Directory

of public transport
in the European metropolitan areas

2003 - 2004

EMTA
EUROPEAN METROPOLITAN TRANSPORT AUTHORITIES

EDITORIAL

The association of European Metropolitan Transport Authorities (EMTA) celebrates its fifth birthday this year. At this occasion, EMTA has decided to publish a Directory of public transport in the European metropolitan areas highlighting the current challenges of mobility in the European largest cities and the actions of public transport authorities to bring adequate solutions to these challenges.

The 1990's have seen major improvements in the public transport systems of the European cities, with numerous extensions of transport networks, improvements of the quality of services provided, the introduction of intelligent transport systems, the integration of fare policies and of services provided by different operators, and lastly the investments undertaken so as to improve the accessibility of the transport services. In most cities, these improvements have led to increased patronage, illustrating that the decline of public transport can be reversed under certain conditions.

Concerning the organisation and funding of the transport systems, many public transport authorities have been set up or modernised over the past ten years, and contracts with transport companies have been signed in nearly every city. These initiatives, which are often not visible from the passenger's point of view, are very important to secure a stable institutional framework taking into account the needs of passengers, of taxpayers, and of society as a whole. They are also fully in line with the objectives of the European Union, which is getting more and more involved in the shaping of the future mobility of the European citizens.

Lastly, competitive procedures to award contracts have been introduced in most countries, leading to the concentration of the transport industry and to the constitution of multi-national operating companies.

As the reader will understand from this Directory, public transport authorities, which have long been quite absent from the debate concerning public transport, are back on the stage. This is a consequence of decentralisation and devolution processes implemented in most countries, of the need to reach strong political decisions to reduce the usage of private cars, and lastly of the wish of authorities to get more quality and more efficiency from their transport companies. And this trend is certainly reassuring, since the development of competition will only bring positive results if, at the same time, public authorities have enough expertise, power, and financial resources, to define what should be the public service requirements of their transport systems and to ensure that they are provided accordingly.

I invite you to discover the activities of the passenger transport authorities of the European metropolitan transport authorities which make up EMTA. These authorities are dedicated to improving the mobility conditions of more than 70 million European citizens.

Stéphane Lecler
Secretary General of EMTA


ALSTOM
Les paysages défilent
Le nez à la fenêtre
Les yeux vers l'horizon
Laura, déjà sur la bonne voie.
Demain, les jeunes se déplaceront toujours plus loin, toujours plus vite. Les progrès réalisés dans le transport ferroviaire feront des trajets de la génération du XXIe siècle un véritable jeu d'enfant. ALSTOM a compris cet enjeu et ne cesse d'anticiper ce que seront les transports ferroviaires de demain : des trains sûrs, rapides, confortables et performants. Nos ingénieurs développent des solutions innovantes dans tous les domaines du transport de passagers comme de marchandises : matériel roulant, signalisation, infrastructure et maintenance. Mais ALSTOM ne s'arrête pas là et va encore plus loin dans son expertise en proposant des solutions financières sur mesure à chacun de ses clients. C'est certain, nous accompagnerons ceux qui demain iront loin.
ALSTOM, le spécialiste global des infrastructures pour l'énergie et le transport
TRANSPORT • 48, rue Albert Dhalenne • 93482 Saint - Ouen Cedex • France
Tél. : 33 (0) 1 41 66 90 00 • Fax : 33 (0) 1 41 66 96 66
www.transport.alstom.com
© - ALSTOM - 2002 - Bon Angle

SUMMARY

connex

Transport – the key to mobility!

Connex is Europe's leading private operator of public transport networks under contract. Connex manages and operates a large variety of urban, regional and national road and rail networks in 22 countries around the world. Connex brings people together by organizing the travel of more than 1,4 billion passengers every year. Our towns and cities need to get traffic flowing – 55 000 Connex employees help them do just that !

VEOLIA Environnement

IKONEO

EMTA

EUROPEAN METROPOLITAN TRANSPORT AUTHORITIES

PRESENTATION OF THE ASSOCIATION
OF EUROPEAN METROPOLITAN TRANSPORT AUTHORITIES (EMTA)

The association of European Metropolitan Transport Authorities (EMTA) was created in 1998 so as to form a venue for exchange of information and best practices between the public authorities responsible for planning, integrating and financing public transport services in the largest European cities. Five years after its creation, it now brings together 28 such authorities, responsible for improving the mobility conditions of some 70 million European city dwellers.

The activities of EMTA consist mostly in:

- **exchange of information between the Member authorities** through regular meetings, the pages reserved to the members on EMTA's website, and the quarterly letter of information EMTA News;
- **permanent assistance** by the secretariat general when the Members need information or advice;
- **information of the members** on the latest developments of transport issues at the European level;
- **research and benchmarking so as to improve the knowledge and competence of public transport authorities.** Working groups dedicated to accessibility of public transport systems to people with reduced mobility, electronic ticketing and funding of public transport through land value capture have been set up. Surveys have been ordered and their conclusions are available on EMTA's website;
- **publication of a quarterly letter of information** about the latest news of public transport in the European metropolitan areas.
- **edition of a Barometer of public transport** in the European metropolitan areas, summarising the main statistics about some 20 urban territories;

- **organisation of workshops and conferences on issues of common interest:** contracts in the field of public transport (Rome, Nov. 2000), missions and organisation of public transport authorities (Barcelona, Nov. 2001), co-ordination between transport and land use policies (Frankfurt, Oct. 2002), relationships with transport operating companies (Vienna, Feb. 2003), accessibility of public transport systems (Brussels, Nov. 2003). The proceedings of these workshops are available on EMTA's website;
- **representation and defense of the interests of public transport authorities** at the European and international levels;
- **adoption of common positions on issues of common interest** (draft European regulation on public service requirements, Green Paper on services of general interest).

www.emta.com

The association is controlled by a board elected every two year by the general meeting of the members. The current board consists of:

- AB Storstockholms Lokaltrafik (AB SL) as President;
- the Consorcio regional de Transportes de Madrid (CRTM) and Syndicat des Transports d'Ile-de-France (STIF) as Vice-Presidents;
- Ministère de la Région de Bruxelles-Capitale as Treasurer.

The association is managed by a Secretary general placed under the authority of the President.

EMTA Members
ON 1ST SEPTEMBER 2003

METROPOLITAN AREA	TRANSPORT AUTHORITY	POPULATION
AMSTERDAM	Regionaal Orgaan Amsterdam (ROA)	1,800,000
ATHENS	Athens Urban Transport Organisation (OASA)	3,700,000
BARCELONA	Autoritat del Transport Metropolità (ATM)	4,300,000
BILBAO	Consorcio de Transportes de Bizkaia (CTB)	1,000,000
BIRMINGHAM WEST MIDLANDS	West Midlands Passenger Transport Authority (Centro)	2,600,000
BRUSSELS	Ministère de la région de Bruxelles-Capitale	1,500,000
DUBLIN	Dublin Transportation Office (DTO)	1,100,000
FRANKFURT RHEINMAIN	Rhein-Main Verkehrsverbund GmbH (RMV)	5,000,000
GENEVA	Office des Transports et de la Circulation (OTC)	400,000
HELSINKI	Helsinki Metropolitan Area Council (YTV)	950,000
LISBON	Autoridade Metropolitana de Transportes	2,500,000
LONDON	Transport for London (GLA-TfL)	7,100,000
MADRID	Consorcio Regional de Transportes de Madrid (CRTM)	5,100,000
MANCHESTER	Greater Manchester Passenger Transport Executive (GMPTE)	2,600,000
MILAN	Comune di Milano - Assessorato ai Trasporti	3,700,000
OSLO	Oslo Sporveier (OS)	800,000
PARIS ILE-DE-FRANCE	Syndicat des Transports d'Ile-de-France (STIF)	11,000,000
PRAGUE	Prague Transit Authority (ROPID)	1,600,000
ROME	Comune di Roma - Assessorato ai Trasporti	3,000,000
SEVILLA	Consorcio de Transportes del area de Sevilla(CTS)	700,000
STOCKHOLM	AB Storstockholms Lokaltrafik (AB-SL)	1,800,000
VALENCIA	Entidad Publica de Transporte Metropolitano (eTM)	1,300,000
VIENNA	Verkehrsverbund Ost-Region GmbH (VOR)	1,800,000
VILNIUS	Susiekimo Paslaugos (SP)	700,000
WARSAW	Komunikacja miejska w Warsawie (ZTM)	2,500,000
ZURICH	Zürcher Verkehrsverbund (ZVV)	1,200,000

ASSOCIATE MEMBERS

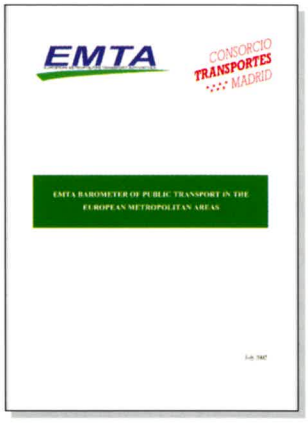
Associazione delle Città Italiane per la mobilità sostenibile
Verkehrsverbund Berlin Brandenburg (VBB)

PUBLICATIONS AVAILABLE ON EMTA'S WEBSITE

www.emta.com

EMTA News, the quarterly letter of information of EMTA (14 issues since July 2000, with a summary of all articles released)

EMTA Barometer of public transport in the European metropolitan areas (editon 2002 and update 2003)



EMTA position papers

- Position of the transport authorities of EMTA on the Green Paper of the European Commission on services of general interest (July 2003)
- Expectations of the public transport authorities of the European large cities for the future of public transport (April 2003)
- Position of EMTA on the draft new European regulation on public service requirements and public service contracts in the field of passenger transport (March 2003)
- Charter of commitment of the transport authorities of the European metropolitan areas concerning the accessibility of public transport systems to people with reduced mobility (February 2003)
- Position of EMTA transport authorities on the proposal of the European Commission to harmonise taxation of commercial diesel fuel (December 2002)
- Position of EMTA on the White Paper of the European Commission on the Future of the European Transport Policy (December 2001)

EMTA workshops

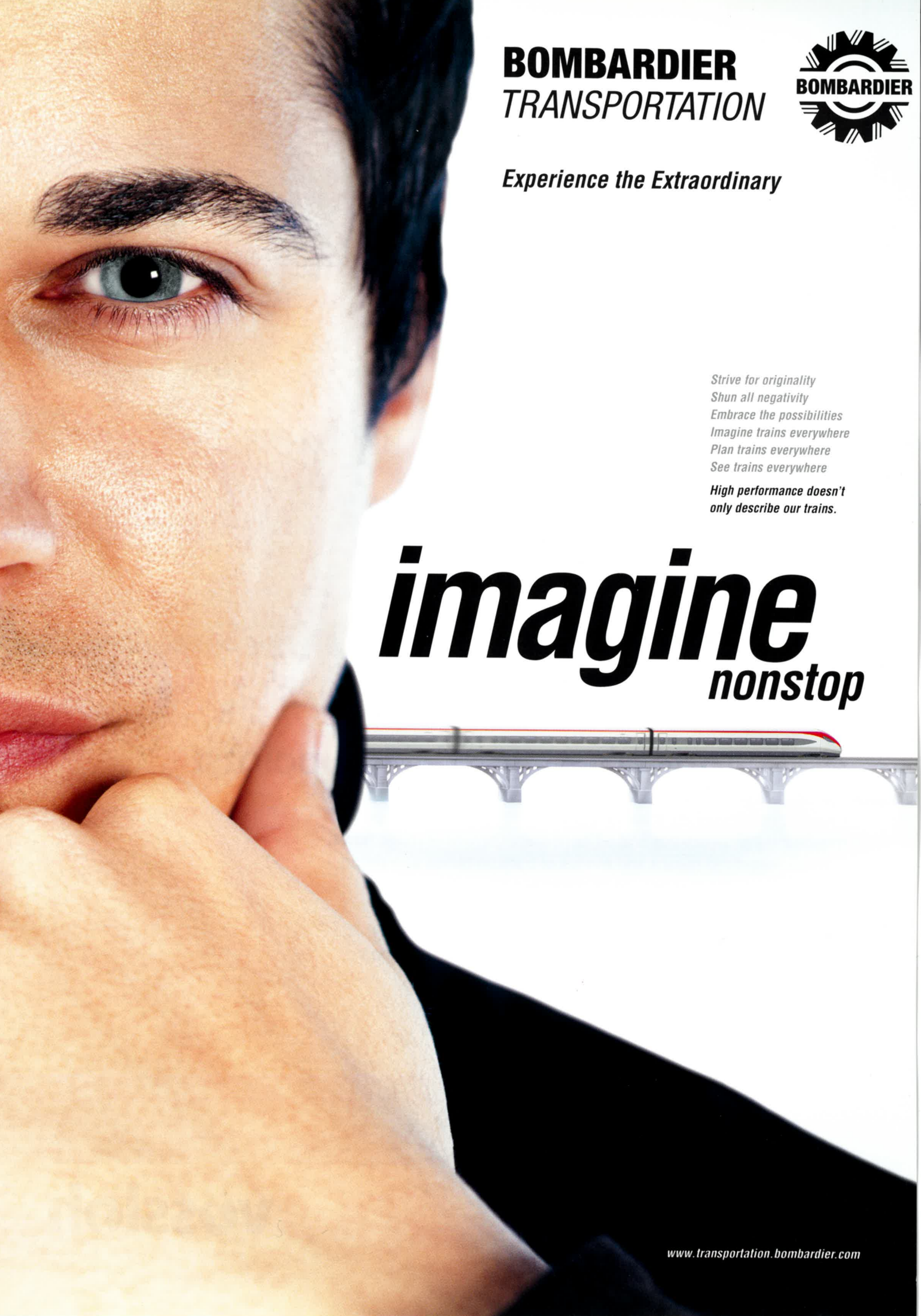
- EMTA UITP Workshop on contractual relationships between authorities and operators (Vienna, February 2003)
- EMTA workshop on "Transport and land use policies: what lessons for public transport authorities ?" (Frankfurt, October 2002)
- EMTA workshop on public transport authorities in the European metropolitan areas (Barcelona, November 2001)
- EMTA workshop on contracts between transport authorities and network operators (Rome, 23 November 2000)

EMTA surveys

- Contribution of the transport authorities of the European metropolitan areas to the research project of the European Commission on integration of public transport systems (June 2003)
- Survey on information of people with reduced mobility in the field of public transport (June 2003)
- Comparative survey on the funding of public transport in the European metropolitan areas (2001)
- Report on mobility in the European metropolitan areas (May 2000)

For EMTA Members only

- Contracts between EMTA transport authorities and operating companies (in english)
- Working documents of thematic working groups on accessibility, electronic ticketing and funding of public transport systems through land value capture
- Records of decisions of meetings


BOMBARDIER
TRANSPORTATION
BOMBARDIER
Experience the Extraordinary
Strive for originality
Shun all negativity
Embrace the possibilities
Imagine trains everywhere
Plan trains everywhere
See trains everywhere
High performance doesn't only describe our trains.
imagine
nonstop
www.transportation.bombardier.com

Transport is one of tomorrow's major talking points:

Growing needs and rising mobility call for worldwide expansion of existing infrastructures and efficient management of traffic flows. Vossloh regards all means and modes of transportation as a single integrated system. Building on its decades of experience, the Company has evolved into a specialist in railway business, one able to identify the trends of the transport markets. Backed by this tradition, Vossloh has redefined its priorities, with transport at the focus of all its activities.

Vossloh Aktiengesellschaft
Vosslohstraße 4 · D-58791 Werdohl
P.O. Box 1860 · D-58778 Werdohl

Phone +49 (0) 23 92/52-0
Fax +49 (0) 23 92/52-219
www.vossloh.com

vossloh

SITUATION OF PUBLIC TRANSPORT IN THE EUROPEAN METROPOLITAN AREAS

CHALLENGES OF PUBLIC TRANSPORT
IN THE EUROPEAN METROPOLITAN AREAS AT THE BEGINNING OF THE 21ST CENTURY

Towards an urban world

75% of the European population now lives in urban areas, and this rate even reaches 80% in Western Europe[1]. Urban areas of more than 250,000 inhabitants account for one fourth of the population of our continent. Surveys of the Division of the population of the United Nations show that the fast urbanisation of Europe (+ 9% between 1980 and 1995) will go on at a pace of + 0.3% per year in average.

This trend can be regarded as a key opportunity. Urban areas are indeed the engines of economic development and of progress in society. Knowledge and the access to information will be the basis of wealth in the 21st century. Circulation of ideas and information is best achieved in cities, which have always been at the forefront of the transmission of knowledge and of technological innovations. The new technologies of information (Internet) haven't really changed that reality. Proximity and exchange are consubstantial with urban life. Cities are places where freedom (the medieval German saying that the air of city makes free is still true), tolerance, social blending, art creativity and emulation of all kinds can blossom. To put it in a nutshell, cities are places of civilisation.

© Johan Otto Von Spreckelsen

At the same time, the growth of urban areas can bring damages which public authorities have to cope with so as to provide sustainable urbanisation, and to enable cities to remain what they have always been: places where the quality of life is the best.

The harms are well known:

- damages to the quality of life and public health: extension of distances to the workplace, time spent in transport, road accidents (one third of the 40,000 people who die each year on the roads in the EU are killed in urban areas), breathing difficulties, psychological trouble and sleep disorders linked to noise, etc;

[1] *Source: Division of the population of the United Nations*

- economic unefficiency: the city focused on cars is sub-optimal in economic terms. Moreover, congestion which faces most cities is a source of economic waste;
- damage to the environment: air pollution, artificialisation of grounds, reduction of biodiversity;
- social segregation and creation of urban ghettos;
- damage of urban landscape with the monopolization of space - a rare and therefore precious resource – for traffic or parking;

Mobility issues lie at the core of these damages, and can be, provided that they are dealt with in an appropriate way, at the core of the solutions.

Public transport: at the service of a sustainable urbanisation

Public transport played a key role in the extension of urban areas in relation with the industrial revolution of the 19th century. The suburbs of most large cities have grown thanks to the fast extensions of tramways, metropolitan railways and suburban railways after 1830. The setting up of efficient public transport systems turned pedestrian cities, caracterised by a high compacity and density, into cities covering wider territories, although this spatial expansion didn't disrupt the urban organisation.

The fast growth in the use of the private car since 1950's has amplified this trend towards more spatial extension, and was regarded by some people as a universal solution to mobility problems. The private car was a symbol of freedom since it provided each one with door to door trips, and it was expected to replace progressively totally public transport.

However, the limits of this approach became progressively obvious and there has been a growing consensus since the 1970's on the necessity to keep high quality public transportation systems. But it is not easy to reverse such heavy trends. Between 1970 and 2000, the modal share of public transport

fell by 50% in average in Europe to reach around 16% of the total number of trips, while the share of the private car grew from 73.8 to 78.3 %[2].

The growth in car trips leads to a vicious circle: the more people own cars, the more they can settle away from city centres. As a result, they become even more dependent on their car, which keeps it very difficult to reverse the trend.

And yet, public transport systems have never been as useful as today, more especially in the case of metropolitan areas:

- public transport provides mobility for all, while the private car, although widespread as it can be, doesn't benefit to all the population. The freedom of movement which it brings depends on the age and the ability to run a car and to have sufficient means. Youngsters, elderly people, deprived persons, people suffering from a handicap, are generally excluded from the mobility provided by the private car ;
- only public transport is capable of carrying fast hundreds of thousands of persons, for example at peak hours;
- public transportation systems provide the best ratio of number of passengers carried on space consumption, and is therefore very well adapted to dense urban areas.

The very bad consequences of public transport disruptions illustrate better than long speeches how public transport are absolutely necessary for the viability of large urban areas.

Key success factors for the provision of high quality public transport systems

Public transport systems have a string potential of development over the coming years. To achieve this, they will have to provide an attractive alternative to the use of the private car.

The improvement of public transport will mean:

- **an increase in the provision of services and an adaptation to the new mobility needs:** people will only renounce using their car if they have at their disposal public transport services in sufficient quantity. This means a good service of the territory, large amplitudes of service, and a capacity in line with the demand. Demand responsive transport systems can open promising perspectives for the service of less dense territories and for night services.
- **a strong integration of networks,** so as to provide a seamless trip to passengers. This integration must cover the various transport companies of a given territory, as well as all the different public transport modes available. It must also include other transport means (private car, walking, cycling). Integration must be functional (networks are structured in a logical way), physical (no barrier from one mode to the other), and cover also fares and information.
- **an improvement in the quality of service.** Public transportation must provide a quality of service similar to that of private car, which has benefited largely of the technological progress of the past decades. The improvement of real time information, of regularity of services, of commercial speed, of comfort of waiting conditions and on-board, and of the level of accessibility to people with reduced mobility, are key factors. It is important to measure regularly the level of satisfaction of passengers so as to highlight the priorities for improvement.

© SNCF-CAV/Philippe Fraysseix

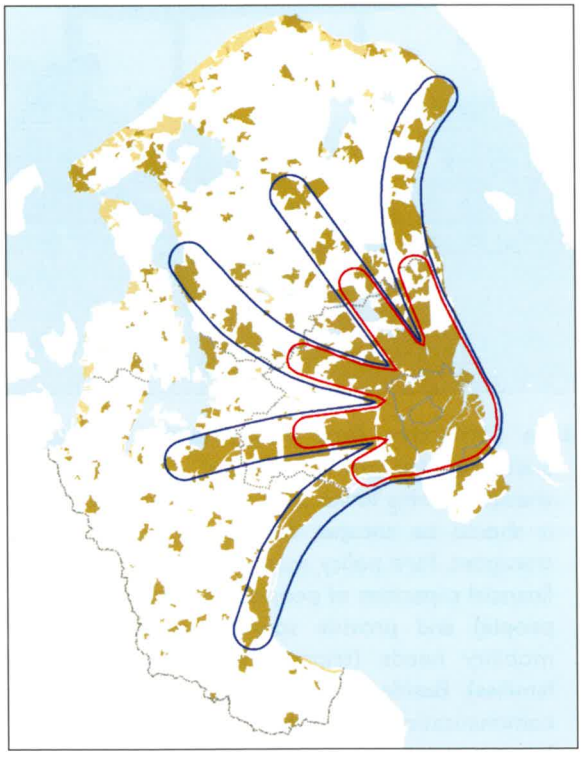
- **an attractive fare policy and a dynamic communication.** The social cost of public transport being lower than that of the private car, it should be cheaper for people to use public transport. Fare policy must take into account the financial capacities of people (youngsters, deprived people) and provide solutions to the specific mobility needs (trips with group of people, families). Besides, public transportation shall use communication and marketing tools so as to improve its image among people and thus compete on an equal basis with the private car, which can be seen everywhere in the media.
- **a strong focus on funding issues.** In most European cities, public transportation is not profitable without public subsidies. Fares enabling to

[2] *Source: EU Energy and Transport in figures, Statistical pocketbook 2002*

attract large numbers of passengers are usually inferior to the break even points of operating companies. It is therefore fundamental that public authorities agree to bring in public money, which can stem from overall public budget, or from dedicated resources. Internalisation of external costs of the private car, charging of road usage by private cars, funding of public transport projects through capture of land value, are promising ways. Public authorities must also see to it that the cost of operation of the networks for which they are responsible are reasonable, and that gains in productivity are chased by operators.

- **a co-ordination with policies of land planning and urban development,** so that the extensions of urban areas are compatible with public transport service. It is important to increase the density of territories well served by public transport systems, and to prevent developments attracting lots of people (business districts, commercial or leisure centres, major airports) from not being served by public transport.

The Finger plan in Copenhagen



The stakes for public transport authorities

Contrary to commercial sectors in which companies are free to define their strategies to meet the needs of customers, the field of public transport cannot be ruled only by market forces and calls for a strong involvement of public authorities. Public transport is indeed what can be defined as a service of general economic interest, that it to say that it meets requirements of the society as a whole, and that no one should be excluded from having access to it. Besides, the fact that this sector is, in most cases, not viable commercially without public money confirms that public authorities cannot ignore it.

The need for a strong involvement of public authorities

Public authorities have a key role to play in:

- the definition of the objectives of the policies of mobility. It is their responsibility to define what shall be the place of private cars in cities, what shall be the quantity and quality of the provision of public transport services, the level of accessibility of the services.
- the size of networks and the choice of transport modes to provide.
- the fare policy.
- the co-ordination of the policy in terms of public transport with regard to the other aspects of mobility issues (car traffic, parking, taxis, alternatives modes such as walking or cycling) and of public policies in general (land use planning, housing, etc.).

On these issues, authorities shall work closely with operating companies, which often have a strong technical expertise and can make interesting proposals, but the decision power shall remain in the hands of public authorities. This means that public authorities shall give themselves the human, technical, and financial means to develop their own expertise so as to be independent from companies.

The current trend that can be witnessed in most European countries leads to more devolution of powers from the central governments to local authorities for the organisation of local and regional public transport systems.

It is important that authorities responsible for organising public transport systems cover pertinent territories corresponding to the reality of the everyday trips of people. When several public authorities are concerned by mobility issues on a given pertinent territory, they should come together in a structure of co-ordination, like British PTAs, German Verkehrsverbund, French Syndicat mixtes and Spanish Consorcio de Transportes. This is a pre-requisite for the definition of an integrated policy of promotion of public transport.

The need for transparent and balanced relationships with transport companies

Contracts can be regarded as an interesting tool to manage relationships between authorities and companies in charge of operations. They enable to define clearly the responsibilities of each side and to determine the amount of public funds that shall be brought by the authority in exchange for the public service obligations imposed on the company. Contracts shall take into account the quality of service provided and contain incentives enabling to reward the company when it provides high quality services.

When public authorities own neither infrastructures nor rolling stock, they shall nonetheless ensure that these strategic assets are maintained in an appropriate way and meet the security and accessibility requirements.

If authorities decide to award contracts to companies from the market sector, the procedure shall be open, transparent and non-discriminatory.

The need for new sources of funds and for an optimisation of the money allocated to public transport systems

The necessary increase of the quantity and quality of public transport supply in urban areas will lead to a need of additional public money available, since it is not realistic to contemplate strong increases in fare levels. The authorities responsible for organising public transport systems have a direct responsibility in the search of new sources of funds an in the monitoring of production costs. They should also help operators reach high levels of efficiency through incentives and new technologies.

© RATP/Bruno Marguerite

Organising authorities must be at the forefront of the thoughts and alert national and supra-national authorities on the necessity to devise shortly new financial mechanisms. Unless this can happen, there is a strong threat that severe financial shortages will hurt lots of networks before the end of the decade.

The need for a pertinent level of subsidiarity

Although the responsibility for public transport organisation is mostly local, national and supra-national authorities also have a key role to play in the promotion of a sustainable urban mobility. The European Union, which has committed itself to reducing the emissions of greenhouse gases in the Kyoto protocol, cannot ignore the patterns of urban mobility, since this constitutes a potentially strong source of reduction of polluting exhausts. In the same way, issues such as the competition rules, transport infrastructure charging, safety of trips, to technical characteristics of vehicles (accessibility, energy consumption), and their standardisation, are in part of European interest.

The White Paper on the future European transport policy by 2010, released in 2001 by the European Commission, was a turning point in the understanding of the damages caused by the excessive use of the private car. However, this document doesn't focus enough on mobility problems in urban areas, where it is important to keep in mind that more than 75% of the European population live. The reference to the principle of subsidiarity and the fear to interfere with exclusive competences of more local authorities should not lead to forgetting that subsidiarity also means that it is the responsibility of authorities of higher level to reach the decisions which the lower levels cannot make.

The authorities responsible for public transport therefore expect from the European authorities and the national governments that they define more ambitious policies and commit more funds to the improvement of mobility conditions in the urban areas.

THE SETTING UP OF STRONG PUBLIC TRANSPORT AUTHORITIES:
AN ANSWER TO THE CHALLENGES FACING MOBILITY IN THE EUROPEAN METROPOLITAN AREAS

The organisation of public transport in the European large cities is a crucial, but very complex task

Public transport services are especially crucial in large cities since the high density of inhabitants and jobs makes space a very scarce resource. As a consequence, public transport, which is the most efficient mode of transportation in terms of space consumption per traveller, is the best answer to mobility needs in densely populated areas. Moreover, large cities suffer heavily from congestion and from the nuisances caused by the excessive use of private car, which affect the lives of thousands of people

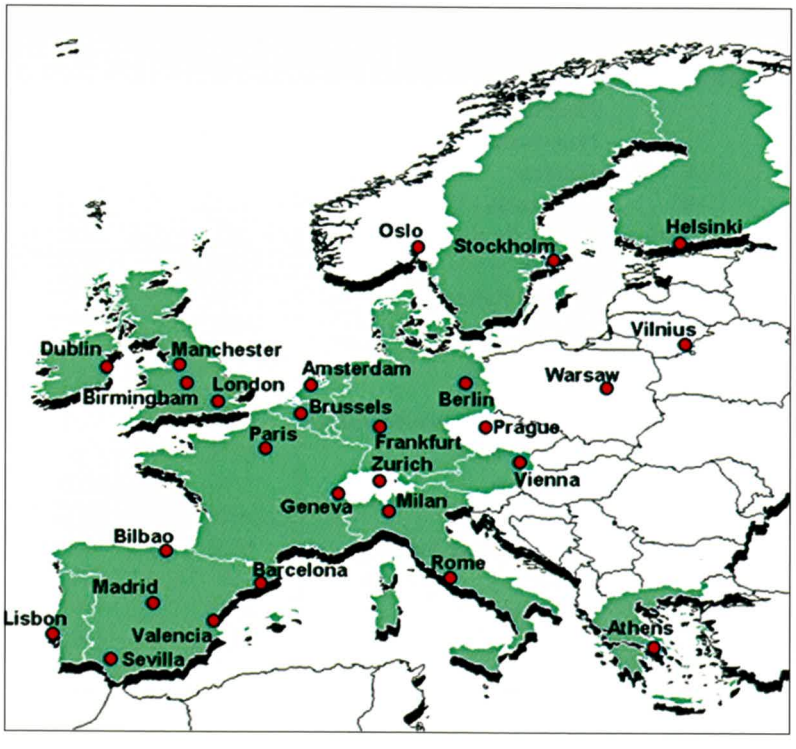
Though public transport services are really necessary in this context, their organisation is very complex, since:

- Public transport networks of large cities are usually multi-modal, including railways. This means that there is a strong need of integration of the various modes. This integration should be both technical (organisation of interchanges), logical (what role is played by each mode, does one feed another ?, etc.) and concerning fares (i.e. same ticket valid for different modes, whose financial characteristics are very different).
- Services are often operated by several undertakings. This leads to a strong need of integration (schedule, fares, physical interchange, information, marketing, etc.).
- The responsibility for public transport organisation is shared between various public authorities (municipalities, metropolitan area, region and sometimes even national governments, especially in the case of capital cities).

When public transport services are not integrated, they cannot be competitive against private car. Indeed, one of the key strengths of the private car is its ability to provide a door-to-door, seamless service. Contrary to this, passengers of public transport often have to change of transport modes to reach their destinations in large cities. These interchanges must be organised in an easy and cheap way for the passengers if public transport is to provide a competitive alternative to the use of the private car.

The introduction of competition for the operation of services in most European countries since 20 years has created a new need for co-ordination of services. As shows the (bad) example of public transport organisation in the British large cities outside London, full deregulation of public transport services and the absence of strong PTAs only brings losses of quality of services and a fall in patronage

The creation of strong public transport authorities capable of organising and managing such complex systems has appeared in most European countries as the best answer to meet these new requirements.



Presentation of the PTAs of the European metropolitan areas

In the UK, the role of transport authorities has evolved greatly with the deregulation in 1986. Before, they used to operate services themselves. Now, their main mission is to plan services, own bus stops, award concessions for the building of new infrastructures (light rail), conclude quality partnerships with the private operators so as to improve the quality of services and fund concessionary fares.

In Germany, public operators were at the initiative of the

creation of structures of co-ordination of the networks ("Verkehrsverbund") in the 1980's. Then, the structures evolved to become real transport authorities. For example, the Frankfurter Verkehrsverbund (FVV), created in the 1970's an association of transport companies, was replaced in 1994 by the Verkehrsverbund Rhein-Main (RMV), which is formed by local authorities and buys services from operators. The most recent German PTA, the Verkehrsverbund Berlin-Brandenburg (VBB), was created in 1998 as an association of local authorities.

France has been used to PTAs since a law gave the responsibility of local transport organisation to local authorities in 1981. In Lyons for example, the SYTRAL (Syndicat des Transports du Rhône et de l'Agglomération Lyonnaise) brings together the metropolitan council of Lyons, comprising itself 55 municipalities, and the Rhone county.

It seems lastly that a Spanish model is currently appearing: the five main metropolitan areas now have PTAs bringing together the public authorities concerned by public transport: Consorcio de Transportes de Bizkaia in Bilbao, Consorcio de Transportes de Madrid, Autoritat del Transport Metropolita in Barcelona, Consorcio de Transportes del area de Sevilla and Entitat de Transport Metropolita in Valencia.

Characteristics of PTAs

The PTAs of the European metropolitan areas are rather recent structures: more than 2/3 of them were created after 1980. The process is not complete yet, as illustrate the current projects of setting up of new PTAs in several countries (Portugal, Italy).

The territory and population covered by PTAs differ greatly, with two "giants":

- Verkehrsverbund Berlin Brandenburg (VBB), which covers 30,000 km² (6 million people)
- Syndicat des Transports d'Ile-de-France (Paris), which organises public transport services for 11 million people (on 12,000 km²).

The number of operators which PTAs are supposed to co-ordinate differs a lot from one city to the other and ranges from less than five (Amsterdam, Brussels, Rome) to 100 or more (Paris, Frankfurt).

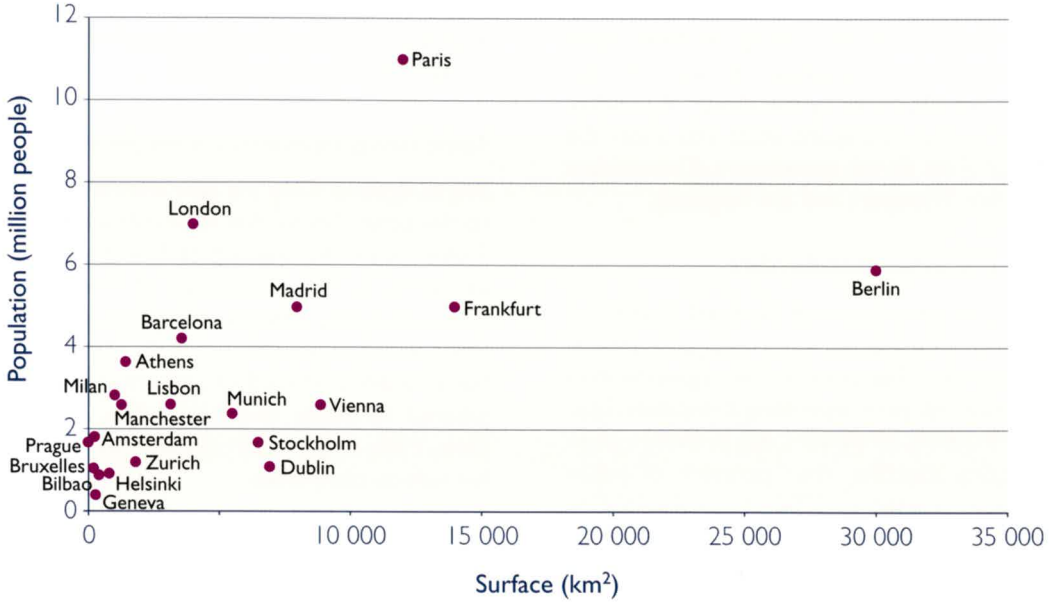
The staff of PTAs is also very variable and doesn't always illustrate the territorial or modal competence of the organisation (less than 30 in Barcelona and Zurich to several hundred in Stockholm and in the UK). Authorities which used to operate networks (Stockholm, UK) before focusing themselves on planning and co-ordination usually have much larger workforce than the authorities created ex nihilo to co-ordinate services (French, German and Spanish PTAs)

Metropolitan area	PTA	Date of creation	Metropolitan area	PTA	Date of creation
Amsterdam	ROA	1993*	**Madrid**	CRTM	1985
Athens	OASA	1977	**Manchester**	GMPTE	1968
Barcelona	ATM	1997	**Munich**	MVV	1975
Berlin - Brandenburg	VBB	1996	**Newcastle - Tyne and Wear**	Nexus	1968
Bilbao	CTB	1975**	**Paris - Ile-de-France**	STIF	1959
Birmingham - West Midlands	Centro	1986	**Prague**	ROPID	1993
Bremen - Niedersaschsen	VBN	1989	**Rhine - Ruhr**	VRR	1990*
Cologne - Rhein Sieg	VRS	1987	**Rome**	ATAC	2000*
Copenhagen	HUR	2000*	**Rotterdam**	Stadsregio	1995
Dublin	DTO	1995	**Sevilla**	CTS	2001
Frankfurt RheinMain	RMV	1994	**Sheffield - South Yorkshire**	SYPTE	1968
Glasgow - Strathclyde	SPT	1973	**Stockholm**	AB SL	1967
Gothenburg	Västtrafik	1999*	**Stuttgart**	VVS	1978
Hamburg	HVV	1996*	**Valencia**	eTM	2000
Helsinki	YTV	1996*	**Vienna - East Austria**	VOR	1984
Leeds - West Yorkshire	Metro	1985	**Vilnius**	SP	1998
Liverpool - Merseyside	Merseytravel	1968	**Warsaw**	ZTM	1992
London	TfL	2000	**Zurich**	ZVV	1990
Lyon	SYTRAL	1983			

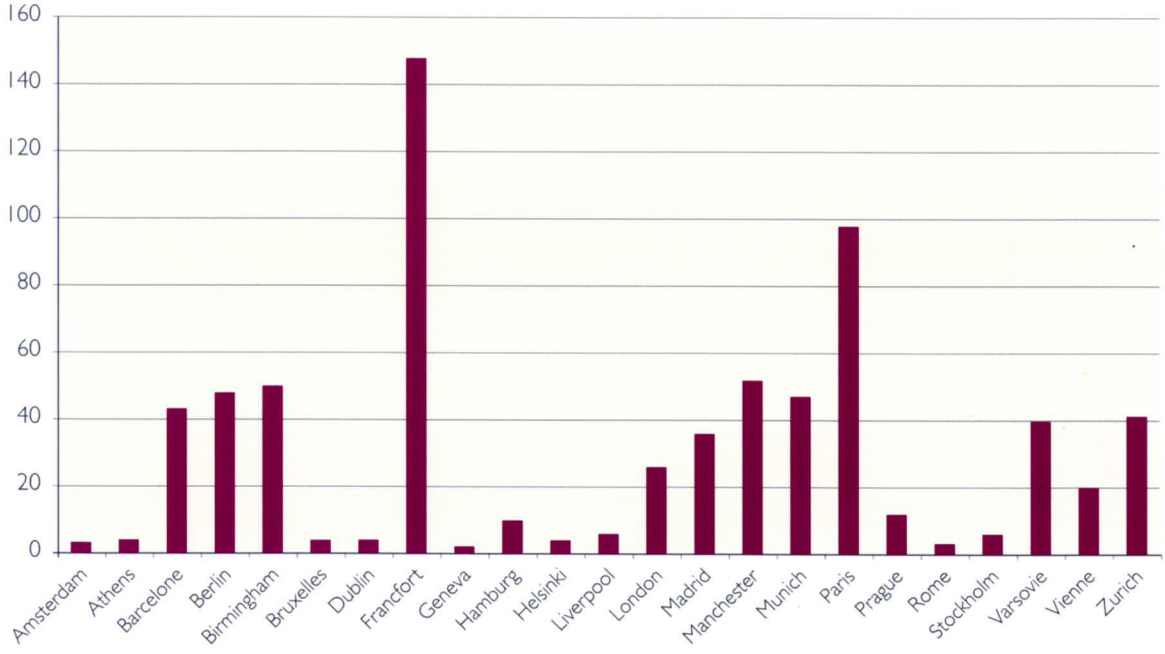
** date of creation of the PTA under its current form and with its current responsibilities.*

*** original mission was the building of underground. Fare and service integration was first achieved in 2000.*

DESCRIPTION OF EUROPEAN METROPOLITAN PTAS



NUMBER OF TRANSPORT OPERATORS IN THE EUROPEAN METROPOLITAN AREAS



A declining role for national governments

In most European large cities, public transport networks are organised locally without any interference of national governments. This is always true in Germany, Italy, or the UK. Exceptions can however be found:

- in some capital cities, where national governments are often more involved than in other – although sometimes large as well – cities (Madrid vs Barcelona).
- in cities where transport networks are operated by national public companies (Paris, Athens)
- in centralised countries or countries with one single large city (Dublin, Athens)

Even in these cities, it should be noticed that there is a growing consensus in favour of more local decisions

for public transport. The most radical illustration is the creation in 2000 of Transport for London (TfL), an organisation in charge of mobility and more especially of public transportation, in the Greater London, and presided over by the Mayor of London. TfL replaced London Transport, which was under the responsibility of the British government (Department of Environment, Transport and the Regions).

