



EMTA barometer

EUROPEAN METROPOLITAN TRANSPORT AUTHORITIES

Foreword

▶ The association of European Metropolitan Transport Authorities (EMTA) brings together the public authorities responsible for planning, co-ordinating and funding the public transport systems of 31 of the European largest metropolitan areas.

A precise knowledge of reality is a prerequisite to define pertinent policies. This is particularly true in the field of public transport, where decisions affect the daily lives of millions of people and where the investment and operation costs of complex systems often amount to millions of euros, if not billions. They also have a determinant impact on the economic dynamism and environmental quality of urban areas.

In this context, **comparison of data between territories facing the same kinds of challenges ("benchmarking") is a useful source of information for decision makers.** One always learns by taking some distance from one's own local context and by looking at how others proceed. The *EMTA Barometer of public transport in the European metropolitan areas* aims to provide such comparative insight.

“Public transport authorities are the only organisations with a broad view of mobility issues in large urban contexts.”



Where they exist, **public transport authorities are the only organisations with a broad view of mobility issues in large urban contexts.** Metropolitan areas have indeed multi-modal and multi-operators public transport networks. But these different means shall not hide the reality of trips as perceived by passengers, which is, or shall be, that of integrated systems. Data collection shall therefore be a key responsibility of public transport authorities. To achieve this end, it is important to:

- **define pertinent territories**, corresponding to the reality of mobility of people. In too many cases, analysis is still confined to the administrative boundaries of local authorities or to the territory served by a given transport company, which don't always fit with the territory experienced by the people;
- **determine a set of key indicators** that shall be collected and reviewed regularly so as to have a clear view of the main trends under way;
- **take into account not only public transport, but also mobility in a broader sense**, including of course trips involving private cars, but also taxis, bicycle, and walking.

The difficulties and biases in the collection of data are well known from experts. EMTA thinks it is time that a process of harmonisation of definitions could be undertaken at the European level, in co-operation with the representatives of the public transport sector. On its side, EMTA has collected data from the public transport authorities of the European large cities. A first edition of this Barometer was published in 2002. This note is a summary of the second edition, released in 2004.



Presentation

Presentation of the 2nd edition of the EMTA Barometer

■ **21 metropolitan areas are listed in the second edition of the EMTA Barometer of public transport:** Athens, Barcelona, Berlin-Brandenburg, Bilbao, Birmingham-West Midlands, Brussels, Dublin, Frankfurt RheinMain, Helsinki, Lisbon, London, Madrid, Manchester, Paris Ile-de-France, Prague, Seville, Stockholm, Valencia, Vienna-Eastern Austria, Warsaw, and Zurich. These metropolitan areas vary heterogeneous in terms of surface and population.

Description of the metropolitan areas surveyed

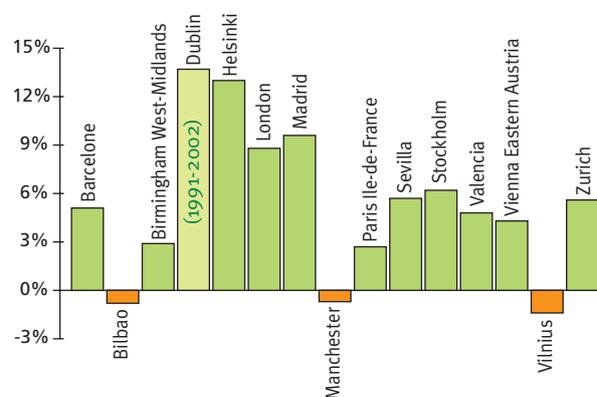
	Authority responsible	Population (inhabitans)	Surface (km ²)	Annual GDP per capita (€)
Athens	OASA	3 659 145	1 450	12 700
Barcelona	ATM	4 482 623	3 236	20 146
Berlin-Brandenburg	VBB	5 987 640	30 367	19 000
Bilbao	CTB	1 145 709	2 217	18 525
Birmingham West-Midlands	Centro	2 555 592	899	16 660
Brussels	Region	2 334 826	5 162	50 000
Dublin	DTO	1 535 000	969	36 500
Frankfurt RheinMain	RMV	5 256 937	13 374	29 320
Helsinki	YTV	965 000	750	37 000
London	TfL	7 410 800	1 580	25 334
Madrid	CTM	5 423 384	8 030	22 818
Manchester	GMPT	2 482 352	1 272	13 832
Paris Ile-de-France	STIF	10 952 000	12 070	37 472
Prague	ROPID	1 663 056	3 749	8 470
Sevilla	CTS	1 121 208	1 387	15 457
Stockholm	AB SL	1 850 000	6 500	38 000
Valencia	ETM	1 562 342	1 503	16 181
Vienna Eastern Austria	VOR	2 616 000	8 841	24 400
Vilnius	MESP	553 300	402	4 229
Warsaw	ZTM	1 630 000	518	
Zurich	ZVV	1 223 101	1 834	48 000

