



# Public Transport in Numbers

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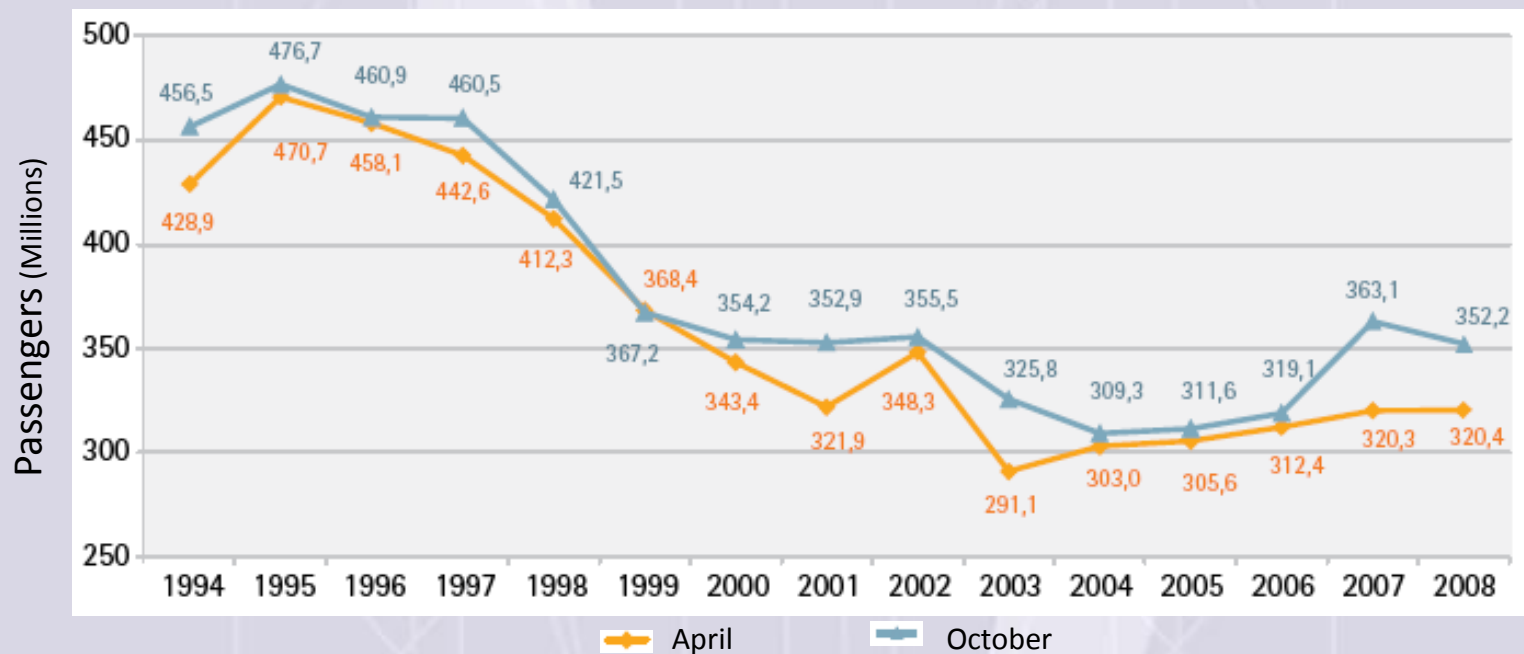
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# Public Transport in Numbers

## Demand in bus systems

Urban Bus Systems – Main State Capitals\*

Passengers per month  
April and October 1994 - 2008



\* São Paulo, Rio de Janeiro, Belo Horizonte, Recife, Porto Alegre, Salvador, Fortaleza, Curitiba and Goiânia

## ANTP - Urban Mobility Report (2006)

- 438 cities over 60,000 inhabitants in 2003 ;
- 60% of the country's urban population (115 million);
- 70% of the vehicle fleet <sup>1</sup> (21 million); and
- 72% of the GRP <sup>2</sup> (R\$ 1.5 trillion) <sup>3</sup>.

Trips	Motorized transport		Non-motorized transport		Total	NNT/MT
	Public	Private	Bycycle	Walking		
Billion trips/year	15.6	15.8	1.4	20.6	53.5	0.70
% of total	29.1	29.6	2.7	38.6	100	

- Local buses operate in all cities, while metropolitan services are provided in 20 areas and railway/subway services in 11 areas;
- Together, the three systems serve 15.57 billion passengers per year (about 52 million per workable day).

