A crack in the automobility regime? Exploring the opportunities and challenges for sustainable urban mobility policy implementation in São Paulo, Brazil.

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São Paulo: overview

▷ Home to 11.3 million people.

▷ 21 million people in the metropolitan region.

▷ Rapid urban growth from the 1950s.

▷ Economic powerhouse of Brazil.

▷ GDP was 189 billion NZD in 2011 (Fecomercio).

Source: Michael Guimarães, Flickr.

Source: Valrui, Flickr.

Urban mobility in São Paulo

Source: Reuters.

▷ Historical car-based urban growth.

▷ 6 million automobiles in the city (Detran).

▷ Heavy traffic congestion, with an average commute time of 2 hours in 2016.

▷ Traffic causes a 65 billion NZD drain on the economy per year (Haddad & Vieira, 2015).
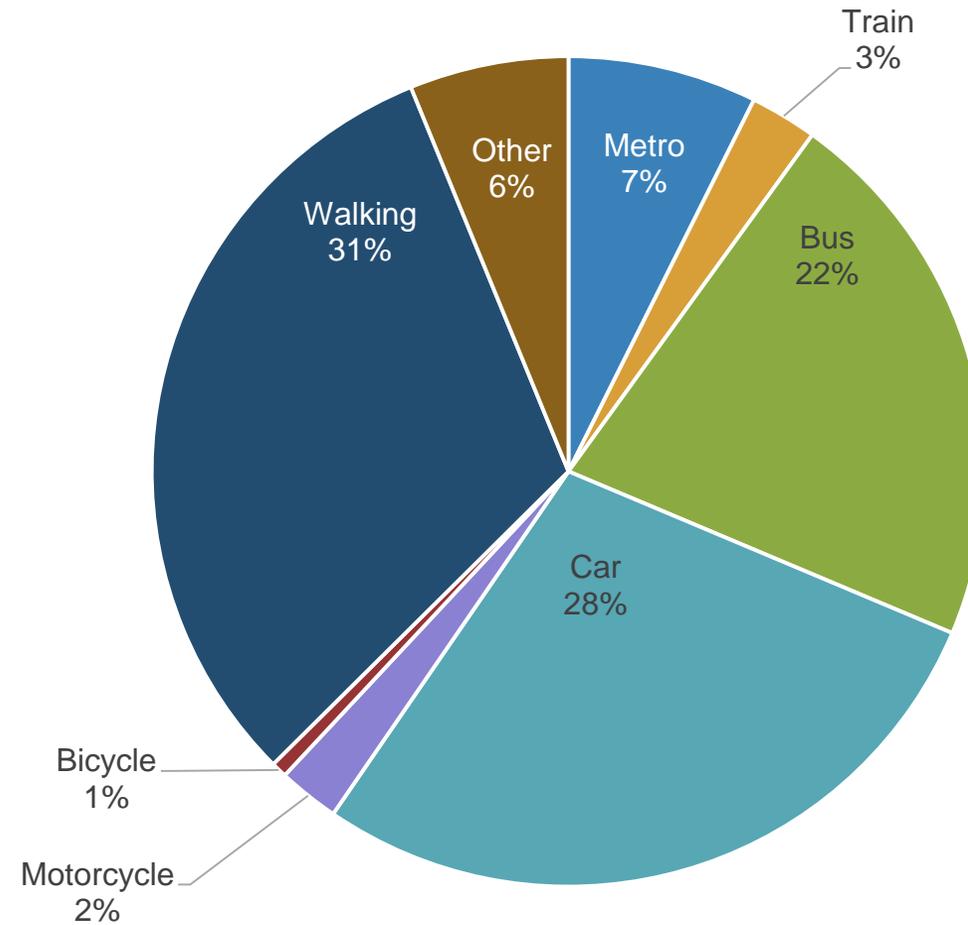
▷ Shared governance structure.

