

### Transportation and physical activity in São Paulo, Brazil

Transporte e atividade física em São Paulo, Brasil  
Transporte y actividad física en São Paulo, Brasil

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The revision published by Becerra et al. <sup>1</sup> in the April 2013 issue touches on interesting aspects of health and transportation in three Latin American cities, and the inclusion of Latin America's biggest city, São Paulo, using the same methodology may increase interest in the subject.

According to the 2010 Census, São Paulo city has 11,253,503 inhabitants and has a Bus Rapid Transport (BRT) system that transports around 13 million people per year, but is considered less important when compared to the underground rapid transport system (the metro), that carries over 4.5 million people per day. Since 2007 it is permitted to transport bicycles

inside the underground trains during weekends and holidays. The integration of transportation and leisure using bicycles has been increasing considerably since 2009 when governmental and the private initiatives created bicycle routes.

Biking routes have expanded since then and the city currently has 112 kilometers of such routes in the city, with an average of 100,000 participations per day when the routes are open. In spite of the increased use of bicycles for recreation purposes it represents only 4% of total bike journeys in São Paulo, whereas cycling to work represents 70% <sup>2,3</sup>.

Bike Sampa is a service for letting or renting bicycles in the city that aims to stimulate the use of this form of transportation. Since it began in May 2012, it has provided 220,000 trips during its first year. Most users (60%) use this transport during the week, in rush hours and for short trips of less than 15 minutes (the maximum time period for free rides), 85% of users rent/let bicycles up to five times per week and 45% of users integrate bicycle services with the metro <sup>4</sup>.

Interestingly, when analyzing physical activity during transportation, differences between genders and in social positions can be found. An average inhabitant of São Paulo spends around 69 minutes per week in physical activities during transportation, with men being more active than women <sup>5</sup>. In addition, the presence of vehicles in the household was associated positively with physical inactivity in transportation, both for men and women <sup>6</sup>.

In spite of the benefits of physical activity during transportation, there has been an increase of 150% in the number of cars circulating in São Paulo from 1.2 million in 1999 to 3 million in 2009. Detailed numbers for transportation in São Paulo are described in Table 1.

Taken together, there is no complete integration of transport and physical activity as a part of everyday routines in São Paulo, in spite of the initiative to increase the use of bicycles as a part of leisure transportation. Healthy and sustainable transportation in megacities is an important matter of debate.

Table 1

Urban transport patterns in the city of São Paulo, Brazil.

| City      | Cycling for transport (%) [2007] * | Walking for transport (%) [2007]                      | Cars per 1,000 inhabitants [2011] ** | Motorcycles per 1,000 inhabitants [2011] ** | BRT total passenger demand (million) *** [2012] |
|-----------|------------------------------------|---|--------------------------------------|---|---|
| São Paulo | 2.8                                | 37% *<br>1.15 ** walking journey per day per habitant | 450.7                                | 77.7  | 12.9  |

\* Companhia do Metropolitano de São Paulo. *Pesquisa Origem e Destino 2007* (<http://www.metro.sp.gov.br/metro/numeros-pesquisa/pesquisa-origem-destino-2007.aspx>, acessado em 17/Mai/2013);

\*\* Departamento Nacional de Trânsito (<http://www.denatran.gov.br/frota.htm>, acessado em 17/Mai/2013);

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### Contributors

G. S. Graudenz contributed to the project conception, bibliographic research, article writing and English version. A. L. C. Menezes contributed to the bibliographic research and article writing. Both authors approved the final version.

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