

# **TOD in Curitiba:** how BRT may reshape a city

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[www.pucpr.br/ppgtu](http://www.pucpr.br/ppgtu)



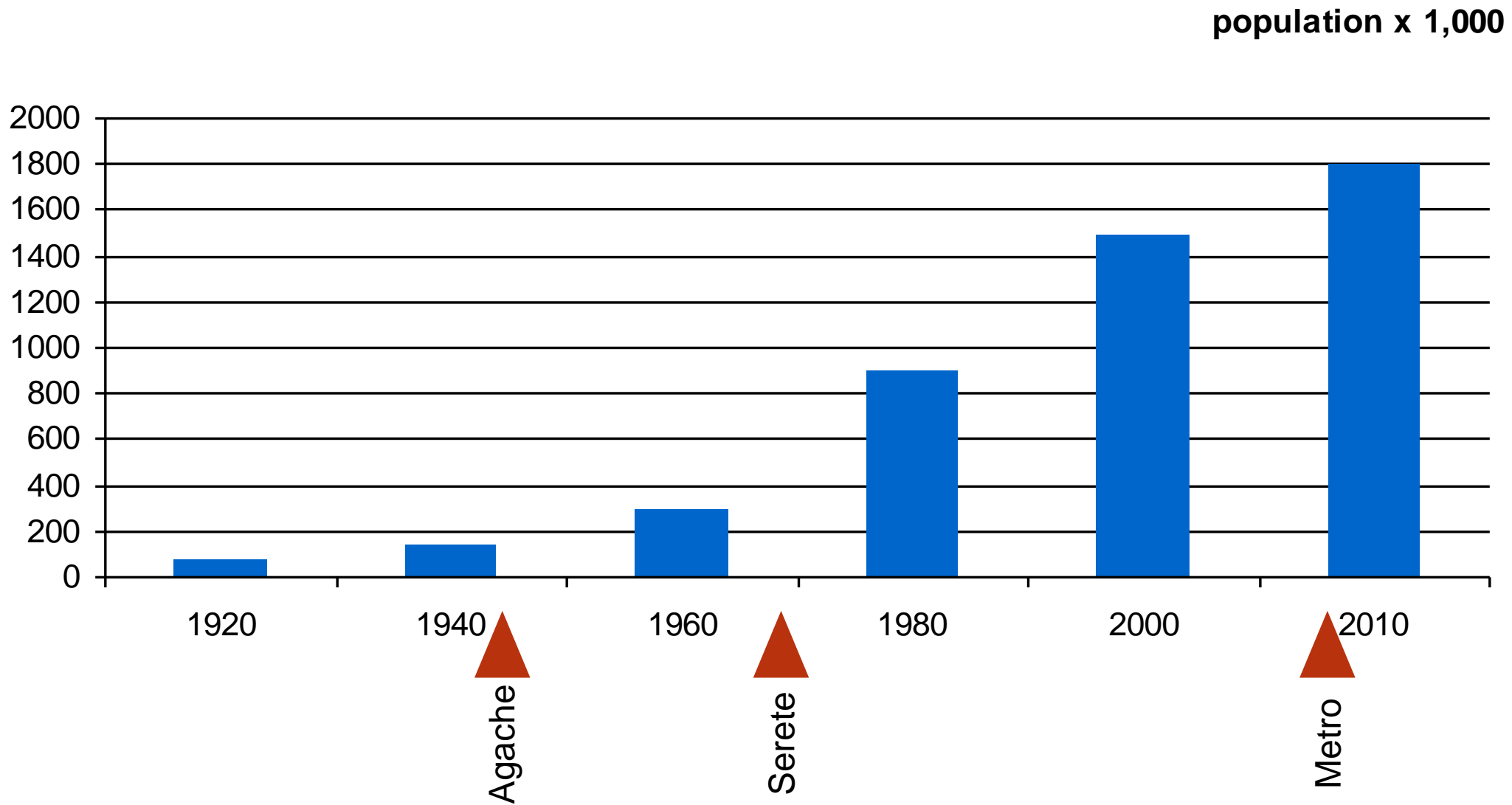




1.8 million inhabitants

3 million in the metropolitan area

430 km<sup>2</sup>



a growing city





Divulgação

**1972** transport and road system  
dedicated lanes





2012 high density along the transport corridor



# elements of a **full brt**

dedicated lanes  
specific terminals and stops  
special vehicles  
operation and service plan  
fare collection  
information technology systems  
marketing

the **success of brt** results from a permanent struggle to fulfil all demands that should be provided by rail




