

Planning Sustainable Urban Transport

Coordinating land use and transport

Thierry Gouin, Cerema

National Days on Urban
Transport
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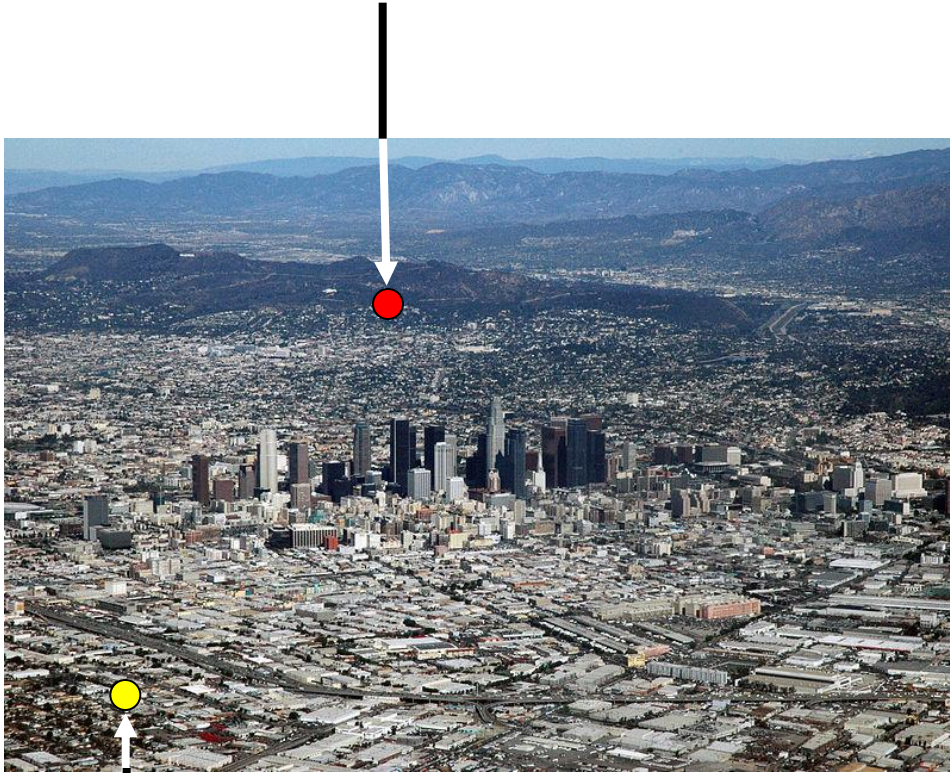


Problems

- Urban growth
- Interaction City / Transport
- Motorised modes > urban sprawl
- Increase of travel distances
- Sustainable development
 - Economy : loss of time in traffic jams, loss of attractiveness of congested cities
 - Environment : consumption of fossil energies, air pollution, noise
 - Society : exclusion, public health

- ⇒ **5.3 billion** people will live in urban areas in 2050
- ⇒ **80%** of urbans will live in developing or emerging countries
- ⇒ **95%** of urban growth till 2050 will concentrate in developing countries
- ⇒ Between 2000 and 2030 the amount of land consumed by urban sprawl will have increased by **72%**.

My home



Fortunately...



... I have a car

My job

My home



My job

Fortunately...



