# Porto – planning for people, not cars



#### John Bartlett

Towards Carfree Cities Conference IX York

28 June 2010

#### Location of Porto



#### Porto snapshot

•Population 1.5 million people in greater metropolitan area (814km<sup>2</sup>)

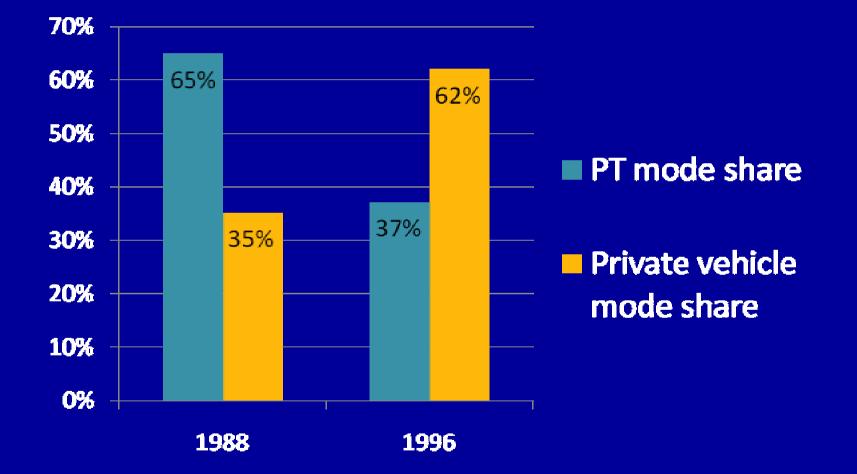
•Density 6316 persons per km<sup>2</sup> in Porto Council area

• General industry, the Port wine industry, retail and tourism are the biggest sectors of the local economy

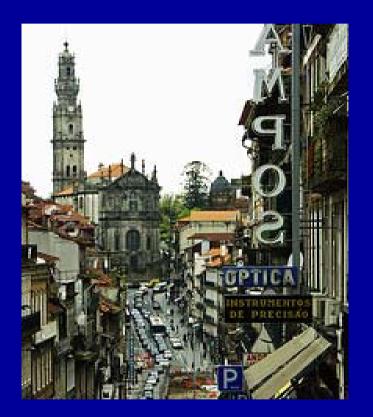
•Porto is the second largest city in Portugal. Situated on the Douro River near its mouth at the Atlantic Ocean.

7 councils in greater metropolitan area. No State Governments.
National Government located in Lisbon. Member of European Union (EU) which is based in Brussels, Belgium.

### The problem...



# The huge fall in public transport use led to worsening traffic congestion



Porto's leaders wanted to ensure that Porto remained an attractive city to live and invest in



## Porto had diesel metre gauge railways



## An unreliable bus service



# Old trolley buses

# 196

A rundown tram system gradually being abandoned



Porto's leaders visited Strasbourg and were impressed by what they saw

Timeline of project

- 1993 Metro do Porto SA established
- 1994 Expressions of Interest sought
- 1997 Decision made to proceed with project
- 1998 Contract awarded to Normetro consortium
- 1999 Construction begins

- 2001 Inner city narrow gauge railway line closed for conversion to light rail
- 2002 Light rail services commence between Trindade and Matosinhos Remainder of narrow gauge railway lines close for conversion to light rail
- 2004 New line opens from Trindade to Estádio do Dragão in time for UEFA Cup
- 2006 30 additional LRVs ordered to cater for growth
- 2008 Phase 1 completed Decision made to proceed with phases 2 and 3
- 2009 Construction starts on first lines of phase 2 First additional LRVs enter service