**tubes** special stops for special vehicles





**express lines** longer buses stopping only at the terminals





. fleet 1,920 buses  
. lines 355  
. terminals 30  
. tubes 362  
. daily km 478,000  
. private operators 11

. passengers / day 2.3 million (1.2 million fares paid, due to integration and 15% of gratuities)

**Integrated Demands**

**Costs and Revenue participation**

**Curitiba**

**92%**

**75%**

**Metropolitan Area**

**73%**

**25%**



## **transport and the city**

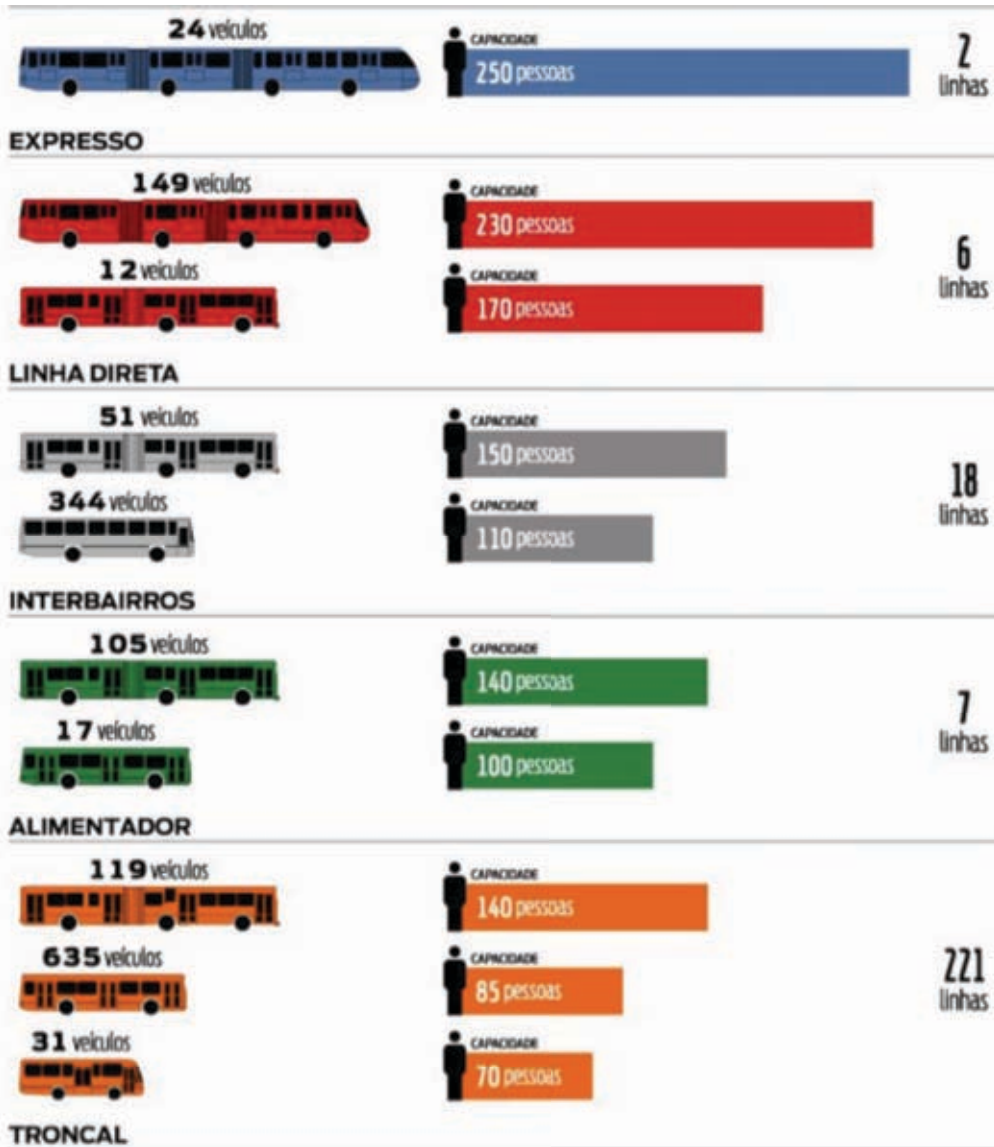
the success of curitiba's BRT has been never a matter of buses, but of planning urban development and transport together.