Involvement of other stakeholders

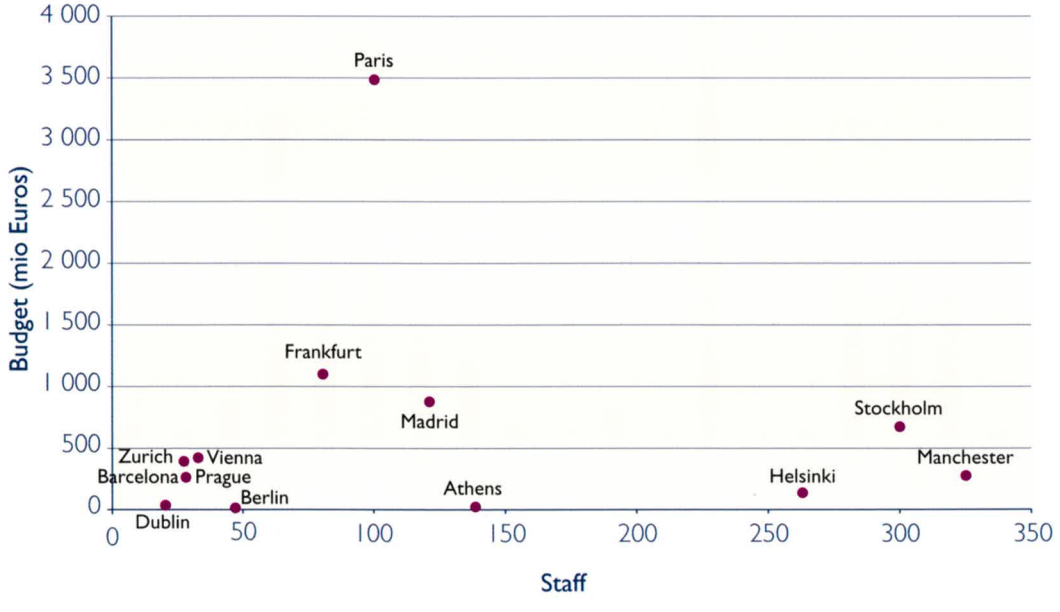
The progress of democracy and the need to improve the governance of public services leads to a greater involvement of all stakeholders in the organisation of public transport services: operating companies, user groups, trade unions, employers, etc. In Paris, a committee bringing together the "partners of public transport" was created in 2000. It is consulted by STIF before it reaches decisions concerning investments, fare policy and the quality of services. In London, a "London Transport Users Committee" can express opinions on the policies carried out by TfL. In Liverpool, the PTA Merseytravel is advised by a "Women's Forum", which was established so as to ensure that women, who are the main users of public transport, have the opportunity to influence its future shape. In Madrid, CTM has gone even further since workers' unions, operators and customers' association are full members of its board.

Some strong differences in the financial resources

The budgets of PTAs are very different from one city to the other: from a few million Euros to more than 3 billion Euros for the largest PTA (Paris). This can be explained by the differences of missions between PTAs and by the different cost-coverage ratios in the cities, which mean different levels of public subsidies. For example, in Paris, STIF gathers all public subsidies granted to public transport, while in some other cities, PTAs only pay for concessionary fares and not for railway companies.

The resources of PTAs mostly stem from grants of their public shareholders. Some PTAs collect all or part of fares sold. Others have got specific resources, as is the case in France with the Transport tax paid by companies (including administrations). In Paris, STIF also receives half of the amount of road traffic fines paid by card drivers in the Ile-de-France.

HUMAN AND FINANCIAL RESOURCES OF EUROPEAN METROPOLITAN PTAS



In Germany, PTAs responsible for regional rail services get a specific resource stemming from taxes on petrol.

Modal competence

Although it seems obvious that a PTA should be responsible for all public transport modes on its territory so as to achieve perfect integration of services for the passenger's interest, it is not always the case. Problems arise frequently with rail services, which play a fundamental role for the transport of great numbers of passengers on long distances in large metropolitan areas. Stockholm, Madrid, Paris, Prague and some German large cities offer good examples of integration of railways in the metropolitan public transport network.

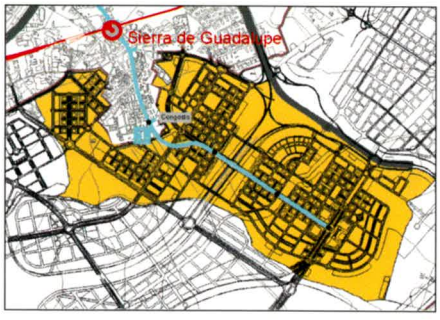
Competence for specific transport services

Aside from conventional regular public transport services, PTAs are in some cases also responsible for planning and organising services for people with specific needs (tourists, students, disabled, demand responsive transport services, etc.). This is a key condition to have a good co-ordination between these services and the mainstream public transport services.

Competence for other aspects of urban mobility and for land use planning

PTAs should be responsible for all aspects of urban mobility and for land use planning, or at least should have their word on these policies, which strongly influence the attractiveness of public transport. Though such a scheme is rarely witnessed, a few recent examples are worth noticing:

- Transport for London (TfL), which was created in 2000, is responsible not only for public transport systems (except rail services) in the Greater London area, but also for taxis, metropolitan roads, congestion charging schemes and promotion of walking and cycling.
- in Dublin, the current project of strategic land use and transportation body would bring in the same organisation the responsibility for transport and land use planning as well as for management of public service contracts with operators.



Intermodality, which is a key tool to improve mobility conditions, can be fostered through policies such as the creation of park-and-ride (P&R) and bike-and-ride facilities. Some PTAs are responsible for developing P&R (Madrid, Prague, British PTAs).

What relationships between PTAs and operators ?

The main current trend is the very fast generalisation of contracts. In 80 % of the cities surveyed, relationships between PTAs and operating companies take the form of contracts, most of which were introduced in the 1990's. It should be noted that in most countries, these contracts are awarded through tendering procedures. This evolution started in the northern countries (Sweden and Finland) and is progressively concerning the rest of the continent. In Italy, for example, competition will be the normal way for the award of contracts as of 2004.

Conclusion

Some common trends can be identified in the organisation of public transport in the European large cities:

- a clear division of responsibilities between public authorities and operating companies
- the competence for organising public transport is a local one, which, when different local authorities are concerned, can be co-ordinated in a single PTA
- the integration of public transport networks (all modes including railways, fares, services, schedule, information, marketing) is needed so as to offer passengers a reliable, easy to use and efficient alternative to private car
- a generalisation of contracts between public authorities and operators, leading to a better definition of their respective roles and to a stronger commitment of operating companies
- a generalisation of competition for the award of contracts, with a few, but very controversial, exceptions

The draft new European Regulation on public service contracts and public service requirements in passenger transport, when (if ?) it is passed, will certainly bring no major change to this overall evolution. The only question which is still unsolved today is whether authorities should, in some cases, be allowed to operate services themselves or through their own public companies.

WHAT FUNDING OF PUBLIC TRANSPORT SYSTEMS
IN THE EUROPEAN METROPOLITAN AREAS ?

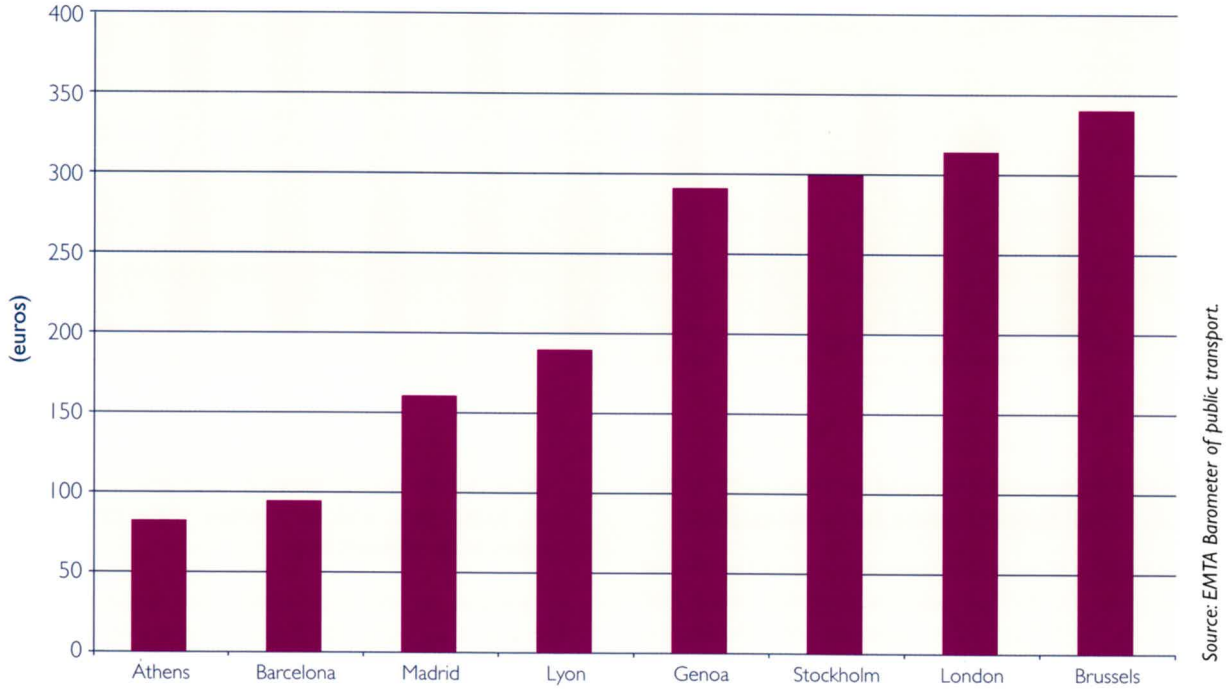
Some heavy budgets, that will necessarily increase strongly in the coming years.

The cost of operations and investments into urban and regional public transport systems is already heavy and still increases very fast. Data collected by EMTA show that the yearly cost of operation of large public transport systems can reach €300/inhabitant without heavy rail systems (see chart below). The objectives of reduction of car traffic in the urban areas, highlighted by the European Commission in its White Paper on transport policy by 2010, which are shared by most national governments, will mean that the supply of public transport serv ds of their populations. All EMTA cities are currently building new systems such as heavy rail, metro, or tramways, even in the cities whose population is stagnating. These projects mean more resources both for investment and for operation of the future systems;

- so as to attract more passengers, the quality of existing public transport services will have to be upgraded. The objective will be to convince car users that public transport can provide them with the same freedom, simplicity of use and quality of mobility as the private car. This need will have consequences both for the increase of supply of existing systems (higher frequencies during the day development of night services), and for the improvement of the quality of existing services (modernisation of rolling stock, improved accessibility and comfort, waiting conditions, static and real-time information, security, etc.). This policy will also necessarily lead to more expenses in the coming years.

The question that public transport authorities face is therefore: how will we pay for this policy ?

YEARLY COST OF OPERATION OF URBAN PUBLIC TRANSPORT SYSTEMS PER HABITANT (OUTSIDE HEAVY RAIL)



Source: EMTA Barometer of public transport.

A need for public compensations

In no European country can public transport systems be operated without public subsidies. Even in the United-Kingdom, which liberalised the transport sector at the end of the 1980's leading to purely commercial operations by private companies, some concessionary fare schemes funded by public transport authorities are needed so as enable all citizens to have access to the services.

Public subsidies, which we will rather refer to as public compensations, can be justified for several reasons:

- some transport routes and services, although not profitable on a commercial basis, must be operated for the social cohesion of society (services for people with reduced mobility, remote and poor areas, night services, etc.). It is therefore the duty of public authorities to ask some transport companies to

operate these services, but to compensate them for the cost of these non-profitable services;

- the fares of public transport systems, which cater for the basic need of mobility, should be adapted to the wealth of passengers (youngsters, elderly people, unemployed, large families, etc.);
- there should be an incentive for people to use public transport rather than private car because of the negative external costs of car traffic (pollution, accidents, noise, congestion).

Although public compensations can be found in all European countries, the ratio of coverage of costs of operation by fare revenues is very diverse in the different countries, as is illustrated by the chart below (source: Maretope research programme). Some countries are close to break even point (UK), while others cover less than 50% of costs with fare revenues (France, Italy). This diversity of situations leads to very different needs of public money.

RATIO OF TICKET REVENUES ON TOTAL COSTS

Public compensations paid to transport companies shall respect some basic principles:

- the burden of public compensations should be shared between the various public authorities concerned on an objective basis (number of inhabitants, wealth, power in the transport authority, etc.);
- the compensations paid to companies should be determined in an objective and transparent way, preferably through a public service contract signed between the authority and the transport company;
- financial flows should be simple and cross-subsidies should be avoided. Somebody, somewhere, should have a clear overview of all the public money granted to some companies;
- transport companies should have incentives to provide high quality services that give satisfaction to passengers, and to manage their production costs in an efficient way.

In addition to these principles, the decision of the European Court of Justice in the Magdeburg-Altmark case (24 July 2003) demands that, when a company is selected without tendering procedures, the level of the compensations is determined by the authority on an analysis of the costs of the company and a comparison of the costs which a medium company would have incurred for the provision of similar services. To summarise this principle, transport authorities should never give money to companies without knowing if the amounts are reasonable for the services concerned, and the answer to this question can only come from comparisons with other companies, through tendering procedures or benchmarking.

Funding of investments

The numerous projects of extensions of transport systems are funded through various schemes, but in most cases, public money is involved. Even in the case of public-private partnerships (concessions, BOT, etc.) with private companies bringing in some money, public funds are often needed.

Public money can stem from different levels of public authorities (municipalities, counties, regions and also national governments). In most European countries, the national governments bring subsidies to heavy projects of public transport infrastructures which would be too expensive for local authorities only. Debt is also frequently used by public authorities to fund investment projects. The European Investment Bank (EIB) is for example keen to grant loans to local authorities for the funding well devised public transport projects. Debt can be regarded as a logical resource for infrastructures that will have very long life-times, but it also leads to some constraints. The reimbursement of the debt and the financial interests will come in addition to the cost of operation of the infrastructure itself. It is therefore fundamental that public authorities devise long-term financial plans ensuring that their future resources will be sufficient to cover their expenses. It is also an incentive for them to ensure that the new infrastructures will attract enough passengers so as to maximise the fare revenues, and thus minimise needs for public compensations.

Perspectives

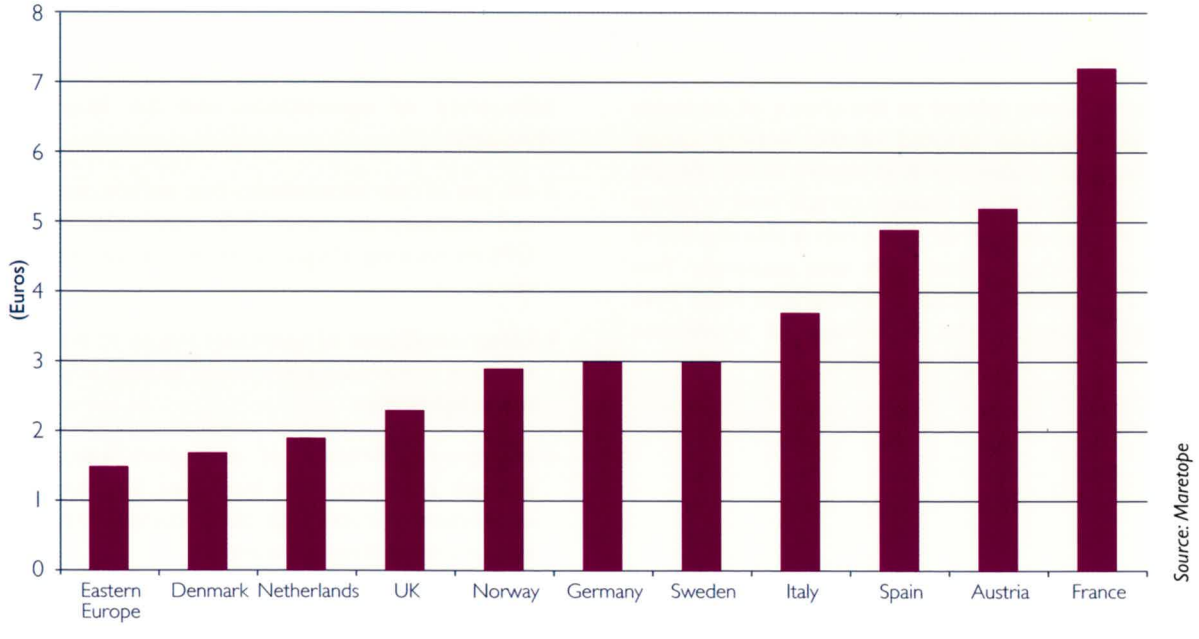
Public authorities have the duty to look at the future and invent schemes that will secure stable and sufficient sources of funding for public transport systems over the next decades. Two ways must be envisaged simultaneously: an increase in revenues, and an increased efficiency of operations.

Increased revenues for public transport

Three categories of resources can be thought of:

- commercial revenues: increased fare revenues through a more targeted fare policy (differentiation of prices for peak and non-peak hours, etc.), increased revenues from advertisements, rental of spaces in public transport stations
- revenues from indirect beneficiaries: employers whose employees benefit from public transport systems (as the transport tax in France, which brings about one third of the cost of operation of public transport systems), land and property owners who benefit from the existence of good public transport systems (examples of funding of new infrastructures by development companies in Madrid and Copenhagen)
- internalisation of external costs of private cars: through dedication to public transport of resources from congestion and infrastructure charging (London), workplace parking levy (UK), tax on

COST OF OPERATION PER VEHICLE-KM



Source: Maretope

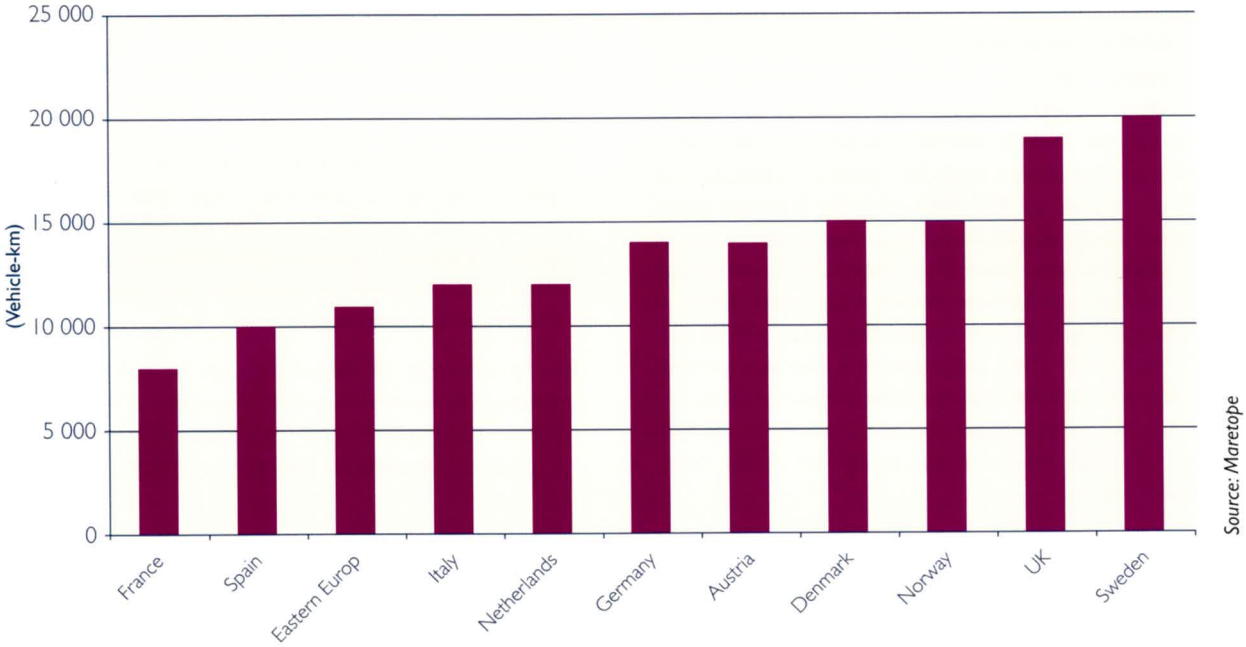
petrol used by cars (Germany), road traffic fines (Paris), etc., public authorities can contribute to a better allocation of resources.

Increased efficiency of operations

European comparisons highlight varying levels of efficiency of public transport operations, as show the following charts (source: Maretope research programme).

This chart shows that countries with the highest wages and welfare systems (Scandinavian countries) are not the countries with the most expensive production costs. This finding highlights a key fact: efficiency of operations is not related only to wages, but much more to the organisation of transport companies the management of resources (rolling stock, energy, etc.). The following chart shows, for example, that it is once again in the Scandinavian countries that the ratio of vehicle-km riden by staff number of transport companies is the highest. At the other extremity are countries from Southern and Eastern Europe, which seem to have difficulties to organise their operations properly.

VEHICLE-KM OVER STAFF NUMBER



Source: Maretope

Efficiency is also related to the choice of pertinent transport systems adapted to the mobility needs. For example, a tramway is, in theory, more efficient to operate than buses above a certain level of patronage, and as opposed to this, a taxi is less expensive for society than a bus with one passenger. This means that public transport authorities must have enough expertise and knowledge of production costs to reach the right decisions.

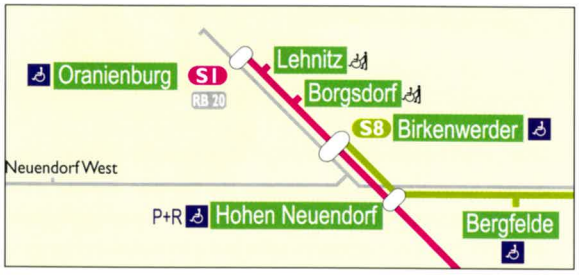
Efficiency of operations can be improved through:

- the use of new technologies that reduce operation and maintenance costs (fully automatic metros, GPS monitoring of operations, electronic ticketing, etc.);
- better conditions of operation thanks to bus lanes enabling to increase commercial speeds, priority at traffic lights, etc.;
- improved efficiency of transport companies through contracts with incentives, benchmarking of production costs with other comparable cities, and/or competitive pressure.

THE DUTIES OF PUBLIC TRANSPORT AUTHORITIES
IN THE FIELD OF ACCESSIBILITY OF PUBLIC TRANSPORT SYSTEMS TO PEOPLE WITH REDUCED MOBILITY

At the occasion of the European year of people with disabilities (2003), the public transport authorities of the European metropolitan areas have adopted the following Charter of commitments so as to highlight the fact that they have a strong responsibility to improve the accessibility of their transport systems to people with reduced mobility, and that this duty shall not be left only in the hands of transport companies.

It is currently estimated that 12%[3] of the European population is disabled. The combined number of elderly and disabled people reaches 24% of the population, and figures taking into account people with a temporary impairment (people with luggage, prams, etc.) reach about 30%[4] of the overall European population, that is to say more than 100 million persons in EU25. With the ageing population, this number is expected to increase significantly over the coming years.



The issue of accessibility to all citizens of public transport systems is a major social objective. All citizens, regardless of disability or age, must have an opportunity for independent living, and accessible transport systems contribute in a determinant way to this goal. They increase educational, employment and recreational opportunities and can reduce social services and welfare costs to governments and communities. Moreover, it should be noted that all people benefit from accessible public transport.

Public transport systems shall provide an easy mobility for everyone. But in most cases, the reality doesn't meet this expectation. Old metro systems with stairs, high-floor buses and coaches, rolling stock not providing enough space for wheel-chairs, insufficient or badly devised information, etc.: the list of difficulties encountered by people with reduced mobility is endless.

Some progress has been made over the last decade, mostly under legal pressure[5]. The European Conference of Ministers of Transport (ECMT) has worked actively to raise the awareness of national governments on this issue. The European Commission has ordered several research projects on technical aspects[6] and the international organisations active in public transport (UITP) have been working both on exchanging information on best practices and on the definition of standards. All these initiatives have benefited from the advice of organisations representing the interests of people with reduced mobility, like the European Disability Forum.

But in spite of these positive initiatives, a lot still remains to be done. Improving the accessibility of transport systems is a difficult challenge, which not only needs political support, but also takes time, needs technical expertise and can seem costly in a first approach. As a result, the majority of public transport vehicles and stations are still not accessible for people with reduced mobility in the European metropolitan areas[7].

Improving the accessibility of public transportation systems has mostly been an issue of transport operators in the past. Operating companies have indeed a key responsibility in the management of the systems that must provide every day accessible services, and they usually have the technical expertise when it comes to setting standards for rolling stock and infrastructure.

© Phébus/B.Runtz

[3] *Source: COST 335*
[4] *Source: ECMT*
[5] *Source: ECMT report on legislation to improve access (2000)*
[6] *COST 322 on low floor buses, COST 335 on heavy rail systems, COST 349 on long-distance buses*
[7] *Source: EMTA Barometer of public transport in the European metropolitan areas (2000)*

Although that will remain true in the future, public transport authorities should be more involved in the process and could play a bigger role for the improvement of the accessibility of transport systems, for several reasons:

- **public transport authorities are involved in the planning of transport systems from the very beginning,** and it is obvious that accessibility is more easy and cheap to achieve if it is taken into account at the initial stages of the process;
- **improving the accessibility of public transport systems is a complex task which implies to intervene not only on public transport systems, but also on their physical, social and legal environment,** and public authorities are best suited to have this co-ordinated approach. For example, improving the accessibility of bus routes often involves to have a special design for bus stops and the pavement around them, and only public authorities can have such a broad view;
- **public authorities are contributing large amounts of money to the funding of public transport systems and of public transport operations.** In many European cities, they are even the main contributors[8]. This fact gives them a key responsibility, but also a real clout in the design of transport systems. A Charter adopted by the Ministers of Transport (ECMT) in 1999 recommends that public funding of transport should be conditional on providing accessibility to people with reduced mobility[9];
- **most public transport authorities are now bound to transport operators through contracts, be it contracts** awarded through competitive procedures or not[10]. These contracts often contain requirements about quality of service, which can include items like percentage of rolling stock accessible or availability of equipment like lifts in stations. They are therefore very powerful tools to prompt operators to pay a strong attention to this aspect of their activity which is complying with the need of all passengers and therefore achieve higher accessibility;
- **the generalisation of competition for the award of contracts to operating companies often leads to the ownership of infrastructure and of rolling stock by public authorities,** which then lend or rent them to the operators for the length of the contracts. This gives public authorities a new responsibility for the definition of the physical characteristics of infrastructures and rolling stock, and leads them to direct contacts with the manufacturers. This implies that public authorities must develop their own expertise in this field and that they should ensure that this dimension is well taken into account in the process of design and of purchases of rolling stock;


© S. Lecler

- **the provision of demand responsive door-to-door transport services in many cities for some categories of disabled passengers should be co-ordinated and complementary with the efforts to improve the accessibility of the mainstream public transport systems.** Information should take into account these two categories of services and advise people which services best meet their needs. This is once again a mission of public authorities;
- and lastly, as strong differences can be witnessed in the levels of accessibility of public transport networks between the European countries, the survey of the most advanced countries (Scandinavian countries) could help public authorities in the other countries to learn fast from the cases of best practices. Therefore, **benchmarking between public transport authorities should be regarded as a permanent process of improvement;**

In this context, the public transport authorities represented in the EMTA association commit themselves, both on an individual level and collectively, to improve the accessibility to people with reduced mobility of the public transport systems they are responsible for.

[8] *Source: Comparative survey of funding of public transport in the European metropolitan areas (ATM/EMTA, 2001) and EMTA Barometer of public transport in the European metropolitan areas (2000)*
[9] *Source: ECMT Charter on access to transport services and infrastructure (1999)*
[10] *Source: What public transport authorities for the European metropolitan areas ? (S. Lecler/EMTA, 2001)*

■ *Resolutions*

The public transport authorities of the European metropolitan areas represented in the association EMTA commit themselves to:

01 ◗ consider the improvement of the accessibility of their transport systems as a major social objective, which benefits all passengers, and which shall not be left under the sole responsibility of transport operators;

02 ◗ co-ordinate their actions with the other public authorities so as to tackle the issue of accessibility of transport systems under all its aspects, concerning for example the way stations and bus stops are physically organised;

03 ◗ take into account the needs of people with reduced mobility for each of their decisions, so as to ensure that no decision might harden the mobility conditions of people with reduced mobility;

04 ◗ develop master plans of improvement of the accessibility of the public transport systems under their jurisdiction, with the ultimate objective to provide barrier-free, fully accessible, transportation systems;

05 ◗ ensure that people who cannot access public transport systems have at their disposal a door-to-door accessible transport service which is both of high quality and affordable in the territory concerned;

06 ◗ ensure that information about public transport systems is clear, comprehensive, up-to-date and accessible to all people, including persons with learning difficulties. This concerns both before trip and on-board information. Accessible information means information provided by redundant channels (visual and vocal, for example);

07 ◗ develop their own expertise in the field of accessibility, which encompasses both issues related to infrastructures, rolling stock, and information;

08 ◗ consult experts and representative organisations of people with reduced mobility on a regular basis, and especially before reaching decisions concerning accessibility of public transport systems, so as to ensure that the solutions chosen really meet the expectations of the people they are aimed at;

09 ◗ follow-up carefully the results achieved by any measure aimed at improving the accessibility of public transport networks to people with reduced mobility. This includes the technical performance of equipment, and the satisfaction of the users;

10 ◗ define and measure at regular intervals indicators reflecting the level of accessibility of the networks they are responsible for (number of metro stations accessible, number of low floor buses, number of routes with visual or vocal information);

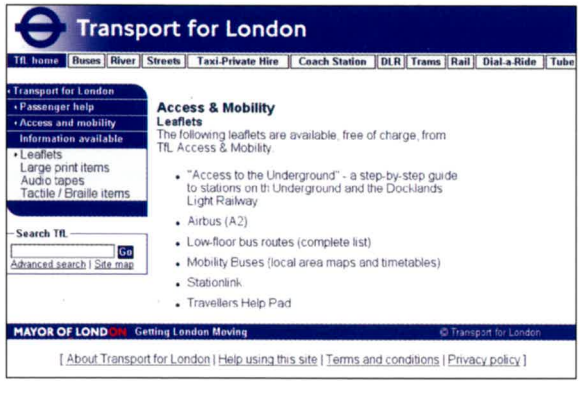
11 ◗ identify in their structures some senior managers responsible for co-ordinating accessibility issues, which are transversal topics concerning most aspects of the missions of transport authorities (new infrastructures, contracts with operators, information, etc.);

12 ◗ regularly look at policies carried out in other cities so as to identify the best practices and learn from the successful experiences. Benchmarking is a useful tool to make progress faster and in a cheaper way;

13 ◗ see to it that the transport companies in charge of operating the transport systems pay a strong attention to the accessibility of their networks. Accessibility should be a major requirement in tendering procedures, and when contracts between authorities and operators contain incentives based on quality of service, accessibility should be part of them;

14 ◗ communicate on the efforts made to improve accessibility and ensure that the achievements receive wide coverage in the society;

15 ◗ contribute to the adoption of standards for the technical characteristics of equipment designed for accessible public transport systems that shall be unified at the European level.



© www.tfl.gov.uk

Institutions involved

The Title V of the Treaty establishing the European Community sets a European Common Transport Policy. This policy is decided jointly by the Council of Ministers of Transport of the Member States and by the European Parliament in accordance with the co-decision procedure (Art. 251 of the Treaty). The European Commission has the power of initiative to propose new Regulations to achieve these goals, and is in charge of monitoring the implementation of Regulations and Directives by Member States. The Directorate General for Energy and Transport (DG TREN) of the European Commission is placed under the responsibility of Ms de Palacio, Vice-President of the European Commission and Commissioner for Energy and Transport. For more information about DG TREN:
http://www.europa.eu.int/comm/dgs/energy_transport/index_en.html

At the European Parliament, the Committee on Regional Policy, Transport and Tourism, is responsible for preparing the work of the plenary assembly of the Members of the Parliament for all the issues linked to transport. For more information:
http://www.europarl.eu.int/committees/rett_home.htm

Lastly, the European Union can bring financial support to local and regional transport, either through research programmes and initiatives such as CIVITAS (see below), or through funds for investments coming from European structural funds (FEDER) or loans from the European Investment Bank (www.eib.eu.int).

Objectives of the European Common Transport Policy

The European Common Transport Policy has two basic goals: efficient, accessible and competitive transport systems - essential to growth and employment and to keep EU businesses competitive - and a high level of safety and environmental protection.

The European Commission published on September 2001 a White Paper on the European transport policy for 2010, which presents its political objectives:

- shifting the balance between modes of transport, with an aim to revitalising the rail sector. The objective is
- eliminating bottlenecks
- placing users at the heart of transport policy so as to halve the number of fatalities and to charge gradually the use of infrastructure
- rationalising urban transport through the development of clean fuels and the exchange of best practices

For more information about the White Paper:
http://www.europa.eu.int/comm/energy_transport/en/lb_en.html

The European Parliament approved these objectives in a vote in February 2003, and even asked the Commission to go even further in its targets of rebalancing traffic towards less-polluting transport modes.

On its side, the European Council of heads of state in March 2000 in Lisbon called for an acceleration of the liberalisation of the transport sector.

Completing the internal market for public transport services

The article 73 of the Treaty states that, as an exception to the principles laid down in article 88 about the interdiction of State aids, financial aids by authorities to companies shall be compatible with the European regulations if they meet the needs of coordination of transport or if they represent reimbursement for the discharge of certain obligations inherent in the concept of a public. The Regulation 1191/69 of 1969, modified in 1991, defines under what conditions transport companies can be granted financial support by public authorities.

In 2000, the European Commission proposed to modify this Regulation so as to generalise controlled competition mechanisms in public transport services of passengers. This draft new Regulation is still being debated at the Council of Ministers of Transport.

In July 2003, a decision by the European Court of Justice in the Magdeburg-Altmark case ruled that financial support to transport companies which are imposed public service obligations by authorities are not State aids if they correspond to the cost incurred by the company while fulfilling the obligations.

Opening of the rail sector

Since the Directive 91/440, which asked for separate accounting between rail infrastructure and operation of networks, the European Union is progressively opening its rail sector to competition. The first rail package, adopted in 2001, has led to the opening to competition of the trans-European rail freight market on 15 March 2003. A second railway package, which

could lead to the opening of the international rail freight market in 2006 and of the domestic rail freight in 2008, is currently being debated at the Council of Ministers of Transport and at the European Parliament.

For more information about the European rail policy: *http://www.europa.eu.int/comm/transport/rail/overview/index_en.htm*

Trans-European Transport Networks (TEN-T)

A High Level Group proposed in June 2003 a new approach for implementing the Trans-European Transport Networks, as well as an enlarged list of priority projects in the perspective of EU enlargement in 2004. New sources of funds and new structures are recommended.

Infrastructure charging

The Commission proposed in July 2003 to align the national systems of tolls and road use charges on common principles.

For more information about the infrastructure charging policy of the European Union:

http://www.europa.eu.int/comm/transport/infr-charging/charging_en.html

Sustainable transport

The European Union has launched several initiatives aiming to achieve a sustainable mobility:

- setting up of a High Level Group on Hydrogen and Fuel Cells
- adoption of a **Biofuel Directive** in April 2003 leading to the setting by each Member State of precise targets for the market share of biofuels. These targets will have to be based on challenging benchmarks set by the directive: 2% market share by December 2005; 5.75% market share by December 2010

Research and development in the field of transport

The European Commission orders regular surveys in the field of transport. The **ISOTOPE, QUATTRO and MARETOPE research programmes** have surveyed the organisation of transport systems in Europe, and the way to improve quality of services. The results of a current research on integration of public transport systems will be available soon.

ELTIS
European Local Transport Information Service

For more information about European research in the field of transport: *http://www.eltis.org*

The **6th European Framework Programme** of research and development, that was launched in January 2003 with a total budget of €17.5 billion, will contribute to finding systems that offer 'near zero emissions and near zero accidents,' in the field of transport. Key transport themes will look at reducing congestion, intelligent transport systems, new vehicle concepts and fuels, revitalising railways, and sea and inland waterways. Energy and transport projects will be awarded €2.1 billion.

