

Bicycle transportation in Brazilian cities: motivations and challenges

Victor Andrade¹, Filipe Marino², Ana Lucia Britto³

*1-2-3Programa de Pós-Graduação em Urbanismo – PROURB/ Universidade Federal do Rio de Janeiro
– UFRJ*

¹victorandrade@fau.ufrj.br

²filipemarino@gmail.com

³anabrittoster@gmail.com

The current scenario of urban mobility in Brazilian metropolitan areas is critical. Urban mobility has a direct impact on social and environmental dimensions. The environmental and life quality provided in a city are inherent to the mobility infrastructure. In this context, the active transport - defined here as cycling and walking - plays a key role in building a more sustainable city.

Despite the central importance of active transport, the knowledge about the motivations and difficulties related to walking and cycling in Brazilian cities is still scarce. This background brings a major challenge for policy makers, Non-Government Organizations and other actors involved in project development and implementation of public policies aimed at active transport.

Focusing on the bicycles transport, this article aims to present the results of the first Brazilian national survey about the motivations and challenges for the use of the bicycle as a urban transportation, as well as the profile of users of this means of transport.

This study was conducted through a partnership between the Sustainable Mobility Lab of the Post Graduate Program in Urbanism from the Federal University of Rio de Janeiro – PROURB/UFRJ, the Non-Government Organization Transporte Ativo and the Research Center Observatório das Metrôpoles. The questionnaires were applied by a network of researchers related to the subject between June and August 2015 and were tabulated in September 2015 for further analysis.

The method of this study was to interview bicycle users who use it as a mode of transport in the cities encompassed by the project at least once a week. We attempted to interview both bicycle sharing system users and cyclists owning private bicycles.

Pursuing a greater national representativeness on the survey, the data were collected in ten Brazilian metropolitan areas, distributed in different regions of the country. The cities were chosen due to the geographical position in the country and the local logistical capacity to assist in the questionnaires administration.

From the national survey, a panorama of 10 Brazilian cities was drawn, which is used for a critical and comparative analysis. The ten participating cities in the study are distributed along different regions of the country. The cities and their respective regions are: Belo Horizonte, Niterói, Rio de Janeiro and São Paulo in the Southeast; Porto Alegre in the South; Aracaju, Salvador and Recife in the Northeast; Brasília in the Midwest and Manaus in the North.

The interviews were conducted with approximately 0.015% of the population of each city. Demographic data related to the behavior of cyclists and challenges they face were collected, thus enabling the correlation of demographic and behavioral data.

The article presents and discusses the results that were found, revealing similarities and specificities of bicycle users in each of the ten cities surveyed.

The main focus of this study is to find a better understanding of "What makes a person change their mobility behavior and switch to use the bicycle as a primary means of transportation over other modes?" And "What would do a person to use bicycles as means of transport more often? "

Based on these two inquiries and their responses, it is believed that it is possible to identify some viable directions for the understanding of what allows for the promotion of this modal in the composition of urban mobility in Brazilian cities.

This study also attempted to identify what are the challenges faced by cyclists in everyday life (safety, distance, climate, infrastructure, etc.) and to define what would make cyclists use the bicycle more often.

Simultaneously, several demographic data were collected, which may support the development of more effective mobility policies, focused on specific cyclists

profiles. Throughout the study it was important to define who are the urban cyclists and thus collect data relating to them, such as age, income level of education.

At last, it was aimed to understand the bicycle modal interface with other urban modes. How much intermodality is currently used by bicycle users and which role it plays in everyday cyclists life and in the choice of cycling to complement the daily commutes.

Finally, the results presented and discussed in this study are used to support the elaboration of recommendations for urban policies to promote bicycle transport. The recommendations presented focus on the refinement and expansion of cycling infrastructure, optimization of intermodality, education and awareness campaigns and expansion of the knowledge on the profile of cyclists the Brazilian metropolis in favor of a more democratic city.