## brt in curitiba

curitiba's public transport is based on 4 elements

- . a complex **network of feeder lines**
- . link between **transport and road system**
- . link between **transport and land use**
- . BRT corridors keep the city at a **human scale**





**operation** lines, purpose and vehicles: dealing with complexity

1974



Corredor Norte/Sul

2009/2010



Linha Verde/Ligeirão Boqueirão

**RIT** brt as a transport network

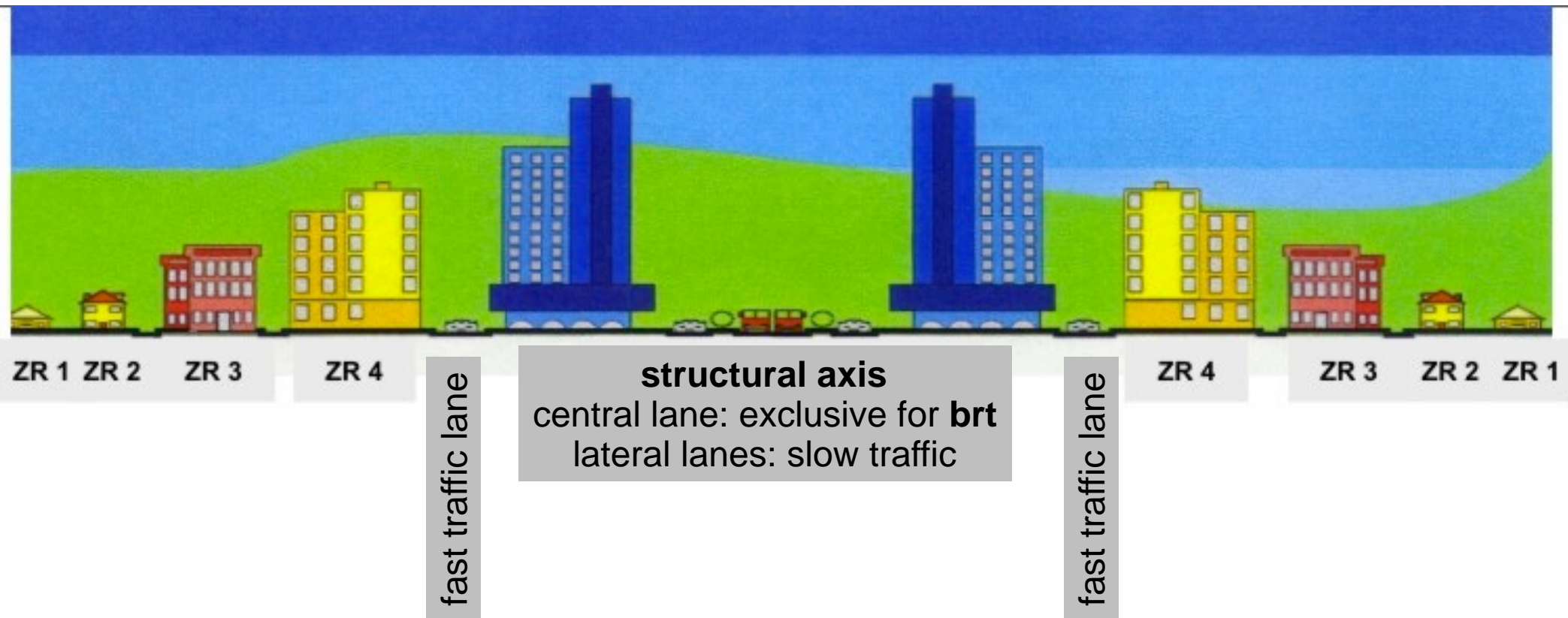


transport and zoning



## system

- . transport and zoning
- . transport and road system
- . transport hierarchical network