For more information about the 6th Framework Programme for R&D: *http://cordis.lu/fp6*

European initiatives in the field of transport

The **Galileo** system of radio-navigation by satellite was launched in 2002. It will provide numerous applications to the transport sector, such as real-time information devices and automatic positioning of vehicles. It shall be deployed in 2008. *(www.galileoju.com)*

The European Commission launched in 2001 a **CIVITAS** programme, that will bring financial support (€50 million) to 19 cities which are implementing ambitious integrated leading to a radical change in urban mobility patterns (reduction of car traffic, development of public transport and of non-polluting modes of transport). A second CIVITAS initiative will be launched in 2003. *(www.civitas-initiative.org).*

Following its Green Paper on the Citizens' Network, (1995), the European Commission has launched a **Benchmarking initiative** that aims to help local authorities compare their transport systems and identify the best practices in Europe. *(www.eltis.org/benchmarking).*

2002

February

- **The European Commission released a modified version of its draft new Regulation on public service requirements** and public service contracts in the field of passenger transport of draft regulation. This new draft takes into account some, but not all, of the amendments adopted by the European Parliament in November 2001. Still debated is the possibility for public authorities to award contracts to undertakings that they control without tendering procedures as well as the possible exclusion of long-distance rail services from the scope of the Regulation. It is now the turn of the Council of Ministers of Transport to reach a position on this draft regulation.

March

- **Galileo, the European project of satellite navigation and positioning gets the go-ahead** of Council of European Transport Ministers. Developed jointly with the European Space Agency, Galileo should be deployed in 2008.

July

- The European Commission released a proposal to **harmonise gradually Member States' excise duties on commercial diesel fuel** and to align minimum excise rates on non-commercial diesel and unleaded petrol by 2010. EMTA authorities adopted a common position highlighting the need not to set a maximum rate for excise duties, so as not to penalise countries with ambitious policies of tackling pollution, and to take into account the specific needs of the public transport industry.
- The European Commission launched a **research programme on integration in public transport.** EMTA was associated to this project, and highlighted the key role of public transport authorities to achieve high levels of integration in large urban areas with multi-modal and multi-operator networks.

September

- The European Court of Justice ruled that **public authorities can take account of ecological considerations for the award of public service contracts** in the field of passenger transport (Concordio-Helsinki case).

October

- **Launch of the CIVITAS Forum,** bringing together the 19 cities selected by the Commission in 2001 to receive European subsidies to help them implement ambitious integrated policies of reduction of car traffic, and all cities interested by the results achieved.
- The European Commission set up a **High level group on hydrogen and fuel cells** so as to assess the potential benefits of using hydrogen and fuel cells in EU transport and energy production, and to make recommendations to the European institutions.
- EMTA organised a **Workshop on transport and land policies,** that focuses on the integrated planning of transport infrastructures and land use policies, and on the potential new sources of funding of public transport that could derive from land value capture (Frankfurt).

2003

January

- Start of the **6th European Framework Programme for research and development,** granted 17.5 billion Euros for the period 2002 - 2006.

February

- Joint EMTA-UITP conference **on contractual relationships between public transport authorities and operating companies** (Vienna).

March

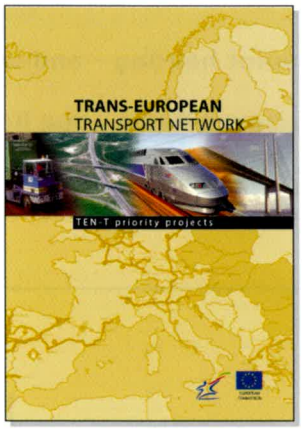
- The **Transport Ministers of the European Union approved the second railway package** prepared by the European Commission. This package, which contains three new directives that will have to be translated into national legislation by the Member states, will lead to the opening to competition of international rail freight in 2006, and of the whole European rail freight market in 2008. The package still has to be adopted by the European Parliament in October 2003 to come into force.
- **The first railway package entered into force on 15th March,** opening to competition the international rail freight market using the Trans-european transport network.

April

- The European Commission released a **draft directive on the introduction and the interoperability of electronic road toll systems in the EU.**
- The **Council of Ministers of Transport adopted the biofuels directive** prepared by the European Commission, which lays down targets for the progressive introduction of biofuels derived from agricultural, forestry and organic waste products. By 2010, biofuels should reach 5.75% of the market share of fuels in Europe.

June

- The European Commission released its **Green Paper on services of general interest** and launched a public debate on this issue.
- The Van Miert High Level Group on **Trans-European Transport Network proposed an updated list of priority projects for the enlarged EU** and suggested to put in place a new financial framework to complete these projects in due time.



- The **European Commission unveiled a programme to save 20,000 lives every year on European roads** by 2010.
- **Launch of the CIVITAS II Initiative** to promote integrated measures of reduction of car traffic in the European cities thanks to European subsidies. Target of this second initiative are Accession and medium-sized cities.

July

- The European Court of Justice ruled that **financial support which only represents compensation for public service obligations imposed on transport companies by authorities does not have the status of State aid** (Magdeburg-Altmark case). However, four conditions are set by the Court concerning the definition of public service obligations, the determination of the level of the compensation, and an analysis of production costs when the operator is not awarded the contracts through public procurement procedures.

NOTES

PRESENTATION OF THE PUBLIC TRANSPORT AUTHORITIES OF THE EUROPEAN METROPOLITAN AREAS

AMSTERDAM NETHERLANDS

REGION

- The "Regionaal Orgaan Amsterdam" is the co-operation of the capital of the Netherlands with 15 surrounding municipalities, chartered by law in 1994. It has a population (2002) of 1,323,234 inhabitants (Amsterdam: 735,328) on a territory of 1,003 km² (Amsterdam: 219 km²). The number of jobs in the region is 995.000 (2002), which contribute to 12% of the national GDP.
- ROA is one of seven metropolitan areas in the Netherlands, which have their own status more or less beside the 12 provinces.
- ROA is among other things responsible for: traffic and public transport, regional planning (land use and zoning), housing, economic development.
- As from January 1, 2004 only the 12 provinces and the 7 metropolitan regions will be responsible for the public transport on their territory.

REGIONAAL ORGAAN AMSTERDAM (ROA)

Missions

The main goals of ROA are:

- establishing a healthy and differentiated economy which is able to compete in the international markets
- offering a good social climate for the inhabitants of the region
- creating a durable environment

In the field of traffic and public transport ROA is responsible for the planning, programming and financing of regional infrastructure (roads and public transport) and for the organization of all public transport services within the region (apart from heavy rail), including planning of new services, improving the existing services and funding via contracts with the operating companies. Fare policy will be included in the tasks and responsibilities as soon as electronic ticketing will be introduced in the Netherlands (at last in 2007)

Organization

Regional co-operation of 16 municipalities :

- A Regional Council (56), elected by and from the municipal councils, an Executive Council (7), elected by and from the Regional Council. The Mayor of Amsterdam presides the Regional and the Executive Councils. There are also standing Committees in specific fields (e.g. traffic and public transport), made up of the in that field responsible aldermen of the co-operating municipalities.
- "Regiohuis": ROA has some 40 staff members; the main departments are: physical planning / zoning / housing / economic development and traffic policy / infrastructure / public transport

Amsterdam metropolitan region

Amsterdam city

Budget

ROA's budget for 2003 amounts to EUR 392 million, of which EUR 303 million is spent in the traffic and public transport field. Provinces, regional and local authorities in the Netherlands are for about 95% of their income dependent on the national government. Provinces and municipalities have further income from provincial or local taxes, bur regional authorities do not have this opportunity. So, the rest of ROA's revenues come from subsidies of the co-operating municipalities. The main expenses in the public transport field in 2003 are a subsidy to GVB, the Amsterdam municipal transport company (EUR 217 million) and to Connexxion, the regional bus company (EUR 51 million).

CONTACT

Responsible Person : Paul Gravemaker

Address: Weesperstraat 111, NL-1018 VN AMSTERDAM

Tel: 00 31 (0) 20 527 3700/3709 - Fax: 00 31 (0) 20 527 3777

E-mail: paulg@roa.nl - Web: www.roa.nl

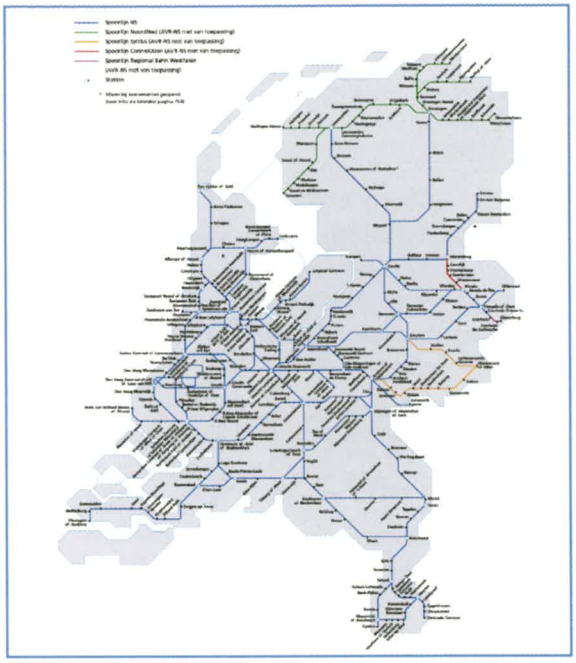
R O A

AMSTERDAM NETHERLANDS

PUBLIC TRANSPORT SYSTEM

The public transport in the Amsterdam region is of great importance, as shows the modal share: 26% in the region and 28% in the city of Amsterdam. (Car: 53% and 51%, bicycle: 21% and 21%).

The public transport within the region is operated by 6 companies: **Nederlandse Spoorwegen** (NS) (heavy rail), shares owned by the state, **GVB** (Amsterdam municipal transport company) within the city and some lines to some other municipalities, **Connexxion** (regional bus company, operating throughout the Netherlands, shares owned by the state), **B-Rental** (private bus company, operating one service to and from Amsterdam Airport Schiphol), **SSK** (private company, operating one service to and from Amsterdam Airport Schiphol) and **BBA** (private company, member of the Connex Group), operating services between Utrecht and the Amsterdam region.



Netherlands transport network map

	Urban Bus, Tram and Ferries	Metro	Heavy Rail	Regional Bus	Regional Bus	Regional Bus
Management Body	GVB (Amsterdam municipal transport company)	GVB	Nederlandse Spoorwegen (NS) Regio Randstad Noord	1. Sub region Amstelland-Meerlanden, operator: Connexxion Midden West 2. sub region Waterland, operator: Connexxion Noordwest 3. sub region Zaanstreek, operator: Connexxion Noordwest	1. B-Rental (service Noordwijk - Schiphol Airport) 2. SSK (service Alkmaar -Schiphol Airport)	BBA (service Utrecht – Amsterdam and service Utrecht – Uithoorn)
Address	P.O. Box 2131 NL-1000 CC Amsterdam		P.O. Box 1283 NL-1000 BG Amsterdam	1. P.O. Box 30252 - NL-1303 AG Almere 2. P.O. Box 514 - NL-2003 RM Haarlem 3. P.O. Box 514 - NL-2003 RM Haarlem	1. P.O. Box 150 - NL-2200 AD Noordwijk 2. Smaragdweg 6 - NL-1812 RJ Alkmaar	P.O. Box 3306 NL-4800 DH Breda
Managing Director	J.G. Kroon, C.E.		H. Gelissen	1. H.H. Dijkstra 2. J.P.M. Bakker 3. J.P.M. Bakker	1. A.A.J. Beuk 2. S.P. Schilder	
Web site	www.gvb.nl		www.ns.nl	www.connexxion.nl	1. www.beuk.nl	www.bba.nl

FUNDING OF PUBLIC TRANSPORT IN 2002

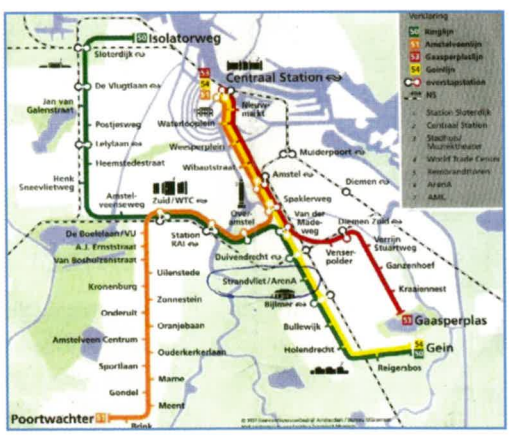
For GVB (Amsterdam municipal transport company) only:
Revenue from scheduled services EURO105.971.000
Revenues from contracts/government grants EURO 207.347.000

SUPPLY/DEMAND DATA 2002

(GVB annual report 2002: see www.gvb.nl)

	METRO	URBAN BUS	TRAMWAY
SUPPLY			
Network length (km)	81.2	422	80.5
Number of lines	4	55	16
Number of stops/stations			
Number of vehicles	106	303	234
Seat-km (x 1,000)	3,847,900		
Number of operators	1 (GVB)	1 (GVB)	1 (GVB)
DEMAND			
Number of trip (million)	250		
Passengers-km (x 1,000)	971,700		

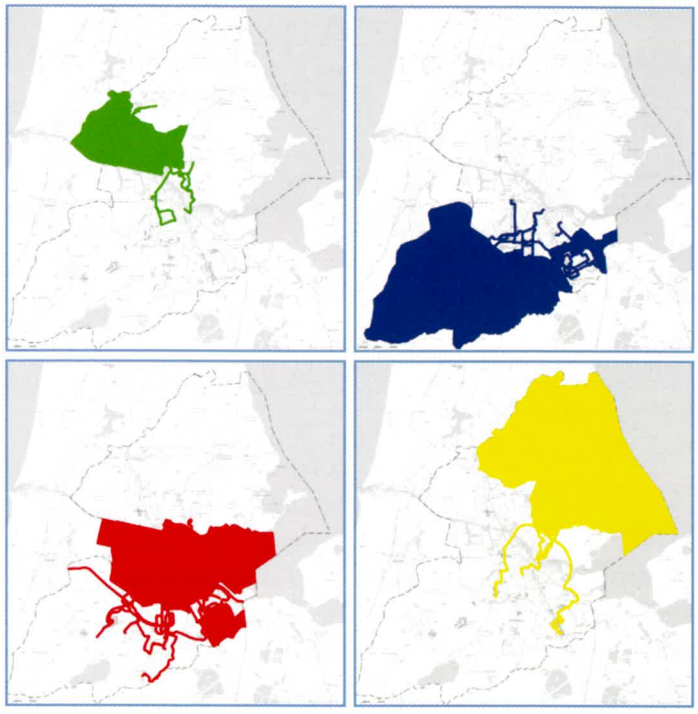
Metronet



FARES IN 2003

The public transport in the Netherlands (heavy rail excluded) has one national fare system, the "strippenkaart". The country is divided in fare zones of approx. the same size and the price of a journey depends on the number of zones ('strippen') a passenger is travelling plus one "strip" as a kind of entrance fee.

Prices: single ticket (2 strippen) EURO 1,60; 8 strippenkaart EURO 6,40 (both sold in the vehicles); 15 strippenkaart EURO 6,20 (sold at tobacconists etc); local daily pass EURO 6,40, national daily pass EURO 12,80; weekly pass EURO 9,30 – 23,80; monthly pass EURO 30,75 – 182,75; yearly pass EURO 307,50 – 1.827,50. Children between 4 and 11 and OAPs benefit from a 36,67% price-reduction on the 15 strippenkaart and the price of passes. Youngsters between 12 and 18 benefit from this reduction on passes only. There are also combinations with railway-passes, the price depends on the class (1st or 2nd) and the distance of the railway-journey. Fares in 2003 are 5,5% higher as in 2002, in 2004 fares will rise with 4,87% and the reduction will go down to 34%. Electronic ticketing (see under current developments) will bring the public transport authorities the responsibility for fare policy and the setting of fare levels.



CURRENT DEVELOPMENTS AND PROJECTS

Towards more competition in public transport in the Netherlands: according to the new law on public transport ("wet Personenvervoer 2000": deregulation, competition, etc.) transport authorities had to regulate their relations with the transport operators by means of a public service contract before January 1, 2002. As per January 1, 2003 35% of the volume of public (bus) transport should have been based on a contract, granted after competitive tendering (it was approx. 20%) and as per January 2006 it has to be 100%. As per January 1, 2006 35% of the volume of municipal transport companies has to be based on contracts, granted after tendering and as per January 2007 this should be 100%.

First public transport concessions in the Amsterdam Region: the ROA-region is divided in four sub regions: Amstelland-Meerlanden (operator Connexxion, concession and contract till 2008); Amsterdam (operated by GVB, concession and contract till 2006); Waterland (operated by Connexxion, concession and contract till 2006); Zaanstreek (operated by Connexxion, concession and contract till 2005) (see the maps). Beginning of 2003 ROA started the process of the competitive tendering for the concession Zaanstreek (see www.roa.nl) and at the moment ROA has ordered two surveys in view of the possible competitive tendering for the concession Amsterdam. This is still a difficult item, as some parties are opposed to deregulation and competition and fear that this will lead to loss of quality and interest in the product and the passenger, etc. These parties want to wait till the European Commission has decided on the new Regulation on passenger transport and the evaluation of the law, which is foreseen for 2004. After the discussion in parliament the Transport Minister will take a decision about continuation of the competitive tendering for concessions which are now operated by municipal transport companies. But if ROA waits till that moment, it could be too late to start the process!

Electronic ticketing: the Ministry of Transport and the public transport authorities have agreed on the introduction of an electronic ticketing system in the coming years, at last in 2007. The system is contact-less and check in-check out. As introduction with a 'big bang' is impossible, some time the two systems will operate beside each other. GVB will start a pilot project in the metro in combination with tourniquets. The start of this pilot is foreseen in 2004/2005.

Together with the introduction of electronic ticketing the Transport Ministry will no longer be responsible for the fare policy and fare level setting. The public transport authorities will be responsible and so the national fare system will be abandoned. This gives the possibility to introduce special fares for commuters, etc.

New metro line in Amsterdam.
Work on the new North/South line of the Amsterdam metro has officially started on April 22, 2003. The line will run from Amsterdam-Noord, underneath the harbour and the historic city centre, to the railway station Zuid/WTC in the southern (business) district of the city. Prior to the drilling of the tunnel a lot of preliminary work had to be done. Due to objections and protests the original planning had to be reconsidered: start op operation is now foreseen in 2011 instead of 2009. (http://www.ivv.amsterdam.nl/nzlijn) Costs: EURO 1,5 billion, the city pays EURO 346 million, the rest is a lump sum subsidy from the Ministry of Transport.

New tramline to Amsterdam-IJburg
In the most eastern part of the city a new neighbourhood is being realised on reclaimed land. As soon as there are 3,500 houses built, a direct tram service to Amsterdam Central Station will be operated (line 26). (http://www.ivv.amsterdam.nl/ijtram)

Extension of light trail service to Amstelveen.
Line 51, the light rail service from Amsterdam Central Station, via the metro tunnel, to the municipality of Amstelveen will be extended to a new neighbourhood 'Westwijk". Start op operation 2004.

Fuel cell buses.
As partner in the project Clean Urban Transport for Europe (CUTE) GVB will operate three fuel cell buses from the end of this year. Other partners are: Daimler-Chrysler / EVO-Bus, Shell and energy supplier NUON.

New system of public transport subsidies from the Ministry of Transport.
At the moment the national subsidies for public transport are based on the number of passengers and the revenues of scheduled services. The Ministry of Transport and the Ministry of Finance have decided on a new system from 2005 on: a lump sum, based on the subsidies in the year 2003 and a subsidy, related to the construction of houses in a region.

ATHENS

GREECE

REGION

- Athens lies in the Attica region and is the capital of the country and its main administrative centre. Ministries, all the higher courts, the head offices of most banks and other businesses as well as a large part of the Greek industry are concentrated in the capital area.
- Athens attracts visitors from many parts of the world, who come to visit the Acropolis, the city's and country's trademark, as well as other archaeological sites.
- Population of the City Centre (2001): 789,166 inh.
- Population of the Region(2001): 3.8 million inh.
- Area of City: 38 km²
- Area of Region: 1,450 km²
- N° of jobs (2001): 1.53 million
- Annual GDP/ inhab: 12,700 €

ATHENS URBAN TRANSPORT ORGANISATION (OASA)

Missions

The Athens Urban Transport Organisation (OASA), first founded in 1977, is a Legal Entity of Private Law. It is totally owned by the Greek State, applying the principles of private economy and performing for public benefit under the supervision and the control of the Ministry of Transport and Communications.

- The Athens Urban Transport Organisation (OASA) is responsible for planning, organising management, control and co-ordination, implementation and operation of all public transport modes in the Greater Athens area.

Organization

The Athens Urban Transport Organisation (OASA) is the authority responsible for the urban public mass transportation and its legal framework is set in the 2669/98 Public Transport Act. It has established 3 subsidiaries to operate urban transport:

- **ETHEL:** operates thermal buses
- **ILPAP:** operates trolley buses
- **ISAP:** operates metro line 1 (metro lines 2 and 3 are operated by AMEL S.A. which is under the control of OASA)

The superior administrative body in Athens Urban Transport Organisation is the Administrative Board. The Board consists of eleven (11) members: 7 are appointed by the State (including the Managing Director and the President of Board), 2 are representing the employees, 1 is appointed by the Economic and Social Committee and 1 is appointed by the Association of Prefectures.

The Board of Directors is the responsible body for deciding, controlling and organizing the company's operation and activities, as well as for setting the standards to achieve aims and goals.

The superior executive position within Organisation belongs to the Managing Director of OASA. The Managing Director is appointed after public announcement by the Minister of Economy and Finance and the Minister of Transport and Communications and is responsible for suggesting and directing policy, plans and decisions.

OASA Group (OASA and subsidiaries) has 10,667 staff members, of which OASA S.A. has 142 staff members in 4 main departments: transport development & operations, economic – financier, human resource and general secretary, quality and public & customers relations

Budget

Revenues from fares: 211.508 million €
Revenues from subsidies: 117.39 million €

CONTACT

Address: 15 Metsovou Street, GR-10682 ATHENS
President: George Papavassiliou
Tel: 00 30 210 82 00 959 - Fax: 00 30 210 82 10 508
E-mail: oasa@otenet.gr
Internet: www.oasa.gr

ΟΡΓΑΝΙΣΜΟΣ ΑΣΤΙΚΩΝ ΣΥΓΚΟΙΝΩΝΙΩΝ ΑΘΗΝΩΝ

Public Transport System

The public transport system amounted to 691 million passengers in 2002. The modal share of public transport in Athens is 45% of motorised trips.

The Athens Urban Transport Organization (OASA) has the overall responsibility for public transport in the greater Athens area, which includes the city and surrounding conurbations.

The OASA subsidiaries, which are responsible for the execution of transport services, are:

- ETHEL S.A., founded in 1994 by OASA. The company is a Legal Entity of Private Law and belongs to the public sector. The mission of ETHEL is the operation of urban transport services with thermal buses in the Metropolitan area of Athens. The company serves 300 bus routes and performs 13,500 scheduled itineraries on a daily basis. With 7 bus depots and 1,800 low-floor and air-conditioned vehicles, ETHEL covers the transit needs of 1,300,000 customers every day. Since last year, after an OASA initiative, the company operates 295 new CNG buses equipped with telematics, offering a more environmental friendly transport service. By the end of 2003, ETHEL will have 600 more new vehicles at its disposal. ETHEL employs 6,000 people.
- ILPAP S.A. was founded in 1970 and is responsible for trolley bus operation in the center of Athens and Peiraias. The company belongs to the public sector and OASA is its only shareholder. ILPAP serves 21 trolley bus routes with 400 vehicles and covers the needs of 80,000,000 customers annually. The company is focused on an ambitious programme of modernisation of its fleet. 224 new anti-polluting, air-conditioned vehicles have starded operation and 140 more will be purchased. ILPAP employs today 1,800 people.
- ISAP S.A. was established by the 10-12/2.1976 Legislative Act. It is a Legal Entity of Private Law and a subsidiary of OASA. The company is responsible for the operation of metro line 1 (Peiraias-Kifisia). ISAP is 133 years old and is the oldest public transport mode in the city and one of the oldest in Europe. The Athens-Piraeus Electric Railway covers, on a daily basis, the transit needs of 400,000 people with 233 vehicles. ISAP has purchased new vehicles and has focused all efforts on raising the functionality and the aesthetic standards of the 23 stations of metro line 1. Responsible for the company's management is the Administrative Board and the Managing Director. ISAP employs today 1,317 people.

Except for OASA Group, there is ATTIKO METRO S.A. which was founded in 1991 to study, supervise, construct and manage two new metro lines (2&3) in the Athens Metropolitan Area. The operation of these two new metro lines is undertaken by AMEL (the operation company for ATTIKO METRO).

Supply/Demand Data

	Metro	Bus + trolleybus	Total
SUPPLY			
Network length (km)	40	3,122	3,162
Number of lines	3	324	327
Number of stops/stations	77	19,603	19,607
Number of vehicles	340	2,460	2,800
Places-km (millions/year)	5.61	8.91	14.52
Number of operators	2	2	
DEMAND			
Number of trips (million)			539
Passengers-km (million)			4,200

Current Fares

Thermal and Trolley buses
Single ticket: 0.45 €
Monthly travelcard: 35 or 17.50 €

Metro Lines 2 & 3 (ATTIKO)
Single ticket: 0.70 €
Monthly travelcard: 35 €

Metro Line 1 (ISAP)
Single ticket: between 0.45 € and 0.70 €
Monthly travelcard: 35 €

	Thermal Bus	Trolley Bus	Metro	Metro
Management Body	Public – OASA affiliate	Public – OASA affiliate	Public – OASA affiliate	Public under the Ministry of Transport & Telecommunications
Address	6, Parnass ou str. Ag.Ioannis Rentis 182 33 GR Tel. +302104 933002 Fax. +302104 922155	Achaias and Kirkis str. Nea Filadelfia 143 42 GR Tel. +302102 583300-6 Fax. +302102 533050	67, Athinas str. Omonoia Sq. 105 52 Athens GR Tel. +302103 248311-17 Fax. +302103 223935	191-193 Mesogeion Ave. 115 25 Athens GR Tel. +302106 792399 Fax. +302106 726126
Managing Director	Constantine Kokkoris	Ioannis Petropoulos	Dionyssios Rapos	Vasilis Oikonomopoulos
Web site	ethelbus@otenet.gr	grammatia@athens-trolley.gr	http://www.isap.gr	www.ametro.gr

FUNDING OF PUBLIC TRANSPORT IN 2002

INDICATOR	UNIT	ISAP METRO	ETHEL BUS	ILPAP TROLLEY	Total
A/ Cost of operations yearly cost of operations of public transport	M EURO/Year	105	240	63	408
B/ Revenues of operations total public subsidies	M EURO/Year	15	73	30	118
among them public subsidies from national government	M EURO/Year	15	73	30	118
other revenues (advertisements, land revenues, etc.)	M EURO/Year	7	3	3	13
estimated fraud	%	2.5	5.2	1.1	8.8
among them share of monthly card use	%	74	9	16	100
among them share of yearly card use	%	74	9	16	100
C/ Investments (latest year available) new infrastructure	M EURO	82	3	10	95
roling stock	M EURO	14.5	0.5	7	22

CURRENT DEVELOPMENTS AND PROJECTS

PUBLIC TRANSPORT PROJECTS FOR THE ATHENS 2004 OLYMPIC GAMES

Creation of a tram network

The Ministry of Transport has decided to build a tram network connecting the City Center with the southern suburbs. Tram will satisfy the increased transport needs and contribute to the protection of the environment. The total length of the tramway will be 23.7 km and the maximum capacity 8,500 persons per hour and direction. The project is supervised by Tram S.A., a new company established for this purpose, as a subsidiary of Attiko Metro. The two tramlines are expected to be in operation before the Olympic Games.

Public Transportation to the Athens International Airport (AIA)

The Grand Opening of the New Athens International Airport (AIA) took place in 2001. A new suburban rail line is being built so as to connect the Athens-Piraeus Metropolitan Area and the Airport. It is expected to carry the majority of the traffic to/from the Airport with an estimated capacity of 5,000 persons per hour and direction. The Rail line will be 32 km long and constructed in the median lane along the newly constructed Attiki Odos Toll Road. Responsible for the implementation of the Suburban Rail Project is ERGOSE, a subsidiary of the Hellenic Railways (OSE). The line is expected to start operation in 2004.

Old Metro Line refurbishment and upgrading

The primary objective is to increase the transport capacity from 17,000 to 26,000 passengers per hour and direction. This will be achieved by increasing and renewing the rolling stock and improving the track and traffic signaling system.

Major renovation works are in progress in order to improve the operability, appearance and attractiveness of the oldest metro line in the area (ISAP line 1).

In addition, 120 new railcars will be delivered until November 2003.

Bus and Trolleybus Fleet renewal

The renewal of the bus and trolleybus fleet is underway. By the end of 2003 a total fleet of 1,850 buses and 350 trolleys will be available to meet the needs for the Olympic Games. All vehicles will be air-conditioned, environmental friendly (antipolluting technology) and accessible by handicapped people (kneeling, low floor, 500 buses equipped with ramps). 295 buses will be powered by Compressed Natural Gas (CNG).

BARCELONA

SPAIN

REGION

- The metropolitan region of Barcelona is made up of seven counties with a total of 164 townships.
- Population of Barcelona (2001): 1.50 million inh.
- Population of the Region(2001): 4.39 million inh.
- Area of City: 97.6 km²
- Area of Region: 3,237 km²
- N° of jobs in the Region (1998): 2.28 million
- Annual GDP/inhabitant (2001): 19,309 €

AUTORITAT DEL TRANSPORT METROPOLITÀ (ATM)

Missions

a) Planning public passenger transport infrastructure within its territorial area, defining the characteristics of the infrastructure, programming investment, proposing financing agreements.
b) Planning services and establishing co-ordinated operating programmes for all the companies.
c) Drawing up and approving a common fare framework within a financing policy which defines the degree to which costs should be covered by income from fares and defining an integrated fare system.
d) Formalising programme agreements with companies providing public transport services within its territorial area.
e) Formalising financing agreements with the public administrations in order to subsidise the service deficit.
f) Collecting income from fares for combined tickets and distributing this appropriately among operators.
g) Controlling income, costs and investment by service companies.
h) Exercising the administrative powers with regard to the organisation of services in its territorial area.
i) Advertising, information and user relations.
j) Establishing relations with other administrations in order to better fulfill the ATM's functions.

Organization

The Metropolitan Transport Authority (ATM), founded in 1997, is an inter-administrations consortium open voluntary to all authorities responsible for collective transport services in the metropolitan region of Barcelona. Currently, the consorted administrations are the Generalitat de Catalunya (the autonomous government, 51%), and the local administrations (49%): the Ajuntament de Barcelona (the Barcelona city council), the Entitat Metropolitana del Transport (the metropolitan transport organization of 18 central municipalities) and the AMTU (municipalities with urban bus network outer EMT).

The **Board of Directors** is the highest directing body of ATM, and it is constituted by 18 members: 14 representatives of the consorted administrations (7 nominated by the Generalitat de Catalunya, and 7 by the local administrations), 2 representatives of the nation's Government as observers, the managing director and the board's secretary. The conceller (minister) of Territorial Policy and Public Works of the Generalitat de Catalunya is its president, and its two vice-presidents are the major of Barcelona and the president of the Entitat Metropolitana del Transport, or the persons delegated by them.

The **Executive Committee** of the Board of Directors is made up of six members of the Board, three representing the regional government and three representing the founding local authorities. The Executive Committee has the general function of examining and elevating to the Board of Directors proposals.

General Manager: Sr Francesc X. Ventura

Staff: 36 (november 2002)

CONTACT

Responsible person: Jordi Prat

Address: Muntaner 315-321 - 08021- Barcelona - Spain

Tel: (34) 93 362 00 20 - Fax: (34) 93 362 00 22

E-mail: atm@atm-transmet.org - Web: www.atm-transmet.org

ATM Autoritat del Transport Metropolità

Public Transport System

The number of trips per week inside Barcelona Metropolitan Region is 49.96 million. Of these, 38.2% were by foot, 36.5% by car and public transport share was 25.4%. The year 2002 had 800.05 million public transport trips in Barcelona Metropolitan Area, uplifting in 5.27% the data for year 2001.
Transports Metropolitana de Barcelona (TMB) provide metro and Barcelona urban bus services.
There are more than 25 municipalities in Metropolitan area that have urban bus network.
Suburban buses are operated by private companies under concesion and agreements with regional government.
Renfe Cercanías (state railways company) and **Ferrocarrils de la Generalitat de Catalunya (FGC)** (regional railways company) operate suburban train lines.

Budget

The ATM **Budget in 2003 rose to € 565.90 million.**

Main expenditures:
Personnel € 1.82 million (0.3%);
Purchases of goods and services € 261.28 million (46.2%);
Financial expenses € 2.17 million (0.4%);
Current transfers € 265.48 million (46.9%);
Investment € 5.44 million (1.0%);
Capital transfers € 29.68 million (5.2%).

Main revenues:
Rates and other revenues € 259.21million (45.8%);
Current transfers € 270.24 million (47.8%);
Capital transfers € 22.22 million (3,9%).

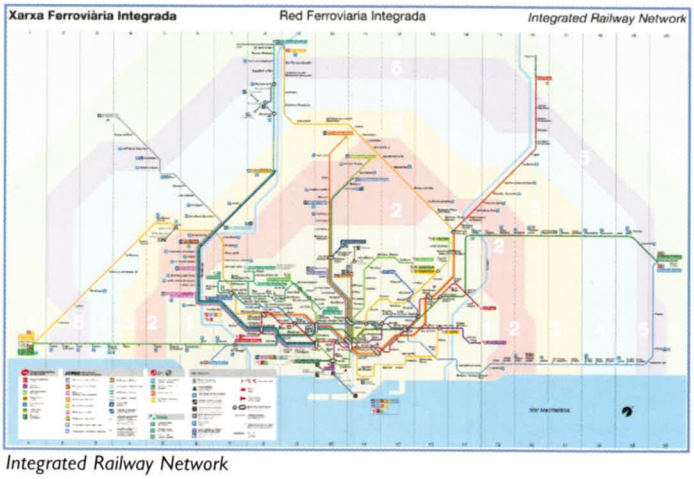
	TMB		FGC	Renfe Cercanías	Suburban bus
	Urban bus	Metro	Suburban train		
Management Body	Public under municipality		Public under Regional Government	Public under State Government	Private, under Public Concesion
Address	Calle 60 N.21-23, P.Ind Zona Franca		Av. Pau Casals, 24-8e	Estació de Sants Pl. Països Catalans, s/n	
Managing Director	Constantí Serrallonga		Antoni Herce	Josep Manau	
Web site	www.tmb.net		www.fgc.net	www.renfe.es	

Supply/Demand Data 2002

Indicator	Metro	Urban bus	Suburban rail	Suburban bus
SUPPLY				
Network length (km)	84.3	897.3	569.7	6,279.3
Number of lines	5	103	6	336
Number of stops/stations	117	2,365	173	5,000
Number of vehicles	581	1,007	376	675
Total places-km (millions/year)	11,193.6	3,628.3	9,176.0	–
Number of operators	1	1	2	
DEMAND				
Number of trips (millions)	322.0	189.8	180.9	107.3
Passengers-km (millions)	1,674.4	626.4	3,108.4	

Funding of Public Transport in 2003

The increase by 10.7% of the budget in 2003 is mainly due to the culmination of the whole fare integration process and to a greater contribution by the Administrations on the basis of the current negotiations of the new 2002-2005 Programme-Agreement for the operators that are part of the Integrated public transport system.



Integrated Railway Network

Central Integrated Railway Network

FARES 2003

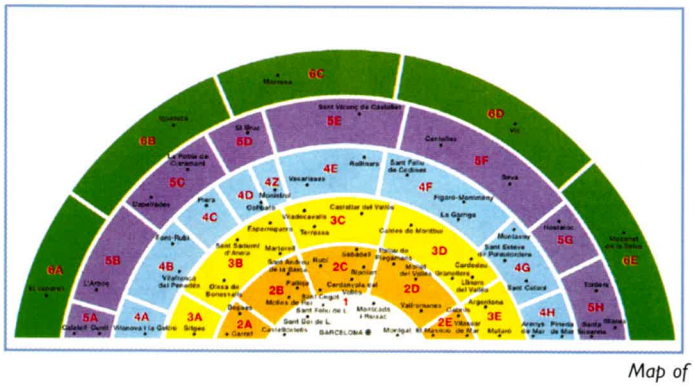
ATM has developed a new integrated fare system which has entered into force in the year 2001. This project is of vital importance for public transport in the metropolitan region, as it represents a substantial improvement to the features of the service provided and enables users to see all the different operators as forming part of a single, global system.

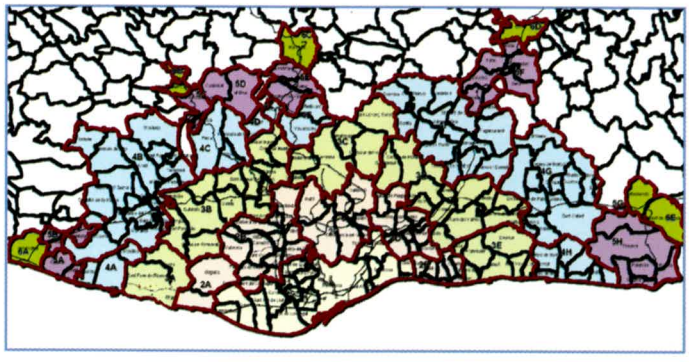
Geographic area covered:

200 municipalities and 4.5 million inhabitants.

Divided into 6 rings and different sectors. A "fare zone" consists of the intersection between rings and sectors.

(Euros)	1	2	3	4	5	6
10-trip ticket	5.80	11.70	16.10	20.65	23.65	25.30
50-trip ticket	24.30	40.65	57.00	71.05	84.20	93.40
Monthly ticket	37.65	54.20	73.30	87.30	100.50	106.70
1-Day ticket	4.40	6.90	8.80	10.00	11.30	12.50
Familycard	35.60	50.30	68.90	85.10	97.40	104.60
Quartercard	103.60	149.20	201.80	240.60	274.30	284.00
Youthcard	88.00	126.80	171.50	204.50	233.20	241.50





Map of fare zones

CURRENT DEVELOPMENTS AND PROJECTS

There are two new tramway lines under construction

Diagonal –Baix Llobregat Tram.