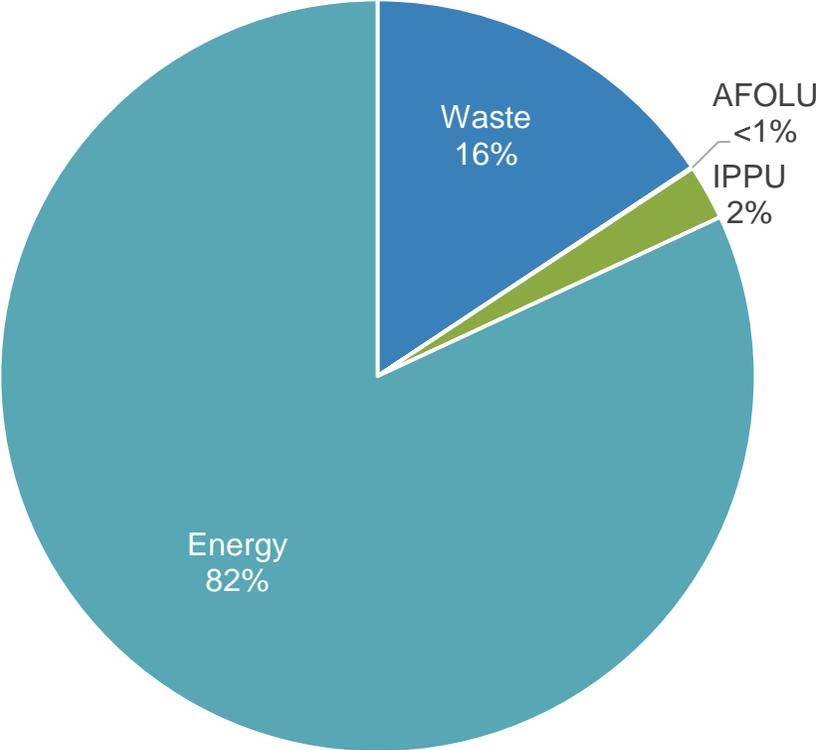Source: Johnny De Franco, Sigmapress, Estadão Conteúdo.

Modal Share 2012
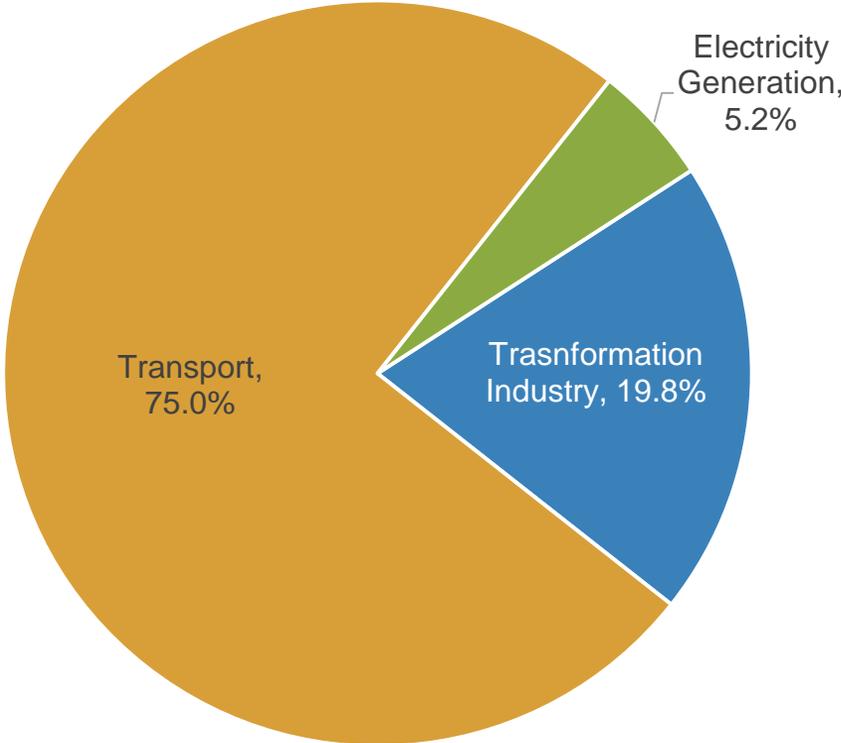

Adapted from Pesquisa Origem-Destino (Metro SP, 2012).

GHG Emissions in São Paulo (2003-2009)

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- Waste 16%
- AFOLU <1%
- IPPU 2%
- Energy 82%

Source: Prefeitura de São Paulo, 2013

Fuel Combustion Subsector (2009)

- Electricity Generation, 5.2%
- Transport, 75.0%
- Trasnformation Industry, 19.8%

Source: Instituto Ekos Brasil and Geoklock Consultoria, 2013

Master Plan and Urban Mobility Plan

▷ 2012 National Urban Mobility Law – calls for sustainable urban development and social control.

▷ 2014 Strategic Master Plan – guiding urban development for the next 20 years.

▷ 2015 Urban Mobility Plan – guiding the urban mobility system for the next 15 years.

Methodology

▷ Aim: To analyse the sustainable urban mobility policies implemented in São Paulo in accordance with the city's Strategic Master Plan and Urban Mobility Plan.

▷ Research adopts a qualitative approach.

▷ 17 semi-structured interviews with 20 participants

▷ Thematic interview analysis.

▷ Use of secondary data sources.

Sustainable Urban Mobility

Four actions required to achieve sustainable mobility (Banister, 2008):
1. Reduce the need to travel – substitution;
2. Reduce levels of car use – modal shift;
3. Land-use policy measures – distance reduction;
4. Technological innovation – efficiency increase.

"Transport planning must involve the people" (Banister, 2008, p. 75).

