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# Urban transport in France

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Resources, regions and habitats  
Energy and climate  
Sustainable development  
Risk prevention  
Infrastructure and transport

Present  
for  
the future

The french experience



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- 2 An increasingly effective service
- 3 Innovative, purpose-designed tools
- 4 A shared vision of transport policy



# Declared political will, concertation at every level

## Ensuring lasting mobility.

### • Extension of the urban area of influence

French urban areas are becoming larger and more specialised. Urban activities are spread over an increasingly vast area: peri-urban dwellings, administrative and economic services in town centres, on the outskirts commercial activities and general amenities (hospitals, universities, multiplex cinemas).

### • Reorient rather than reduce travel

Because more and more households have cars, people are readily using them to go to work, take their children to school, do their shopping, go out for the evening, etc. This trend is more marked the further they are from the town centre. Hence an increase in home-to-work trips and inter-suburb traffic. Today, each French person travels an average of 7.3 km/day. People living in the peri-urban areas travel 3 times this figure, eat up 3 times more fuel and produce twice as much nitrous oxide. The energy crisis (depletion of oil and fossil fuel reserves) and protection of the environment (reduction of greenhouse gases - as part of the fight against global warming and atmospheric pollution) make it essential to rationalise travel. Road transport (including private travel) reputedly accounts for 25 to 30% of greenhouse gas emissions at global level. Since mobility is a factor of personal fulfilment and greater social cohesion, it is less a question of reducing travel than of encouraging alternatives to the car, alternatives that use less fuel and cause less pollution: public transport, walking and the bicycle.

### • A Sustainable Mobility Policy

In this context, the French urban transport policy aims at coordinating the initiatives of the different players concerned with transport, roads, parking and urban planning in concertation with the economic players, the associations concerned and the general public. The objective is to reconcile apparently contradictory requirements: ensuring mobility and access to one or another area whilst protecting the environment; satisfying personal needs but not at the expense of the community or of both present and future generations.

In this light, the urban transport policy falls well within a meaningful approach of sustainable mobility.

Total funding of urban transport in France in 2005

Euros million	IDF	Non-IDF	Total France
Passenger receipts	1990	998	2988
Transport allocation and employers	3231	2261	5492
Local authorities	1230	1699	2929
State	360	78	438
Other	600	1290	1890
Total	7411	6326	13737

Key figure: total of 13,737 euros for urban transport resources in France in 2005.

## A global policy of urban transport.

The French legislator has progressively acquired the tools needed to formulate a global urban transport policy.

- Promulgated in late 1982, the Domestic Transport Act (LOTI) provides for the right to low-cost public transport (establishing the concept of economic and social efficiency). It establishes the urban transport plans (PDU) for the purpose of sharing the public road space. It clarifies the institutional organisation of public transport by separating the organiser and operator functions of the relevant services. It requires the competent authorities, those responsible for the organisation of urban transport (AOTU), to define, to finance (chiefly through the transport allocation, which is a specific tax resource) and to organise regular public passenger transport in the urban environment (PTU). The 232 AOTUs may decide to do this themselves (under state control) or have it done by a fully private or semi-public company or a public-private company (SEM).

- The decentralisation acts of March 1982 and January 1983 bolster the powers of the elected representative and share responsibilities between the government and the local authorities (regions, departments, municipalities). They widen the scope of authority of the AOTUs (extension to parking areas, possibility of inter-municipal cooperation).

- The Sapin Act of January 1993 concerning both the prevention of corruption and transparency in economic life and public procedures requires the AOTUs to organize competitive bidding, without, however, waiving the right to provide these services themselves (under state control).

- The Barnier Act of February 1995 introduced the public debate procedure guaranteeing the public participation in the decision-making process concerning major public projects of national interest.

- The Laure Act of 1996 governing the air and the rational use of energy broadened the initial objective of rationalising urban travel, specifying that urban development plans "aim at ensuring a sustainable balance between requirements of mobility and accessibility on the one hand; and on the other hand, the protection of health and the environment. It makes urban development plans (PDUs) mandatory in urban areas with a population of over 100,000, effectively turning them into long-term planning tools.