**structural axes** transport and land use  
1972



zoning  
high density



dedicated bus lane  
+ slow traffic

fast traffic

**structural axes** transport and land use

2010



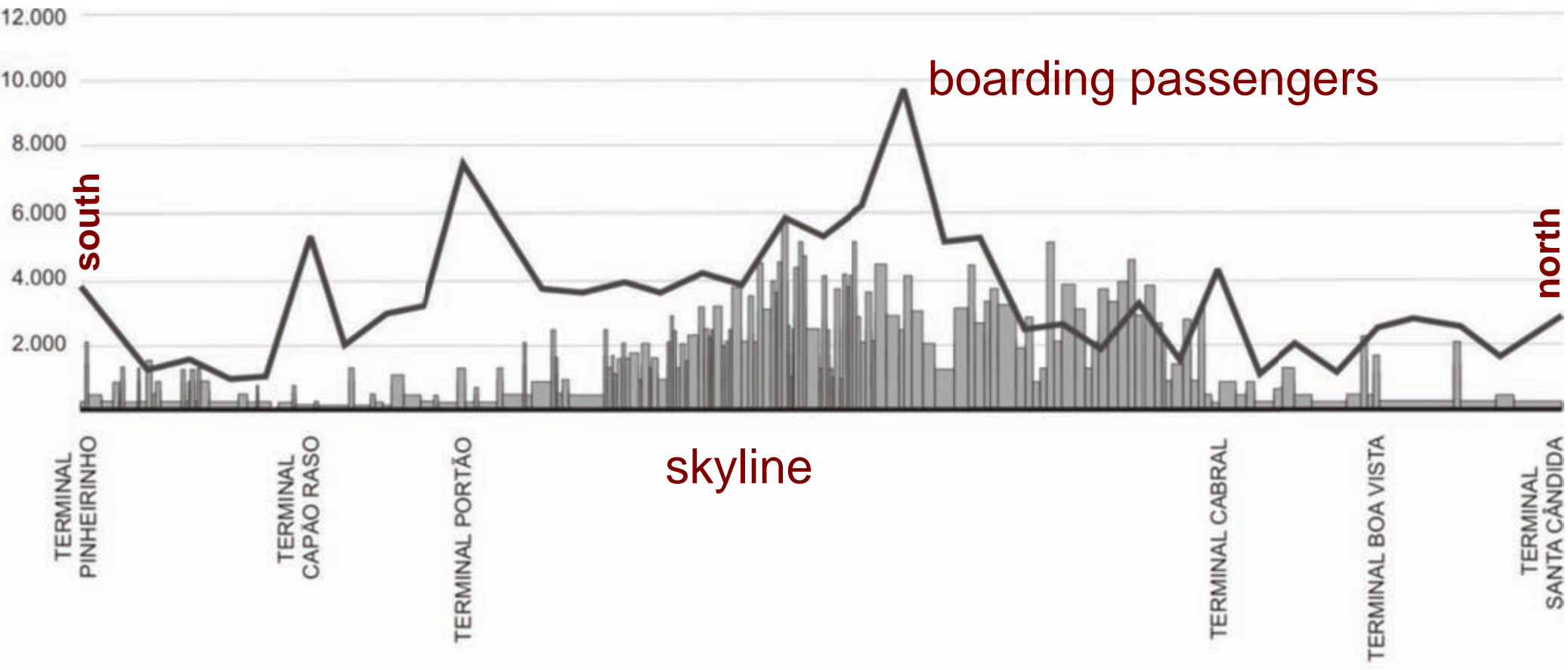




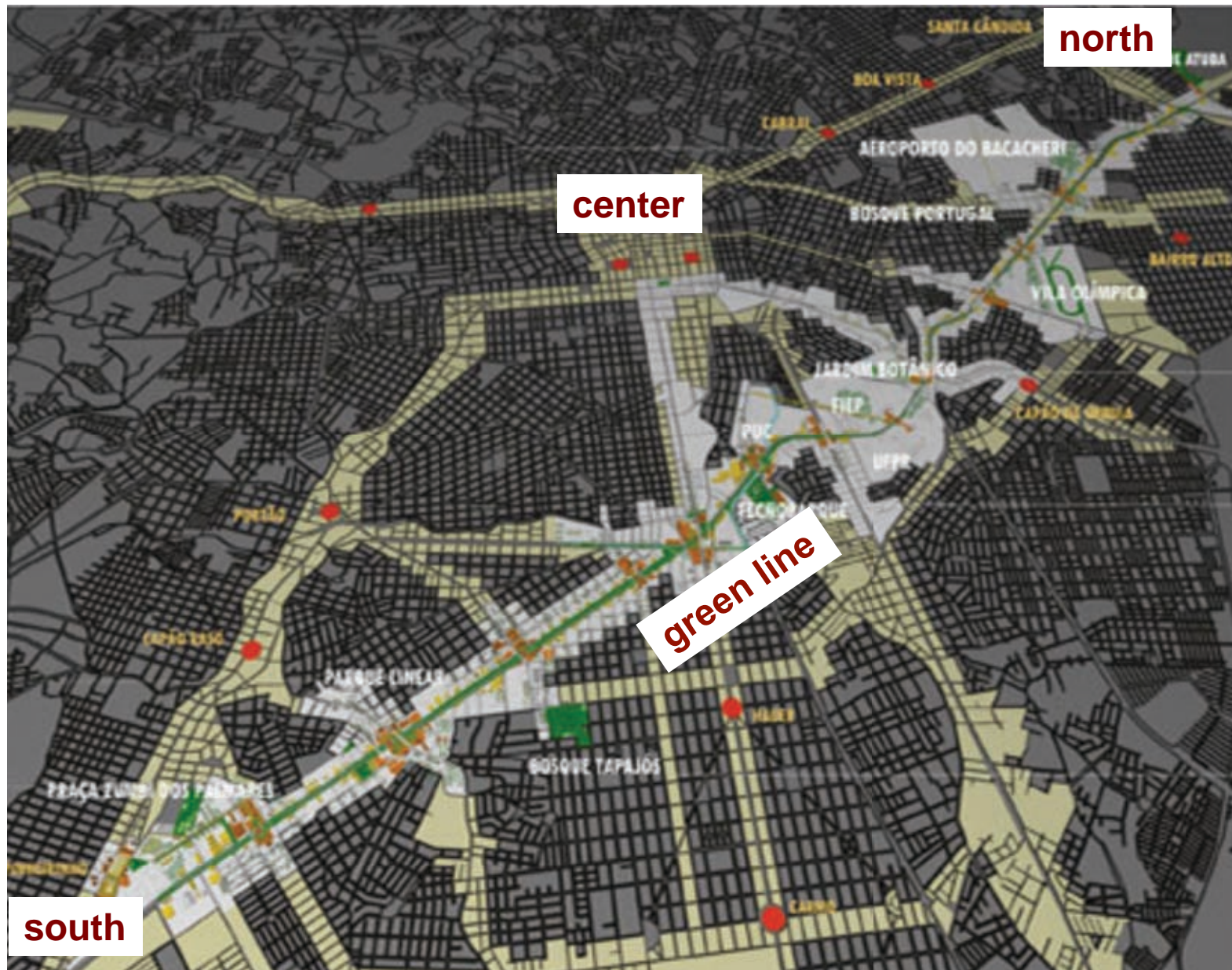
contemporary challenges  
metropolitan scale



# verticalization x boarding passengers



## green line: BRT shaping a metropolitan axis



an alternative north-south axis integrating the metropolitan area



## **green line:** BRT shaping a metropolitan axis



former federal highway: transport and land use



## **green line:** BRT shaping a metropolitan axis



**TOD needs to transform the city, not only transport.**





obrigado // thank you // merci // धन्यवाद