Janeiro.

The poll resulted in 84% of respondents saying they would use the bicycle as a principal means of transport in case of an adequate infrastructure of the city.

Thus, the research analyzes the feasibility of using the bicycle as a non-motorized vehicle capable of contributing to sustainable mobility, in large scale, from the integration of bicycle networks in the city of Juiz de Fora and its integration with other transportation modes. So we hope to contribute to replace the paradigms that govern our automobile society, with some urgency, by new paradigms of sustainable urban mobility.