Type of service	Pass (billion)		
	Quantity	% of total	Fleet
Local buses	11.48	73.7	72,721
Metropolitan buses <sup>4</sup>	2.45	15.7	21,822
Railway and subways	1.65	10.6	2,681 <sup>5</sup>
Total	15.57	100.0	97,224 <sup>6</sup>

Source: ANTP ([www.antp.org.br](http://www.antp.org.br))

1 – Automobiles, buses, trucks and motorcycles;

2 – Gross local economic product.

3 – The exchange rate of the US Dollar to the Brazilian Real in December 2005 was 1: 2.3.

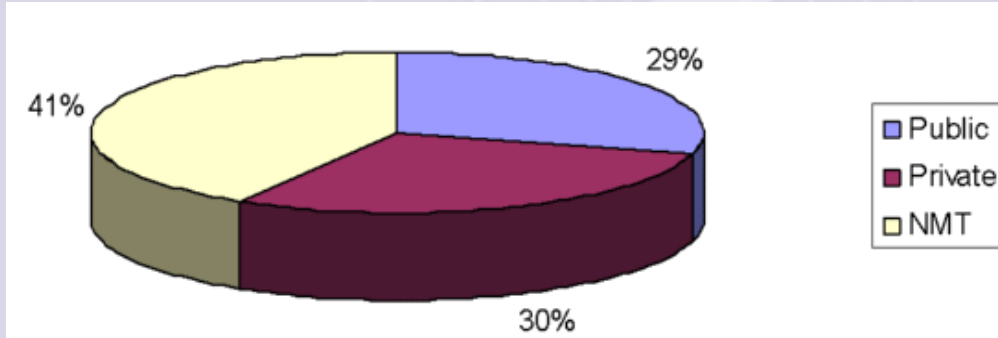
4 – Buses linking cities within metropolitan areas;

5 – Railway or subway cars;

6 – Considers railway and subway cars as equivalent to 3.5 standard, 45-seat diesel bus.

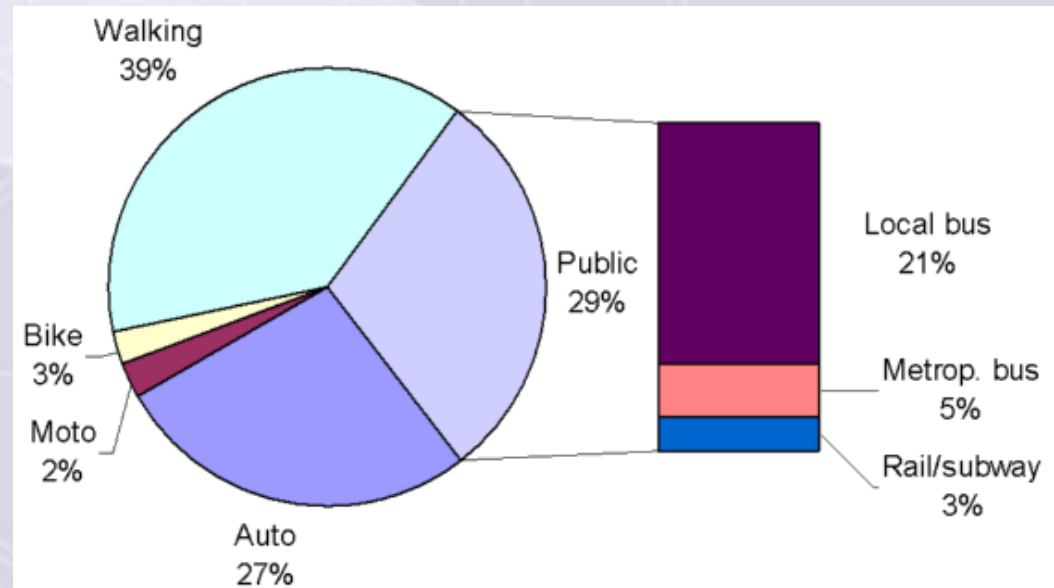
# Public Transport in Numbers

## ANTP - Urban Mobility Report (2006)



Modal Share of daily trips, 2006

Modal Share all modes, 2006



## 2014- FIFA World Cup Brazil.

### **Rio de Janeiro:**

R\$ 5 billion to be invested in  BRT, expansion of metro network, stadium access and airports

### **São Paulo:**

Investments planned to improve public transport: Expansion of metro network, modernization of urban rail transport in order to become a single integrated transport network, tramways and buses complement the system.