European metropolitan areas keep growing but have various demographic structures

Most urban areas surveyed have seen an increase of their population over the past 10 years. The average growth rate is around 5% for the cities which have provided data, Dublin ranking first with a growth estimated at 12.4% for the period 1992-2002 (the percentage available is 13.7% between 1991 and 2002). Helsinki comes second, with a growth of nearly 13%, followed by Madrid (+9.6%) and London (+8.8%).

The weight of the main city over the whole metropolitan area is roughly a 40% of total population with large differences, illustrating the diverse administrative frameworks and histories of the cities.

Population Evolution (1992-2002)



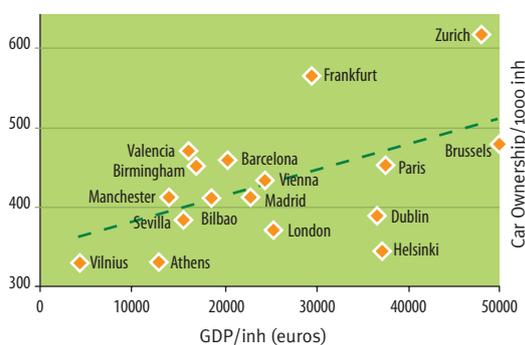
Car ownership rates are nearly twice as high in some cities as in others

(more than 600 cars per 1,000 inhabitants in Zurich vs less than 350 in Athens and Vilnius). Regression analysis seems to show a weak link between economic wealth and car ownership rates, on the one hand, and car ownership rates and car

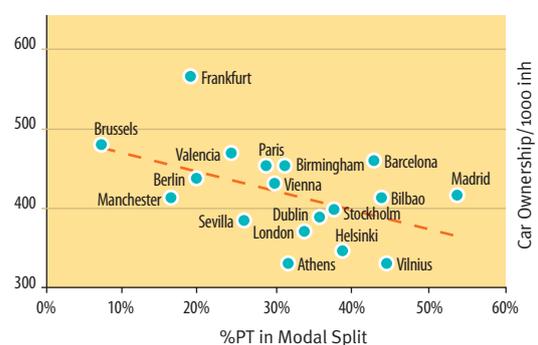
modal split, on the other hand, with large variations in some cases.

Other factors like urban density, family size, existence of efficient public transport systems, or the cost of using and parking of cars can lead to lower car ownership rates.