- Lastly, the Urban Solidarity and Renewal (SRU) Act of 2000, and Urban Planning and Housing Act (UH) of 2003 ensure the consistency between urban planning, transport and housing. They impose new urban planning objectives on the PDUs of social and urban cohesion and the

improvement of travel safety. Urban development plans must quite obviously reduce motor vehicle traffic and promote passenger transport and clean, energy-saving alternatives, as well as ensuring a balanced distribution of the road space (parking included) – all objectives to be addressed if state aid is to be given.

In this regard, a global urban transport policy has gradually been formulated, including restrictions on motor vehicle traffic and the coordination of urban planning and transport in order to increase the credibility of urban public transport in terms of frequency, density of the service, priority roads, bus lanes, etc., through governance based on urban transport authorities with the ability to effectively organise every urban area and the required financing.

since 1982, passengers have been entitled to low-cost transport

today, the average French person travels an average of 7.3 km/day

Public transport map on dedicated corridor



### A MAJOR FINANCIAL ISSUE

The urban transport facilities serving the 36,679 French municipalities account for 8% of the GDP and provide employment for 1.5 million persons (direct and indirect jobs).

The total public transport budget for Île-de-France (84% for operating costs, 16% for investment costs) reached 7.4 billion euros in 2004; and the urban transport budget for built-up areas in the provinces amounted to 4.7 billion euros in 2002.



## An increasingly effective service

### From the dismantling of the tramways in the 1960's...

Until the 1950's, Paris was the only city with an underground railway system (the Metro). In the provinces, the larger towns had tramways.

In the 1960's, French towns saw an increase in private cars, and the tramways were dismantled to provide more space (except for the conurbations of St Etienne, Lille and Marseille). In Paris, the tramway system had been dismantled before 1940.

In the 1970's, the "everywhere by car" mania increased levels of both pollution and congestion in town centres. Buses saw their speed reduced by 5% a year. And that triggered the all too familiar vicious circle: a lowering of quality and reliability in the service provided, fewer passengers, falling revenues, no more investment, and so on.

Following the "oil shock" in 1973, the car had to adapt to the town, and not the other way round. The French government then set about revitalising urban public transport: making funds available for the construction of underground railway systems in the provinces and revitalising the French urban tramways.

The beginning of the 1980's saw the implementation of a decentralised administrative system (The Domestic Transport Act, the decentralisation acts). Given total autonomy over their public transport systems, the towns went on to develop their own public transport systems and dedicated traffic corridors: underground railways in the cities, new tramways in the towns.

The 1990's saw the growing influence of environmental concerns: these became musts in urban areas with a population of over 100,000, with urban development plans

imposing a global vision of transport organisation; with state subsidies for local authorities for the construction of new urban surface transport systems. This resulted in better sharing of the urban road space and revitalisation of the French tramways (first lines in Strasbourg, Rouen, Montpellier, Lyon and the Paris region).

In 2000, the government suspended its aid to new urban transport operations, but this did not prevent the revitalisation of the tramway – a mode of public transport with dedicated corridors having a lower capacity but better suited to the principal provincial towns and cities, and at less cost than a metro.

Numerous local authorities then took full advantage of the tools provided (urban travel plans, local cohesion strategies) to develop their own public transport systems in their areas, and give the tramway its legitimate place.

Since 2006, Mulhouse, Valenciennes, Le Mans, Nice and Paris have opened their first lines; Clermont-Ferrand has completed its tramway on tyres; and Angers, Reims and Toulon have built their first tramways.

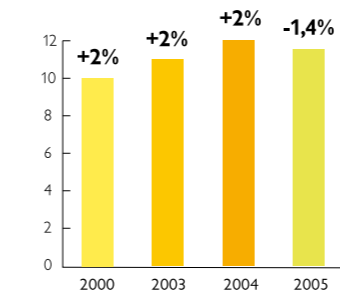
In the Paris region, the first tram-train, running on some 8 km of rail track between Aulnay-sous-Bois and Bondy (Seine-St. Denis), was inaugurated in late 2006. This can carry up to 40,000 passengers a day.