The new infrastructure will serve 7 municipalities: Barcelona, L'Hospitalet de Llobregat, Esplugues de Llobregat, Cornellà de Llobregat, St. Joan Despí, St. Just Desvern and St. Feliu de Llobregat.

Total length of line 15.8 km with with twenty-eight (28) 64 m long platform stops. Six of these stops will be connected with suburban train (Cercanías) and metro.

Investment of 245.68 million euros (38,400 million pesetas): Includes infrastructure work, systems and city development, expropriations and rolling stock.

Accessible to all people with reduced mobility, with ease of access for bicycles, children's prams or push-chairs, etc.

Fares integrated in the system, with connections to other modes of transport.

The average expected demand is 16.9 million travellers/year, between 7.6 million in the first year and 18.8 by year 25.

Sant Martí-Besòs Tram

It will serve 3 municipalities: Barcelona, Sant Adrià del Besos and Badalona.

14.1 km of line with 27 platform stops. Connection with suburban train (Renfe Cercanías) and metro by 11 stops.

Investment of 205.0 Million euros (28,113 million pesetas): This includes work on infrastructure, superstructure and development of 111.3 million euros (16.253 million pesetas). Installations and systems 48.5 million euros (3,934 million pesetas) and rolling stock 45.2 million euros (7,926 million pesetas).

Accessible to all people with reduced mobility, with ease of access for bicycles, children's prams or push-chairs, etc.

Fares integrated in the system.

The average expected demand is 11.8 million travellers/year.

BILBAO

SPAIN

REGION

- Bizkaia is one of the Regions of the Basque Country. It has 1,123,000 inhabitants living in 111 municipalities and covers a surface of 2,217 km².
- Its capital city is Bilbao, a city of 350,000 inhabitants on 41.3 km². The Metropolitan Area of Bilbao has a population of 866,000 inhabitants in 26 municipalities covering 364,8 km². Other municipalities are Barakaldo (100,000 inhab.) and Getxo (82,000 inhab.).
- N° of jobs: 354,000
- Bizkaia annual GDP/inhabitant : 17,971 €
- Local Governments in the Region: 111 municipalities

BIZKAIO GARRAIO PARTZUERGOA
CONSORCIO DE TRANSPORTES DE BIZKAIA

Missions

The powers set out to CTB are as follows:

- To assist with financing the Bilbao Metropolitan railway infrastructures, and carrying out general superstructura and fittings projects.
- To operate the Bilbao Metropolitan Railway through Metro Bilabo S.A., a publicly-owned company in which the Bizkaia Transport Consortium hold 100% of the shares.
- To ensure sound operation of the transport system in Bizkaia province, taking any measures required in conjunction with other authorities.
- To exercise any authority invested in the Consortium by virtue of a plan for arrangement an co-ordination of public transport in Bizkaia.

Organization

- Date of creation: 1975.
- Status: Local company with participation of the Basque Government, Bizkaia county government (Diputación Foral de Bizkaia), municipality of Bilbao (Ayuntamiento de Bilbao) and other municipalities

The Consorcio de Transportes de Bizkaia was created in December 1975 as an organisation independent from its members. Its budget comes from the Basque Government, the Diputacion Foral de Bizkaia and from operations.

The Board has 26 members:

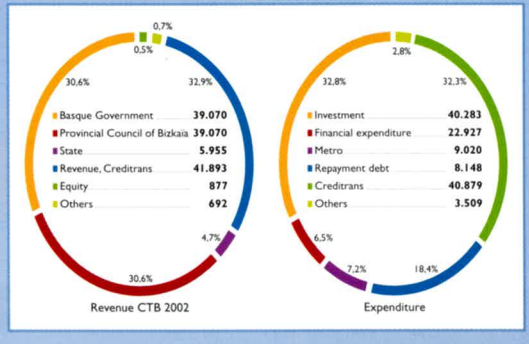
- Basque Governement: 13 members
- Bizkaia county government (Diputación Foral de Bizkaia): 2 members
- Municipality of Bilbao (Ayuntamiento de Bilbao): 2 members
- Other municipalities: 9 members

Current President of the Consorcio de Transportes is the general county councillor (Diputado General) de Bizkaia and the Vice-President is the Mayor (Alcade) of the Municipality of Bilbao.

Budget

CTB budget amounted to 187.4 million Euro in 2002

The institution must finance work on the Bilbao Metropolitan Railway, subsidise any operating deficits in the Metro, absorb finance relating to outstanding debt and deal with any other investment or expenditure in connection with its powers.



CONTACT

Managing Director: Juan Cruz Nieves
Address: Ugasko 5 bis, 1 - 48014 Bilbao
Tel: 34 94 476 61 50 - Fax: 34 94 475 00 21
E-mail: partzuergoa@cotrabi.com - Web: www.cotrabi.com

BIZKAIKO GARRAIO PARTZUERGOA
CONSORCIO DE TRANSPORTES DE BIZKAIA

PUBLIC TRANSPORT SYSTEM

2002 mobility study shows us that Bizkaian population makes 2,900,000 trips a day, of which a 57% are motorised.

Public transport shared with a 43% to the motorised mobility. In Bizkaia users of public transport have arisen from 150.13 million passengers in 1998 to 172.05 million passengers in 2002; which represents a yearly average increase of 3.5%.

Transport Network Map

FUNDING OF PUBLIC TRANSPORT IN 2002

The Consortium's overall finance scheme is set out in the Finance Plan, a document providing a scenario of almost 40 years, a balanced and feasible system, and this is why current decisions are assessed as to their impact on finance.

The Finance Plan stabilises economic providing funds from the Basque Government and the Provincial Council of Bizkaia at around 40 million euros.

Providing funds peaked at 42.07 million between the year 2003 and 2014, whereupon it began to level off.

	Urban bus. Bilbobus	Metro Bilbao	Suburban Rail			Suburban bus	
			RENFE	FEVE	Euskotren	Euskotrenbus	Bizkaibus
Management Body	Private under Bilbao Municipality	Public Under CTB	Public under State Government		Public under regional government		Public under County Government
Address	Compo Volantin 1, 5j 48007 Bilbao	C/ Navarra, 2 ES-48001 Bilbao	Plaza Circular, 2 - 3j 48008 Bilbao	Plaza de las Estaciones s/n 39002 Santander	C/ Atxuri, 6 ES-48006 Bilbao		Iparragirre, 21 - 1..., ES-48009 Bilbao
Managing Director	Fernando Gonzalez Vara	Josu Sagasttagoitia	Julian Padierna	Angel Vicente Unzue	Jose Miguel Mugica		Jose Antonio Asensio
Web site	www.bilbao.net	www.metrobilbao.net	www.renfe.es	www.feve.es	www.euskotren.es		www.bizkaia.net

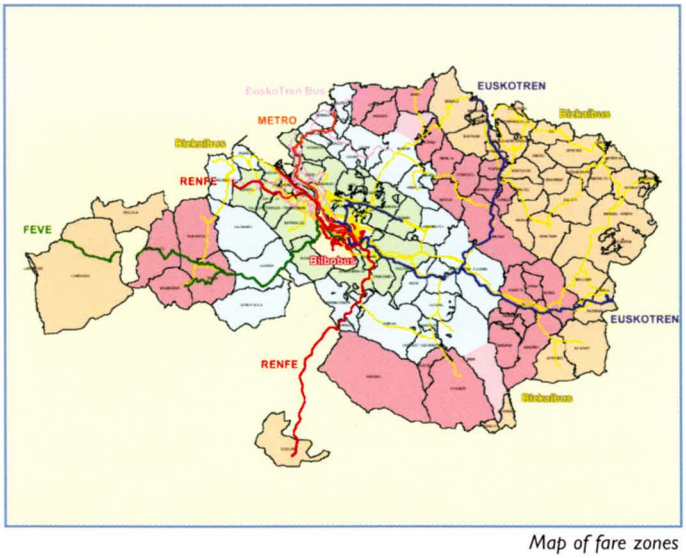
SUPPLY/DEMAND DATA 1999/2002

	METRO	URBAN BUS	SUBURBAN BUS	SUBURBAN RAIL	TRAM	COMMENT
SUPPLY						
Network length (km)	34,24	–	3.359	89,43*	2,40	*ET only
Number of lines	2	37	114	7	1	–
Number of stops/stations	32	457	2.595	45*	12	*ET only
Number of vehicles	37	136	321	–	7	–
Places-km (millions/year)	1,806	527	2.540	506*	–	*ET only
Number of operators	1	1	5	3	1	–
DEMAND						
Number of trip (million)	64,8	21,4	32,7	–	–	–
Passengers-km (million)	440,9	69	330,12	112,7*	0,12	*ET only

FARES IN 2003

A common zoning scheme was approved in the year 2001, and this is the target reference for the operators to use in their future considerations.

The launch of the **Creditrans** Uniform Ticket (Billete Único) in September 2000 was the first effective step in this direction following the agreements. **Creditrans** is a ticket with money to be used for travel, and each mode of transport deducts its fares for the journey made. The amount charged is that set out in each mode for "season" tickets (bonos). The Creditrans allows passengers to change modes at lower prices, since 20% of the total price of the combined journey is deducted by the second operator.



Map of fare zones

Price in Euro	1	2	3	4	5
Metro Bilbao					
Single Ticket	1.00	1.15	1.25		
Creditrans	0.58	0.68	0.79		
Monthly	24.00	28.50	33.00		
Eusko Tren Bus					
Single Ticket	1.00	1.15	1.50	2.05	3.05
10 trips	6.60	8.05	10.85	14.70	19.75
Monthly	20.10	24.50	30.00	41.00	47.70
Renfe					
Single Ticket	0.95	0.95	1.00	1.60	2.00
10 trips	5.95				
Monthly	19.00	19.00	22.95	33.75	39.45
3 months	84.35	84.35	95.60	111.95	
Feve					
Single Ticket	0.85	1.05	1.50	1.80	2.50
10 trips	6.20	8.25	12.40	14.55	20.60
Monthly	34.70	38.80	42.85	49.00	63.25
Biskaibus					
Single Ticket	0.90	1.00	1.30	1.90	3.20
Creditrans	0.70	0.80	1.00	1.45	2.50
Bilbobus					
Single Ticket	0.83				
Creditrans	0.46				

CURRENT DEVELOPMENTS AND PROJECTS

- **Bilbao: Metro Line 2 has started operations.**

Line 2 of the Bilbao Metro started operations on 13th April 2003, five years after Line 1, which has proved a great success since its inauguration. Line 1, which is 28 km long and has 27 stations, carried 56 million passengers in 2001.

The new metro route will serve the left bank of the Nervion River (Ezkerraldea district), which has a population of about 275,000. The arrival of the metro system in this area, which was severely hit by industrial crisis over the last 20 years, with high rates of unemployment and social degradation, will help contribute to transform this district into a location of opportunity and progress.

Line 2 will be, when it is fully completed in 2011, 20.5 km long, of which 10 km will run along the left bank, and the remaining 10.5 km will be shared with Line 1, which serves the centre of Bilbao.

This project will require a total investment of €434 million, paid by the CTB. Half of this amount will come from the Basque government and the other half from the Provincial Council of Bizkaia.

The first section of Line 2, inaugurated in April, is 5.7 km long and cost €281 million. It provides five new stations, three of which retain the cavernous configuration designed by the architect Norman Foster for Line 1, with access to street level via escalators and lifts. Stations provide access to a metro station in less than 10 minutes for over 75,000 people.

Additional rolling stock for this new line consists in 13 trains equipped with hi-tech ATO and ATP safety systems, for a total cost of €82 million.

- **Tramway comes back to Bilbao:** 36 years after they disappeared from the streets of Bilbao, the capital city of Bizkaia in the Basque Country, tramways are about to come back. The decision to build a new tramway network, called EuskoTran, was reached in 1998 between the Basque Government, the Municipality of Bilbao and Bilbao-Ria 2000, a public company in charge of designing the project. The first section of Line A, opened on December 18th, 2002, the modern Tram service became operational between Atxuri and Uribitarte, with six stops: Atxuri – Ribera – Arriaga – Abando – Pío Baroja – Uribitarte. On july 2003 it was enlarged to Uribitarte – San Mamés. Finally, the extension to Basurto, pending the global town development plans being undertaken in that area by Bilbao Ría 2000, has been planned for the year 2004. The Line will be 4.5 km long and provide 11 stations. The cost of building the Line A was shared between the three stakeholders of the project (64,75% for the Basque Government, 11,75% for the Municipality of Bilbao and 23,50% for Bilbao-Ria 2000).

BRUSSELS BELGIUM

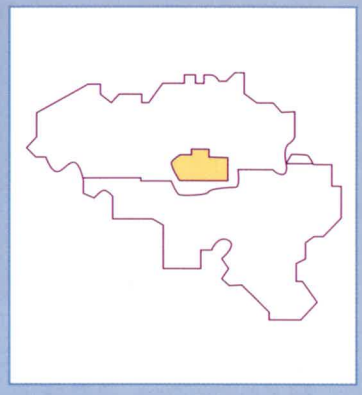
REGION

- The Region of Brussels is one of the three Regions making up federal Belgium since 1989.
- It has a population of 950,000 inhabitants on a surface of 160 km².
- The Region is the core of a metropolitan area of 2.5 million people in a radius of 30 km.
- The Region is managed by a council elected by the inhabitants. It has 19 municipalities on its territory.

MINISTRY OF THE REGION OF BRUSSELS-CAPITAL

Missions

Like the other two Belgian Regions, the Region of Brussels-Capital is in charge of transport policies. The Administration de l'Equipement et des Déplacements is the department of the Region in charge of defining and implementing the policies in the field of transport and communications. More precisely, it defines the Region plan of mobility (Iris Plan) and signs the contract of service with STIB, the company belonging to the Region in charge of operating the public transport services on the territory of Brussels.

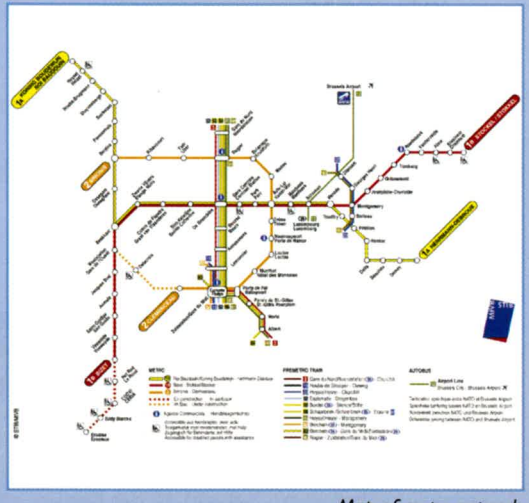


PUBLIC TRANSPORT SYSTEM

Metro, tramway and urban buses are operated by **STIB**, a public company belonging to the Region of Brussels. STIB has 6,000 employees and its turnover reached € 323 million in 2002. (www.stib.be)

Suburban buses are operated by TEC: (www.tec-wl.be) and De Lijn: (www.delijn.be) the public companies in charge of public transport systems in the Walloon and Flemish Regions.

Heavy rail services are operated by SNCB, the national railway company in Belgium: (www.b-rail.be).



Map of metro network

CONTACT

Address: Ministère de la Région de Bruxelles Capitale
Administration de l'Equipement et des Déplacements
Direction de la Politique des Déplacements
Rue du Progrès 80 boîte 1 - B-1030 BRUXELLES
Tel: + 32 2 204 19 27 - Fax: + 32 2 204 15 10
E-mail: tduquenne@rmbc.irisnet.be - Internet: www.bruxelles.irisnet.be

BRUSSELS BELGIUM

SUPPLY/DEMAND DATA

	HEAVY RAIL	UNDERGROUND	TRAMWAY	URBAN BUS	SUBURBAN BUS
SUPPLY					
Network length (km)	210	40	205	436	260
Number of lines		3	16	48	54
Number of stops/stations	100	64	2,200	2,200	
Number of vehicles		218	292	570	120
Places-km (millions/year)		3,399	1,923	2,273	
Number of operators	1	1	1	1	2
DEMAND					
Number of trips (million)	66	97	58	50	10
Passengers-km (million)		480	300	250	

FARES IN 2003

- **Single ticket:** € 1.40
- **5-trip ticket:** € 6.30
- **10-trip ticket:** € 9.20
- **Season passes:**
  - Daily: € 3.70
  - Daily for group of 5 persons: € 6.30
  - Monthly pass: € 34.20
  - Monthly pass for less than 25 or more than 60 years old: € 25.20
  - Yearly pass: € 342
  - Yearly pass for less than 25 or more than 60 years old: € 252
  - Yearly pass for student: € 200

FUNDING OF PUBLIC TRANSPORT IN 2002

- **Income (2001):**
  traffic revenue: € 114 million.
- **Expenses of operations (2001):**
  € 318 million.
- **Investments:**
  € 75 million, divided between the Region (€ 50 m) and STIB (€ 25 m).

CURRENT DEVELOPMENTS AND PROJECTS

Extensions of the metro

STIB, the public transport company of the region of Brussels, inaugurated on 15th September 2003 an extension of metro line 1 towards the western suburbs of the Belgian capital.

The new section is 2.7km long, of which 2km are underground, and its four stations (three underground and one on surface) with central platform provide full accessibility to people with reduced mobility. The terminus station (Erasmus) is located close to a major university hospital, two schools for nurses and several companies. Two P&R ride facilities are provided : at the terminus station (600 spaces in the future), and at the station close to the highway ring road (1,200 spaces when completed). The total cost of this extension amounts to about € 120 million, out of which € 20m for the rolling stock.

Further extensions of the metro line are expected in 2005 and 2007. Besides, a new railway station is planned for 2007-2010 at the intersection between the metro line and the railway line Brussels-Gent.

Creation of a regional express railway network (RER)

The Urban Mobility Plan of Brussels adopted in 1998 (Plan Iris) plans an increase of the supply of rail services in a radius of 30 km from the city centre thanks to the creation of a regional express network. The objective is to raise the modal share of public transport from 34% to 41% in the central area of the city. In 1999, the Walloon, Flemish, Brussels and federal governments agreed on the objectives and the programme of the project, and in 2001, the federal government agreed to fund the extensions of railway infrastructures over 12 years, for a total investment of 2 billion Euros. An agreement of co-operation between the 3 Regions and the State will determine the funding of operating deficits of the new services and the accompanying measures, such as the capacity of radial roads, the management of parking and land planing. The project will mean the purchase of 500 2-level cars so as to enable a doubling of the number of passengers arriving in the Brussels stations by train. The project also foresees the creation of a dozen new stations in the central part of the metropolitan area, either in connection with the underground or in areas not served yet.

Launch of car-sharing

The first four car-sharing stations of the Belgian capital city were inaugurated last May. This project, called Cambio, was developed jointly by Taxistop, a non-profit organisation and STIB, which intend to open two new stations in a near future. Surveys showed that each car from a car-sharing scheme has the potential to replace between four and ten private cars, and that car-sharing is less expensive than owning a private car up to 12,000km a year.

The Region of Brussels will support the launch of the initiative with a subsidy of €150,000 on 4 years, and it intends to promote the use of clean vehicles by car-sharing. Brussels is the fourth city in Belgium to set up a car-sharing scheme.

DUBLIN

IRELAND

REGION

- **Population of the City (2001): 1,2 million inh.**

DUBLIN TRANSPORTATION OFFICE (DTO)

Missions

The Dublin Transportation Office (DTO) aimed not just to provide another report on a shelf but ongoing planning process. The Dublin Transportation Office (DTO) makes a continuous input to transport planning and land use policy through a team of engineers, planners, GIS officers and administrators who specialise in Transportation Planning, Transportation Modelling, Traffic Management and Land Use Planning.

Organization

The Dublin Transportation Office (DTO) was established in 1995 to co-ordinate implementation by relevant agencies of an agreed integrated transport strategy for the Greater Dublin Area, namely the Dublin Transportation Initiative (DTI) which was adopted as government policy in 1994. The business of the office is managed and controlled by the Director.
Overall responsabilities for the office rests with the Steering Committee appointed by the Minister of Transport.

SUPPLY DEMAND DATA

	BUS
SUPPLY	
Network length (km)	885
Number of lines	140
Number of vehicles	989

FARES 2003

Current Fares

- Daily ticket: between 5,00 € and 17,50 €
- Weekly ticket: between 5,00 € and 55,00 €
- Monthly ticket: between 68,00 € and 98,00 €
- Annual ticket: between 650,00 € and 850,00 €

CONTACT

Address: Hainault House - St Stephens Green 69-71, DUBLIN 2
Director: John Henry
Tel: 00 353 1 4778 1000 - Fax: 00 353 1 4778 5935
E-mail: johnh@dto.ie - Internet: www.dto.ie

REGION

- **Population of RMV: 5 million inh.**
- **Population of Frankfurt: 0.7 million inh.**
- **Area of RMV: 14,000 km²**
- **Number of jobs: 1.9 million**
- **Local Governments in the Region: 15 counties and 11 cities**

RHEIN-MAIN-VERKEHRSVERBUND (RMV)

Missions

The Rhein-Main-Verkehrsverbund (RMV) has five different divisions within its organisation.

- Planning develops the Integrated Timetable (ITF). The ITF is an instrument designed to offer optimum connections. This division developed a public transport policy.
- The Ordering and Contracting division maintains RMV's efficiency and is also responsible for the quality check. The division orders the capacities by our contractual partners.
- The Marketing division is responsible for marketing and transport research, sales, distribution and tariff. RMV is responsible for marketing within its area.
- The Controlling division does the budget planning, controlling and allocation of revenues for the local partners and for the RMV GmbH.
- The very new division Infrastructure Management has to organise the vehicle management. The goal is to provide vehicles to all rail transport suppliers. The management of the stations and rail infrastructure is the second branch of this field.

In addition, RMV develops its mobility services and creates a mobility agency for all services around mobility and house-to-house performance.

Therefore, RMV is responsible for regional transport and infrastructure development, development of the regional schedule for trains and buses, regional marketing with fare system-ticketing-electronic ticketing, financial management for the public co-financed infrastructure and service of public transport, budget planning and allocation of revenues for about 147 transport companies.

Organization

The Rhein-Main-Verkehrsverbund (RMV), established in July 1994, organises the regional public passenger transport in its region. There are nearly 150 transport companies associated within RMV. RMV is not a merger of transport companies. Instead, 11 cities, 15 districts and the State of Hesse work together on a voluntary and contractual basis and as equal partners.

The company meeting and the supervisory board are the bodies at the political level. The participating districts and cities are represented in both of these organs together with the State of Hesse. The second level, management level, is represented by the RMV and the local authorities that are responsible for the local transport.

CONTACT

Address: Alte Bleiche 5, D-65719 HOFHEIM

Managing Director: Ing. Volker Sparmann

Tel: 00 49 61 922 94 101 - Fax: 00 49 61 922 94 940

Internet: www.rmv.de

PUBLIC TRANSPORT SYSTEM

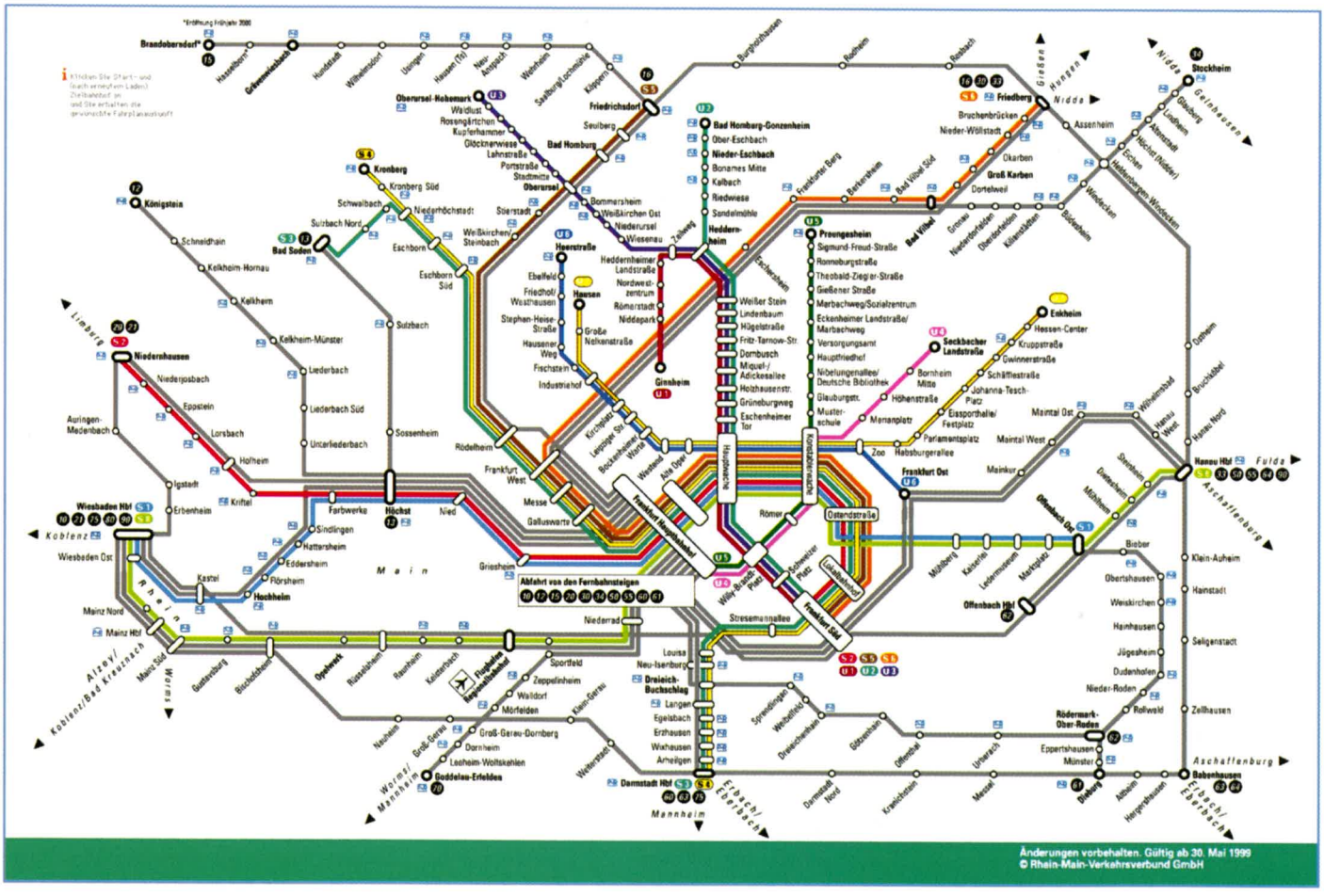
The RMV-network consists of about 400 railway stations, 1 500 track km and more than 10 000 stops for trains and buses. As a result, RMV facilitated the transfer of at least 620 million passengers in 2002.

The public transport networks are operated by:

- 5 transport companies for heavy rail
- 3 transport companies for tramway
- 1 transport company for underground
- about 140 transport companies for buses

SUPPLY/DEMAND DATA

	METRO	BUS	TRAMWAY	HEAVY RAIL
SUPPLY				
Network length (km)	58	–	125	1,500
Number of lines	9	870	14	46
Number of stops/stations	84	11,500	–	400
Number of vehicles	224	25,987	188	–
Number of operators	1	141	3	5



Map of rail network

FARES 2003

The passenger uses only one ticket that allows him or her to travel through the entire RMV-region. This is a huge advantage and has increased the acceptance of the public transport system in the last few years.

The network pricing system is an area zone system, dividing the network area into tariff zones.

Ticket assortment :

- Single ticket (adults, children, apprentices)
- Short-haul ticket
- Season ticket (day, weekly, monthly, annual, day ticket for groups)
- Hessenticket
- Job ticket
- Student ticket
- Combination ticket

FUNDING OF PUBLIC TRANSPORT IN 2002

48% Revenues by passengers
22% State government of Germany
15% Municipal authorities
15% Federal State government of Hesse

1,130 million Euro total (year 2001)

Financing of the basic regional range of services is achieved by using fare revenues. Transfer payments from the national government to the state use funds from the regionalisation law and equalisation payments.

The additional regional range of services on offer in the cities and districts are covered by financing according to the partnership model. This means that 50% of the higher costs created by additional supply are in principle financed by state funds and 50% by the area bodies where the population benefits from the improved services. The cooperation grant is a further fund intended to equalise the losses resulting from unified pricing policy and harmonisation introduced by the single ticket system in the entire network area. The state covers 85% of the costs, the remainder is paid by the local agencies.

CURRENT DEVELOPMENTS AND PROJECTS

- **Bus and bicycle: together for leisure time:**

the strong development of cycling as a leisure activity, which enables to practice sport in a natural environment, creates a new mobility market in Germany : bringing cyclists to their practice destinations. Public transport systems have clear advantages on the private car for this new market : they enable cyclists to depart and to arrive at different places, and they can carry bicycles more easily than cars. After the completion of the bicycle route "Vulkan" in the Vogelsberg region in 2000, RMV decided to create a regular bus line called "Vulkanexpress", which is specifically devised so as to bring cyclists to this area and which can carry bicycles on hooks. Given the success of this first experience, RMV created two new routes adapted for the transport of bicycles in 2001, which operate during the week end and the holidays. All these routes can be accessed with RMV season passes and tickets. Regional trains serving the area, which are equipped during the week end with multi-use vehicles that allow to carry a greater number of bicycles as well as kinderwagen and wheelchairs, also witnessed an increase in the number of cyclists carried out with their bicycle.

- **Better and more accessible information for users of public transport systems**

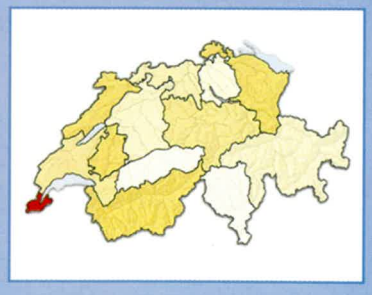
RMV now provides the population with 10 mobility centres in co-operation with local authorities, where people can get information, advice, and buy tickets for the RMV public transport systems. These mobility centres also provide their visitors with Internet services enabling them to get information about tourism, car rental, car sharing, parking facilities,etc.

GENEVA SWITZERLAND

REGION

- Population of the City (2001): 0.18 million inh.
- Population of the Canton: 0.4 million inh.
- Area of City: 15 km²
- Area of Region: 246 km²
- Local Governments in the Region: 45 municipalities

OFFICE DES TRANSPORTS ET DE LA CIRCULATION (OTC)



Missions

OTC is charged :

- to define and negotiate the offer in public transport
- to allot the exploitation of it
- to ensure the quality control of it

OTC treats administrative procedures in connection with the proper authorities (Federal Office of Transport - OFT-, partners of Vaud and French).

Organization

OTC collaborates with the organising authorities of regional public transport.

SUPPLY/DEMAND DATA 2002

	URBAN BUS	METRO	SUBURBAN RAIL	SUBURBAN BUS
SUPPLY				
Network length (km)	12	300	30,8	–
Number of lines	2	41	–	–
Number of vehicles	46	222	73	2

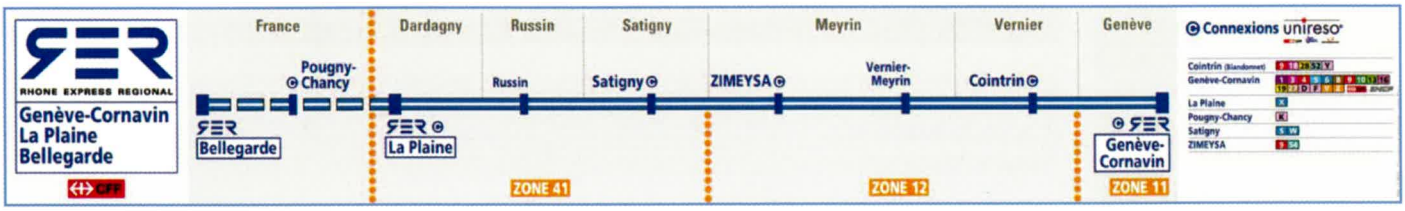
FARES 2003

Individual ticket:	2.20 CHF
Weekly ticket:	30.00 CHF
Monthly ticket:	70.00 CHF
Annual ticket:	700.00 CHF

CONTACT

Address: Office des Transports et de la Circulation
20, rue du Stand; CH-1204 GENEVA
Director: Frédy Wittwer
Tel: 00 41 22 327 4770 - Fax: 00 41 22 327 5133
E-mail: secretariat-otc@otc.etat-ge.ch - Internet: www.etat-ge.ch/otc

Transport network map



RER of Geneva

CURRENT DEVELOPMENTS AND PROJECTS

Geneva will increase by 20% the provision of public transport services by 2006:

the government of the canton of Geneva approved the masterplan of public transport networks for the period 2003-2006. Motorised trips are expected to rise by 20% until 2020, threatening the city of major congestion. In this context, public transport authorities have decided to increase by 65% the provision of public transport services so as to foster modal transfer towards public transport, and to improve the quality of services provided. A first intermediary target is to increase by 20% the provision of public transport services by 2006. Concerning the quality of services, the commercial speed shall be above 18 km/h for bus transport and 30 km/h for transport systems with dedicated lanes.

Three key actions will be carried out to meet the target of modal transfer:

- increase of the overall supply of services
- creation of new services and increase of the supply at non-peak hours
- improvement of connections between the urban public transport networks and railways

Tramways are a key tool for the improvement of the attractiveness of public transport. Between 1994 and 1998, tramway routes have seen an increase of 40% of their patronage. 14,5 km of new routes will be built before 2006, bringing the total network to 35,8 km.

35 million Euro will be invested every year to increase the capacity of networks and to build new infrastructures. This plan will lead to an increase by 30 million Euro of the costs of operation. This new cost will be covered by an increase of fare revenues by 19 million Euro and increased public subsidies (+ 26 million Euro).

The objective is to maintain the ration of coverage of costs by farebox revenues at 40%.

HELSINKI FINLAND

REGION

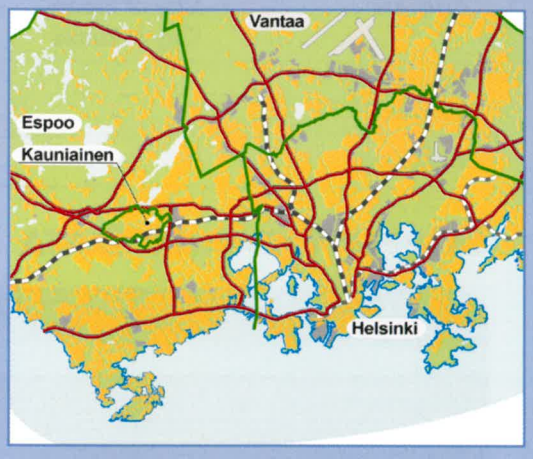
- Population of the metropolitan area : 0.96 million inh.
- Population of the city of Helsinki: 0.55 million inh.
- Area of metropolitan area: 750 km²
- N° of jobs: 570,000
- Contribution to Finnish GDP: 30 %
- Local Governments in the metropolitan area: 4 municipalities

HELSINKI METROPOLITAN AREA COUNCIL (YTV)

Missions

The Helsinki Metropolitan Area Council (YTV) promotes the development of the Helsinki metropolitan area by providing first-class services for traffic and public transport, waste management, air-pollution control and development planning through :

- procurement of regional public transport services, planning of traffic and public transport networks, managing tariff and ticketing schemes and regional fares
- waste management of member municipalities
- monitoring, research, planning as well as training and information services for air-pollution control in member municipalities
- survey, research, planning and preparatory services for the metropolitan area and its municipalities



Organization

The Helsinki Metropolitan Area Council (YTV) was created in 1970. Operations of YTV are based on a specific Act (1.1.1996), which determines member municipalities, legal capacity, duties, organization and financing. The Act refers to the region comprising the member municipalities of Helsinki, Espoo, Kauniainen and Vantaa as the Helsinki Metropolitan Area.

The Regional Assembly, which comprises 22 members (Helsinki 11, Espoo 5, Vantaa 5 and Kauniainen 1), approves the budget and the annual accounts, it elects the members of the Executive Board and nominates the Executive Director. The Executive Director refers to an Executive Board of 14 members, which is responsible for YTV's administration and finances, and prepares the issues for decision by the Regional Assembly.

YTV has five departments: Department of Transport, Department of Waste Management, Environmental Office, Development Planning Office and Administrative Office.

Budget

167 million Euro; of which Transport Dept. 121 million Euro (2003)

CONTACT

Address: Opastinsilta 6A, PO Box 521, FIN-00521 HELSINKI
Director of Transport: Niilo Järviluoma
Tel: 00 358 9 156 1232 - Fax: 00 358 9 156 1456
E-mail: niilo.jarviluoma@ytv.fi - Internet: www.ytv.fi

YTV

PUBLIC TRANSPORT SYSTEM

General description

Helsinki region has an integrated multi-modal public transport system with a good level of service. The network consists of extensive bus services throughout the region, three railway corridors and two metro lines as well as tramways covering the central urban area of Helsinki City. Almost 1 million trips are made on public transport on a weekday. The modal share of vehicle trips is 39 % overall and 72 % of peak hour trips to the CBD. The integrated ticketing system covers all modes within the Metropolitan Area.