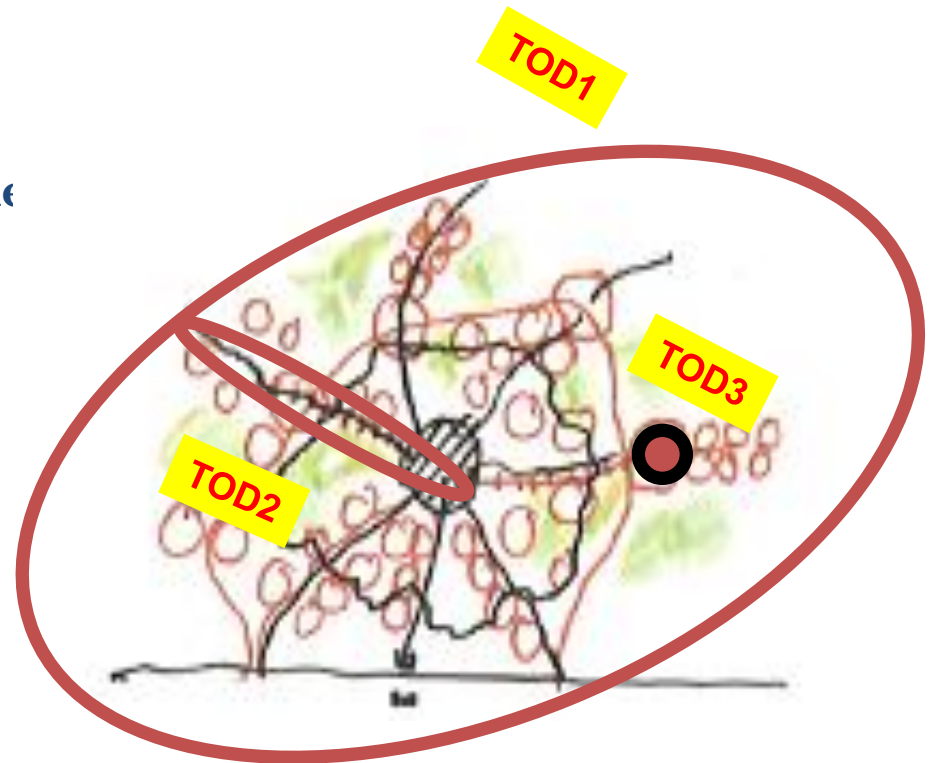
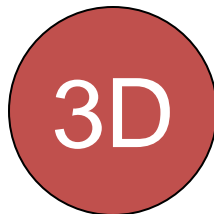
... I have a pair of shoes...
... and a donkey

Challenges

- **Sustainable transport modes**
 - Public transport
 - Less energy and public space consumed, less pollution per passenger transported
 - PT efficiency depends on the urban context !
 - Walking & Cycling
 - Adapted to short distances, no fossil energy, no pollution, good for health
 - W&C need adequate infrastructures !
- **Need to access essential urban functions (jobs, education, health...)**
- **Need to develop transport and city in a coherent way**

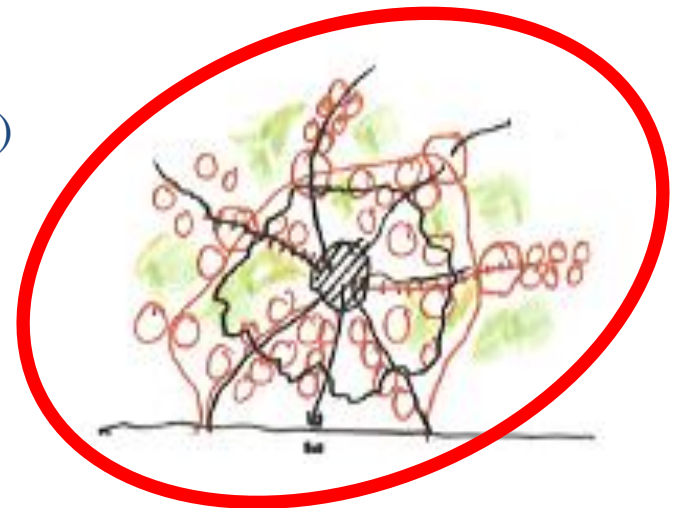
Solutions

- Action needed at all scales
 - Living area
 - Transport infrastructures and networks
 - Neighbourhood
- Diversity, Density, Design
- Transit Oriented Development
- TOD : Various acceptations

