CASE STUDY: Lyon Urban Mobility Master Plan

SECTOR: Transport
COUNTRY: France

BACKGROUND

At a national level, the urban mobility master-plan (UMMP) is a guideline document defining basic organisational principles for transport, traffic and parking. The aim is to strike a sustainable balance between the needs for mobility and ease of access on the one hand, and protecting health and the environment on the other. The idea of UMMPs was first set out in the 1982 guidance law on domestic transport. The December 1996 law on air and rational energy use made them mandatory in conurbations of over 100,000 inhabitants.

UMMPs combine a whole series of objectives, including reduction of motor traffic, development of public transport, cycling and walking, reducing the number of accidents, reducing pollution and disturbance, promoting social fairness, and the reallocating of urban space. A national committee monitors the progress of the UMMPs.

The Lyon UMMP concerns the *55 communes* of Greater Lyon. It was adopted in 1997 after two years' study and consultation. It specifies objectives and target levels (disturbance reduction, market-share of the various modes of transport, etc.).

	1995	2205 trend	UMMP 2005 objective
Walking	31.5	30	31.5
Cycling	1.9	1	3
Public Transport	20.6	19	22.5
Private Cars	77.5	80	74.5

Table 1: Market shares for modes of transport

An urban mobility consultative committee has been set up to monitor and co-ordinate local initiatives so as to ensure overall coherence. A mobility observatory has also been created to asses the various actions.

Public space plans (road capacity, lane specialisation, quiet areas, etc.) will favour walking and cycling and discourage people from resorting to their cars. A parallel improvement in public transport supply and service has begun: 11 strong surface network lines, including four tramway lines, will reinforce and complete the existing network. Two (both tramway lines) have been in service already since January 2001. Intermodal linking between buses, metro, trams and rail (schedules, tickets and fares) is also going to be developed.



Tramway on University Campus

EVALUATION

UMMP monitoring ideally consists in observing the following 19 themes: urban dynamics and attractiveness, reduction in motor traffic, development of public transport, development of rail transport, intermodality, development of walking, development of cycling, car parking, goods handling in town, mobility plans, atmospheric pollution and energy consumption, noise, road safety, social fairness, accessibility, quality of public spaces, communication and feedback, financing and, finally, urban mobility.

For each theme, indices are set up, the geographic area and frequency of assessment defined and data sources identified. Interconnections with other themes are highlighted. A-priori

difficulties are also listed and means of solution drawn up: e.g., lack of data or, on the contrary, a plethora of incoherent data from different sources, failing to be informative as to the index as set up, or the localised nature of certain indices (for noise or pollution, for example), or the various factors determining variability.

The Lyon UMMP "observatory" in charge of measuring and analysing the various indicators will, among other actions, undertake an extension of the air-quality monitoring network and the creation of a transport account to register all mobility-related expenses and assess the market share of the various modes of transport.

BENCHMARK DATA
The broad outlines of UMMPs are drawn up nationally.

Diagnosis, plan, means and monitoring are set up per conurbation.

The Lyon UMMP diagnosis was founded on a series of surveys of household mobility, of which the most recent dates back to 1995.DRIVERS
The UMMP was drawn up by *SYTRAL*, responsible for organising public transport in the Greater Lyon area, the Greater Lyon local authority, the *Rhone Departement* authority, the Rhone-Alpes regional authority and the State.

LESSONS LEARNT
In Lyon, as in many other cases in France, deficient environmental observation, among other factors, required the setting up of monitoring systems and models enabling assessment actions undertaken impacts.

APPLICATION
The UMMP is a conurbation-level guideline document, specific to the area in question.

TRANSFERABILITY
The methodology might be adapted to other European conurbations, notably where the government system in terms of strata makes this feasible.

IMPACT ON SUSTAINABILITY AREAS
The UMMP was drawn up with environmental, social, economic and institutional concerns in mind.

Environmental
The Lyon UMMP aims to meet guideline values for nitrogen dioxide and particle levels. The actions planned to control private vehicle use, especially for short and home-to-work trips, should help towards this. The type of fuel (diesel, electric, etc.) to be favoured for public transport and municipal fleets will also be studied. Likewise, the public sector will encourage its employees to use public transport to travel to and from work.

Noise on the noisiest routes in the Lyon UMMP area will be reduced by the full set of means available: traffic plan, lane reduction, type of road surface, facade treatment, etc. A noise simulation tool including a map of the sound environment (not only in terms of roadways) is under development and should enable assessment of planning projects, whether local (such as the tramway) or general (at neighbourhood or conurbation level).

The UMMP also aims at reallocating public space (squares, quaysides, roadways) by redeveloping them, as well as reducing parking and traffic flow on certain roads.

Social
UMMP objectives obviously include:

- A 40% reduction over 10 years in the number of fatal and serious accidents, by acting on the major causes (e.g. road planning to force drivers to reduce speed
- Accessibility of the main poles of the conurbation. The two tramway lines just opened (of the 11 strong surface network lines) serve two university campuses. Cycle tracks around these

university areas will also be developed- whereas parking is to be frozen. Solutions will be developed to improve access to the hospitals and economic and cultural centres.

- Access to outlying and sensitive areas. Demands are for adaptation of lines (local-to-centre or inter-local), frequency and number (late service for leisure purposes), and also for adapted fares. Such needs are to be quantified neighbourhood by neighbourhood, with solutions drawn up in co-ordination with local partners.
- Accessibility for persons of reduced mobility, by improving the existing OPTIBUS transport network, long-term generalisation of low-floor buses and general adaptation of the network as a whole (kerb heights, warning strips on platforms, etc.).

Economic

The UMMP covers many actions, actors and decision-makers; SYRTAL, however, has a 1998-2006 investment capability of 5,700,000,000 FF.

- 3,660 m FF for the creation of the 11 strong surface network lines, including the 4 tramway lines;
- 1,620 m FF to replenish fleets and infrastructure
- 420 m FF to modernise equipment (ticketing, information, etc.).

As part of the observatory, a transport account is to be set up, gathering together all the various partners' annual mobility-related expenditures. These figures will then be broken down per mode of transport.

Institutional

An urban mobility consultative committee has been set up to co-ordinate and monitor the various actions. It comprises the decision-making partners (State, *Region*, *Departement,* Greater Lyon Council and SYTRAL), economic partners and four qualified user representatives. Any local mayors concerned by the agenda will be invited to working meetings of the Consultative Committee.

PROJECT CONTACT

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REFERENCES

CERTU (forthcoming). *L'observatoire Des PDU.* Certu publications.

CERTU, ADEME (1999). *Prise en compte de la pollution de l'air, du bruit et de la consommation de lenergie*. Certu publications. 300 p

CETE de Lyon, INRETS (1998). *Systeme d'evaluation Des effets d'un PDU sur l'environnement sonore.* PREDIT study report, *Ministere* de l'equipement

GART, CERTU (2000). *Suivi des plans de deplacements urbains*
Certu publications.96

SYTRAL (1997). *Le plan de deplacements urbains de l'agglomération lyonnaise..* SYTRAL report, 67 p.