	Urban bus	Metro + trams	Suburban rail	Suburban bus
Management Body	Municipalities: City of Helsinki	Helsinki City Transport (HKL) Sitasaarenkatu 12A	State Railways (VR) Vilhonkatu 13	YTV Opastinsilta 6A
Address	City of Espoo City of Vantaa	P.O. Box 1400 FIN-00099 HELSINKI	P.O. Box 488 FIN-00101 HELSINKI	P.O. Box 521 FIN-00521 HELSINKI
Managing Director	-	Mr. Matti Lahdenranta		Mr. Niilo Järviluoma
Web site	-	http://www.hel.fi/hkl/english.html	http://www.vr.fi/heo/eng/	http://www.ytv.fi.english/

SUPPLY/DEMAND DATA 2002

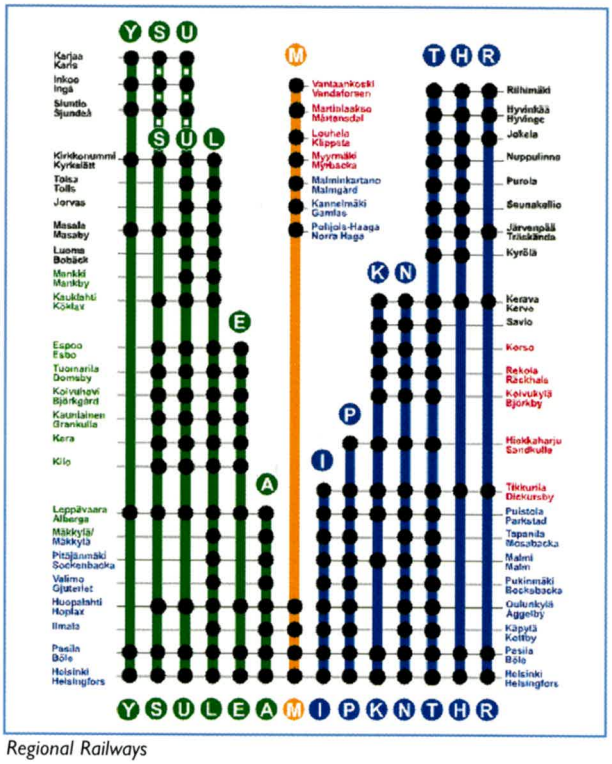
	METRO	TRAMWAY	BUS	HEAVY RAIL
SUPPLY				
Network length (km)	21	90	1,000+	60
Number of lines	2	10	260	5
Number of stops/stations	16	242	5,000	34
Number of vehicles	54	115	1,500	94
Places-km (millions/year)	2,581	658	6,000	1,340
Number of operators	1	1	12	1
DEMAND				
Number of trips (million)	55	56	170	37
Passengers-km (million)	385	118	1,135	329

FARES 2003

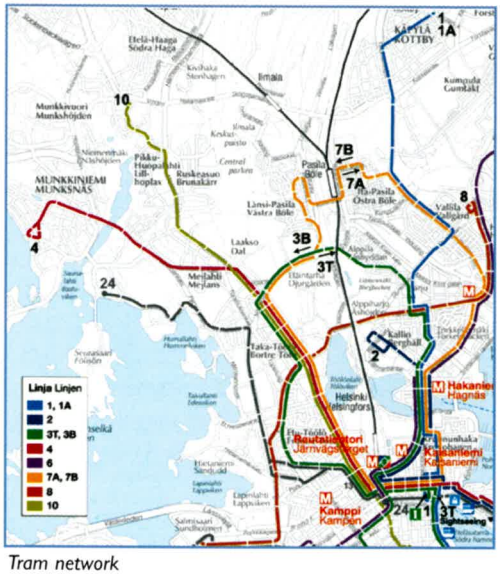
- Single ticket : between 1,50[0] € and 3,00[2] €
- Multiple trip or multiple coupon ticket = travel card value debit : between 1,13[0] € and 2,40[2] €
- 2 week pass* : between 19,10[1] € and 34,00[2] €
- Yearly pass* : between 385,00[1] € and 715,00[2] €
- Price per day : between 1,04[1] € and 1,94[2] €
- Price per day for pupils / students : between 0,78[1] € and 1,46[2] €
- Price per day for elderly persons : between 0,55[1] € and 0,97[2] €
- Pass for small groups (24h) : between 7,00[1] € and 11,00[2] €

Fare Zones:
[0] Tram trip, no transfer
[1] Trip within a city
[2] Regional trip

Travel Card:
Contactless smart card. Pass for period of 14-366 days.
Stored value for single tickets.



Regional Railways



Tram network

FUNDING OF PUBLIC TRANSPORT IN 2002

Cost of operations of public transport :

- 42 million Euro / year for heavy rail
- 19 million Euro / year for metro
- 30 million Euro / year for tramway
- 172 million Euro / year for bus

Funding for public transport operations:

170 million Euro / year from ticket revenue = 65 %

92 million Euro / year from municipal subsidies

no national or regional government subsidies for public transport operations

CURRENT DEVELOPMENTS AND PROJECTS

Projects concluded in recent years:

Western City Rail link to Leppävaara opened 6/2002 (capacity extension on 7 km of line, enhanced service)

Crosstown trunk bus line 550 "Joker" opened 8/2003 (new bus lanes, tunnels and interchanges)

Projects planned for near future:

Northern City Rail link extension Tikkurila - Kerava, 2004 (capacity extension on 12 km of line)

Kamppi Travel Centre, 2005 (underground complex w. 2 bus terminals and a metro station in City Centre)

Enhanced "Joker" crosstown trunk bus line service, 2005

New tram line 9, 2006>

Marja railway line, 2008> (circular urban rail extension with Airport connection, 17 km of new line, 7 stations)

Metro western extension Ruoholahti - Matinkylä, 2010> (14 km of new line, 7 stations)

Western City Rail link extension Leppävaara - Espoo Centre, 2010 (capacity extension on 9 km of line)

Ticketing and information:

Travel Card implementation starting in 2001, total implementation 3/2003

Internet Journey Planner launched 11/2001, currently 15 000 daily users

Mobile phone ticket piloted 9/2001, expansion to regular use in 2003-2004

Expansion of real-time information and traffic signal priority system 2003>

LISBON

PORTUGAL

REGION

- **Population of Lisbon: 0.6 million inh.**
- **Population of the Metropolitan Area: 2.7 million inh.**
- **Area of City: 85 km²**
- **Surface of metropolitan area: 3,200 km²**
- **Contribution to portugal (GDP): 36%**
- **Local Governments in the Region: 19 municipalitas**

AUTORIDADE METROPOLITANA DE TRANSPORTES

The metropolitan transport authority of Lisbon was created by the decree-law n°268-2003 of 28 October 2003. It will start operations in 2004 to co-ordinate the provision of public transport services in the metropolitan area of Lisbon. Public transport services in the metropolitan area are operated by several transport companies.

- **Companhia Carris de Ferro de Lisboa S.A. (Carris)** provided, as exclusive concessionnaire, bus and tramway services in city area.
- **Metropolitano de Lisboa (ML)** operates the metro network.
- Suburban rail lines are under Portuguese Railways -**Caminhos de Ferro Portugueses (CP)**- responsibility.
- CP operates, as well as Lisbon South Tagus, cross-river ferries.
- Suburban bus services are operated by municipally owned bus company **(Transportes Colectivos Barreirio)** and private operators.

Map of metropolitan area

Carris Network Map

CONTACT

Camara Municipal

Praça do Municipio - 1100 Lisbon Portugal

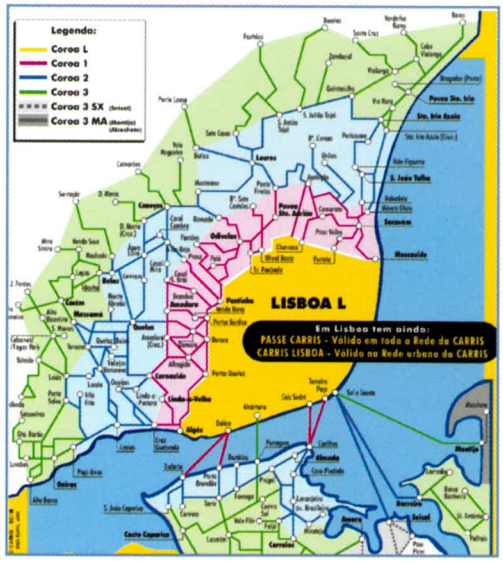
FARES 2003

Fares framework is based on three different types of tickets as follows:

- Tickets exclusive of each operator, and valid for its network.
- Intermodal passes, integrated tickets valid on urban and suburban transport. Means based on a crown structure.
- Combined fares, valid on the Lisbon underground network and on other suburban transport operator, the prices being calculated based either on a crown structure or on a mileage system.

For those last two sort of tickets are settled 4 concentrical fare zones in Lisbon.

Fares in Euro	L	1	2	3	3FS
Normal	22.00	29.85	35.95	40.85	
Elderly people	10.40	13.95	16.70	19.05	4.3
Pupils	15.80	21.35	25.65	29.10	



SUPPLY/DEMAND DATA

INDICATOR	METRO	URBAN BUS	SUBURBAN BUS	SUBURBAN RAIL	TRAM
SUPPLY					
Network length (km)	19.0	595.0	129.0		53.0
Number of lines	2	93	14	6	
Number of stops/stations	25				100
Number of vehicles	331	786	77		55
Number of operators	1	1	1	1	1
DEMAND					
Number of trips (millions)	139.8	351.9			20.0

CURRENT DEVELOPMENTS AND PROJECTS

A tramway on the south bank of river Tagus in 2005

After the opening in 1999 of Fertagus, a new railway line linking the centre of Lisbon with the southern bank of the river Tagus, where one fourth of the 2.6 million inhabitants of the metropolitan area of the Portuguese capital city live, a tramway network is being built on the southern bank of the river.

The first phase of the project, that consists in three routes serving the municipalities of Almada and Seixal (310,000 inhabitants altogether), will start operations in December 2005. The network will have a total length of 13.6 km, and will reach 28 km in a second phase. Routes, that will provide connections with heavy rail Fertagus stations and ferry boats, will be operated from 5 am to mid-night, and the commercial speed of the 24 Siemens Combino trams that have been ordered will reach 22 km/h on average. The vehicles, that will be air-conditioned, will have a capacity of 225 passengers (75 seated among them), and will provide easy access thanks to their low floor. 28 millions passengers are expected to travel on the three lines every year.

The total cost of the project is estimated at € 320 million. The Portuguese government will bring € 190 million and the European Union € 75 million. MST, the consortium that has been selected in 2002 by the government to build the system and operate it for 30 years, comprising the Portuguese transport company Barraqueiro and German manufacturer Siemens, will bring € 55 million, that will mostly consist of the rolling stock and of ticketing systems.

The building of the lines will provide opportunities of urban renewal of brownfield areas and of improvement of public spaces (trees, new pavements, bicycle lanes).

LONDON UNITED KINGDOM

REGION

- London has had an elected Mayor and Assembly (who together form the Greater London Authority) since 2000.
- It has a population of 7.4 million inhabitants on a territory of 1,580 km².
- London contains 32 Boroughs and the Corporation of London.
- The Mayor has executive responsibility, while the Assembly's main role is to scrutinise the Mayor's actions and agree budgets. The Mayor is responsible for developing a Transport Strategy for London, alongside a number of other strategies. The Transport Strategy was published in July 2001.

TRANSPORT FOR LONDON (TfL)

Missions

Transport for London (TfL) is the body responsible for the majority of London's transport systems. Its role is to implement the Mayor's Transport Strategy for London and manage the transport services across the capital for which the Mayor has responsibility.

TfL is accountable for both the planning and delivery of transport facilities, which enables it to take an integrated approach to how people, goods and services move around London. TfL manages London Buses, the London Underground, the Docklands Light Railway (DLR) and London Trams. It also runs London River Services, Victoria Coach Station and London's Transport Museum. TfL manages the central London congestion charging scheme. Railways are a crucial component of London's transport system, and although TfL is not directly responsible for national rail services, a partnership has been established with the Strategic Rail Authority, to improve national rail services in London, to ensure progress on major new rail projects and to develop national rail's contribution to an integrated public transport system for London.

TfL also manages a 580km network of main roads, all of London's 4,600 traffic lights and regulates taxi's and the private hire trade. TfL co-ordinates schemes for transport users with mobility impairments as well as running the Dial-a-Ride scheme.

Considerable work is being undertaken to improve conditions for walkers, cyclists, drivers and freight and to implement proposals for reducing congestion on London's streets.

Organization

TfL is directed by a management board whose Members are chosen for their understanding of transport matters and appointed by Ken Livingstone, Mayor of London, who chairs the TfL Board. TfL has some 17,000 staff members, including some 13,000 employees by the London Underground which transferred to the Mayor's control on 15 July 2003.

Budget

TfL (excluding Underground) spent £1,768 million from April 2002 to March 2003.

Main revenues: A total of £1,092 million of transport funding is provided through the government, the Greater London Authority and third parties. Passenger fares, Street Management activities and other services, contributed a further £717 million.

Main expenses: Bus Services (£1,060 million), roads (£510 million), rail (£40 million). During the year, TfL invested £280 million, £63 million on vehicles and equipment, £214 million on infrastructure and £3 million on land and buildings.
London Underground joined TfL on 15 July 2003. In a full year, this will add a further £1.2 billion to sales, £2.1 billion to expenditure (including capital investment) and £2.6 billion to net assets.

CONTACT

Adrress: Windsor House, 42-50 Victoria Street, London UK - SW1H OTL
Commissioner: Robert Kiley
Tel: + 44 (0)20 7941 4069 - Fax: + 44 (0)207941 4318
E-mail: ltinternational@compuserve.com - Internet: www.tfl.gov.uk

PUBLIC TRANSPORT SYSTEM

The modal share of public transport for all mechanised trips: made by Greater London residents in London is: 42% (Underground: 15%, Bus: 19%, National Rail: 6%; Taxi: 2%). For trips involving travel in the Central London area, accounting for 21% of all trips, this figure rises to 80%.

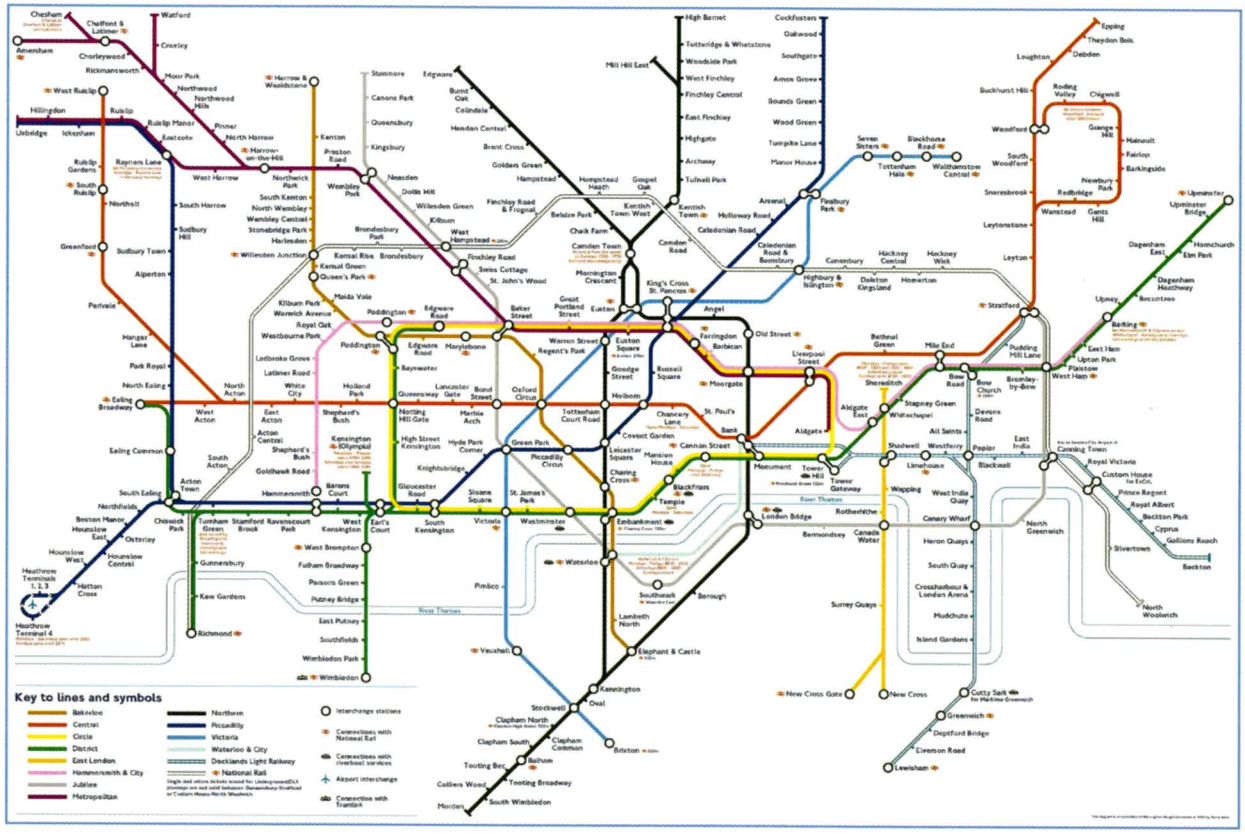
Outside Central London, the modal share of public transport is 32%. The responsibility for the **Underground** was transferred to Transport for London on 15 July 2003. London Underground has been merged with TfL. It employs over 13,000 members of staff.

London Buses, which is part of TfL, manages **bus services** in London. It plans routes, specifies service levels and monitors service quality. It is also responsible for bus stations and stops and other support services. The bus services are operated by 31 private operators, which work under contract to London Buses.

London Trams, also part of TfL, is responsible for overseeing the development of guided **light transit schemes** and is involved in the management of the 99 year Tramlink Concession Agreement awarded to Tramtrack Croydon Limited (TCL) in 1996 under the Government's Private Finance Initiative. Docklands Light Railway, another subsidiary of TfL, owns the infrastructure of this line and franchises its operation to private companies.

National Rail services are operated by 10 companies which are granted franchises by the Strategic Rail Authority.

TfL is also responsible for river services, which carried 2 million passengers in 2002. Services are run by private companies.



Map of underground

SUPPLY/DEMAND DATA

	HEAVY RAIL	UNDERGROUND	TRAMWAY	LIGHT RAIL	BUS
SUPPLY					
Network length (km)	788	408	28	27	3,730
Number of lines	40	12	3	4	700
Number of stops/stations	500	275	38	34	17000
Number of vehicles	-	598	24	35	6500
Places-km (millions/year)	-	-	-	-	-
Number of operators	12	1	1	1	30
DEMAND					
Number of trips (million)	655	953	-	41.3	1540
Passengers-km (million)	18454	7451	-	206.7	5734

FARES IN 2003

Underground and National Rail services within Greater London are divided into six zones.

- **Single ticket**
  - Single ticket for bus: 1.40€ for any journey including Central London, and 1.0€ for other journeys
  - Book of 6 pre-paid tickets for bus trips: 5.50€
  - Single ticket for underground: between 2.3€ and 5.3€ depending on the number of zones
  - Book of 10 tickets for underground: 11.50€ for zone 1
- **Travel Cards (giving access to all public transport systems):**
  - Daily: between 7.30€ and 15.30€ for the whole day and between 5.90€ and 7.30€ for off-peak (after 9.30am)
  - Weekly: between 23.50€ and 53.0€ depending on the number of zones
  - Monthly: between 90.50€ and 203.90€ depending on the number of zones
  - Annual: between 942€ and 2.123€ depending on the number of zones
  - Weekly Youth Card: between 16.40€ and 37€
  - Monthly Youth Card: between 63€ and 142.6€
  - Yearly Youth Card: between 657€ and 1.484€
  - Bus Passes: 2.85€ (daily); 12.10€ (weekly); 46.60€ (monthly); 484.2€ (annual)
  - Youth Buss Passes: 8.40€ (weekly); 32.30€ (monthly); 336€ (annual).

FUNDING OF PUBLIC TRANSPORT IN 2002

A mix of government grants and ticket revenues funded TfL's operations in the fiscal year April 2002 to March 2003. Transport grants contributed £ 1,024 million (58% of total requirement), precept £ 36 million (2%) and sales revenue (includes both fares and other income sources) £ 717 million (40%). These figures do not include the London Underground operations that became part of TfL in July 2003. The London Underground received £ 742 million (45% of total requirements) in the form of grants and the balance from fares and other internal sources.

CURRENT DEVELOPMENTS AND PROJECTS

Smartcard: A new brandname, Oyster, has been developed that will apply to all TfL smartcards. Oyster cards are contactless smartcards which do not need to be removed from a purse or wallet for the holder to pass through a Tube gate or board a bus or tram.

Oyster cards cannot be de-magnetised and will last longer than card or paper tickets.

Oyster cards have been issued to all TfL staff and are currently (autumn 2003) being rolled out to season ticket holders. Early 2004 a new stored value, pay-as-you-go ticket -branded as Pre Pay - will be rolled out. This new product will co-exist with existing Passes etc - for example, an Oystercard may contain a weekly Bus Pass plus Pre Pay when the card holder wishes to travel on the Tube.

DRL enhancement: a series of projects designed to facilitate regeneration, improve accessibility and interchanges and to extend and increase capâcity on the network.

Thames River Crossings: part of a package of planned improvements to transport in east London, including:

- an extension of the Docklands Light Railway (DLR) from London City Airport to Woolwich;

- a road bridge between Gallions Reach and Thamesmead, known as the Thames Gateway Bridge which would have dedicated lanes for public transport, possibly intermediate modes;

- a road tunnel between North Greenwich and Silvertown, known as the Silvertown Link.

Crossrail: This is the only realistic means of securing a major step change in London's rail capacity within a decade – providing of the order of 10% additional capacity across London. It will provide high quality access to London's key financial districts and to Heathrow.

Tram projects: developing new tramway initiatives including : extensions to Croydon Tramlink, West London Transit - tram based (to be progressed first), Cross River Transit - tram based, Greenwich Waterfront Transit - bus based.

MADRID

SPAIN

REGION

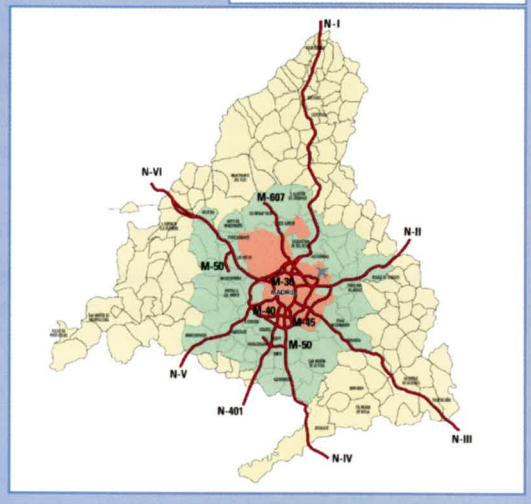
- Madrid is located in the heart of the Iberian peninsula and right in the center of the Castillian plain, 646 meters above sea level. Madrid is the name of the main City and its region.

- The city of Madrid is the capital of Spain and the region is one of the 17 spanish autonomous regions, with a regional Parliament and Government.

- Comunidad de Madrid
  - Population (2001): 5.4 million inh.
  - Area: 8,028.0 km²
  - N° of jobs (2001): 2.25 million
  - Annual GDP/inhabitant: 22,818 euros
  - Local Governments: 179

- City of Madrid
  - Population (2001): 2.9 million inh.
  - Area: 606.0 km²

CONSORCIO REGIONAL DE TRANSPORTES DE MADRID (CRTM)



Missions

The Consorcio Regional de Transportes de Madrid (CRTM) is the public transport authority for Madrid Region. CRTM depends functionally on the Regional Government (Comunidad de Madrid) and was created by law at the end of 1985.

The CRTM functions are the following:

- Planning of public transport infrastructure. Metro extension, interchanges, bus lane, etc. Responsible for surveys and models of mobility.
- Planning and authorising provision of transport services. Definition of routes in the network, stops, timetables and control of the level of service.
- Definition of the ticketing policy and fare framework for the public transport system. Management of the monthly and annual travel card (Abono Transportes), and multimodal tickets
- Public transport information, marketing and image improvement.

Organization

The Consorcio Executive Board includes 20 members: 5 members representative of the regional government (Comunidad de Madrid); 5 members of Madrid municipality; 3 members of other municipalities of the Region; 2 members of central government; 2 members of private operators association; 2 members in tne name of Worker Unions and 1 member of Customer associations.

The CRTM President is a representative member of the Comunidad de Madrid, and the Vice-president is a representative member of the municipality of Madrid.

CRTM has some 120 staff members, in 4 main directions: technical, economic-financier, quality and general secretary.

Budget

CRTM budget amounted to 1.09 billion Euro in 2002 including selling of integrated ticketing. These funds are used for pay operating costs of public transport operators and CRTM itself. New Infrastructure and Rolling Stock investments are not included.

Main revenues:
Passengers (€ 581 million); National Government (€ 145 million); Regional Goverment (€ 233 million); Madrid Municipality (€ 107 million); other funds (€ 23 million).

Main expenses:
CRTM (€ 46 million); Metro (€ 424 million); Madrid Urban buses EMT (€ 322 million); Interurban Rail and buses (€ 272 million); Other costs (€ 26 million).

CONTACT

Managing Director: Joaquin Nieto Fernández
Address: Plaza del Descubridor Diego de Ordás, 3-28003 Madrid – Spain
Tel: 34 91 580 45 28 - Fax: 34 91 580 46 69
E-mail : estudios@ctm-comadrid.com - Web site: www.ctm-madrid.es

CONSORCIO TRANSPORTES MADRID

CONSEJERIA DE OBRAS PUBLICAS, URBANISMO Y TRANSPORTES
Comunidad de Madrid

Public Transport System

The public transport system amounted to 1.5 billion passengers on 2002. The modal share of public transport is 54% in total motorised transport.

The Consorcio Regional de Transportes has overall responsibility for public transport in the autonomous region of Madrid, which includes the city and surrounding conurbation.

Main bus services, in Madrid City, provided by a municipal undertaking (EMT) The metro is jointly owned by the municipality (75%) and the region (25%) placing all the inherit rights due to shares ownership to CRTM. The suburban metro line 9b between the stations of Puerta de Arganda and Arganda is operated under public concession by TFM, a private company.

Suburban rail services run by Spanish National Railways (RENFE).

CRTM maintains contractual agreements with the 33 private bus operators to provide suburban services. Most of them are grouped on two associations called Fenebus and Asintra.

Cercanías (Suburban Rail)

	Urban bus	Metro	Suburban Rail	Suburban bus	
				Fenebus	Asintra
Management Body	Public Under Municipality	Public Under CTM	Public Under National Government	Private Under Public Concession	
Address	Alcantara 24, E-28006 Madrid	Canaville 58, E-28007 Madrid	Ciudad de Barcelona 8, E-28007 Madrid	Orense 20, E-28007 Madrid	Hermosilla 30, E-28001 Madrid
Managing Director	Jose Ignacio Iturbe	Ildefonso de Matias	Cecilio Gomez-Comino	J. Luis Pertierra	Lorenzo Chacon
Web site	www. emtmadrid.es	www. metromadrid.es	www.renfe.es	www. fenebus.es	www. asintra.net

Metro

Supply/Demand Data 2002

Indicator	Metro	Urban bus[1]	Suburban rail	Suburban bus
SUPPLY				
Network length (km)	178.9	1,547.0[2]	335.7	3,396.0[2]
Number of lines	12+1	188	10	377
Number of stops/stations	158	3,972[2]	92	6,604[2]
Number of vehicles	1,357	1,900	667	1,494
Total places-km (millions/year)	22,006.0	7,692.0	—	9,9881.0
Number of operators	2	1	1	33
DEMAND				
Number of trips (millions)	563.8	478.4	193.7	277.8
Passengers-km (millions)	3,155.8	1674.4	3,457.5	4,402.8

1 = urban buses of Madrid City (EMT)
2 = total lines lenght and stops

MADRID

SPAIN

FARES 2003

There are 6 fare zones in Madrid Region.

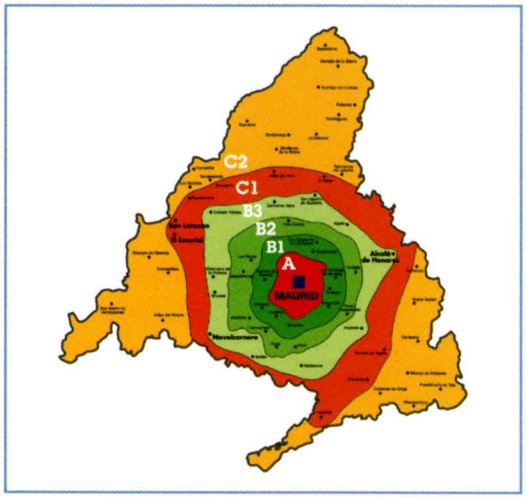
Fares are integrated for every public transport mode using mensual and annual cards.

In Madrid city 10 trips ticket is also integrated for metro and urban buses.

- Single ticket: 1.1 €
- 10 trips ticket: 5.2 €

Fares in Euro	A	B1	B2	B1-B2	B3	C1	C2
Mensual Card							
Standar	33.6	39.0	44.5	28.4	50.1	55.3	61.2
Young	23.0	26.0	29.5	19.4	33.8	36.8	40.5
Elderly P.				9.0[1]			
Annual Card							
Standar	369.9	429.0	489.0		551.1	608.3	673.2
Elderly P.				99.0[1]			

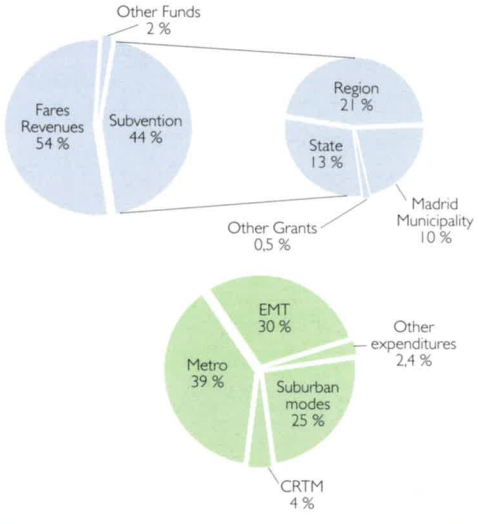
1 = For all zones



Map of fare zones

DISTRIBUTION OF 2002 PUBLIC TRANSPORT OPERATING COSTS

ORIGIN AND APPLICATION OF ECONOMIC RESOURCES



FUNDING OF PUBLIC TRANSPORT IN 2002

CRTM centralizes most of economic resources for public transport operating costs. Only single tickets revenues are, directly, managed by Metro and EMT(Madrid Urban Buses) and 10 trips and single tickets revenues by suburban modes.

Infraestructure investments are made by the different governments. In that way, the Regional government supports the financial needs of the metro extension plans and the National government manages the suburban rail investments.

In rail modes funds for rolling stocks renewal came directy from public operators.

CURRENT DEVELOPMENTS AND PROJECTS

- **Metro extension plan:** New underground extension plan can be approved after the successful experience of 1995-1999 and 1999-2003 extension plans. The Metro network will grow, for next four years, around 36 km if political green light is, finally, got to the new plan.

  In the north-west of the metropolitan area two new lines of LRT, totalizing 19.5 km, could start operating on next years, connecting the cities of Pozuelo and Boadilla with metro and suburban train networks.

- **Four new Intermodal change points in Madrid City:** Currently are reaching the technical projects for the new Intermodal change points: Principe Pio, Plaza de Castilla, Plaza Elíptica and Moncloa (extension). These infrastructures will be built on next four years.

  These Intermodal points are mainly oriented to make interchange between interurban buses and urban modes (urban buses+metro) easier.

- **New tunnel for suburban train:** A second tunnel for Suburban train through CBD, from Atocha to Chamartin railways stations, is under construction. It allows reducing congestion in the first one, opened on 1967, and provide 3 new inner City stations (Sol, Alonso Martinez & Nuevos Ministerios) connected, each one, with 3 metro lines. The total length is 8.4 km, and the investment amount to 169.19 M€.

- **EMT operates three hydrogen fuel cell powered buses since june:** These buses, developed inside the European Project 'CUTE' (the most comprehensive for fuel cell vehicles on a global scale to date), hold a regular service on line 52.

  The zero-emission and low-noise operation of these buses is a significant advantage especially in urban traffic

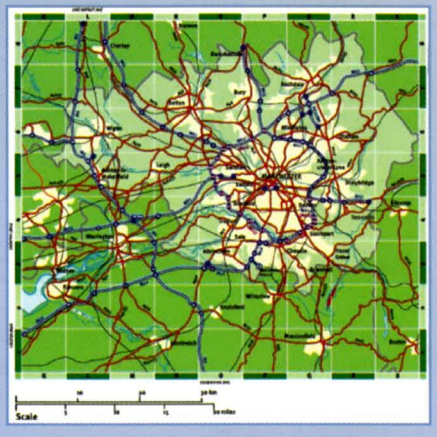
- **Global Mobility Study for the whole region:** CRTM will launch next year a wide mobility survey it will update the last one (ended on 1996). The knowledge of mobility habits of Madrid region citizens are in the root of most of transport planning studies.

MANCHESTER UNITED-KINGDOM

REGION

- **Population of the metropolitan area : 2.5 million inh.**
- **Population of Manchester : 393,000 inh.**
- **Surface of Greater Manchester: 1,276 km²**
- **N° of jobs (2001): 1,130,000**
- **Contribution to National GDP: 3,85 %**
- **10 city / Metropolitan District Councils**

GREATER MANCHESTER PASSENGER TRANSPORT EXECUTIVE (GMPTE)



Missions

Greater Manchester Passenger Transport Authority (GMPTA) and Greater Manchester Passenger Transport Executive (GMPTE) are responsible for:

- provision of socially necessary bus services that would not otherwise be provided commercially
- financial support and determination of fares and service levels of local railways
- ownership and development of Metrolink
- provision of accessible transport services
- concessionary fares scheme for elderly people, people with disabilities, children and scholars
- provision of bus stations, bus shelters and bus stops
- planning and development of the future public transport infrastructures and services
- provision of information about public transport
- promotion of public transport

Organization

There are 395 full time staff. GMPTA and GMPTE are statutory bodies created by 1968 Transport Act. The authority consists in 33 elected councillors who are appointed by the 10 district councils of Greater Manchester. GMPTE is a separate body of officers which advises GMPTA and executes its policies.

GMPTA determines the public transport policies for county and GMPTE implements these policies. Its work is funded by the GMPTA which in turn receives money from the 10 District Councils in a form of levy.

GMPTA has power under 1985 Transport Act to set policies to promote the availability of public transport as a whole in Greater Manchester.

Budget

GMPTE's budget for 2003/2004 is £ 196.4 M.

Total bus operator passenger - related commercial revenue (i.e. excluding support from GMPTE) is approximately £134 M p.a.

CONTACT

Address: 9 Portland Street, Piccadilly Gardens, MANCHESTER M60 1HX

Director General: CJ. Mulligan

Tel: 00 44 161 242 6000 - Fax: 00 44 161 228 3291

Internet: www.gmpte.com

GMPTE

PUBLIC TRANSPORT SYSTEM

Approximately 260M p.a. trips are made by public transport within Greater Manchester, 86% by bus, 7% by light rail and 6% by heavy rail. All services are operated by private sector companies.

83% of operated bus miles are provided commercially, with the operator taking the commercial risk. The remainder are subsidised by GMPTE. Light rail is operated on a franchise let by GMPTE. Heavy rail is operated on franchises let by central government, although GMPTE has some influence on service levels.

SUPPLY/DEMAND DATA 2002

	HEAVY RAIL	METRO	BUS
SUPPLY			
Network length (km)	292	39	n/a
Number of lines	12 [1]	3	600 [3]
Number of stops/stations	99	37	1,200
Number of vehicles	270	32	2,000 [4]
Places-km (millions/year)	–	620	8,300
Number of operators	2 [2]	1	11 [5]
DEMAND			
Number of trips (million)	16.8	18.8	229
Passengers-km (million)	282	168	1,028

[1] *Approximate - the rail network is not easily separated into distinct "lines"*
[2] *3 other operators run national and regional services*
[3] *Approximate number of services excluding school services*
[4] *Estimate*
[5] *Operators running more than 1M miles p.a.*

Approximately 60 other operators run services partly or wholly within Greater Manchester

FARES 2003

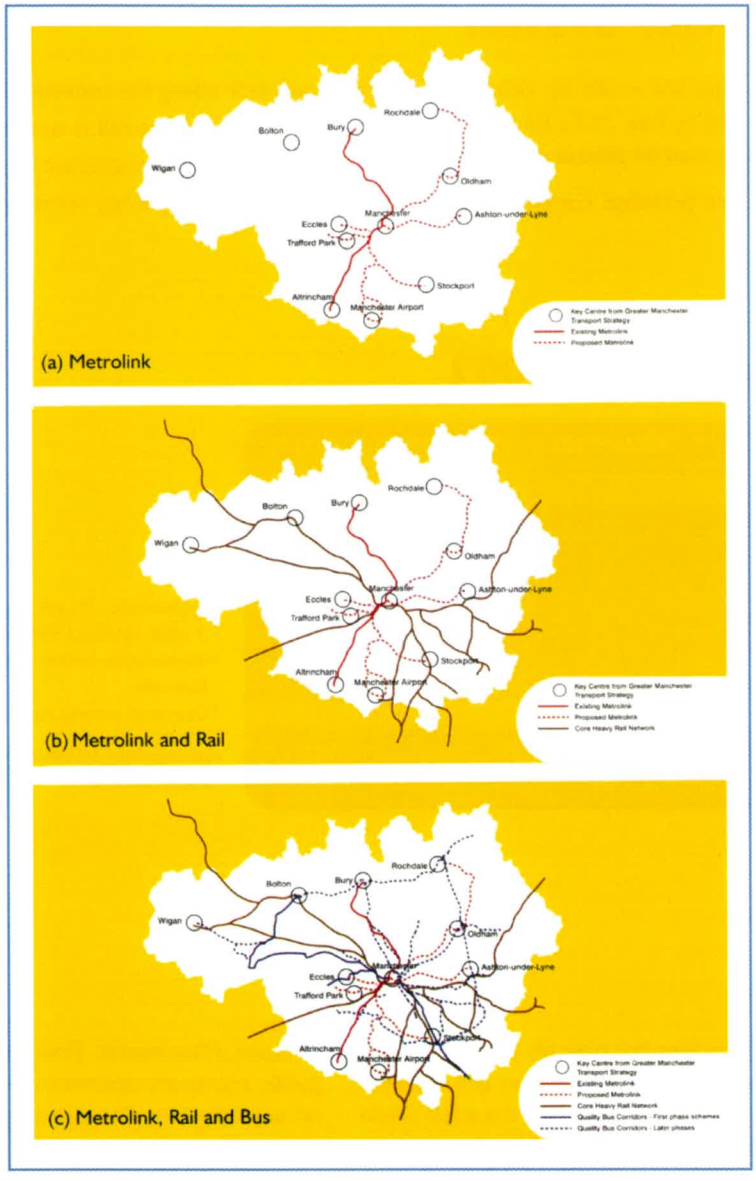
Adult single fares vary from operator but typically range from 50p to £2-00. Concessionary fares for elderly, children and disabled are set by GMPTE and are currently 40p or half the adult single fare, whichever is less. Children on school trips of 3 miles or more and certain categories of disabled passengers travel free.