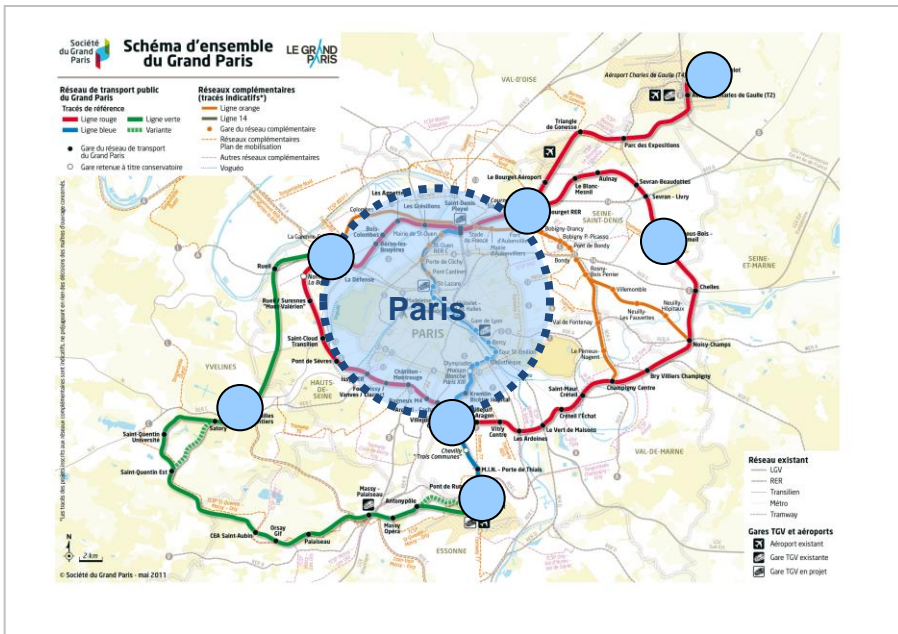
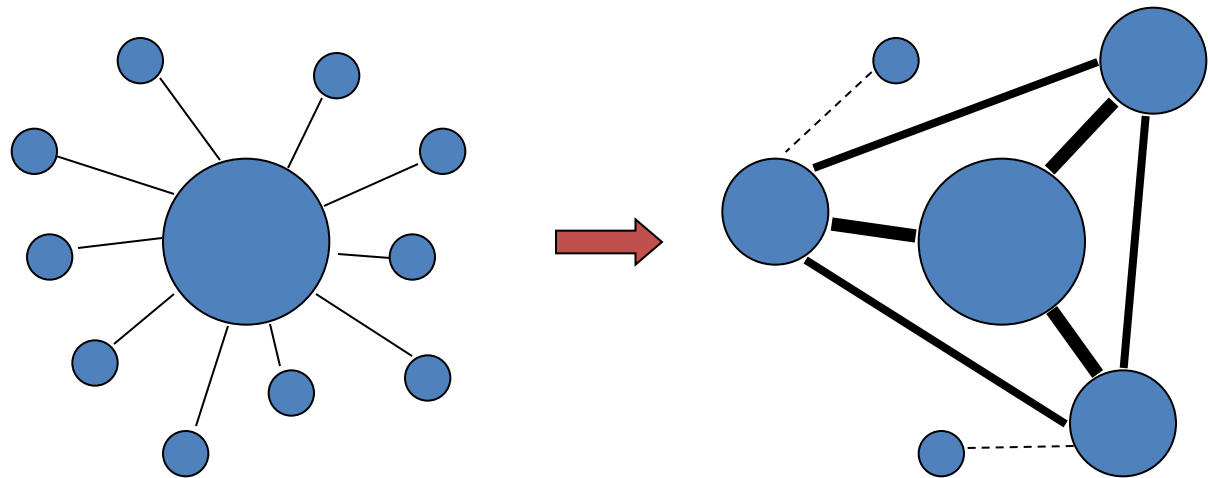


TOD1 / At the level of the living area

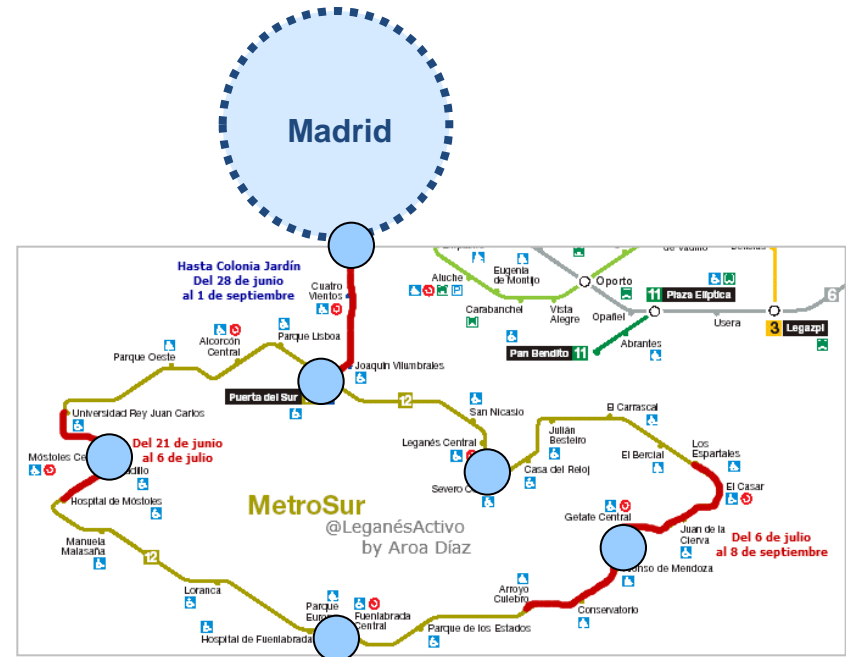
- Diversity
- Act on diversity of territories for a better access to urban functions
- Develop secondary centres to reduce travel distances (« short distances » cities)
- Develop the territory by using the structuring transport infrastructures
- International references
 - Chinese-style TOD / New cities around mégalopoles along mass transit lines)
 - Metro Sur Madrid (« pearls neckless »)
 - Grand Paris