Relationship between Car Ownership and GDP per capita



Relationship between Car Ownership and Public Transport Share



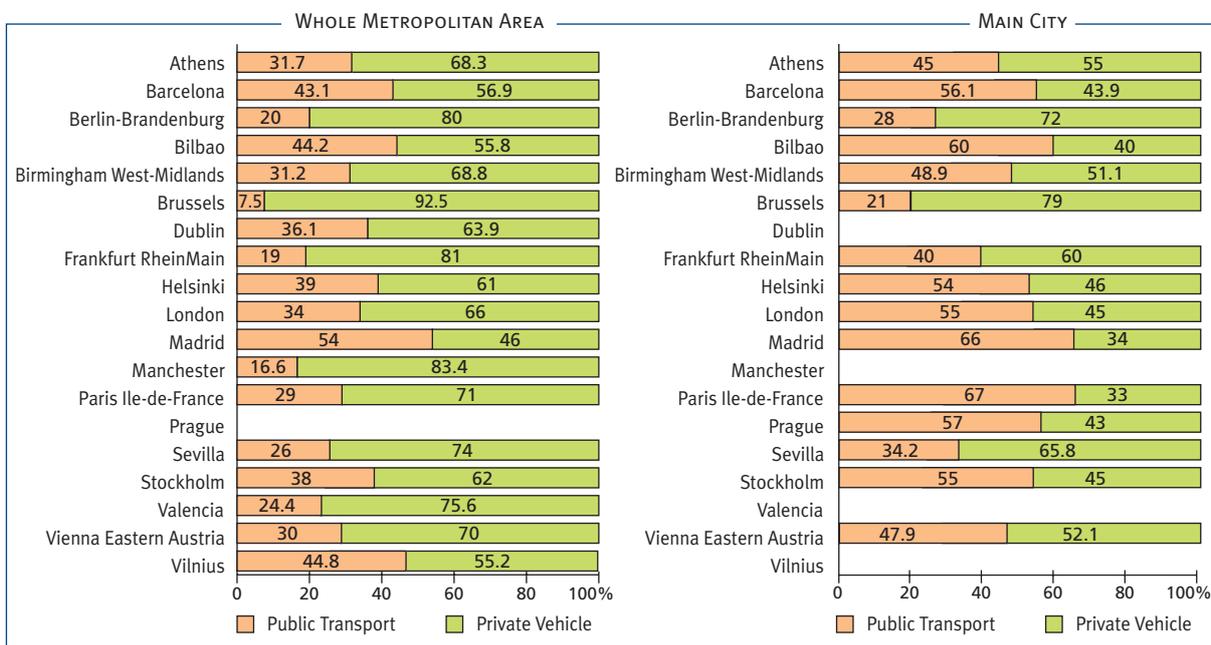


Public transport accounts for more than 50% of all motorised trips in the densest parts of most European metropolitan areas, illustrating its fundamental economic, social, and environmental role in large urban territories. Madrid is the only major European metropolitan area among those surveyed, where public transport accounts for more than 50% of all motorised trips (54%). Other metropolitan areas with more than one third of motorised trips done by public transport include Barcelona, Bilbao, Dublin, Helsinki, London, Stockholm, and Vilnius. In the main city of the metropolitan areas, a majority of

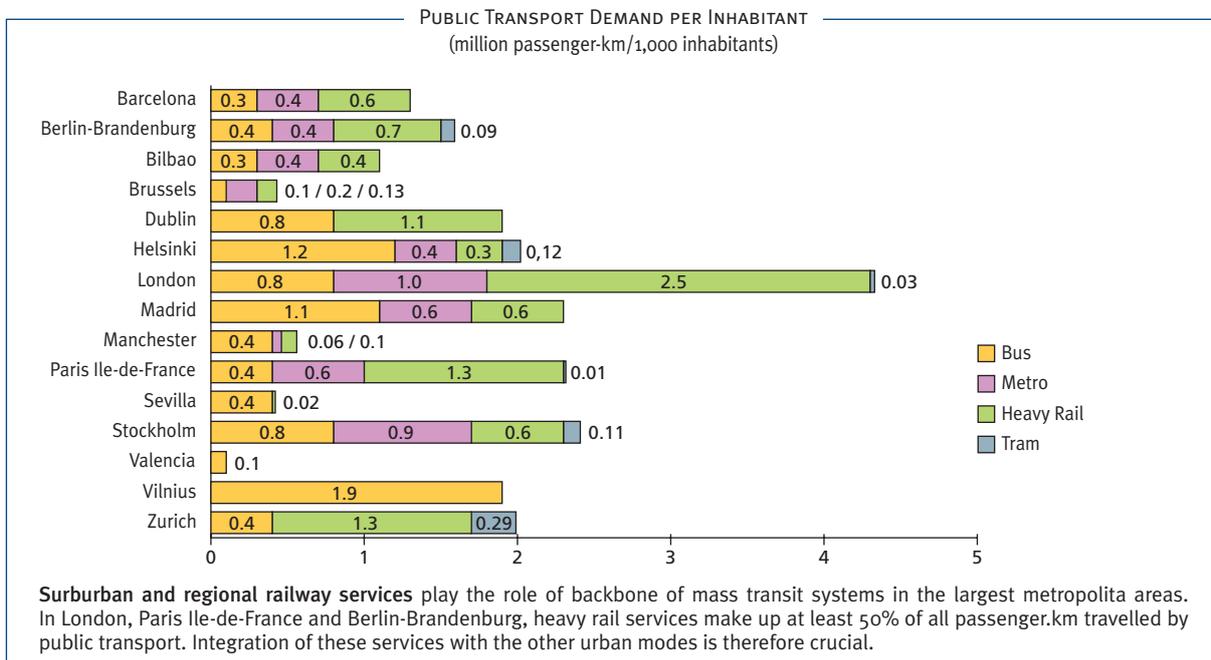
cities achieve more than 50% of modal share for public transport, Paris and Madrid leading with a rate of two thirds of all motorised trips, illustrating the very dense public transport systems irrigating the heart of the two capital cities.

The strong gap between modal share in the main city and in the whole metropolitan area (where public transport accounts, in average, for 30% of motorised trips) illustrates one of the main challenges facing public transport authorities and operating companies in the coming years: develop public transport in the suburbs and the less dense parts of the metropolitan areas.