Greater Manchester Travelcards Ltd, a company formed by public transport operators and GMPTE, market tickets for use on any operator. The prices of the most important tickets are:

Day:	£ 3-30 (bus only)	£ 6-50 (all modes)
Week:	£ 13-00 (bus only)	£ 22-00 (all modes)
Monthly:	£ 45-00 (bus only)	£ 69-50 (all modes)
Young persons (16-21) weekly:	£ 9-45 (bus only)	n/a
Young persons (16-21) monthly:	£ 35-00 (bus only)	n/a
Child / elderly weekly:	£ 4-85 (bus only)	n/a
Child monthly:	£ 19-40	n/a
Elderly carnet (10 trips):	£ 3-70	n/a

FUNDING OF PUBLIC TRANSPORT IN 2002

Contribution from the 10 Districts of Greater Manchester	£ 113.6M
Central Government rail support grant	£ 81.5M
Special Government Grants (Urban and Rural Challenge)	£ 1.3M
Total GMPTE budget	£ 196.4M



Strategic Public Transport Network

CURRENT DEVELOPMENTS AND PROJECTS

Metrolink Phase 3: Manchester is at the hub of three existing Metrolink (light rail) lines: to Bury in the north of the conurbation and to Altrincham in the southwest (Phase 1) and to Eccles in the west (Phase 2). The bidding process for Metrolink Phase 3 is in its final stages and two short listed bidders submitted their best and final offers in 2003. Phase 3 will extend Metrolink the northeast (Oldham and Rochdale), east (Ashton-under-Lyne) and the south extremity of the county (Wythenshaw and Manchester Airport). Bidders have also been asked to include a price for a possible extension to Didsbury in south Manchester.

Quality Bus Corridors: GMPTE, in partnership with District Councils and local bus operators, is developing a network of Quality Bus Corridors (QBCs). QBCs take a complete journey approach in order to provide service punctuality and reliability, regular peak journey times, safe and secure journeys, accurate information and high quality buses and shelters. Bus priority measures are being implemented to keep buses running to time and the aim is to provide real time information at 25% of bus stops. More and better pedestrian crossing points are being provided to allow passengers to get to and from bus stops safely. Where possible, enhancements to the general street scene are introduced, such as better paving and street lighting to improve safety and security, along with other improvements of benefit to pedestrians and cyclists in the communities along the QBCs.

Free city centre bus services: In September 2002, GMPTE launched Metroshuttle, the UK's largest free city centre bus service. The two routes, operated by the private bus company First, have been a phenomenal success, carrying 1.7 million passengers in their first year of operation. A key component of the City Centre Transport Strategy, Metroshuttle is improving access into and across Manchester city centre by providing seamless interchange between the city's rail stations, car parks and key public transport points, and linking them with the main retail, commercial, leisure and cultural destinations. Metroshuttle is funded through a partnership involving GMPTA/GMPTE, Manchester City Council, National Car Parks Ltd and Allied London Properties.

American-Style school buses: GMPTE has introduced American-style school bus trials in three Metropolitan Districts : Stockport, Wigan and, from September 2003, Tameside. Features include regular drivers, reserved seats, no standing, seat belts, CCTV, punctuality and high quality vehicles. These experiments have proved successful and GMPTE plans to identify further suitable services for introduction in September 2004.

MILAN

ITALY

REGION

- Population of Milan: 1.3 million inh.
- Population of the Metropolitan Area: 2.8 million inh.
- Area of city: 182 km²
- Surface of metropolitan area: 1,052 km²

COMUNE DI MILANO/ATM

Milan Transport Authority (ATM) was born on 1st January 1999 following a resolution of the Town Executive Board and Council. From the legal point of view it is a joint-stock company from January 3rd 2001. As provided by the service agreement signed with the Municipality of Milan, ATM deals with all the aspects of the public transport service management and development.

At present ATM activities are organized according to a functional structure divided into 5 Departments: Sales, Finance, Administration and Control, Personnel and Organization, Logistics, Operations.

In their turn the Directions are divided into Sectors according to their specific responsibilities.

PUBLIC TRANSPORT SYSTEM

Azienda Trasporti Milanesi (ATM) is responsible for bus, trolleybus, tram and metro services within the Metropolitan area.

At the end of 1997 was created Servizio Ferroviario Regionale (SFR), the regional rail authority. Under its responsibility run the regional suburban rail services of FS and FNM (Ferrovie Nord Milano Esercicio).

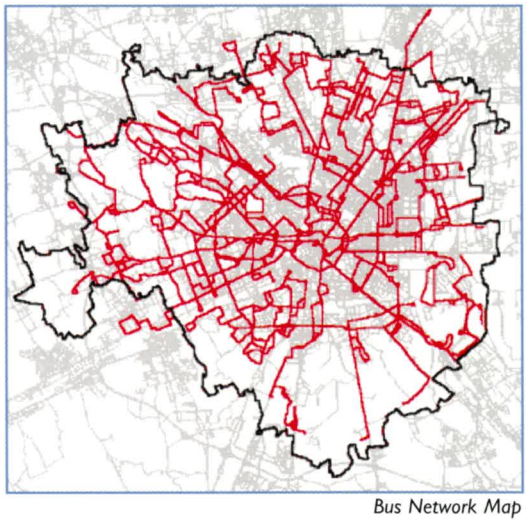
CONTACT

Responsible person: Prof. Giorgio Goggi
Address: Comune di Milano - Via Beccaria 19 - 20122 Milano - Italia
Tel: 39 02 76 0046 44 - Fax: 39 02 79 43 56
Web site: www.comune.milano.it

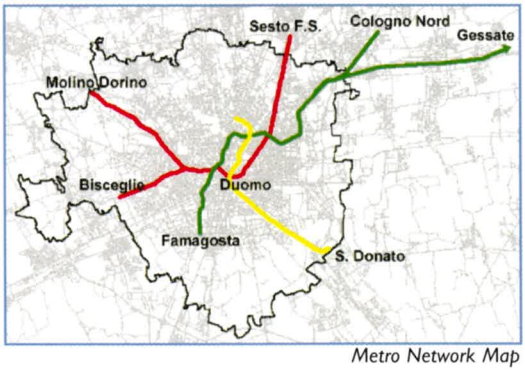
FARES 2003

Current Fares in Milan City:

- **Single ticket:** € 1.00 – valued for 75 minutes and since pick up the ticket.
- **10 trips ticket:** € 9.20
- **1 day:** € 3.00
- **2 days:** € 5.50
- **Settimanale 2x6:** € 6.70 From Monday to Saturday, 2 trips a day.
- **One Week pass:** € 9.00
- **Monthly pass:** € 30.00
- **Yearly pass:** € 300.00
- **Students pass:**
  - **Monthly:** € 17.00
  - **Yearly:** € 170.00
  - **Monthly pass for elderly people:** € 16.00



Bus Network Map



Metro Network Map

SUPPLY/DEMAND DATA 2002

INDICATOR	METRO	BUS	TRAM
SUPPLY			
Network length (km)	69.3	1,056.8	201.4
Number of lines	3	96	18
Number of vehicles	714	1,091	403

CURRENT DEVELOPMENTS AND PROJECTS

- **RADIOBUS: a new demand responsive public transport service in Milan:** The attention to the needs of the clients of public transport, especially as to the security problem, led to the planning of a special service that guarantees more security, a higher comfort level, the minimization of both the waiting times, the distances of walk and the travelling times. RADIOBUS is a new service representing an intermediate position between "traditional" public transport and taxis. It covers the area where the night life takes place in Milan. This "bus on request" service picks the customers wherever they want in the area concerned. It is only accessible on request. The booking can be made both some days earlier or soon before the travel, by telephone or via the internet. This new service, operated by municipal company ATM, uses small-dimension buses (7.50 m long with 16 seats and 2 places for people in wheelchairs) equipped with air-conditioning and a telecommunication system tracing the route (GPS). RADIOBUS, which was launched in December 2000 as the most "complete and sophisticated" public transportation system in Europe, can be used with an additional ticket, at the price of € 1.50 (additional ticket bought at a sale point) and € 2.00 (when bought on the bus). Service is operated everyday between 8pm and 2am.

- **Mobility projects for Milan: Several important projects are currently being implemented:** the extension of the network, the electronic-magnetic ticketing system, intelligent traffic lights, the extension of the Radiobus service, corporate mobility agreements and the public transport fluidification project. These projects pursue various objectives: improvements in viability, reductions in average journey times, decreases in power consumption, reductions in atmospheric and acoustic pollution, improvements in the level of road safety and increases in the speed of public vehicles make the service more attractive as regards vehicle punctuality and regularity.

- **Extension of the network:** An adequate and efficient metropolitan railway network is a fundamental element of a city transport system. In 2002, extension work on the existing metropolitan railway lines and the Railway Link continued. A further two metropolitan lines, both underground but with smaller tunnels and trains that those used on existing lines, are currently in the design stage. Along with the metropolitan network, the light railways project is also very important : these innovative tramways combine the high capacity of metropolitan railways with the greater simplicity and lower costs of building surface tramways. The vehicles chosen for this service are extremely comfortable and are crammed with leading-edge technology : priority at traffic lights; air-conditioning; audio-visual stop announcements; a low floor to make it easier and quicker for passengers to get on and off; a lifting platform for wheelchairs; silent running.

- **The electronic-magnetic ticketing system:** the electronic-magnetic ticketing system tickets will allow passengers to travel with just one ticket on the integrated urban and interurban public transport system, regardless of the various management companies; it also offers entrance to interconnection car parks and other urban services. The aim is to make fares transparent, unified and flexible. The new system includes replacing about 6000 ticket stamping machines, adapting the structures in the interconnection car parks and depots and installing 500 ticket recharge and sales points. Some metro stations were adapted during 2002. The trial phase is due to start by the end of 2003. Within a year, the metropolitan network will have been adapted followed by the surface network, while the system is planned to be extended to all the ATM, FNME and TRENITALIA networks and all the interconnection pay car parks within 2005.

OSLO

NORWAY

REGION

- **Population of the City: 510,000 inh.**
- **Population of the metropolitan area: 850,000 inh.**

AS OSLO SPORVEIER

Missions

AS Oslo Sporveier will - based on a sound economic foundation - develop, co-ordinate and operate a city transportation system that is safe, efficient, attractive and environmentally responsible.

Strategic objectives: more passengers, satisfied customers:

- highly skilled employees who embrace changes implemented for greater efficiency
- traffic services that support business and urban growth
- safe, on-time transportation
- flawless maintenance
- customer-oriented operation and management

Vision 2016: AS Oslo Sporveier handles traffic growth:

- development of services and passenger growth in a continuing positive spiral
- best customer satisfaction among public transportation providers
- strengthened metro network in the city and surrounding areas, actively participating in urban development plans and providing convenient transportation hubs
- combined rail lines utilising railway, tram, metro systems for new regional services

- strengthened bus services through more frequent departures and differentiation between main lines and local lines
- road pricing combined with market-oriented public transportation fees
- regional transportation package featuring co-ordinated planning and financing

Budget in NOK million

Revenue	Group	Parent Company
Annual Revenues	1890 (231,88 €)	1680 (206,12 €)
Traffic Receipts	1134 (139,13 €)	902 (110,67 €)
Sales of Services	591 (72,51 €)	591 (72,51 €)
Other Revenues	202 (24,78 €)	224 (27,48 €)
Expenses	**Group**	**Parent Company**
	1789 (219,50 €)	1579 (193,74 €)

CONTACT

Address: MOS Rhaduset, N-0037 OSLO

Managing Director: Trond Biorgan

Tel: 00 47 23 46 1973 - Fax: 00 47 23 46 1442

Internet: www.sporveien.no

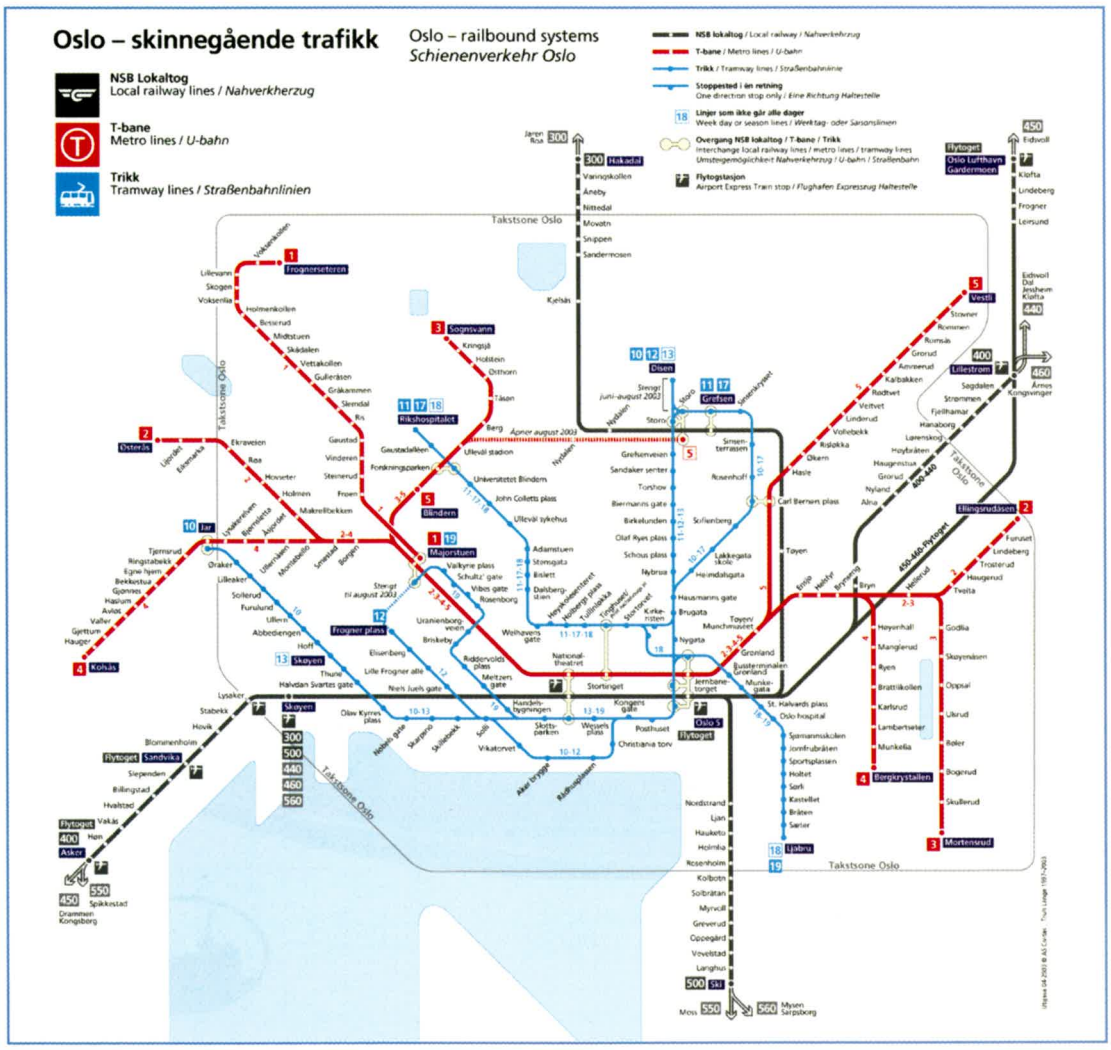
AS Oslo Sporveier

SUPPLY/DEMAND DATA

	METRO	BUS	TRAMWAY
SUPPLY			
Network length (km)	80.20	1,454	38.30
Number of lines		34	
Number of vehicles		280	

FARES 2003

- **Single Ticket:** between 10.00 and 20.00 NOK (1.22 € and 2.45 €)
- **Nightlines:** 40,00 NOK (4,90 €)
- **Multiple Tickets, Flexi-Card:** between 65,00 and 125,00 NOK (7,97 € and 15,33 €)
- **24-Hour Pass:** between 25,00 and 50,00 NOK (3,06 € and 6,13 €)
- **7-Day Pass:** between 75,00 and 150,00 NOK (9,20 € and 18,40 €)
- **Flexible Monthly Pass:** between 290,00 and 580,00 NOK (35,58 € and 71,16 €)
- **3-Month Pass:** between 740,00 and 1480,00 NOK (90,79 € and 181,59 €)



Map of transport network

PARIS ILE-DE-FRANCE FRANCE

REGION

- Ile-de-France, the capital region of France, is one of the 22 French regions.
- Population: 10.9 million inhabitants
- Population in Paris city: 2.1 million
- Surface of Ile-de-France: 12,000 km²
- Surface of Paris city: 105 km²
- 5 million jobs
- 28 % of French GDP

ADMINISTRATIVE STRUCTURE OF THE ILE-DE-FRANCE REGION:

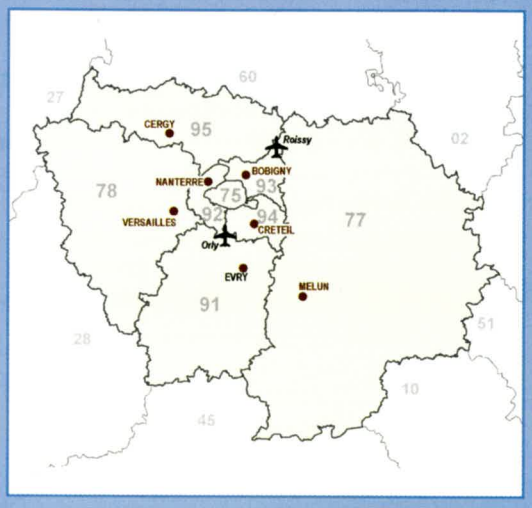
- one regional elected council
- 8 elected "départements" (including Paris city)
- 1,280 elected municipalities

SYNDICAT DES TRANSPORTS D'ILE-DE-FRANCE (STIF)

Missions

The Syndicat des Transports d'Ile-de-France (STIF) was created in 1959 so as to co-ordinate the provision of public transport services and to determine the fare policy in the French capital region. STIF's current missions comprise:

- Organising all public transport services of the Ile-de-France region (heavy rail, metro, tramway, and bus) and co-ordinating the activities of the 80 transport operating companies.
- Defining the fare policy and setting fare levels.
- Improving the public transport systems of Ile-de-France through the approval and monitoring of projects of new infrastructures and its own policy of improvement of the quality of services through subsidies stemming from road traffic fines.
- Planning the future needs of travellers in Ile-de-France and measuring their level of satisfaction with the existing public transport services.
- Funding public transport systems through contracts with the operating companies.



Organization

Since 2000, STIF's Board of Directors includes 34 members, 17 of which represent the French State, and 17 local authorities of the Ile-de-France: 5 for the region, 5 for Paris City, and one for the remaining 7 "départements" (counties). It is presided over by the Prefet (representative of the government in the region). The director general of STIF is nominated by the government. Paris Ile-de-France is the only French region in which the national government is involved in public transport organisation.

STIF has some 120 staff members, in 4 main departments: transport operations, projects of infrastructures, surveys and fare policy, and secretariat general.

Budget

STIF's budget amounted to 3.5 billion Euros in 2002.

Main revenues:
Transport tax (€2,295 million); Subsidies of the State (€575m), of the region (€208m), and of "départements" (€336m, including Paris); Revenues from road traffic fines (€80million)

Main expenses:
Subsidies to RATP (€1,867million), to SNCF (€1,168m), to private bus companies (€297m); Other expenses linked to transport services (€45m); Overheads (€11m)

CONTACT

Director General: Emmanuel Duret
Address: 11 avenue de Villars, F-75007 PARIS
Tel: + 33 (0)1 47 53 28 00 - Fax: + 33 (0)1 47 05 11 05
E-mail: stif@stif-idf.fr - Internet: www.stif-idf.fr

STIF

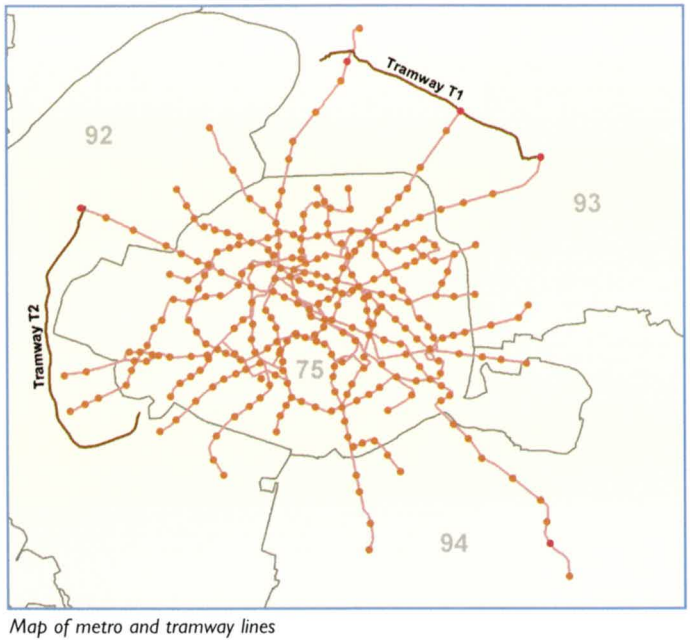
PUBLIC TRANSPORT SYSTEM

The public transport systems of Paris Ile-de-France carry 10 million passengers every day. The modal share of public transport on all motorised trips is 28.5% in the whole region (62% in Paris city, 59% on trips between Paris and the suburbs, and only 15% for trips inside suburbs).

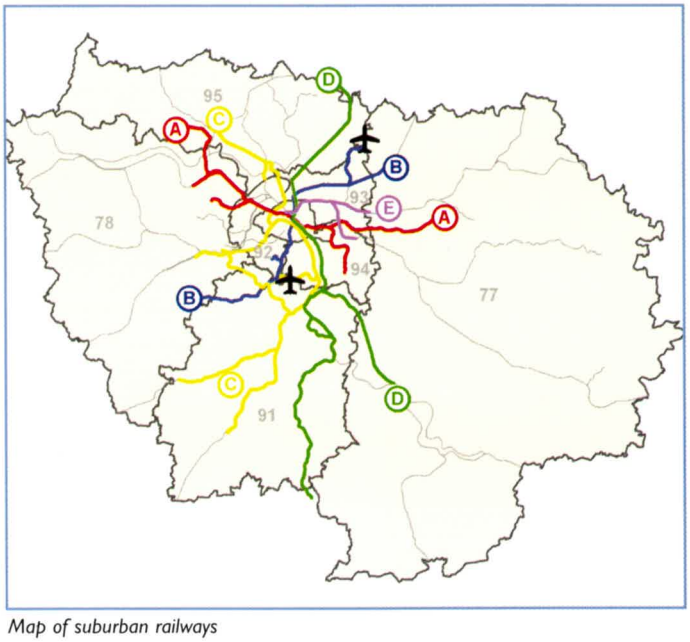
The public transport networks are operated by more than 80 transport companies:

- **RATP,** state-owned company operating metro, tramway and bus services in the central part of the metropolitan area, and part of the heavy rail network (RER) in co-operation with SNCF. RATP employs 42,000 staff members and had a turnover of 2.9 billion euros in 2002. RATP carries 50% of traffic (in passengers.km) and 75% of passengers. www.ratp.fr
- **SNCF,** French national railways (state-owned company), operating suburban rail services (RER). Some 20,000 staff members work in Ile-de-France, which carries 40% of all Ile-de-France traffic (in passengers.km). www.sncf.fr
- **More than 80 private companies** operating bus services in outer suburbs, and represented by their federaion OPTILE (5,000 employees, 10% of traffic). www.optile.com

107,000 P&R spaces are provided for car drivers close to rail stations in the suburbs, as well as thousands bicycle racks.



Map of metro and tramway lines



Map of suburban railways

SUPPLY/DEMAND DATA

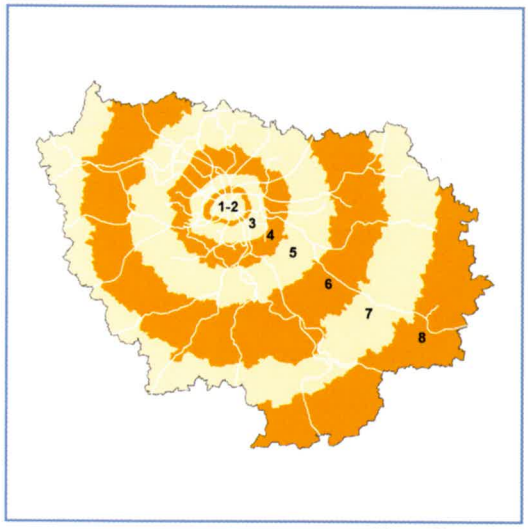
	HEAVY RAIL	METRO	TRAMWAY	BUS
SUPPLY				
Network length (km)	1,401	218	20	18,693
Number of lines		16	2	1,191
Number of stops/stations	446	380	34	27,309
Number of vehicles	4,809	3,548	105	8,304
Places-km (millions/year)	97,900	24,700	400	18,600
Number of operators	2	1	1	80
DEMAND				
Number of trips (million)	3,240	1,283	52	1,230
Passengers-km (million)	14,278	6,184	136	4,029

FARES IN 2003

The Ile-de-France region is divided into 8 concentrical fare zones, with full fare integration between the more than 80 transport companies on the territory thanks to STIF's competence for fare policy.

- **Single ticket:** 1.30 €
- **10-ticket booklet:** 10.00 €
- **Season passes:**
  - Daily pass: between 12.00 and 18.30 € depending on zone
  - Weekly pass: between 14.50 and 40.00 €
  - Monthly pass: between 48.60 and 132 €
  - Yearly pass: between 493.90 and 1340.90 €
  - Yearly pass for students: between 251.10 and 769.80 €

To be noticed: all employees get 50% re-imbursement of the price of their season passes from their employer.
Electronic contact-less pass, called Navigo, is progressively replacing all magnetic tickets (already 1 million passes distributed in September 03)



Map of fare zones

FUNDING OF PUBLIC TRANSPORT IN 2002

Expenses (operations + investments):

6.73 billion Euros, out of which 6.2 billion for operations only

Revenues:

- **Passengers:** €1.73bn (25.7%)
- **Employers:** €2.84bn (42.3%), including transport tax (€2.26bn) and re-imbursement of half of the price of season passes to passengers (€0.58bn)
- **State:** €0.67bn (9.9%)
- **Region:** €0.56bn (8.3%)
- **Departements (including Paris city):** €0.53bn (7.8%)
- **Others:** €0.4bn

CURRENT DEVELOPMENTS AND PROJECTS

Reform of STIF: After the entry of the Ile-de-France regional council in the board of directors of STIF in 2001, the Government is currently preparing a new phase of the reform, leading to the complete withdrawal of the French State from STIF, that will be chaired by the President of the Region in the future. The reform, that shall enter into force in 2005 or 2006, will also bring new competencies to STIF (responsibility for on-demand transport services, full responsibility for infrastructure building, possibility to set the rates of the transport tax). STIF will also be encouraged to devote some of its competencies, aside from the fare policy, to local authorities when this is a better way to manage local transport services.

Contracts with operators: STIF signed in 2000 a contract with RATP and one with SNCF, the two main operating companies, which define the duties of each side: definition of the quantity and quality of transport services which companies must provide and definition of the fare policy for STIF ; operation of services in line with the objectives set in the contract for the companies. Some financial incentives reward the efforts of companies and penalise them when the objectives are not met. The first generation of contracts (2000-2003) proved a success and the new contracts shall enter into force in early 2004. STIF will also contemplate to conclude contracts with the private companies operating bus services in the outer suburbs.

Extension of the transport systems: the contractual investment plan between the State and the Region for the period 2000-2006 will devote €3.6bn to public transport infrastructures (2/3 of all infrastructures). Main projects will comprise the building of a ring road of tramways in inner suburbs (€400m for 20km of new lines), the building of an orbital network of heavy rail lines (€880m for 120km), extension of 5 metro lines (€630m), building of new tramway lines and dedicated lines (€1,130m). STIF is responsible for approving all these projects and monitoring their implementation.

Improvement of accessibility: STIF is working hard to improve the accessibility of regular public transport systems through adapted stations and rolling stock. It also funds specific door-to-door services, and a regional information centre for mobility people with disabilities.

Improvement of the quality of service of the bus network: one of the main projects of the urban mobility plan of Ile-de-France, whose target is to reduce car traffic by 3% between 2000 and 2005 (-5% in Paris city and -2% in the suburban areas), consists in the setting up of a regional bus trunk network called Mobilien. This network will comprise 150 lines, 100 of which will be urban lines, and 50 interurban lines. The project aims to improve the attractiveness of bus services through high commercial speed (thanks to dedicated lanes and priority at traffic lights), increased frequencies (5 minutes at peak hours) and amplitude of service (until midnight 7 days a week), more comfortable and accessible rolling stock and stops, and real-time information onboard and at stops. The vehicles will all be air conditioned and will use clean technologies with low levels of polluting emissions.

PRAGUE

CZECH REPUBLIC

REGION

- Prague region, in addition to Prague city, includes a part of the Central Bohemian Region surrounding the city, particularly the entire area of districts Prague-East and Prague-West and parts of adjacent districts.
  The boundary is defined by an area reaching 40-50 km from the centre
- Population of Prague: 1.2 million inh.
- Population total : 1.7 million inh.
- Area of Prague: 496 km²
- Area total: 3.750 km²
- N° of jobs (Prague): 0.73 million
- Annual GDP/inhabitant: 8,470 €
- 2 local Governments, 319 elected municipalities

METROPOLITAN AREA

Missions

Key tasks of ROPID:

- traffic solution of Prague integrated transport
- assessment of traffic volumes to harmonize transport supply and demand
- supervision of compliance with quality criteria
- coordination of timetables between individual PIT subsystems
- drawing up timetables for suburban bus lines and small operators
- fare and ticketing system concept
- organisation of financial flows (fare revenues, subsidies and contributions allocated to transport)
- determination of the key for distribution of fare revenues between transport operators
- selection of operators for newly established suburban lines
- preparation and contractual negotiations with transport operators, municipalities and district authorities
- creation of conditions for market and competitive environment
- supervision of contract performance (compliance with agreed terms and conditions, implementation of financial flows)
- ensuring of a uniform information system

Budget

ROPID's Budget (2002) 852,000 €

Organization

Date of creation: 1993;

Status: Municipal contributory organization

Organizational structure:

- Department of Contracting and Contract Supervision
- Department of Traffic Surveys
- Department of Transport Economy
- Department of Economics and Operation
- Department of Transport Planning and Organisation
- Department of System Development
- Informatics Department

Director: Jiri Prokel

Staff: 51

CONTACT

Responsible Person: Jiri Prokel

Address: Rytírská 10 - 110 00 Praha 1 - Czech Republic

Tel: 420 2 24 23 47 37 - Fax: 420 2 24 22 94 23

E-mail: ropid@ropid.cz - Web: www.ropid.cz

Ropid

PUBLIC TRANSPORT SYSTEM

In September 2003, 15 operators operate 390 lines. The integrated system includes 3 lines of metro, 33 tram lines, 26 railway routes, 1 line funicular, 133 suburban bus lines and 194 other bus lines in the city of Prague.

Prague integrated public transport system based in :

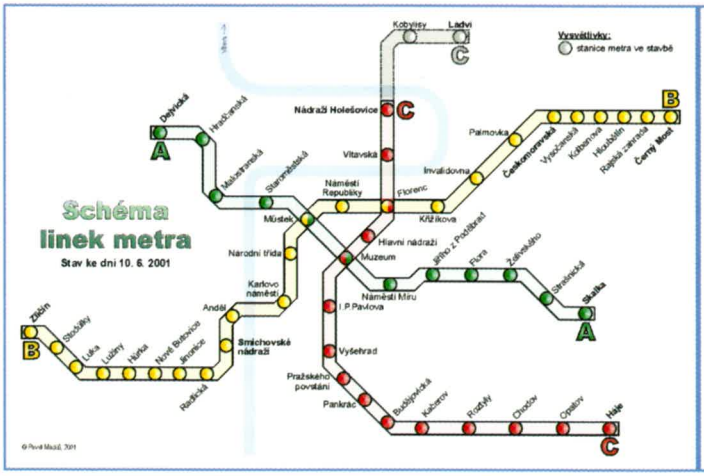
- uniform regional transport system based on preference of backbone rail transport
- uniform tariff system and contractual transport conditions
- contractual relations between municipalities, transport authorities, transport operators and the organizer, ROPID.

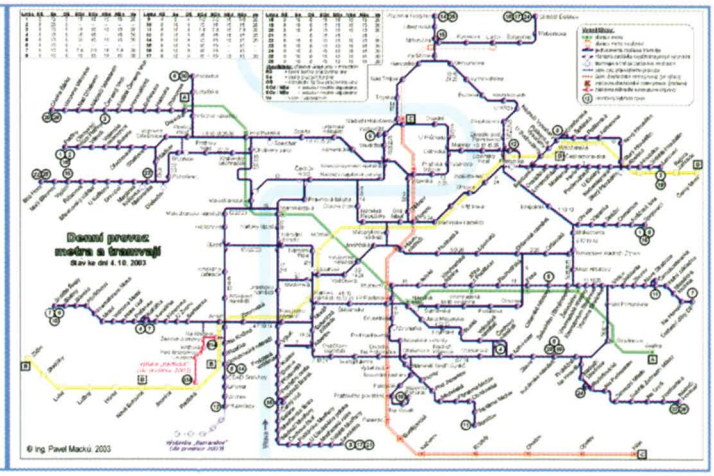
Tram, metro and the most part of the bus services are provided by **Dopravni podnik hlavniho mesta Prahy, akciova spolecnost,** a municipally owned corporation. Suburban services run under State Railway **(Ceske Drahy a.s.)** and usually private bus operators.

	Dopravn pdnik hl. m. Prahy, a.s. **Metro-Bus-Tram**	**Suburban Bus**	Cesk drahy a.s. **Suburban rail**
Management Body	Municipally owned corporation Government	13 operators	State owned corporation
Address	Sokolovsk 217/47, Prague 9		L.Svobody 2, P-1
Managing Director	Milan Houfek		Petr Kousal
Web site	www.dpp.cz	www.ropid.cz	www.cd.cz

SUPPLY/DEMAND DATA

	METRO	URBAN BUS	SUBURB. BUS	SUBURB. RAIL	TRAM
SUPPLY					
Network length (km)	50.0	718.2	1,451.5	639.7	137.5
Number of lines	3	193	130	26	2
Number of stops/stations	51	–	–	219	606
Number of vehicles	292	1,015	270	n.a.	708
Places-km (millions/year)	35.5	65.3	15.8	57.2	49.0
Number of operators	1	6	13	1	1
DEMAND					
Number of trips (million)	1,240				
Passengers-km (million)	6,260				

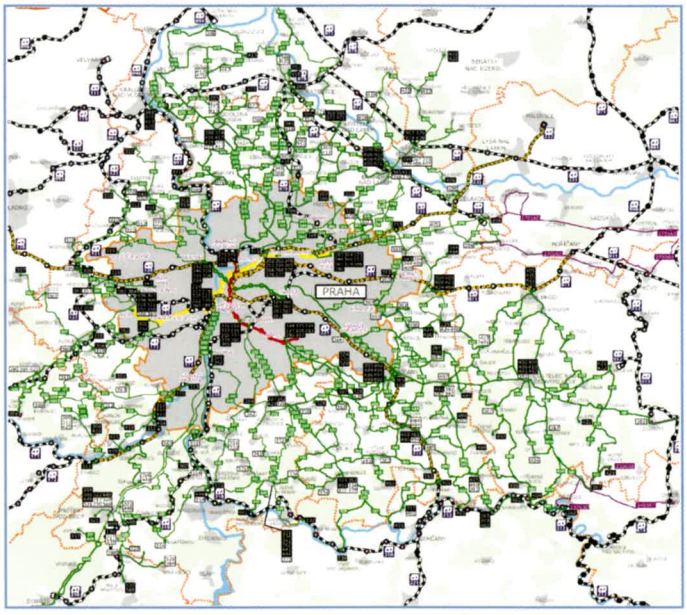




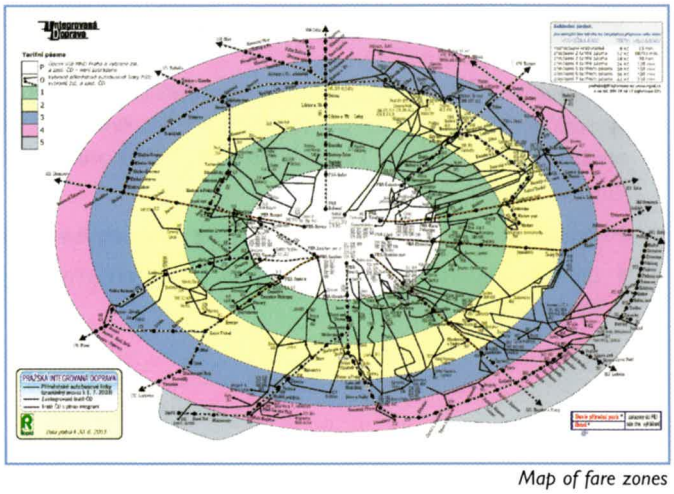
Metro and Tram schemes

PRAGUE

CZECH REPUBLIC



Suburban Integrated Routes



Map of fare zones

FARES 2003

Current fares:

TICKETS

Individual ticket price:

- 0.38 €, validity period 60 min, 2 zones; 0.19 € for each additional zone.
- 0,25 €, validity period 15 min, 2 zones.

PRAGUE PASSES

- Weekly ticket price: 6.94 €
- Monthly ticket price: 13.27 €
- Annual ticket price: 120.08 €

FUNDING OF PUBLIC TRANSPORT IN 2002

Total expenditure from the City Budget for the transport: 0.575 bn €

Coverage of the public transport operational costs

subsidies	0.236 bn €
fare revenues	0.081 bn €
other revenues	0.022 bn €
TOTAL for public transport operation only	0.339 bn €

CURRENT DEVELOPMENTS AND PROJECTS

11 years of bus suburban transport in Prague - 10 years of ROPID

Suburban bus lines have been a part of Prague integrated transport (PIT) for 11 years. The dynamic evolution in the quantity of fare revenues and passengers volume by the suburban lines continued also in 2003.

In September 2003, 13 operators operate 133 suburban lines. The total 3,651 connections carry 120,000 passengers in a typical working day. The longest line (n°381) has a length of 55 km and terminates 40 km from Prague city boundary (in Suchdol, in the fifth outside fare zone).

Suburban bus lines provide uniform regional bus system based on preference of backbone rail transport. The development of the new suburban lines is made possible thanks to favourable ratio of fare revenues towards public subsidies. While fare revenues reach only 25% out of the total cost of operations of public transport systems in Prague city, suburban buses have 75% covering of their own costs (in the outside fare zones). This fact is based on the choice of the operators, limited fixed payment per kilometre (according to timetables range) and on the controlled entrance at the boarding place (entrance at first door only, driver check or sell the tickets). Before this organizational measure, fraud reached 17.7% and in 2002, this rate fell down to only 3.5% of passengers.

Despite of the positive aspects, it must be acknowledged that some lines are not effective. The system has problem with its own fast expansion and the readiness of the municipalities, Prague city and Central Bohemia authorities to share the subsidies and costs - this play the key role for the functioning and efficiency of the whole suburban bus system.