Land use Master Plan



Grand Paris

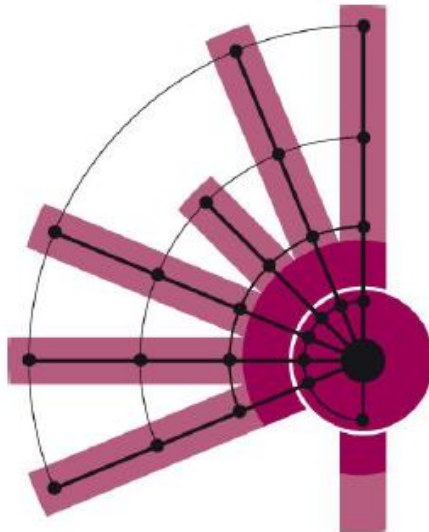
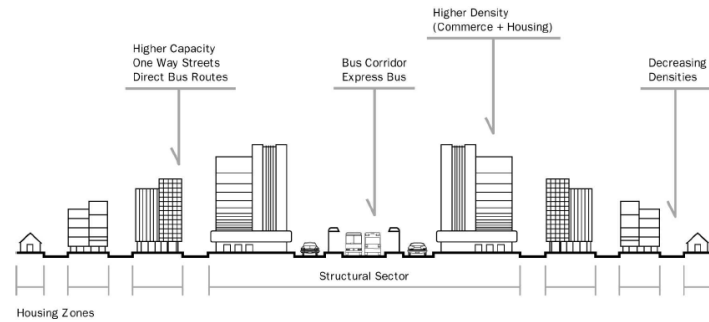


Madrid L.12 Metro Sur

TOD2 / At the level of the public transport network

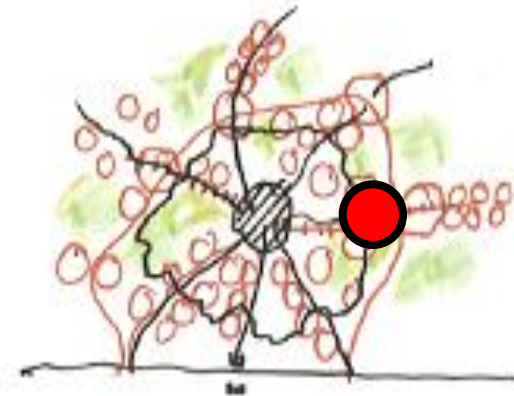
- Density
- **Densify along the lines and around the stations of the structuring public transport network**
- **Urban development under control**
- **More efficient public transport**
- **International references**
 - US-style TOD (real estate around PT stations)
 - « Contrat d'axe » in Grenoble (win/win partnership)
 - Copenhagen Finger Plan (« glove fingers » city development along train lines)
 - ABC Pays Bas (jobs around PT stations)
 - Urban development along BRT corridors in C





TOD3 / At the level of the neighbourhood around PT stations

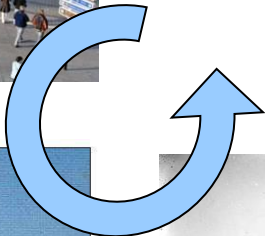
- Design
- Work on public space to facilitate the access to the stations but also to encourage the use of active modes (W&C)
- Public transport but not only
- Make a peaceful neighbourhood around PT stations
- Concertation
- International references :
 - Mexican-style TOD (DOTS)
 - Massena Square in Nice / Meeting zones



2010



Life cycle
(back to the future)



1960



1920



Barriers

- Different cultures (transport, land use, architecture...)
- Institutional fragmentation
 - Integration
 - Cooperation (contracts)
 - Coordination platforms
- Financing
 - Incentives (cf « contrat d'axe »)
 - Capture of the added land value