"There must be a willingness to change" (p. 79).
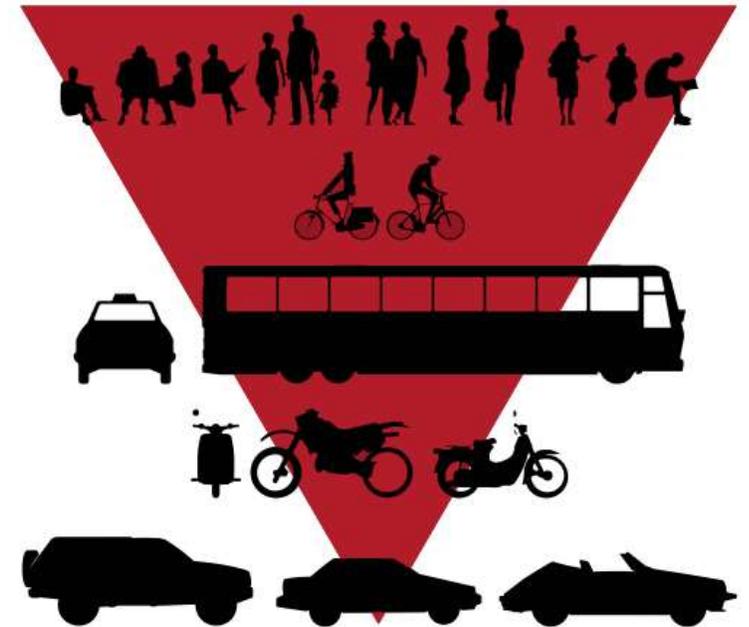
Transport Hierarchy. Source: Bike Perth

Socio-technical transitions to sustainability

▷ Transitions: shifts from one regime to another
▷ Why socio-technical?

The Multilevel Perspective (MLP) Framework
1. Niche: locus for innovation development;
2. Regime: practices and rules stabilizing the system;
3. Landscape: exogenous context.

Four characteristics of the MLP:
1. Co-evolutionary and systemic process (Geels, 2012);
2. Actor-based approach;
3. Stability and change;
4. Complex Dynamics.

Implementation of sustainable urban mobility policies

▷ Institutional capacity:
1. problem of fit;
2. horizontal coordination;
3. human and financial resources.

▷ Urban political economy factors:
1. local framing;
2. leadership.

▷ Trigger events and windows of opportunity.

Understanding Policy Windows

▷ Kingdon's (1995) Multiple Streams Framework.

▷ Three separate processes:
1. Problems;
2. Process;
3. Politics.

▷ Streams come together forming a policy window.

▷ Critical role of policy entrepreneurs in linking streams.

June 2013 Protests

▷ City government announced 0,20c fare hikes;
▷ Expensive and low quality public transport;
▷ Groups take to the streets protesting the measure;
▷ Violent police repression;
▷ Demonstrations gain force and spread nationally;
▷ Fare hike rejected.

Source: Terra

Source: Estadão Conteúdo

The policy window in São Paulo

▷ New administration elected in 2012;
▷ Mayor's commitment with cycling advocates;
▷ Sustainable urban mobility in the agenda;
▷ Protests provided momentum for policy;
▷ Political will and leadership.

Source: R7

Source: Associação Cilcocidade, Flicr

Policies implemented

▷ CMTT - space for civil society participation;
▷ 2015 Urban Mobility Plan;
▷ Bus lanes and bus corridors;
▷ 400km cycling network by 2016;
▷ Mobilab – innovation in transit management;
▷ Speed limits reduction;
▷ Metro and train network expansion;
▷ Paulista Aberta.

Source: Ciro Amado, Flickr

Source: Luiz Cláudio Barbosa, Estadão Conteúdo

Transition to sustainable mobility in São Paulo

▷ Local framing for policy implementation: urban mobility problems.

▷ Momentum for sustainable urban mobility in the city.

▷ Alternative regimes to automobility have gained space.

▷ Spaces for civil society participation have been opened.

▷ Political will and demonstrations were fundamental.

▷ Key role of sustainable mobility advocacy groups.

> *The privilege of the car is now being contested and this is socially accepted*

Transition to sustainable mobility in São Paulo

▷ There has been a 'crack' in automobility, but this regime is still dominant.

▷ Regime is reinforced by social and governance factors:
1. Car ownership association with status;
2. Fragmented governance structure.

▷ Institutional capacity difficulties.

▷ Concern with new city government elected in 2016.

▷ São Paulo as an example for other Brazilian cities.

Recommendations for future research

▷ Integrating São Paulo's metropolitan region.

▷ Integrating the urban mobility governance structure in the city.

▷ Policy change with newly-elected city government.

▷ More research analyzing socio-technical transitions in Brazilian cities.

Thanks!

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