During the "Grenelle de l'environnement", a general debate on the environment initiated by the Head of State in July 2007 with all the players in civil society (the government, local authorities, NGOs, employers and employees), on 25 October 2007 President Sarkozy announced that state aid would be resumed for the construction of tramways.

despite the abolition of State subsidies to public transport, tramways are being revitalised

### ... to the revitalisation of urban public transport.

Average increase in motor vehicle traffic per year (table)



Having increased by an average of 2% a year since the 1990s, urban motor traffic is lessening. For the first time since 1973 (first oil shock), it even decreased by 1.4% in 2005, down from 2004, under the effect of higher fuel prices (pump price up 24% in the last two years) and erosion of the available purchasing

power of the French.

The reversal of this trend is due mainly to the policies pursued for decades to promote public transport:

- more and better public transport facilities: Taking all types of transport together (underground, buses and high-level bus service systems – BHNS), from 1996 to 2005, urban public transport showed an average annual increase of 3.4% (and as much as 4.1% on the Paris region; an increase due to the dedicated transport corridors. (TCSPs - underground rail systems, tramways, tram-trains) which enable a much greater frequency of service. In the provinces, people in towns or cities with a TCSP use public transport three times more than in towns without them.

- urban public transport at affordable prices compared with the growing costs of travel by car: public transport prices have gone up by an average of only 1.8% a year since 1999, just slightly above inflation (+ 1.5%) thanks to initiatives approved by the public authorities concerned, who have granted generous subsidies during this period, increasing the revenue of the public transport companies from 53% to 61%

- the introduction of further traffic regulations (today radar controls, tomorrow the urban congestion charge) and parking regulations (fewer parking spaces in town centres) to dissuade the motorist from using his/her car (82% of French households have one or more cars).

from 1996 to 2006, urban public transport grew by an average of 3.4% a year

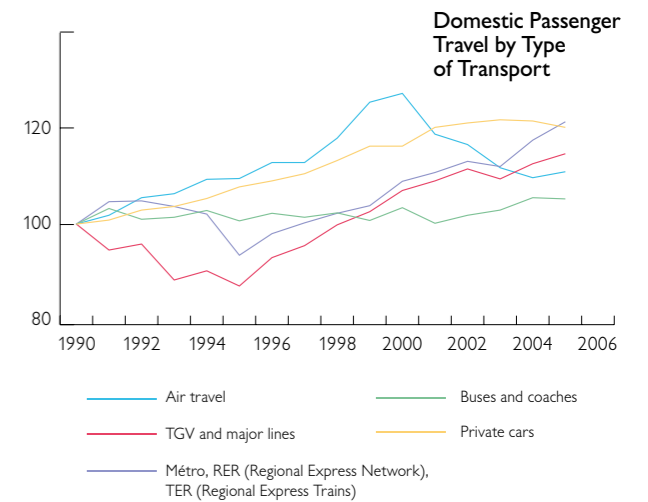
#### THE URBAN PUBLIC TRANSPORT NETWORK TODAY

This comprises 240 individual networks serving local populations ranging from 10,000 to 10 million.

This network represents:

- **Paris region:** 1400 km of regional rail track, 5 rapid transit lines, 16 Metro lines (211 km), 2 tramway lines (20 km), 1254 bus lines (18,300 km), including high-level service buses: with dedicated corridors, minimum frequency, etc. In Ile-de-France, urban public transport represents a cost of some 7 billion euros, basically borne by the local authorities (subsidies) and companies (transport allocation). There are 12 million journeys a day in Paris and the neighbouring departments (set to increase to an estimated 13 million by 2020).

- **The provinces:** The provinces: 232 urban transport authorities: 2 with a metro (Lyon and Marseille); 3 with a "light metro" system (Lille, Rennes and Toulouse), 13 with a tramway on rails (Lyon, Marseille, Lille, Nantes, Grenoble, Strasbourg, St-Etienne, Rouen, Orléans, Montpellier, Bordeaux, Mulhouse, Valenciennes 3 with a tramway on tyres (Clermont-Ferrand, Caen, Nancy).



Sources: SNCF, RATP, DGAC, MTETM/SESP



## Innovative, purpose-designed tools

France has created purpose-designed tools to implement her policy of sustainable development

- planning and concertation with the implementation of urban development plans (PDUs);
- partnerships and contracts with the public service authority (DSP);
- the relevance and originality of the method of funding with the introduction of the "transport allocation" (VT).