SUMP : a pragmatic approach for a better coordination of transport and land use

○ SUMP

1. Public transport projects

- Organisation / Structuration / Network (Organising Authority ? Paratransit ?)
- Mass transit projects

2. Global, integrated, sustainable urban transport policy

- Limitation of motorised transport modes (car parking)
- Development of active modes
- Intermodality

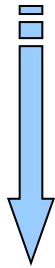
3. Coordination of land use and transport / Cities promoting the use of sustainable transport modes

○ French PDU Experience (LOTI 1982)

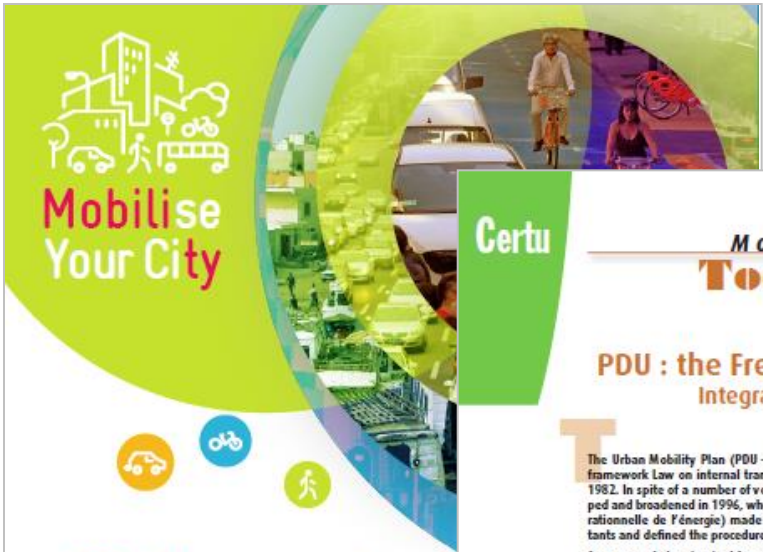
○ SUMPs in Europe (APUM 2004)

○ TOD

- Diversity
- Density
- Design



MobiliseYourCity !



Mobilise
Your City



100 cities engaged
in sustainable urban mobility
planning to reduce greenhouse
gas emissions

MobiliseYourCity supports local governments in developing countries to plan sustainable urban mobility in order to develop more inclusive, liveable and economically efficient cities and reduce GHG emissions.

By 2020, 100 cities will be engaged in deep transformational actions through the implementation of Sustainable Urban Mobility Plans (SUMP) supported by National Sustainable Urban Transport Policies (NUTP).

MobiliseYourCity aims to assist cities in their efforts to cut at least 50% of their urban transport related emissions by 2050 compared to business as usual.

With the support of partners (development and transport) we develop a methodology and technical tools to financing the implementation of SUMP platform to urban mobility.

Certu

Mobility and transport Tools & Methods

01

PDU : the French urban mobility plan Integrating transport policies

The Urban Mobility Plan (PDU - Plan de déplacements urbains) was created by the French framework Law on internal transport (Loi - loi d'orientation sur les transports intérieurs) in 1982. In spite of a number of voluntary schemes in the 1980s and 1990s, it was only developed and broadened in 1996, when the French air quality Act (Loi - loi sur l'air et l'utilisation rationnelle de l'énergie) made it compulsory for urban areas of more than 100,000 inhabitants and defined the procedure to produce a PDU.

As a general planning tool for mobility across an urban area, the PDU defines the organisational principles for transport and parking for both people and goods, and covers all modes of transport.

PDU's were strengthened by several laws passed between 2000 and 2010. They coordinate sector-specific policies on alternative modes of transport to the car, the road network and parking and also incorporate several interconnected issues, such as environmental protection, integrating urban policies and mobility, access to transport for all and road safety.

As well as its role in planning, the PDU is also a scheduling tool insofar as it prioritises and sets out how measures contained within it will be financed; the measures laid down in the PDU also have to be taken into account in local urban development plans and in the actions and decisions taken under the police powers of the mayor and road network managers.

Finally, the PDU is developed using a partnership-based process and involves a range of institutional stakeholders and key players in civil society during its production and subsequent evaluation. The aim is to create a mobility plan designed to serve the interests of residents and local activities.



The PDU gives rise to the development of other modes of transport (walking and cycling) and contribution to improving the living environment. (Source: Certu)

Certu 2012 / 73



Editions du Certu

September 2012 - www.certu.fr

Thank you