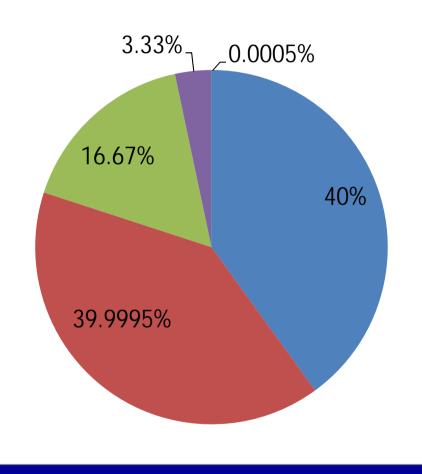


The Porto light rail project did not originate from the national government



#### The project was a local government initiative

#### Metro do Porto ownership



- National Government
- Area Metropolitana do Porto
- STCP
- CP
- 7 Councils



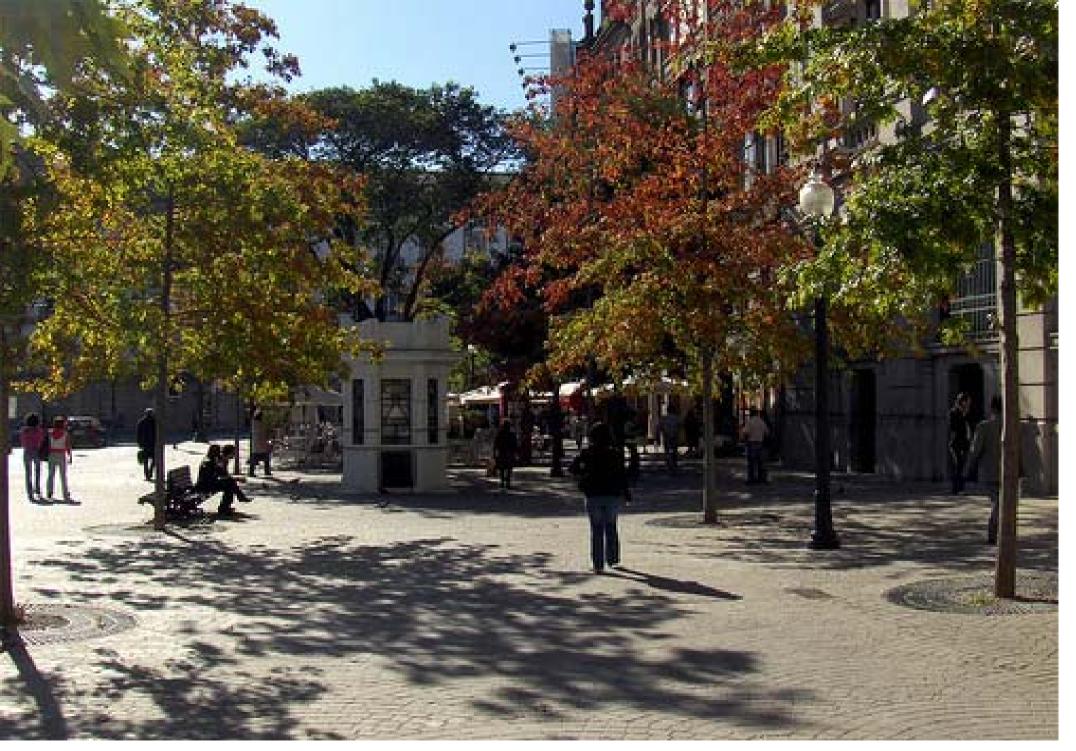
Visionary local government leaders promoted the initial project and subsequent expansion. Rui Rio, President of Porto Council, President of Área Metropolitana do Porto and a board member of Metro do Porto SA, has improved the liveability of Porto through public transport and streetscape projects.



The light rail operates through some pedestrianised areas



The light rail project has been accompanied by streetscape improvements. Pedestrian spaces have been enlarged. Bus terminals and layover areas have been moved away from the main street.



This was formerly a bus layover area. Note the disused Inspectors cabin



The Porto light rail offers easy access to all members of the community



Example of centre street reservation. Traffic lanes were reduced to make way for light rail. Light rail vehicles have priority at *all* traffic lights on the network (no waiting!). Light rail operates in tunnels, former heavy rail reservations, pedestrianised streets and centre street reservations.



A new road bridge was built to replace the top deck of the Dom Luis IV bridge which became the means for the light rail to cross the Douro River



Light rail vehicles shown on the top deck of the historic double deck Dom Luis IV bridge. The fleet comprises 72 Eurotram LRVs which each seat 80 with a capacity of 216 passengers and 30 Flexity Swifts which each seat 100 with a capacity of 248 passengers.

Light rail vehicle operating along former heavy rail reservation



The vehicles feature bright and spacious interiors Porto Council wants to obtain maximum benefit from light rail by making more bus routes feeder services. This will further reduce congestion in the Porto CBD and Boa Vista areas.





# Phases 2 and 3 routes have been determined by analysis of population density



#### In 2008 Metro do Porto won UITP Award for best new light rail network



#### 



Network as at 27 May 2008 (60 kms, including 7 kms underground)



#### Metro do Porto network 2022

#### Key to map:

Blue – In operation now Red – Phase 2 (2009 - 2017) Yellow – Phase 3 (2018 – 2022)

#### Benefits:

- Reduced traffic congestion
- Growing public transport use
- Allows many workers to go home for lunch
- Reduced vehicles in CBD
- World class public transport solution
- Accompanied by streetscape improvements
- Enhanced civic pride
- Reduced CO<sub>2</sub> emissions

In short, Porto is now a much better place in which to live!

Lessons for other cities:

•Councils *can* take the lead in promoting large scale infrastructure projects that are bigger than their financial capacity

•Councils are the level of government most aware of local needs and the best ways of meeting them

•Attractive, reliable public transport is a vital component in rejuvenating cities and improving the quality of life in cities



(Thank you!)

#### Perguntas (questions)