### The urban travel plan, a planning and concertation tool.

A sectoral programming tool serving a global mobility policy applied to a given area, the urban travel plan is the only document specific to urban transport. It deals simultaneously with mobility, the environment and planning and development, at the same time as putting cooperation between the State and the local authorities concerned on a financial basis.

The plan involves assessing the situation, then evolving a number of scenarios and deciding on a strategy leading to a project comprising individualised actions that are fundable and programmed over the long term.

These projects are submitted for approval to the regional, general and municipal councils concerned. The representatives of the different activities, the passengers and the associations may be consulted about these projects. Following a month-long survey, the plans are finalised by the organising authority.

Each plan defines the travel policy (in its widest sense, external exchanges and transit included) to be followed

in regard to urban transport. Numerous cross-disciplinary themes are taken into account: safety, health, social cohesion and urban development, parking, goods deliveries, fares, etc.

Each plan is required to be compatible with the French sustainable development objectives (the effect on air quality, noise, climate, the landscape, human health) and must include local cohesion strategies, local urban development plans, the relevant planning and development directives and the regional air quality plans.

The urban travel plan is not immutable: It is reviewed every five years by the person responsible.

The plan should be designed such that a wider public is made aware of the importance of the issues involved (travel, life style, the public space, urban planning, local planning and development). It should change mindsets – an essential prerequisite if behaviour is to improve. In this sense, it is an essential tool of French sustainable mobility policy.

### Delegated management: flexibility adapting supply to demand.

The urban transport authorities (AOTUs) are responsible for organising urban transport services.

In the most frequent case (9 times out of 10), they decide not to organise the services themselves (direct state control), but to delegate them to a partner. Since the Sapin Act, they are obliged to call for tenders before awarding a contract. Depending on the object of the contract and the type of remuneration envisaged, the local authority delegates the service or enters into a public contract in accordance with the Code of Public Contracts.

Delegation (the most common case) enables a meaningful public-private partnership to be established between the AOTU and the operating company, under the terms of a specific agreement.

This agreement specifies the general characteristics of the service (routes,

stops timetables and frequencies), the operator's obligations to the passengers, the terms and conditions of operator financing and payment and fares), risk-sharing between the contracting parties (both commercial risks relating to traffic and industrial risks relating to costs).

The infrastructures, installations and rolling stock usually belong to the AOTU, who makes them available to the operator - who is however required to share in the creation of new infrastructures under a franchise agreement.

The term of these agreements depends on the ownership of the equipment: 5 to 7 years if it belongs to the local authority; 7 to 10 years if it belongs to the company.

70% of the networks are delegated to a fully private operator, and 20% to a public-private company (SEM). Nearly two-thirds of the French

urban transport market belongs to three large companies: Connex (Véolia Group), 16% of the market, Transdev (a subsidiary of the Deposit and Consignment Office), 15%; and Kéolis (an SNCF subsidiary), 33%.

The objectives of the services to be provided, and the frequency of use and receipts are regularly reviewed, as these agreements provide for changes to the service to keep pace with requirements. The local authorities may delegate all or part of their networks. Allotment enables them to benchmark between the operating companies and prioritises "newcomers" to the market when contracts come to be renewed. As they can periodically redistribute the cards, the local authorities can always obtain the best cost and use the best urban transport company.

70% of the networks concerned are delegated to a fully private operator.

### Transport allocation, an original means of getting industry to contribute.

To meet urban public transport funding requirements, a special tax was introduced in Ile-de-France in 1971: the "transport allocation", imposed on all employers with at least 10 employees and located within an urban transport area with a population of more than 40,000. This tax is applied by each urban transport authority (AOTU). It is designed to meet network operating and investment costs.

The tax is based on the total remuneration paid by the taxable company. The rate is fixed by the AOTU within the limit of the legal ceiling (1% in the large provincial conurbations, and increased to 1.75% for those with

their own urban transport system with dedicated transport corridors).

The tax helps to finance urban public transport in addition to revenues from the sale of tickets, local public subsidies and state subsidies earmarked solely for capital investments.