Use of public transport varies a lot between cities:



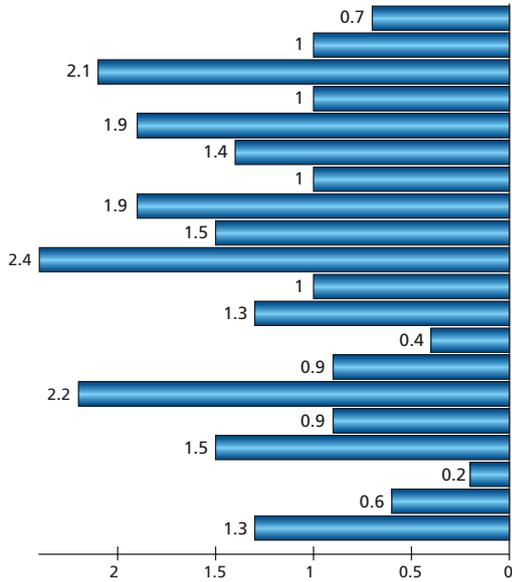
Suburban and regional railway services:



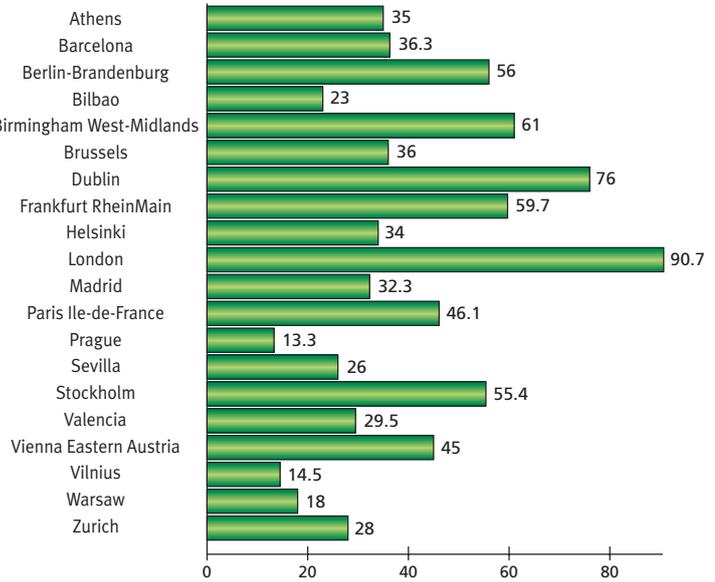
Suburban and regional railway services play the role of backbone of mass transit systems in the largest metropolitan areas. In London, Paris Ile-de-France and Berlin-Brandenburg, heavy rail services make up at least 50% of all passenger.km travelled by public transport. Integration of these services with the other urban modes is therefore crucial.

■ **Fare policies and fare levels differ a lot between the different metropolitan areas**, the price of a single ticket varying from less than 0.50 euros up to more than 2 euros for similar trips.

Price of single ticket valid for one metro trip in centre of metropolitan area (euros)

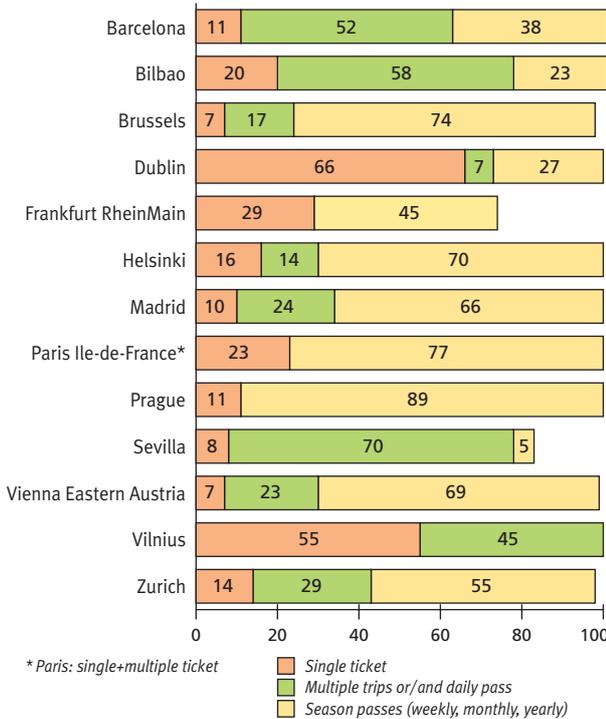


Price of monthly pass in centre of metropolitan area (euros)



■ **The share of season passes in public transport varies a lot between the different metropolitan areas**, with a group of cities having more than 50% of all passengers using season passes.

Use of different travel tickets (%)



■ **The rates of coverage of costs of operation by fare revenues are also varying greatly**, some cities nearing balanced situation, while in others, it is much below 50%.

Coverage of Costs of Operation by Fare Revenues