REGION

- **Population of Rome: 2.8 million inh.**
- **Area of City: 1,286 km²**

COMUNE DI ROMA/ATAC

ATAC SpA is the Company that has taken the lead and is orchestrating the project on the transformation and restructuring of local public transport in Rome. Its role is to plan, coordinate monitor, promote and sell transport services delivered by other companies, in particular:

- surface transport services assigned to Trambus SpA and to a number of new operators in Rome
- underground transport services assigned to Met.Ro SpA.

PUBLIC TRANSPORT SYSTEM

Azienda Tranvie e Autobus del Comune di Roma (ATAC) is the Public transport company of the city of Rome.

Since December 2000 established with the task of planning, regulating and controlling the quality of the public transport service in Rome, and of managing the Metrebus regional integrated fare system, possessing a strong financial ability to invest.

Suppliers of the service, of the maintenance of vehicles and in charge of quality, in accordance with the service contracts signed with ATAC SpA, are:

- **Trambus** for the bus and tram service
- **Metro** for service regarding underground railways and the regional railways operated under concession Rome-Ostia Lido, Rome-Viterbo and Rome-Pantano.133.

Suburban rail are opetated by the national railways company, **Trenitalia.**

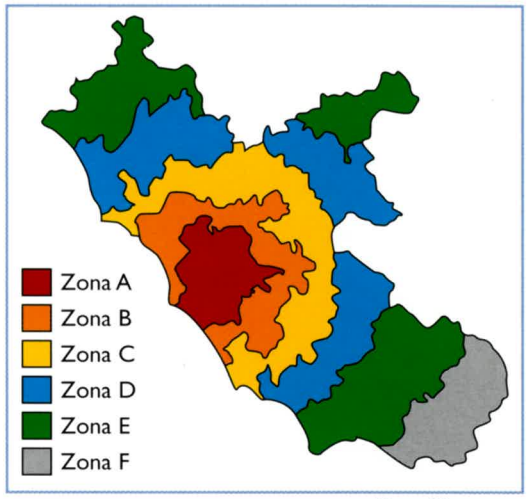
CONTACT

Address: Via Capitan Bavastro 94 - 00 154 Roma - Italia
Tel: 39 06 67 10 32 36 - Fax: 39 06 67 10 37 37
E-mail: DipVII@comune.roma.it
Web site: www.comune.roma.it/dipVII

FARES 2003

The Region of Latium has been split up into 6 concentric zones (A B C D E F).

Metrebus integrated fare system was created to best facilitate mobility inside the region of Latium created which allows holders of tickets and integrated passes to travel, by choice, on all companies' vehicles, within the validity time of the ticket purchased. Comprises **Metrebus Roma**, which allows passengers to travel with public transport throughout the territory of the Capital, and **Metrebus Lazio**, for travel inside the regional territory.



Map of fare zones

Current Fares in Rome city:

TICKETS		PASSES	
BIT (75' since validation):	0.77 €	Monthly (personal):	25.80 €
CIT (Weekly Ticket):	12.40 €	Monthly (non-personal):	36.10 €
BIG (1day ticket):	3.10 €	Annual:	186.00 €

The fares for the region depends on the number of zones required.

FUNDING OF PUBLIC TRANSPORT IN 2002

Revenue from travel passes: estimation as a percentage of total income: 60%

Individual tickets: estimation as a percentage of total income: 40%

SUPPLY/DEMAND DATA 2002

INDICATOR	METRO	BUS	SUBURBAN RAIL	TRAM
SUPPLY				
Network length (km)	36.6	3,281.0		52.0
Number of lines		282		6
Number of vehicles		2,536.0		154
DEMAND				
Number of trips (millions)	267.0	873.0	115.0	46.0

CURRENT DEVELOPMENTS AND PROJECTS

Line C, the new underground line and backbone of Rome

Line C, Rome's third underground line, is assimilated to a backbone that crosses the city from north-west to south-east: It will connect currently distant urban areas and double the length of Rome's Underground network. Line C is 39 km long, with 42 stations, extending from the north in the area of Tor di Quinto-Vigna Clara, to the Farnesina, Flaminio and Prati districts, then bending eastward, passing under the Baroque part of Rome's historical centre, running under Corso Vittorio Emanuele II° as far as Piazza Venezia, and from there to the Colosseum and S. Giovanni. It then crosses the Pigneto, Centocelle, and Alessandrino districts, following Via Casilina to Torrenova, to terminate at the University Campus of Tor Vergata. Another branch, the Pantano line, extends to the eastern limits of Rome's municipal area, until to Pantano.

SEVILLE

SPAIN

REGION

- Seville is the fourth largest Spanish metropolitan area after Madrid, Barcelona and Valencia.
- The Transport Area of Sevilla includes 22 municipalities.
- Population of Seville (2002): 0.704 million inh.
- Population of the Region(2002): 1.121 million inh.
- Area of City: 141 km²
- Area of Region: 1,387 km²
- N° of jobs in the Region (1998): 0.287 million
- Annual GDP/inhabitant: 12,609 €

CONSORCIO DE TRANSPORTES DEL ÁREA DE SEVILLA

Missions

To articulate the economical, technical and administrative cooperation between the different Authorities integrated to manage together competences and responsabilities in the fields of creation and management of infrastructures and transport services into the transport area of Seville.

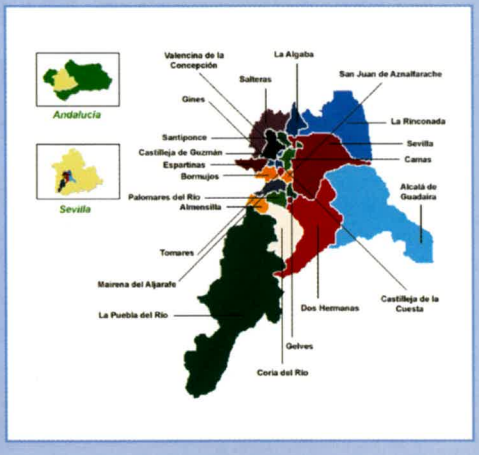
Organization

Date of creation: 30 March 2001

The Transport Consortium of the Area of Sevilla is a public authority integrated by the Andalusian Regional Government (45%), the 22 municipalities included (50%) and the Government of the Province (5%).

The Consortium has the following structure:

- Presidency
- Board of Directors
- Executive Committee
- Consultative Council
- Management



Manager Director: Armando Gutiérrez Arispón

Staff: 7

Budget

The CTAS budget for 2003 amount to € 10.698 million

Among the expenses count personnel with € 0.545 million (which mean a 5.1% of total); purchases of goods and services € 1,259 million (11.8%); financial expenses € 0.03 million (0.3%); current transfers expenses € 7.530 million (70.4%); Investment € 0.770 million (7.2%) and capital transfers € 0.562 million (5.25%) Funds come from fares revenues € 5.859 million (55.1%); and subsidies to operation € 3.505 million (32.4%) and capital € 1.333 million (12.5%).

CONTACT

Responsible person: Ignacio Ramallo García-Pérez
Address: Estacion de autobuses Plaza de Armas
Avda Cristo de la Expiracion s/n - E-41002 Sevilla
Tel: 34 95 505 33 90 - Fax: 34 95 505 33 91
E-mail: iramallo@consorciotransportes-sevilla.com - Web: www.consorciotransportes-sevilla.com

Consorcio de Transportes Area de Sevilla

Public Transport System

Seville metropolitan area generated 1.593 million of daily motorised trips in 2001. Public transport represents a 24.9% of total, amounting to 391,133 trips per day. Historical figures show a constant loss of weight for public transpor in modal split, varying from 43.1% in 1983 to current 24.9%.
Urban bus services are operated by **Transportes Urbanos de Sevilla, S.A.M (TUSSAM),**

9 bus operators provide suburban bus services by means of contract-agreements with the Consorcio de Transportes del Área de Sevilla.

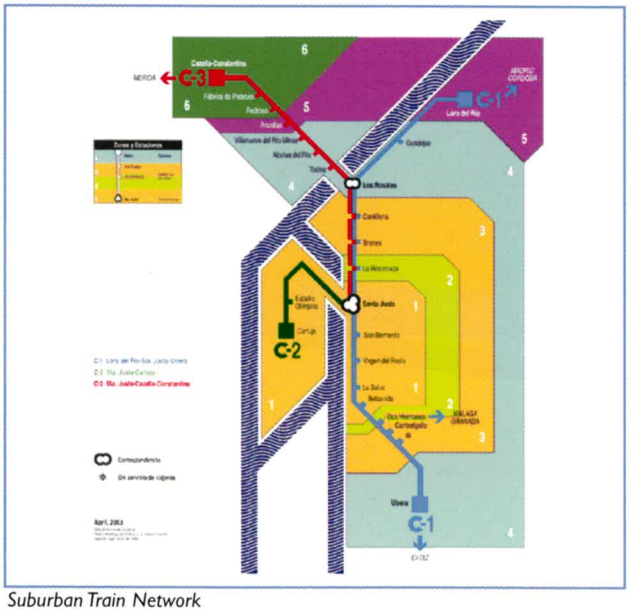
Suburban rail service runs under Cercanias, the public national railways company.

	Cercan as Suburban train	TUSSAM-Urban Bus	Suburban bus
Management Body	Public under State Government	Public under municipality	Private, under public concession
Address	Ciudad de Barcelona, 8	Crta. Amarilla, Avda. de Andaluc a s/n...	
Web site	www.renfe.es	www.tussam.es	

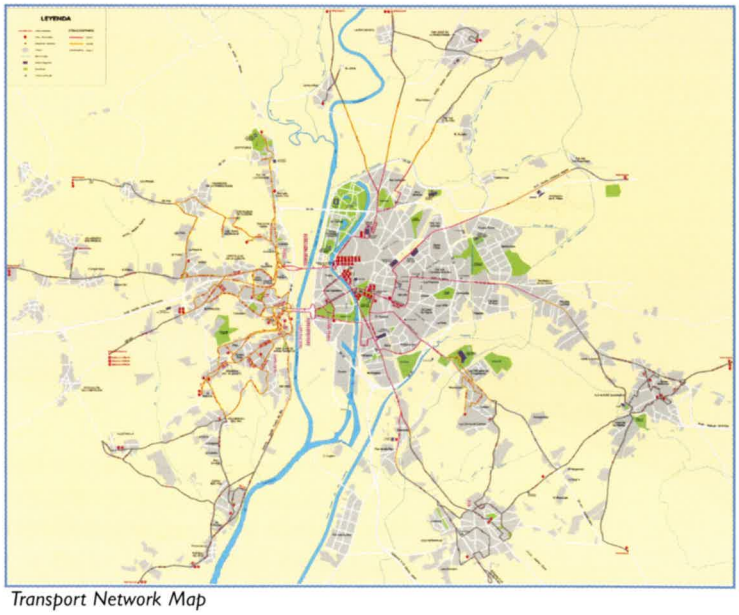
Supply/Demand Data

	Suburban train	Suburban bus	Urban bus
SUPPLY			
Network length (km)	30.1	1,473.0	421.0
Number of lines	2	49	42
Number of stops/stations	7	1,367 [1]	1,434 [1]
Number of vehicles	–	128	353
Number of operators	1	9	1
DEMAND			
Number of trips (million)	2.6	102.4	
Passengers-km (million)	28.4	500.1	

1 = Adding total stops by bus line.



Suburban Train Network


Transport Network Map

FARES 2003

Seville transport area is divided in three fare zones.

There is three kind of tickets:

- **Single ticket:** one trip in a metropolitan bus.
- **Bono 10 trips without transfer** (B10).
- **Bono 10 trips with transfer.** Each kind of ticket can be with **0 step, 1 step** or **2 steps** and depending of the ticket, it has a concrete time to do the bus transfer (45 m - 60 m - 75 m).

Steps	Single	Bono 10	Bono 10 T
0 steps	0.88 €	6.45 €	9.58 €
1 steps	0.94 €	6.57 €	9.99 €
2 steps	1.04 €	7.81 €	10.93 €

The kind of ticket, and its cost, depends of the number of zones that the passenger need to do the trip. It is called **"step"** or **"jump"** of zone.

Map of fare zones

FUNDING OF PUBLIC TRANSPORT IN 2003

Chapter III - Financial expenses	5,859,393.000 €
Chapter IV - Current transfers	3,505,902.222 €
Chapter VII - Capital transfers	1,333,333.333 €
TOTAL	10,698,628.555 €

CURRENT DEVELOPMENTS AND PROJECTS

- **New start for the metro of Sevilla**

A network of 4 routes totalling 54 km was devised. Tunnels built in the 1970's have been examined and a tendering procedure was organised for the building and the operation of the first route in the context of a 35-year concession contract. Three international consortiums bidded for the contract, which was granted to a consortium made of Dragados and Sacyr. Construction works for the first line of 18.9 km, that will link the south-eastern suburbs with the western part of the metropolitan area, started in June 2003. Operations are expected for 2005.

- **Mobility study and quality of transport survey**

The study begin in November 2003 and will be finished in June of 2004.

- **Installaton of stops port.**

More than 900 stop posts will be installed at the end of 2003 with information of lines, stops and timetable.

- **Operating help system.**

In 2004 will be running a service based on GPRS to locate the buses and to provide information to the users.

- **Second phase of the management software.**

This software will provide all statistics of use of the tickets and demands.

- **certification on quality.**

In 2004.

STOCKHOLM SWEDEN

REGION

- **Population of the county of Stockholm : 1.8 million inh.**
- **Population of Stockholm city: 0.75 million inh.**
- **Area of County: 6,500 km²**
- **Local Governments in the county: 26 municipalities**

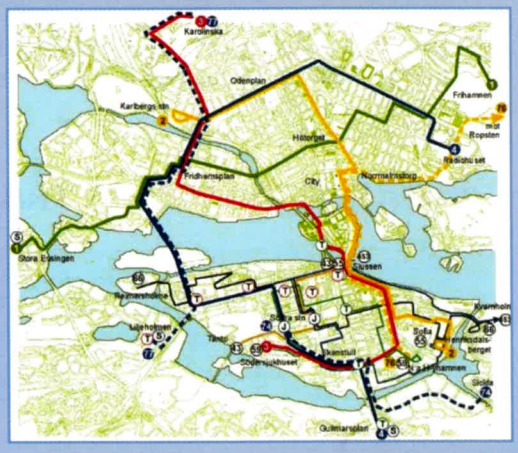
AB STORSTOCKHOLMS LOKALTRAFIK (SL)

Missions

The task of Storstockholms Lokaltrafik (SL) is to offer public transport services to those who living and working in the county of Stockholm. This task includes the planning and the purchasing of transport services by competitive tendering.

An important part of the advantage to society of SL's services, apart from offering travelling opportunities, consists of contributing to reduced crowding of the street and road network and to lowering of the environmental influences caused by traffic.

Apart from forcing technical development forward, SL's main task is to assure that ecological requirements are met when traffic, products and services are purchased.



Organization

AB Storstockholms Lokaltrafik (SL), created in 1967, is owned by the County Council, a political body elected every 4 years. It is chaired by County Council Traffic Commissioner. The SL Board of Directors comprises 9 members and 9 deputy members, all appointed by the Stockholm County Council.

SL's activities are managed by the Managing Director and his management group of directors, all together 8 persons.

Budget

2002 Total operating expenses
7592 million SEK (841 million €)

2001 Total operating expenses
7617 million SEK (844 million €)

CONTACT

Director: Björn Dalborg

Address: S-12080 STOCKHOLM

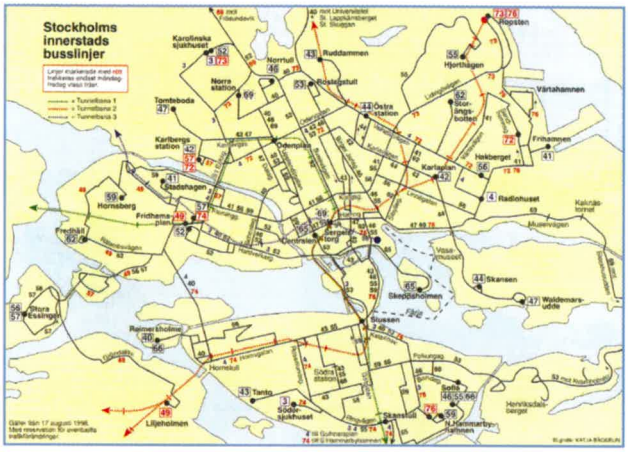
Tel: 00 46 8 686 1430 - Fax: 00 46 8 686 1503

E-mail: bjorn.dalborg@sl.se - Internet: www.sl.se

STOCKHOLM SWEDEN

PUBLIC TRANSPORT SYSTEM

SL has 6 major operators, three on bus and three on rail.



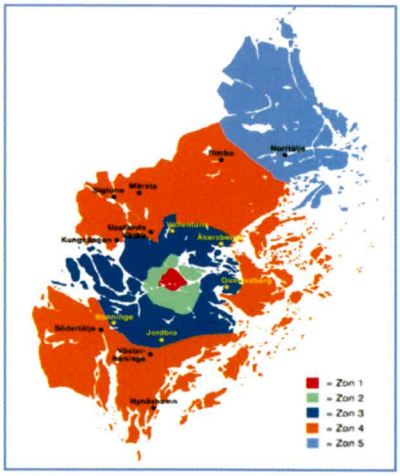
SUPPLY/DEMAND DATA 2002

	COMMUNTER TRAINS	METRO	LOCAL TRAINS AND TRAMS	BUS
SUPPLY				
Network length (km)	200	108	110	9,159
Number of lines	3	7	5	469
Number of stops/stations	50	100	98	6,000
Number of vehicles	314	630	187	1,800
Number of operators	1	1	2	3
DEMAND				
Passengers-km (million)	1,146	1,581	197	1,509

FARES 2003

- Individual ticket: 20 SEK (2,21 €) for trips in zone 1, 10 SEK (1,10 €) for each additional zone
- 30-days card: 500 SEK (55,40 €)
- Annual ticket: 5320 SEK (589,48 €)
- Season card jan-apr: 1940 SEK (214,96 €)
- Season card may-aug: 1440 SEK (159,55 €)
- Season card sept-dec: 1940 SEK (214,96 €)

The work to develop a new ticket system is continuing. The plan is to introduce an electronic rechargeable "Smart Card" in 2005.



FUNDING OF PUBLIC TRANSPORT IN 2002

Fare box revenues: 49.7%

Tax (= county income tax): 50.3%

CURRENT DEVELOPMENTS AND PROJECTS

- **A strategic plan for the development of public transport:**

Storstockholm Lokaltrafik (SL) has devised a strategic plan for the coming 5 years. Its goal is to increase significantly the market share of public transport (from 40% in 1998 with a target of + 15% increase in traffic), and the satisfaction of passengers (from 58% in 1998 to 75%). To meet this objective, SL has devised the vision to provide the best public transportation in Europe. This will result in a strong focus on quality in the contracts signed between SL and the transport operators. To increase its market share, SL will concentrate its effort on some specific target groups (young adults, people currently using a car to travel into the city during the day, people using a car for local trips), and it will introduce a "contract with passengers" which is a commitment of SL to provide passengers with simple and fair trips.

VALENCIA

SPAIN

REGION

- The metropolitan area of Valencia is made up of 3 counties with a total of 60 municipalities.
- Population of Valencia (2001): 0.806 million inh.
- Population of the metropolitan area (2001): 1.6 million inh.
- Area of City: 145 km²
- Area of metropolitan area: 1,503 km²
- N° of jobs in the Region (1998): 0.509 million
- Annual GDP/inhabitant (2001): 16,181 € Local

ENTITAT DE TRANSPORT METROPOLITA DE VALENCIA (eTM)

Missions

- All the competences in regular metropolitan services except the ones belonging to the regional Minister of Transports
- Competences in taxi sector
- Development of metropolitan transport planning of Valencia
- Handling metropolitan integration tickets selling network
- Give passengers right information about transport services in metropolitan area
- Statistics ans studies about metropolitan transport in Valencia
- Infrastructure transport works entrusted from regional Minister of Transport

Map of metropolitan area

Organization

The "Entidad de Transporte Metropolitano de Valencia" (eTM) is a public body depending on regional administration. It is the public transport authority for Valencia metropolitan area. eTM was created by a regional law passed in 2000 and starts operating in 2001.

The Executive Board is composed by 16 members: president, who is the regional government chairman for transport (Conseller de Obra Públicas, Urbanismo y Transportes); 2 vice-presidents, one of them Valencia's mayor, 5 members representing the regional government, 1 member of the National government, managing director of regional railways (FGV), managing director of urban buses (EMT) and eTM Director and Secretary

Director: Aurelio López Martín

Staff: 38

Budget (2004)

Main Expenditures:

- Personnel € 1.375 million (34.7%);
- Purchases of goods and services € 1.039,63 million;
- Financial expenses € 0.006 million;
- Current transfers € 2.917 million;
- Investment € 0,1 million;
- Capital transfers € 0.3 million.

Funds:

- Current transfers € 4.600,63 million;
- Capital transfers € 0.4 million;
- Own incomes: 0,806 million.

CONTACT

Responsible person: José Molto

Address: Av. Enric Valor, 13 - E-46100 Burjassot

Tel: 34 96 316 07 00 - Fax: 34 96 316 07 13

E-mail: jose.molto@etmvalencia.com - Web: www.etmvalencia.com

eTM

PUBLIC TRANSPORT SYSTEM

There are 3.73 million of daily trips inside Valencia metropolitan area. Most of them are motorised trips (56,4) and Public Transport totalised less than a third of these 1.15 million trips, which means a low rate for public transport use among the european metropolitan areas.

Empresa Municipal de Transportes de Valencia (EMT) operates urban buses services.

Ferrocarriles de la Generalitat de Valencia (FGV) provide tram, urban and suburban rail services in Valencia metropolitan area under **MetroValencia** trademark. Other suburban rail services are operated by Cercanias (commuter oriented services of RENFE, the State Railway Company).

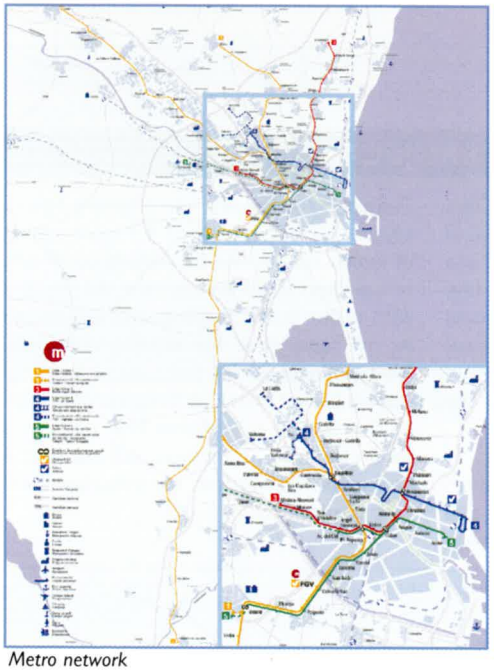
Eight private companies held contractual agreements with regional government to provide suburban bus services. EMT have generated a trademark **Metrobus** that groups them.

	EMT Urban Bus	FGV		Suburban train	Metrobus Suburban bus
		MetroValencia	Tram		
Management body	Public under municipality	Public under Regional Government		Public under State Government	Private, under public concession
Address	Pl. Correu Vell, 5	Partida Xirivelleta, s/n			
Managing Director		Marisa Gracia Giménez			
Web site	www.emtvalencia.es	www.fgv.es		www.renfe.es	

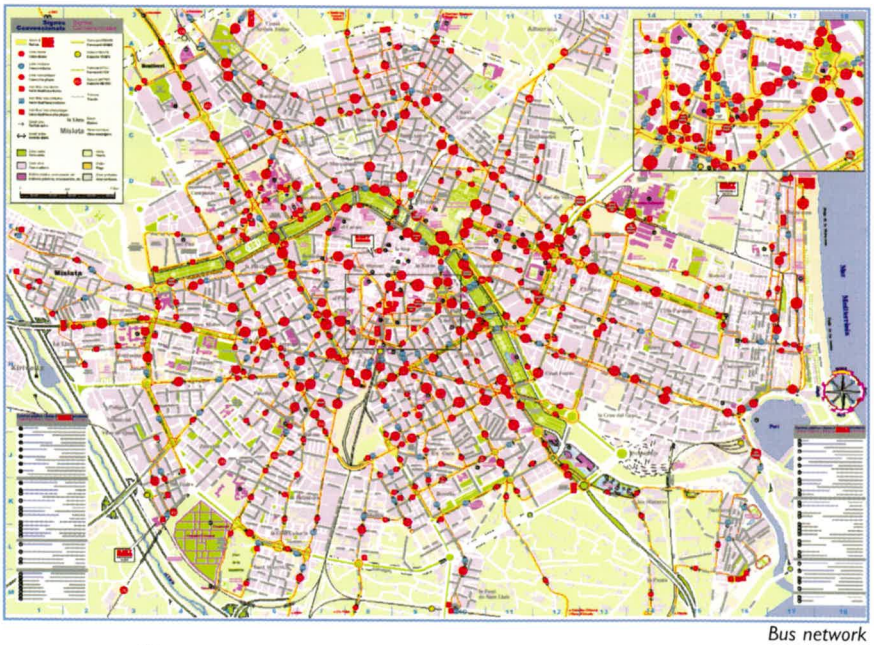
SUPPLY/DEMAND DATA

INDICATOR	UNIT	PUBLIC TRANSPORT SYSTEM IN THE METROPOLITAN AREA				
		HEAVY RAIL	METRO	TRAMWAY	SUBURBAN BUS	URBAN BUS
SUPPLY						
Network length	km	101.1	117.9	13.0	2,843.0 [1]	845.5 [1]
Number of lines	units	5	2	1	52	56
Number of stops/stations	units	27	86	28	2,847 [1]	2,825 [1]
Number of vehicles	units	34	76	24	125	480
Total places-km	millions/year	-	2,525.6	265.6	779.3	2,264.4
Number of operators	units					
DEMAND						
Trips-year (one motive=one trip)	million	-	40.3 [2]	6.3	14.9	104.5
Passengers-km	million	-	-	-	-	103.7

1= total lines lenght and line stops 2= number of stages



Metro network



Bus network

FARES 2003

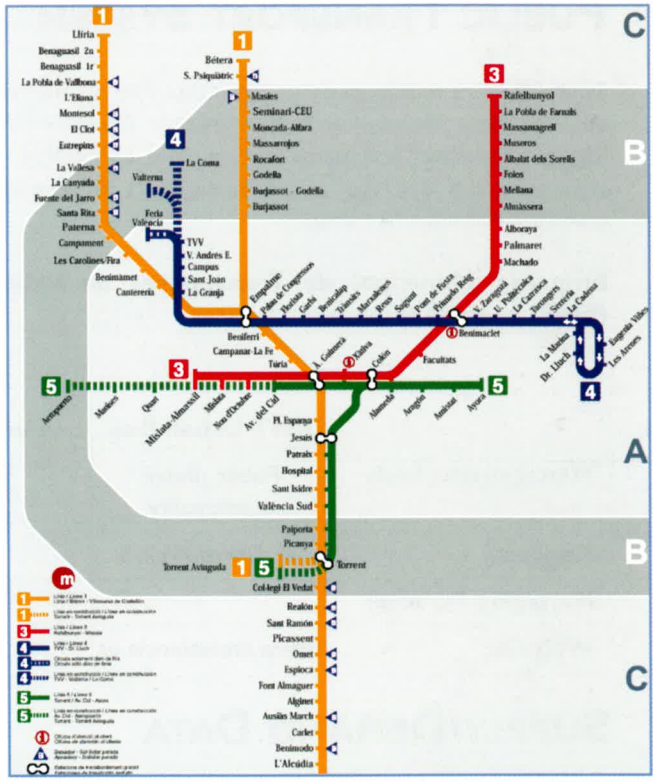
The metropolitan area of Valencia is divided into three fare zones.
Each public transport operator has its own tickets but also allows the use of integrated tickets.

Not Integrated Tickets

Single ticket for **urban buses** costs 0.95 € and 10 trips ticket 4.90 €
Price of **metro** single ticket ranges from 1 € (one zone) to 2,00 (three zones).
In case of 10 trips (bono metro), fares vary from 5.10 € to 10.00 € (three zones).

Integrated tickets and passes

Fares in Euro	A	B	C
1 day (T-1)	3.0	-	-
10 trips (B-10)	5.65	-	-
Monthly pass (AT)	30.0	35.0	45.0
Monthly pass for students (AT-Jove)	22.5	-	-



Map of fare zones

FUNDING OF PUBLIC TRANSPORT IN 2001

Euro	Operating expenses	Operating incomes
Metro Valencia	87,783,710.0	39,433,690.0
EMT	76,888,136.00	38,285,824.0
Private	Companies Self financed by fares	

CURRENT DEVELOPMENTS AND PROJECTS

Increased patronage and ambitious projects for public transport

After several years of falling patronage, the trend has been reversed since 1998, and the number of passengers has increased by 13% in four years. The main reasons for this positive trend seem to be the building and extension of underground lines on the one hand, and the introduction of fare integration, on the other hand.

As an example, the number of passengers using metro (46 million in 2002) increased by 14,2% between June 2002 and June 2003. This result is linked to the inauguration in April of the first section of the third underground line (L5), which is operated by Metrovalencia (the trade mark of FGV, the Valencia regional public company responsible for regional railways). This new line, of a current length of 2.3 km, will connect the seafront with the airport in the future.

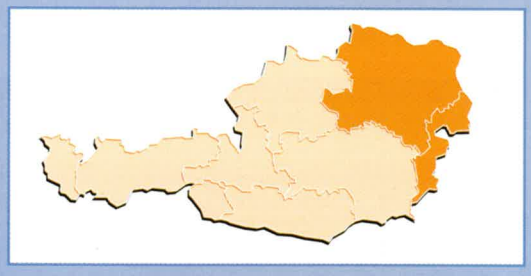
Projects of extention of the network, which already comprises 3 metro lines (L1, L3 and L5) and one tramway route (T4), are underway. The construction of a new tramway line (T2), counting 8 stations on its 4.3 km long route, of which 1.8 km will be underground, will be set up soon. It will connect the old city center with major public facilities and leisure areas. At the same time, the existing underground lines will be extended and a major interchange station (called Bailen) is being built now, close to the central rail station. This project, of a total cost of € 20 million, will connect two underground lines with the suburban and the long distance rail network.

VIENNA EASTERN AUSTRIA AUSTRIA

REGION

- Population of Vienna (2001): 1.6 million inh.
- Population of the Region (2001): 2.6 million inh.
- Area of City: 415 km²
- Area of Region: 8,400 km²
- N° of jobs (2001): 1.04 million
- Annual GDP/inhabitant: 24,400 €
- Car Ownership rate: 495.8 cars/1000 inhab.

VERKEHRSVERBUND OST-REGION (VOR)



Missions

VOR is an independent public service company whose objective is to make public transport systems as easy and as attractive as possible for passengers.

VOR's vision is to provide travelers with an integrated user-friendly public transport network comprising railways, buses, tramways and underground. This means simple fare structure, and a modern and a customer oriented information system.

VOR is responsible for the co-ordination of provision of services by the different transport companies.

VOR sees to the share of fare revenues between the companies and grants subsidies to transport operators in relation with the acceptance of integrated tickets.

At the exception of the regional bus services, for which VOR is directly responsible, VOR has to co-operate with the other public transport authorities for the organisation of local transport services.

VOR has to anticipate so as to provide passengers in the future with public transport services that meet their needs.

This includes extension of underground network, integrated transport planning, setting up of convenient interchange station or use of innovative information technology for customer information.

The members of VOR are the City of Vienna (44%), the Region of Lower Austria (44%) and the Region of Burgenland (12%).

VOR is the largest regional transport authority of Austria. A rail network of 8,000 km enables passengers to reach easily the different parts of Eastern Austria.

Staff: 45

Organization

Status: administrative department

The setting up of an integrated transport system is a complex process. It took more than 23 years to create VOR in 1984 since the first agreement between the Austrian Railways (ÖBB) and the company responsible for public transport in Vienna.

Budget

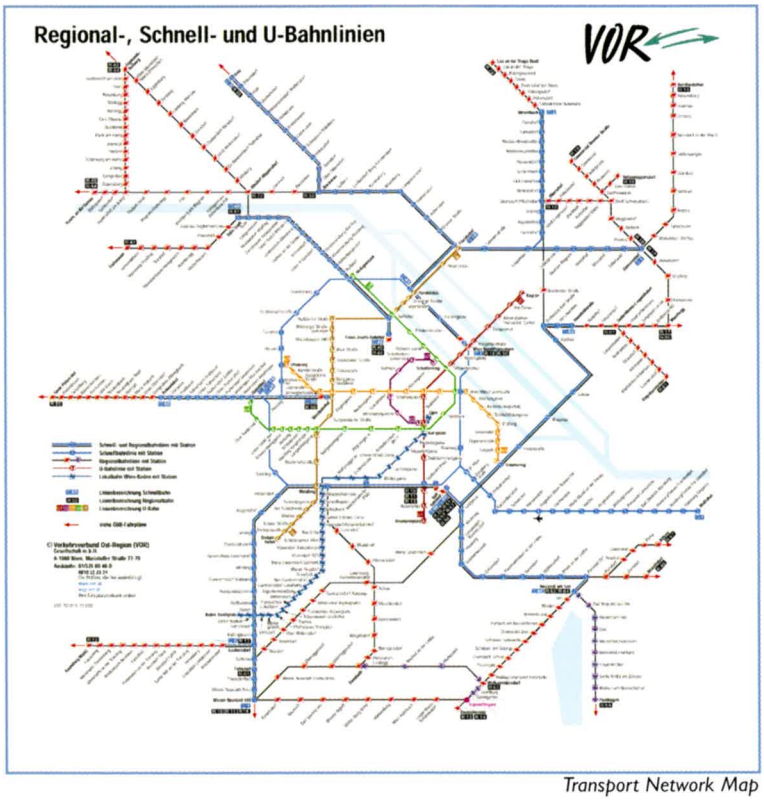
52.09 Mio Euros

CONTACT

Responsible person: Wolgang Schroll
Address: Postfach 361 - 1060 Wien - Österreich
Tel: 43 1 526 60 48 - Fax: 43 1 526 60 48 DW 106
E-mail: office@vor.at - Web site: www.vor.at

SUPPLY/DEMAND DATA 2002

	HEAVY RAIL	METRO	TRAMWAY	BUS
SUPPLY				
Network length (km)	1,579	62	241	6,054
Number of lines	36	5	32	254
Number of stops/stations	1,157	86	1,132	10,125
Number of vehicles	1,384	636	548	1,493
Places-km (millions/year)	20,376	8,272.1	4,116.4	3,441
Number of operators	3	1	2	13



Transport Network Map

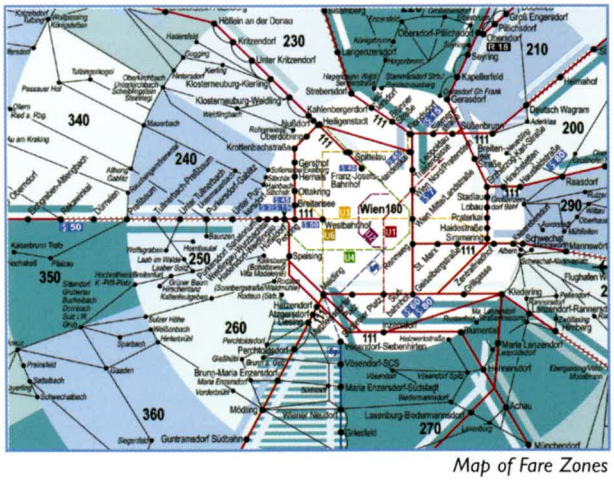
FARES 2003

A wide range of differents tickets are available for city center Classified per number of trips it can found single trip ticket (1.5 €), 4 trips ticket (6 €) and 8 trip ticket (12 €).

According the validity time there are 1 day (5 €), 3 days (12 €) or 8 days (24 €) tickets.

For whole region as well as city center there are weekly, monthly and yearly pass cards.

	Weekly	Monthly	Yearly
City Center	12.5	45.0	409.0
Pupils	–	–	19.6
Elderly	–	–	204.0
Whole Metroopolitan Area	47,6	167.9	1,631.3
Pupils	–	–	19.6



Map of Fare Zones

FUNDING OF PUBLIC TRANSPORT IN 2002

Operation revenues: 414,45 MEUR/year

Share of simple tickets use: 7,49%
Share of concessionary tickets and card use 23,44%
Share of yearly / monthly / weekly card use 69,08%

CURRENT DEVELOPMENTS AND PROJECTS

New organisation of public transport in Vienna and eastern Austria

The Austrian federal government, which used to have a majority stake in the Verkersverbund Ost Region (VOR), the authority responsible for co-ordinating and integrating the supply of public transport in Vienna and eastern Austria since its creation in 1984, withdrew from the organisation on 1st January 2002.

The members of VOR are now the Länder (regions) of Vienna (44%), Lower Vienna (44%), and Burgenland (12%). At the same time, it was decided that VOR will cover the whole territory of Vienna, Lower Austria and Burgenland, that is to say a surface of 23,500 km² (vs. 6,500 today) with a population of 3.2 million people (vs. 2.3 today).

This key reform follows a law adopted in 1999 about the organisation of regional and local public transport in Austria. December 2002.

REGION

- Population of Vilnius (2002): 0.55 million inh.
- Area of Region: 402 km²
- N° of employed (2001): 0.317 million
- GDP per inhabitant: (2001): 5,416 €
- Local Governments in the Region: Vilnius City Municipality; Vilnius Region Municipality.
- Car Ownership Rate: 330 cars/1000 inhab.

SUSISIEKIMO PASLAUGOS (SP)

Missions

The compulsory tasks of the entreprise are :

- Preparing public transport schedules and giving proposals on routes as well as types and numbers of transport vehicles,
- Providing information on compliance with public transport schedules,
- Arrangement of ticket production, distribution and control,
- Passenger compliance control in accordance with the procedure established by the resolution of the Ministry of Communications and legislation,
- Accumulation of means from sold tickets, settlement of accounts with carriers according to concluded agreements,
- Giving proposal on carrier selection tenders organised by the municipality to carry passengers at regular communication routes,
- Collecting and analysing information on passenger carriage within the city,
- Drafting legislation and other documents in relation with the enterprise's activities,
- Placement and maintenance of public transport schedules at stops,
- Preparing a project for the development of transport dispatcher's office.