In the provinces, the tax provides nearly 50% of the total financing required for urban public transport. Ticket sales account for barely 20% of network funding due to moderately priced fares and the numerous low-cost fares offered by the operators. Only the Paris City Transport Authority (RATP) enjoys sales revenues (35%) equating to the tax product.

The tax is justified by the indirect benefit to employers of a well-served employee pool and is a funding tool that intelligently combines economic considerations with the increase in urban services, i.e. linking economic competitiveness with the marked growth of public transport.

the urban travel plan is essential to the French policy of sustainable mobility



## A shared vision of transport policy

The urban travel policy uses a range of tools combined with the expertise acquired over the years and comprises a number of different concepts.

### A public service.

Public transport is a public service in that it meets several basic requirements: economic and social (access to employment, training and health care); environmental (reduction of nuisances, problems affecting transport: pollution, congestion, safety issues).

These are issues of general economic interest to which the market fails to provide a satisfactory answer: too many buses

or trains on certain profitable routes at peak times, fewer available at other times; the local authorities need to more effectively define the routes, stops, frequency of service, scope and fares. If public transport is to be efficient, the operator must – in accordance with his contract – comply with rules of service continuity and equality of access to the network for every member of the public.

### Public debate “à la française”.

This consists in ensuring transparency of the issues involved and inviting the public to attend the various discussions. Since the Act of 27 February 2002 concerning local democracy, the public has been able to take part in the formulation of major projects involving the environment, in the broadest sense of the word. Under the aegis of an independent commission, the public is invited to discuss the very reason for the project: whether it would be better to shelve it or undertake a completely different project. And these discussions take

place even before the project manager starts on his detailed route layout and development surveys. Thus the public has a whole is enabled to participate at a very early stage in the policy decisions concerning local transport. Concerted discussions of this nature force the public authorities to justify their decisions, fine-tune their project and show that it is in the interest of the vast majority of the people, including those deriving no direct benefit from it.

### Local government closer to local needs.

Urban public transport is organised at local, i.e. decentralised, level for greater efficiency. Closer to everyday life, local authorities have a clearer picture of local needs. This in no way prevents them from forming extremely varied legal entities, depending on their more or less voluntary nature, the powers assigned and the applicable taxation system: intermunicipal associations,

municipal communities, urban communities, mixed, mixed syndicates, etc. The Centre for Studies on Road Networks, Transport, Urban Planning and Public Structures (CERTU), which is a national entity under the Minister of Ecology and Sustainable Planning and Development, holds meetings attended by government representatives, elected members of the local authorities, associations

and businesspeople. CERTU offers all the skills required to advise urban decision-makers and both public and private professional entities.

The General Directorate of the Sea and Transport (DGMT) is one of the central administrative departments of the Ministry of Transport, which is responsible for defining national urban transport regulations in the social and safety services.

### The flexibility of delegated management.

Delegated Management has proved efficient: 9 AOTUs out of 10 have adopted it, thankful for being relieved of the constraints of personnel management and investments in rolling stock whilst taking full advantage of the know-how of companies operating the networks in a diversity of towns and cities in the world.

The AOTUs also overwhelmingly appreciate the flexibility of the formula, which, with decentralised organisation of the networks, opens

up a number of possibilities: grouping together to manage some of their urban lines while retaining their autonomy for others, combining the different management formulas (direct and delegated), contracting with private, public and semi-public delegates, assigning more or less extended and more or less subsidised service delegations.

The success achieved by service delegation is all the greater as the local authorities concerned are able to

penalise the operator not only by not renewing the delegation contract on expiry but also throughout the performance of the contract by the application of financial penalties. In this way, operators are permanently required to prove their competence, their efficiency and their capacity of innovation.

9 out of 10 transport authorities practise delegated management

### The ongoing quest for technical innovation.

The delegated management formula has placed numerous French companies at the leading edge of technology and quality of service, which does much to explain their success in the award of international invitations to tender for urban transport services and equipment: assistance with line

operating systems, centralised fleet management, real-time passenger information, electronic sales equipment (e-ticketing, e-money), tricolour light cycles, traffic control cameras and sensors (mainly at crossroads) giving right of way to public transport vehicles.

“Intelligent transport” is a technology that France has developed, chiefly through on-board static and dynamic guidance systems (Visionaute Carminat and RDS).