



MOBILITY, URBAN PLANNING AND DEVELOPMENT IN FRANCE: 1960-2003

J. P. ORFEUIL

**C.R.E.T.E.I.L. LABORATORY
PARIS XII UNIVERSITY, FRANCE**

ORGANISATION OF THE PAPER

- ◆ HISTORY: VALUES, FACTS
- ◆ LEARNINGS ON MODELLING
- ◆ LEARNINGS ON MOBILITY

TRAFFIC FIGURES IN FRANCE 1960-2000

◆ AIR TRAFFIC:	X24
◆ CAR TRAFFIC:	X 9
◆ PUBLIC TRANSPORT:	X1.6
◆ COMMUTING DISTANCE:	X3.5
◆ SHARE OF 2 WHEELERS IN TRIPS:	/9

TREES DONT GROW UP TO THE SKY

	Period1: before 1973	Period 2: After 1973
Car traffic	+12 %/y	+2.5 % / y
Accidents	+4 % / y	- 4 %/y
PT Activity	<0	>0
Commuting distance	+6 %	+2 %

The sixties: 1958-1973

General beliefs

- ◆ **The opinion: great confidence in the progress**
- ◆ **Happiness comes from consumption**
- ◆ **Decision makers use science for our well being**
- ◆ **Progress has a face: the USA**
- ◆ **Acceptance of the « damages of progress » (pollution, accidents, etc.)**

The sixties

City and mobility situation

- ◆ **Population: migrations from rural to urban: high pressure on housing markets**
- ◆ **High levels of lodging and transport needs**
- ◆ **Congested cities**
- ◆ **Inherited city cannot meet the lodging needs and is not sufficiently flexible**

The sixties Urban transport

- ◆ PT and 2w out of favour, private car is our *unique* future
- ◆ Car demand is exogeneous
- ◆ The « science of towns » (Le Corbusier, functionalism) and long term traffic modelling allow decision makers who control the situation « optimal and rational planning »
- ◆ People will live and move in the way authorities think

The sixties

Emblematic elements

- ◆ Big public housing developments
- ◆ Freeways and expressways in towns
- ◆ Decline of PT
- ◆ One car in each household is the horizon

After the sixties

- ◆ From trust to anguish (future) and to distrust (science, progress, policy makers)
- ◆ From holism to individualism, autonomy, « hypermodernity »
(car, telecoms, private home, pill, divorce, private schools, etc.)

After the sixties

- « I » as a consumer and « I » as a citizen are 2 different persons
- New problems on the agenda: local pollution, congestion, accessibility for non car owners, financing urban transport, greenhouse gas emissions

After the sixties Consequences

- ◆ **Mobility behaviour: sustained trends, through autofed, systemic but unpredicted urban sprawl and female autonomy**

Progressively:

- ◆ **Low value to scientific planning, high value to consultation and dialogue**
- ◆ **Citizen values: urban car use as « bad », other modes as « good » .**

After the sixties Consequences

- ◆ Urban and transport planning progressively evolves from consumer satisfaction to citizen satisfaction
- ◆ PT are redevelopped, with moderate patronage success and resulting financing problems
- ◆ « Soft modes » desired, but they can do a small part of the job only.

What have we learnt: As regards modelling

- ◆ According to the periods, people can agree / disagree as regards long term predictability.
- ◆ The ignorance of « systemic effects » is a source of concern / reject:
(PT patronage, parking needs, induced traffic, sprawl, etc.)

What have we learnt as regards mobility

1 Polysemy of the word « mobility »

- **Common sense: trip nb, distance, travel time, etc: actual behaviour**
- **Norm, social requirement**
- **Personal ability**

Stress : problems when:

Ability < norm: disadvantaged people

Norms > system capacity: congestion

What have we learnt as regards mobility

2 The « ability to move » is a key driver
of urban transformation

Private decision making for locations
(homes, activities) takes into account
the potential of movement. High
quality infras not only « meet the
needs », they create opportunities

Mobility is endogeneous, land use
evolutions are exogeneous

What have we learnt as regards mobility

Lots of irreversibility in real life

- **Equilibrium models imply reversibility, but real life is different**
- **Psycho: car license changes the ways of thinking**
- **Monopoly: cars create problems to buses, 2w, etc.**
- **Radical monopoly: land use organised by cars, high costs to serve by PT**

What have we learnt as regards mobility planning

**Mobility policies, whatever they are,
always produce winners and losers**

**Disaggregate « surplus » analysis is
needed**

Silence is good for winners

**Participation / opposition is important
for losers**

The « solution space » is always broader than we think

Example: 10 solutions for suburban freeway congestion

0 Build new freeways

1 Do nothing. Users change « mood », schedule, route, destination, locations

2 Manage uncertainty: real time info

3 Improve quality of service through dynamic management (AID, access control, dynamic lane management)

**The « solution space » is
always broader than we
think**

**4 Supply congestion free alternatives
(rail)**

5-6 HOV / HOT lanes, road pricing

**7-8 Reduce the gap between the
« normal speed » on the « primary
network » and the « urban road
network »**

**The « solution space » is
always broader than we
think**

**9 Improve land use / transport
coordination, urban renewal, high
densities around PT nodes, etc.**

10 Develop a « consistent city » vision