Budget

Expenditures (2002) – 81,578,000 Lt
Hiring of operators – 73,888,000 Lt
Revenues: 81,595000 Lt:
Ticket revenue – 54,395,000 Lt
Compensations – 27,177,000 Lt
Other – 23,000 Lt

Organization

SC Susisiekimo Paslaugos was founded in 1998, as a municipal enterprise, according to the resolution n° 230 of Vilnius City Council

SC staff rise to 145 people (including 118 passenger compliance controllers and 4 traffic controllers).

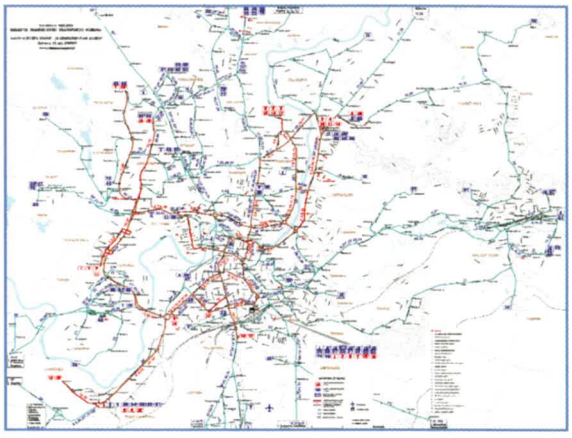
CONTACT

Responsible person: Vaidotas Antanavicius
Address: Zolyno St 15 - LT - 2040 Vilnius
Tel: (+370 5) 270 93 39 - Fax: (+370 5) 2709339
E-mail: vaidotas.antanavicius@vilniustransport.lt - Web site: www.vilniustransport.lt

VILNIUS LITHUANIA

Public Transport system

At the present moment 2 largest carriers in the city of Vilnius are using a common sample of public transport tickets. These are JSC "Vilniaus troleibusai" (Vilnius trolleybuses) and JSC "Vilniaus autobusai" (Vilnius bus fleet).



Supply/Demand Data 2002

Indicator	Tramway	Bus
SUPPLY		
Network length (km)	73,0	327,0
Number of lines	18	63
Number of vehicles	303	286
Total places-km (millions/year)	0,485	0,456
Number of operators	1	1
DEMAND		
Number of trips (millions)	13,319	107,687
Passengers-km (millions)	751,7	–

Fares 2003

Most common travel tickets used in Vilnius are single trip ticket and nominal monthly cards.
One, three or ten days tickets are also available, but they have a very low rate of use.
Standar price for single trip ticket for bus or trolley is 0.23 €, if you get it on board the vehicule it cost 0.29 €.

Fares in Euro	Bus or Trolley Monthly	Bus and Trolley Monthly	1 day ticket	3 days ticket	10 days ticket
Every day	10.1	14.5	1.2	2.9	5.79
working days	8.1	11.6			

50 % discount of single and monthly ticket may use II group disabled people, people who have suffered from Soviet Union repression, their family members, people older than 70 years, students.

80 % discount on single and monthly ticket may use disable children, I group disable people, volunteer soldiers older than 70 years.

Funding of public transport in 2002

The **operating costs** in 2002 Amount to 28.72 MEUR, shared as follows:

- 45.75% due to bus operating costs (13.14 MEUR)
- 46.60% from trolley operation (13.38 MEUR)
- 7.6% from other expenditures (2.2 MEUR)

The **operating revenues** come mainly from:

- Tickets sales:
  - Bus: 7,8 MEUR (31.4%)
  - Trolleys: 8,7 MEUR (35.1%)
- Subsidies from National Government:
  - Bus: 4,2 MEUR (17.0%)
  - Trolleys: 4,1 MEUR (16.5%)

Investments on public transport:

- Rolling Stock:
  - Bus: 1.4 MEUR
- Maintenance and replacement:
  - Bus: 1.4 MEUR
  - Trolley: 4.1 MEUR

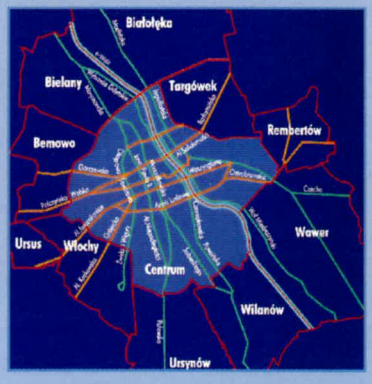
WARSAW

POLAND

REGION

- Population of Varsaw (2001): 0.13 million inh.
- Population of Region (2002): 1.63 million inh.
- Area of Region: 518 km²

ZARZAD TRANSPORTU MIEJSKIEGO (ZTM)



Missions

Warsaw Transport Authority (City Budget Unit) targets are:

- Planning and organising public transport network (routes, timetables),
- Ordering and taking an attitude to the studies concerning development of transport network,
- Ordering service carrying out by strategic firms (MZA, TW and MW) and others (private firms) and monitoring it,
- Maintaining of infrastructure (bus and tram stops information, sheds, terminus),
- Carrying out fares policy (proposing systems, organising of destribution, checking-out of users, collecting fines),
- Creating public transport media image,
- Monitoring carriers.

Organization

Warsaw Transport Authority / ZTM / Budget Unit of Warsaw City Hall

Budget

Funds for ZTM come from fares revenues and from Warsaw City Hall budget

Collecting fare must cover more than 50-55% of ZTM budget

SUPPLY/DEMAND DATA

	METRO	TRAMWAY	BUS
SUPPLY			
Network length (km)	14.2	469.8	3,256.5
Number of lines	1	32	189
Number of stops/stations	14	514	3,374
Number of vehicles	136	890	1,673
Number of operators	1	1	3
DEMAND			
Number of trips (million)	60.0	120.0	225.0

CONTACT

Responsible person: Przemyslaw Pradzynsaki

Address: Ul. Senatorska 37 - 00-099 Warszawa

Tel: 48 22 827 06 64 - Fax: 48 22 827 25 52

E-mail: ztm.pm@ztm.waw.pl - Web site: www.ztm.waw.pl

FARES 2003

A single ticket in city center cost 0.6 €; if ticket is for metropolitan area the price rise to 1.2 €.

Fares for multiple trip tickets in the city center are: 60 minutes (0.8 €) 90 minutes (1 €), 120 minutes (1.4 €), 1 day (1.7 €) and 3 days (2.8 €).

In the whole metropolitan area fares for these tickets are: 90 minutes (1.4 €), 120 minutes (1.7 €), 1 day (2.3 €) and 3 days (3.4 €).

Fares in Euro	City Center	Whole Metropollitan Area
weekly		
Standar	5.7	7.6
30 days pass		
Standar	18.0	24.3
Students	9.0	12.1
Elderly people and pupils	9.4	12.6
90 days pass		
Standar	45.2	61.0

30 days pass is free of charge from people up to 70 years old.

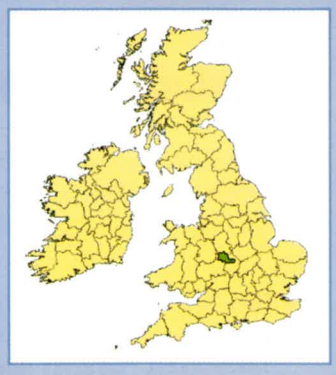
WEST MIDLANDS UNITED KINGDOM

7 districts including Birmingham

REGION

- The West Midlands is made up of seven Local Authority areas.
- These Local Authorities are: Birmingham, Coventry, Dudley, Sandwell, Solihull, Walsall and Wolverhampton.
- Birmingham is the largest of the Local Authority areas and is the second largest city in the United Kingdom.
- Population of Birmingham (2001): 0.98 million inh.
- Population of the West Midlands (2001): 2.56 million inh.
- Area of West Midlands Metropolitan Area: 902 km²
- N° of jobs (2001): 1 million
- Contribution to National GDP: West Midlands contributed £63.5 billion to the UK's GDP (8.2% of the total).

WEST MIDLANDS PASSENGER TRANSPORT EXECUTIVE (CENTRO)



Mission

To increase the use of public transport through partnership to improve the economic, environmental and social wellbeing of the West Midlands.

Centro's three main objectives are:

- Providing people with the opportunity to use public transport and providing real alternatives to car journeys by linking up all types of travel,
- Improving the quality of public transport services and facilities,
- Communicating the availability and benefits of using public transport and its importance to the development of the West Midlands.

Organization

Date of creation: 1986;

Status: Public Corporation; Staff: 300

The West Midlands Passenger Transport Executive (Centro) and the West Midlands Passenger Transport Authority (WMPTA) work in partnership to develop public transport in the region. The WMPTA is made up of 27 elected members from the 7 district councils who set the political and financial framework for Centro. Centro then put these policies into action, by using money raised from council tax payers, Government and private sector finance. Centro works in partnership with the Local Authorities, bus, rail and tram operators and the general public to bring about improvements in the public transport network.

Budget

Capital expenditure is investment designed to improve public transport facilities and to be of lasting value.

Capital budget (2002/2003) £45 million:

Expenditures: Midland Metro future routes (£6.9 million); Rail (£9.5 million); Bus (£12.8 million); Information (£2.2 million); Other (£5.4 million); Multi-modal study (£3.3 million) Bus showcase (£4.8 million).

Funding:
WMPTA Borrowing (£30.5 million); Capital receipts (£5.6 million) Revenue resources (£5.7 million); Grants from Department for Transport (DfT) (£2.4 million); Private sector / third party contributions (£0.6 million).

CONTACT

Responsible person: Rob Donald
Address: Centro House 16 Summer Lane -B19 3SD Birmingham - United Kingdom
Tel : 44 (0)121 200 2787 - Fax : 44 (0)121 214 7010 - DX 712530 Birmingham 30
E-mail : johnsidebotham@centro.org.uk - Web site: www.centro.org.uk

CENTRO

WEST MIDLANDS UNITED KINGDOM

7 districts including Birmingham

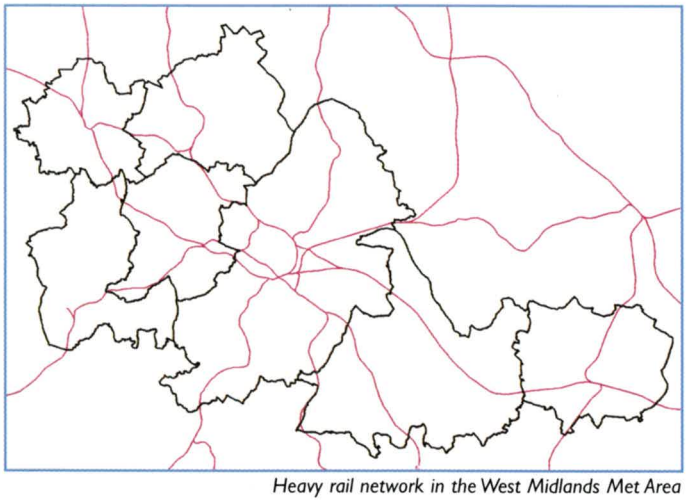
PUBLIC TRANSPORT SYSTEM

General description: In 2002/2003, 332 million bus passenger journeys, 26.4 million rail journeys and 4.9 million Metro journeys were made within the West Midlands Metropolitan area.

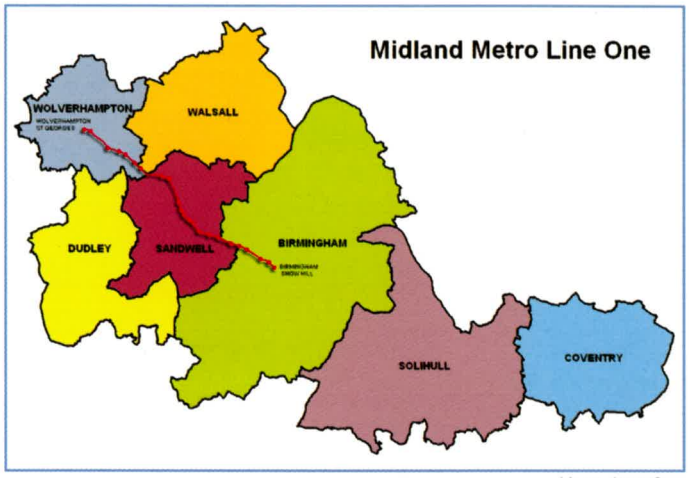
- **Bus:** Over 90% of bus services in the West Midlands county are operated on a commercial basis by over 40 private operators. Travel West Midlands operates over 80% of the bus mileage in the West Midlands. Centro works with bus companies, local authorities and others to continuously improve the quality of bus services in the West Midlands.

- **Rail:** Central Trains Ltd operate the majority of local rail services in the West Midlands under a franchise agreement with Centro, the National Express Group (NEG) and the Strategic Rail Authority (SRA). The franchise was awarded in March 1997 and will run until March 2006.

- **Metro:** Metro Line One has been operating since May 1999. Altram, a consortium of Ansaldo Trasporti, Laing and Travel West Midlands, operate Line One under a 23 year concession let by Centro.



Heavy rail network in the West Midlands Met Area



Metro Line One

SUPPLY/DEMAND DATA 2002

INDICATOR	HEAVY RAIL	METRO	BUS
SUPPLY			
Network length (km)	186.0	20.0	7,524
Number of lines	8	1	500
Number of stops/stations	71	23	–
Number of vehicles	112	16	2,200
Number of operators	5	1	50
DEMAND			
Number of trips (millions)	26.4	4.9	332

FUNDING 2002/2003 (£ m)

Rail Grant	25,493
Deed of assumption	4,292
Rural bus grant	0,111
PTA Levy	113,570
DETR Co-ordinator	0,030
Use of reserves	0,162
TOTAL FUNDING	**143,658**

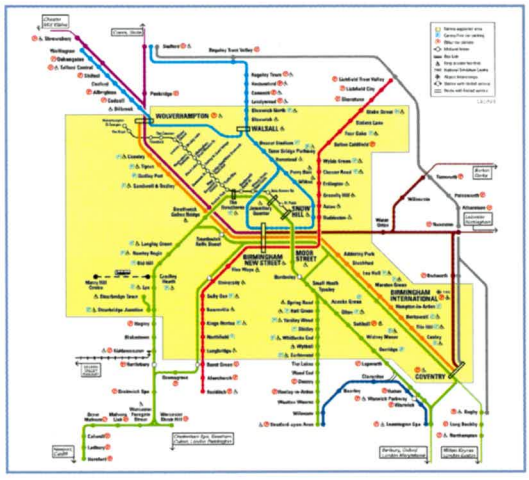
WEST MIDLANDS UNITED KINGDOM

7 districts including Birmingham

FARES 2003

West Midlands is divided into five fare zones.

- The maximum peak fare for the main bus operator is 1.87 €.
- The price for multi-modal, multi-operator day ticket rise to 7.18 €.
- Off-peak day tickets are available for adult (€ 5.75) child (€ 3.59) and families (groups up to 6 people not more than 2 of whom 16 or over) (€ 9.34).



Network map

Prices (£ sterling)		Fare Zone					
		1	1-2	1-3	1-4	1-5	2-5
Centro Card	weekly	14,00	15,00	16,00	17,50	19,00	16,0
	monthly	47,00	50,00	55,00	60,00	64,00	55,00
	13 weeks	144,00	154,00	166,00	180,00	195,00	166,00
	yearly	500,00	530,00	580,00	625,00	670,00	580,00
	Student (one term)			161,00			
Railmaster	weekly	6,00	6,60	11,20	13,70	15,20	11,20
	monthly	22,50	25,00	37,50	47,50	51,00	37,50
	yearly	225,00	250,00	399,00	464,00	499,00	399,00
Busmaster	bus weekly			12,90			
	bus monthly			45,65			
	bus + metro weekly			15,40			
	bus + metro monthly			54,15			

Centro Card: offers savings to commuters who use both buses and trains allowing unlimited travel on virtually all buses in the Centro area, Midland Metro and all trains in the zones specified

Railmaster: for use on trains in Centro area (excludes Metro)

Busmaster: offers travel on bus and Metro services in the West Midlands County

CURRENT DEVELOPMENTS AND PROJECTS

High quality park & ride facilities in the West Midlands. Centro is dedicated to improving the attractiveness of park and ride facilities for car drivers. To this end, it has devised a programme of site upgrades to meet National Security Standards for "Secured Car Parks" sponsored by the Association of Chief Police Officers (ACPO). The upgrades will include monitored CCTV, help points, public address and high quality lighting. A major programme to expand video-monitoring and lighting coverage at all Centro car parks is now in progress. All Centro-controlled car parks will ultimately be linked to the Network Safety and Security Centre located in central Birmingham.

A Centre of Excellence Award for Integrated Transport Planning was awarded to Centro together with partners, Birmingham, Coventry, Dudley, Sandwell, Solihull, Walsall and Wolverhampton local authorities. The award recognises the efforts of local authorities in planning integrated transport including ground-breaking ways to improve local transport.

A £4 million funding bid was won to enhance Bus Information during 2002. Of the £4 million, Government is funding over £2 million, Travel West Midlands a further £1 million and the remainder will be funded by Centro. The project will enable no fewer than 300 bus shelters to be fitted with Real Time Information (RTI), a system where satellite technology is used to tell waiting passengers their next bus at that stop and the time it will arrive. The final phase of the project will allow passengers to 'call a bus stop' whereby RTI will be text messaged to their mobile phone.

The Urban Bus Challenge saw two schemes launched in 2002/2003, the introduction of the Safer Transport for Children and Women, and the Community Transport Prison Visiting Service. The Safer Transport for Children and Women project was formally launched at The Priory in Dudley in September 2002. The Community Transport Prison Visiting Service is a pilot project working with the Prison Service and was introduced in Summer 2002 to Ashwell and Stoken Prisons in Leicestershire. This pilot service was expanded in September 2002 to cover Stoke Heath Young Offenders Institute and the prisons at Hewell Grange, Brockhill and Blackenhurst.

The first ever TravelWise Week took place across the West Midlands in September 2002. TravelWise Week is a West Midlands campaign aimed at creating greater awareness of the alternatives to single-occupancy car use and promoting sensible car use. The Centro exhibition bus and its crew supported events aimed at promoting sustainable transport throughout the region and a poster campaign encouraged rail users to car share to Centro Park and Ride sites.

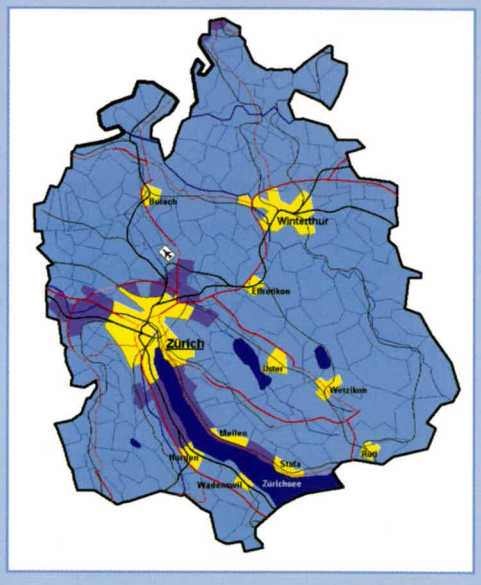
ZURICH

SWITZERLAND

REGION

- **The area served by ZVV contains :**
  - 2 larger cities (Zurich and Winterthur)
  - 171 communes in the Canton of Zurich
  - 14 communes in neighbouring cantons
- **Population of Zurich (2003): 0.4 million inh.**
- **Population of the Region (2003): 1.32 million inh.**
- **Area of City: 92 km²**
- **Area of Region: 1,834 km²**
- **N° of jobs (2001): 0.746 million**
- **Annual GDP/inhabitant: 35,035 €**
- **Local Governments in the Region: 187**

ZÜRCHER VERKEHRSVERBUND (ZVV)



Missions

ZVV is responsible for :

- the long-term strategic transport planning
- the strategic marketing
- the financing
- the tariffs

Organization

Date of creation: 1990; Status: Governmental institution incorporated under public law; Staff: 31; ZVV is part of the cantonal authorities in Canton Zürich, and managed according to the principles of New Public Management.

It is governed by a board consisting of 9 persons. The members of the board represent the government of Canton Zürich and Winterthur, the Communities in Canton Zürich, the National Government and the Swiss National Railway.

ZVV acts as a holding company for eight independent transport companies, each responsible for the market activities for a part of the network. The actual operations are handled by nineteen different carriers, ranging in size from the Swiss National Railway to small bus operators

Budget (2001/2002)

ZVV budget amounted to **455.6 million Euros.** Main funds are provided by fares revenues (€ 272.0 million, 59.72%). Public subsidies rise to € 183.5 million, 40.27%).

SUPPLY/DEMAND DATA 2002

	HEAVY RAIL	TRAMWAY	BUS	SHIP
SUPPLY				
Network length (km)	660.0	109.3[1]	1,591.0[1]	98.0[1]
Number of lines	24	13	223	18
Number of Stops/stations	176	164	1,889	61
Number of vehicles	511	348	643	24
Number of operators	3	1	14	2
DEMAND				
Passengers-km (million)	1,646.0	350.0	447.0	24.0

[1]= *total lines length*

CONTACT

Responsible person: Mr Franz Kagerbauer

Address: Hofwiesenstrasse. 370 - 8090 Zurich - Schweiz

Tel: 41 1 311 35 58 - Fax: 41 1 313 00 18

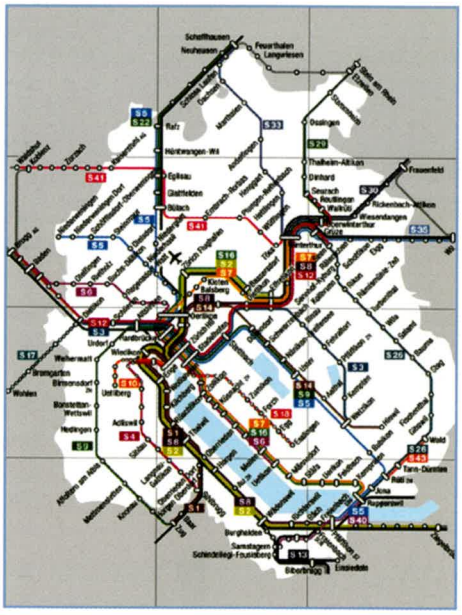
E-mail: dbernet@zvv.zh.ch - Web site: www.zvv.ch

ZVV

Public Transport System

The leading member of ZVV is VBZ which operates bus, trolleys and tramway networks, as well as a 16.4 km line of local railway from Zürich to Esslingen and SBD and Polybhan funiculars, last one private owned.

Suburban train is operated by CFF-Swiss Federal Railways.



Transport Network Map

Funding of public transport in 2002

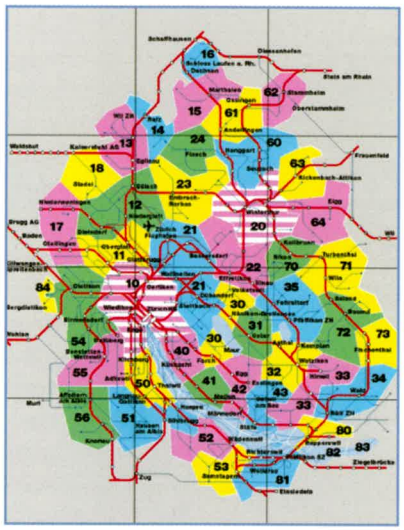
ZVV budget includes all fares income, which compensates individual operators in proportion to service provision and communal tax base.

Fares 2003

There is a fully integrated ticketing system based on nine fare stages (45 zones).

Ticket	Name of ticket	Price in euro for whole area 2000 (2nd class)
Single fare ticket	Einzelbillett	8.8
One day pass	Tageskarte	17.6
Multiple fare ticket	Mehrfahrtenkarte	44
Monthly pass	Monatsabo	126.5
Yearly pass	Jahresabo	1 052.7
Pass for pupils/students (monthly)	Junior Monat	95.4
Pass for pupils/students (yarly)	Junior Jahr	796.8
9 o'clock Pass	9 Uhr Pass	12.9

ZurichCard - the ideal ticket for visitors who only want to stay for one up to three days: 24 hours/10 euro and 72 hours/20 euro.



Map of fare zones

Current developments and projects

More staff members in commuter trains at night

ZVV and the Swiss federal railways CFF adopted last December a new "Security-Package" for night travellers on commuter trains in the Zurich canton. The main measure is the presence of two accompanying staff members on all trains after 9 pm. The tasks of these "train-chiefs" encompass the control of tickets, the provision of information and a reassuring presence. This new human presence will enable to reduce the number of policemen controlling in night trains, and to limit their function to interventions in case of incidents. The recruitment and training of these new train-chiefs will be accomplished in July 2004. The total cost for this new service is estimated at € 10 m. Further measures include the generalisation of a "meeting wagon" where passengers do not feel alone, improved cleanliness of rolling stock, increased fight againts vandalism and fraud, and video-monitoring inside rolling stock.

New night network and high level of passenger satisfaction

ZVV inaugurated on 15 December 2002 a new night network of public transport services. This network consists in 4 railway lines (S-Bahn) and 32 bus routes serving 80% of the municipalities of the canton of Zurich on Friday and Saturday nights. Passengers using night services need to buy a supplementary ticket sold at the price of 5 CHF (€ 3.40). One month after the start of operations, 25,000 passengers had already been carried, the majority of passengers young people.

ZVV carries out every 2 years a survey of the satisfaction of passengers with the public transport networks. The results for 2002 showed an increase in levels of satisfaction, the average grade reaching 74 out of 100,

RailLink: a new co-operation between public transport and car sharing in Switzerland

Swiss Federal Railways (CFF) have joined forces with the car maker DaimlerChrysler and Mobility, the leader of Swiss Car Sharing organisations, so as set up a special automobile rental service called RailLink.

RailLink, which was launched in October 2001, consists in providing passengers of the Swiss Railways with the possibility to rent a Smart car easily and at a cheap price at their destination.

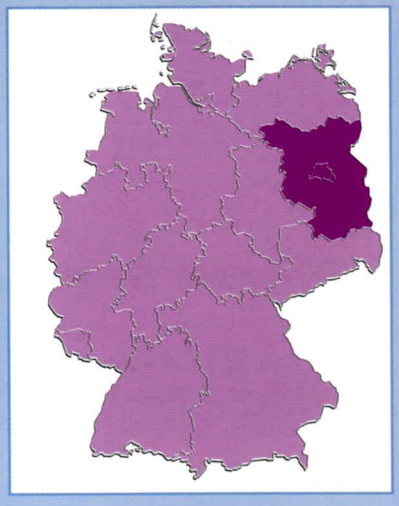
REGION

- The two federal states Berlin and Brandenburg are the capital region of Germany.
- Population of Berlin City: 3.5 million inh.
- Population of Berlin and Brandenburg: 6 million inh.
- Area of Berlin: 890 km²
- Area of Berlin-Brandenburg: 30.367 km²
- Local Governments in Berlin-Brandenburg: 2 regions, 14 counties and 4 cities

VERKEHRSVERBUND BERLIN BRANDENBURG (VBB)

The Verkehrsverbund Berlin-Brandenburg, VBB, is a private company run by the Bundesländer (Federal States) of Berlin and Brandenburg and the Landkreise and kreisfreie Städte (municipal districts and towns) of Brandenburg responsible for public transport. Officially founded on 30th December 1996 it can trace back its roots as far as to the Unification Contract between the once two Germanys in 1990. Feeling the necessity to reconnect Berlin to the surrounding Brandenburg and vice versa, significant efforts have been taken so far. The public transport companies of Berlin, Potsdam and several companies servicing the area surrounding Berlin have started co-operation soon after the Wall came down by introducing a partnership including a first kind of common fare system. The common interests of the Bundesländer of Berlin and Brandenburg to handle the aspects of public transport together led to the introduction of the Verkehrsverbund as a common public transport authority.

It is to convert the extraordinarily heterogene structure of public transport in Berlin and Brandenburg into a well co-ordinated one _ together with a common fare system. Thus it will offer an integrated public transport system within its area including the services of most of the public and private public transport companies of Berlin and Brandenburg comprising bus services, tram services, the Berlin Underground, the S-Bahn, the regional railways and even ferry services run by the local public transport companies and the Deutsche Bahn AG (German Railways). Compared to other unions of public transport of that kind the VBB is the only one in Germany to cover the territory of two Bundesländer (Federal States) and by this it is the largest one in Germany as well. The VBB serves an area of 30.370 sq km with 6.01 Mio inhabitants, round about 500 stations and an railway network of 2.680 km.



Budget
7.7 million Euro (2002)
5.1 million Euro (2003)

CONTACT

Address: Hardenbergplatz 2, D-10623 BERLIN
Director: Uwe Stindt
Tel: 00 49 30 254 14 100 - Fax: 00 49 30 254 14 111
E-mail: info@vbbonline.de - Internet: www.vbbonline.de

Main tasks of the Verkehrsverbund Berlin-Brandenburg are:

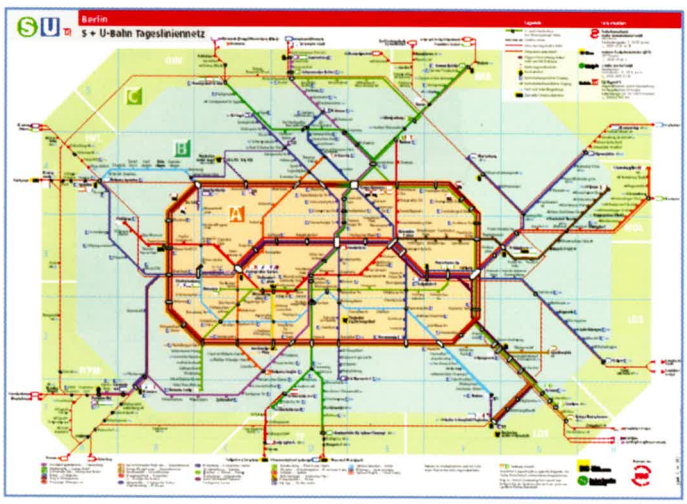
- Co-ordination of the services by the public transport companies and better connections between them.
- Introduction and development of a common fare system for all companies in the VBB area.
- Improvement and quality control of public transport services. Standardisation. Information service.
- Assistance to the authorities in charge of public transport, e.g. planification and ordering of regional railway services.

The aim is an integrated public transport service that handles the requirements of a metropolitan area like Berlin as well as it meets the interests of the rural communities in the countryside of Brandenburg. This requires the development of common concepts suitable and flexible enough to adapt to the specific problems of both of these very different backgrounds.

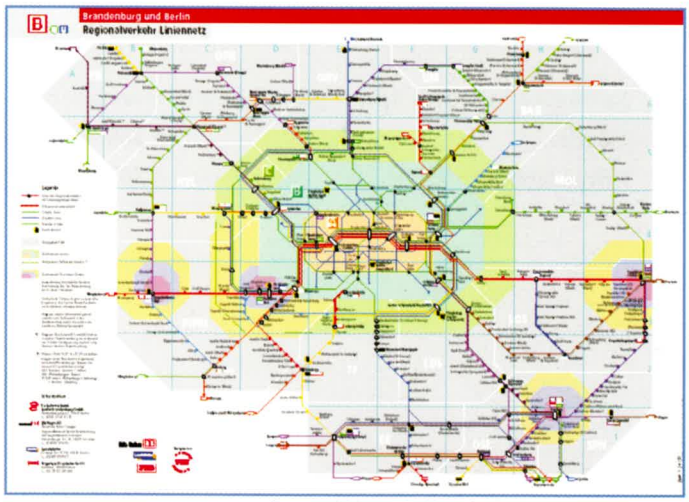
Since 1st April 1999 the introduction of the common fare system had concluded the introduction of the VBB as a new partner in mobility to the people and guests of Berlin and Brandenburg.

PUBLIC TRANSPORT SYSTEM

Partner of the VBB are 43 local and regional public transport operators, among them: DB Regio AG, S-Bahn Berlin GmbH and BVG – Berliner Verkehrsbetriebe AöR, PEG – Prignitzer Eisenbahn GmbH.



S-Bahn and Metro Network Map for Berlin



Regional Network Map for Berlin and Brandenburg

SUPPLY/DEMAND DATA 2002

	HEAVY RAIL	METRO	TRAMWAY	BUS	S-BAHN
SUPPLY					
Network length (km)	2780	144	303	11.064	327
Number of lines	55	9	49	1030	15
Number of stops/stations	360	170	551	13111	163
Number of vehicles	420	1391	764	2778	1500
Number of operators	2	1	7	25	1
DEMAND					
Number of trips (million)	42	399	167	468	305
Passengers-km (million)	1061	2242	529	2354	2950

FARES 2003

The basic of the VBB-fare structure is a distance-dependently regional area fare which offers solutions for every demand. The fare-structure is differentiated in

Cash fare → fareprices calculated according to the distances travelled through in regional areas

Season tickets → main fareprices calculated according to the local unit areas

Both with target-group-specific offers, special local arrangements and house fares in limited ranges are possible.

- Individual ticket: between 0.50 € to 35.70 €
- Daily ticket: between 1.00 € to 71.40 €
- Weekly ticket: between 4.00 € to 38.80 €
- Monthly ticket: between 12.90 € to 164.20 €
- Annual ticket: between 122.50 € to 1,560.00 €

FUNDING OF PUBLIC TRANSPORT IN 2002

Ticket revenues in Brandenburg

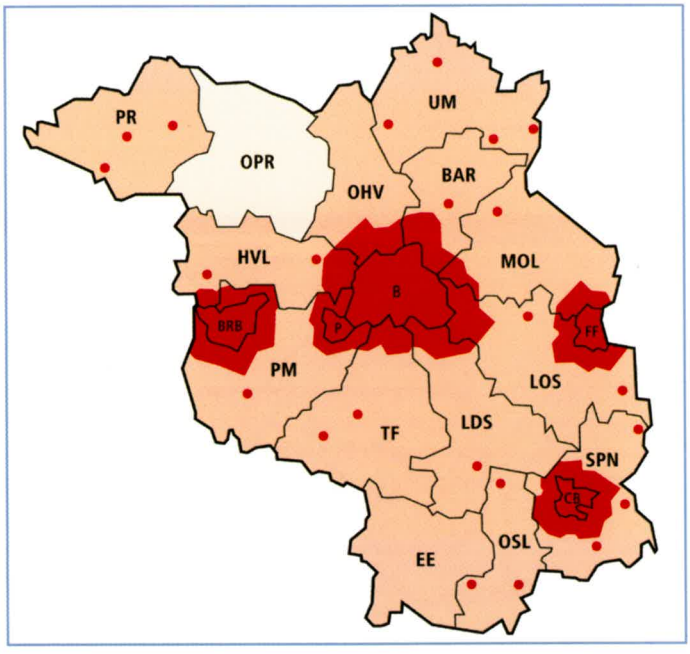
- Local and regional railways incl. S-Bahn → 46.2 million €
- Local public road transport (bus and tram) → 91.5 million €

Ticket revenues within the Berlin ABC-area (Berlin and suburbs)

- Local and regional railways incl. S-Bahn → 206.9 million €

Subsidies for local and regional public transport

- Berlin → 368.1 million €
- Brandenburg → 385.2 million €



CURRENT DEVELOPMENTS AND PROJECTS

Impuls 2005
Integrated mobility planning, implementation, guidance and services for a new integrated traffic system in the region Berlin-Brandenburg – Project financed by conveyances of the German Research Ministry

EU-Spirit
EU-Spirit is a European travel information system offering the calculation of itineraries between European cities and regions with regard to public transport. EU-Spirit is a compilation of already existing internet-based information systems for short and long distance traffic. It is used in such cases as when a customer is in need of an itinerary between different European regions.

DELFI
The aim of DELFI is a germanwide electronic schedule information-system.

Pilot Project: Improving environmental standards through competition of public transport services
To encourage local authorities and public transport operators to take competition elements and quality criteria into account, the German Environmental Ministry started the obove mentionned pilot project. The aim was for transport companies and authorities to show how they will prepare for competitive tendering by integrating environmental criteria. The best concepts from operators came from Berlin and Frankfurt/Oder. In Berlin the operator wanted to introduce clean diesel buses. Frankfurt/Oder decided to renew the whole bus fleet by introducing compressed natural gas (CNG) buses. In both cases the buses fulfil the standard for "Enhanced Environmentally Efficient Vehicles" (EEV). The Environmental Ministry believe that competition forced the manufacturing industries to develop clean buses. An evaluation should cover the environmental effects and life-cycle costs of EEV buses in comparison to EURO III. Within the demonstration project the Ministry also supported preparations for tendering in the Region Hannover. The VBB coordinates the communication of the project.

ASSOCIATION OF ITALIAN CITIES FOR SUSTAINABLE MOBILITY AND TRANSPORT ISSUES (ASSOCIAZIONE DELLE CITTÀ ITALIANE PER LA MOBILITÀ SOSTENIBILE E LO SVILUPPO DEI TRASPORTI)

The association was set up by the 14 Italian municipalities at the core of a metropolitan area so as to improve the mobility conditions in the urban and metropolitan areas, and the sustainability of transport systems.

The aim of the association is to represent the cities by the Italian government, in particular the ministries of environment and of transport, and by the Italian parliament, so as to give a new dynamic to the national policies of mobility. It is concerned by the issues of sustainable mobility, pollution and road security. It follows carefully the European policies and supports the relationships between local authorities and regions, the Italian State and the European Union.

As stated in its statutes, the association promotes:

- the activities of planning of urban developments and development of transport systems
- the exchange of experience and the participation in common projects
- the development of intermodal public transport systems in application of the reform introduced by the legislative decree 422/97
- the setting up of "agencies" for the planning and monitoring of urban and metropolitan transport services
- the reduction of energy consumption, of emission of greenhouse gases, of air and sound pollution due to traffic
- the reduction of accidents and the developments of experiences of traffic calming for an improved security of traffic
- the exchange of experiences and co-operation between all actors involved in the development of transport services and between public and private companies in charge of operating these services
- the use of telematics and computers in the field of transport so as to guarantee the involvement of local administrations in the process of standardisation and of evolution of the legal framework at the natioonal ane European levels

Members:
Bari, Bologna, Cagliari, Catania, Firenze, Genova, Messina, Milano, Napoli, Palermo, Roma, Torino, Trieste, Venezia

CONTACT

Arcangelo Merella
Via Di Francia 1, I-16149 GENOVA
www.cittamobile.it

NOTES

NOTES

RECHERCHES & COMMUNICATION
31, rue Henri Rochefort - 75017 PARIS - FRANCE
Tél. : ++33 1 55 65 12 12 - Fax : ++33 1 55 65 12 00
E-mail : r.com@wanadoo.fr

EMTA
c/o STIF
11, avenue de Villars - 75007 PARIS - FRANCE
Tél. : ++ 33 1 47 53 28 98 - Fax : ++33 1 47 05 11 05
E-mail : emta@emta.com