### **Brasília:**

A LRT system is under development. Phase 1 cost (8km) is estimated at R\$ 775.8 million. Phase 2 and 3 will increase the network in 14 km

### **Belo Horizonte:**

R\$ 211.7 million to be invested in a 5.5 km bus corridor

## ITS – Public Transport

- Fleet control: Control and reliability;
- Urban Traffic control: Public Transport priority;
- Security : Accident prevention and personal safety;
- OCC : Urban mobility management.

# Public Transport in Numbers

## HST – Rio de Janeiro - São Paulo

- Total distance between Rio de Janeiro and Campinas is 510km
- 8 stations including Guarulhos, Galeão and Viracopos Airports;
- 3 optional stations at Resende, Aparecida and Jundiai;
- Estimated journey time for non-stop service between Sao Paulo and Rio de Janeiro 1 hour 33 minutes over 411 km;



## HST – Rio de Janeiro - São Paulo

- Total TAV revenue in 2014 (including induced demand) is R\$2.421 billion increasing to R\$8,2 billion by 2044

Demand Component	Journeys (passengers / year, '000)	2014	2024	2034	2044
Express sub-model	Rio de Janeiro – São Paulo Rio de Janeiro – Campinas	7,070	11,282	19,323	27,788
Regional sub-model (including airport services)	Rio de Janeiro – Galeão – Volta Redonda/Barra Mansa – São José dos Campos – Guarulhos – São Paulo – Viracopos – Campinas	27,944	38,734	55,353	71,577
	<b>Total Journeys</b>	<b>35,014</b>	<b>50,016</b>	<b>74,676</b>	<b>99,365</b>
Demand Component	Revenue (R\$/year, in '000)	2014	2024	2034	2044
Express sub-model	Rio de Janeiro – São Paulo Rio de Janeiro – Campinas	1,460,025	2,328,500	4,012,100	5,769,781
Regional sub-model (including airport services)	Rio de Janeiro – Galeão – Volta Redonda/Barra Mansa – São José dos Campos – Guarulhos – São Paulo – Viracopos – Campinas	961,387	1,337,780	1,909,096	2,417,894
	<b>Total Revenue</b>	<b>2,421,412</b>	<b>3,666,280</b>	<b>5,921,196</b>	<b>8,187,675</b>



# Public Transport in Numbers

## HST – Rio de Janeiro - São Paulo

### Basic Service Pattern by Type of Service and Year

Service Type	Period	Seats per train	Peak hours		Off Peak hours		Trains per day	Average journey time
			Trains per hour per direction	Service interval	Trains per hour per direction	Service interval		
Express	2014 – 2017	458	3	20 min	1.5	40 min	85	1 hr 31 min
	2018 - 2030	458 x 2	3	20 min	1.5	40 min	85	1 hr 31 min
	2031 - 2037	458 x 2	4	15 min	2	30 min	102	1 hr 31 min
Regional short distance	2014 - 2021	600	4	10 min	2	20 min	111	1 hr
	2022 - 2040	600 x 2	4	10 min	2	20 min	131	1hr
	2040 – 2044	600 x 2	7	8 – 9 min	2	20 min	187	1hr
Regional long distance	2014 - 2021	600	2	30 min	1	60 min	53	2 hr 25 min
	2022 - 2040	600 x 2	2	30 min	1	60 min	53	2 hr 25 min
	2040 - 2044	600 x 2	2	30 min	1	60 min	53	2 hr 25 min

### Rolling Stock Plan (trains/sets)

Train Type	2014	2024	2034	2044
High Speed	39	78	78	78
Maintenance Spares	3	6	6	6
<b>Total</b>	<b>42</b>	<b>84</b>	<b>84</b>	<b>84</b>

## Recomended web sites

- [www.antt.gov.br](http://www.antt.gov.br)
- [www.antp.org.br](http://www.antp.org.br)
- [www.ntu.org.br](http://www.ntu.org.br)
- [www.cnt.org.br](http://www.cnt.org.br)
- [www.tavbrasil.gov.br](http://www.tavbrasil.gov.br)
- [www.itsb.org.br](http://www.itsb.org.br)