

The need for pooled parking capacity

1. A MAJOR PROBLEM: RIGIDITY OF BUILDING NORMS

Buildings have their own life, independent of the urban context. There are a number of examples of this situation:

- In an office building, employee density varies over time. Depending on the tenant businesses or economic conditions, the density is generally between 15m² and 30m² per employee: parking needs vary in the same proportions.
- Footfall in a store can vary greatly over customer generations: for example, an old corner drugstore may be converted into a MacDonaldis or a Starbucks, and conversely stores can age or go out of fashion.

So parking demand in buildings can change, but the capacity of the private car parks linked with them remains fixed. This means that over time a mismatch emerges between the regulations governing car park dimensions and actual usage, which results in urban disorder:

- Anarchic parking, pavement parking, inadequate public parking capacity near buildings where demand has grown.
- Rise in the rate of car use for commuting in office buildings where employee density has fallen. Falling employee numbers reduce demand for parking, releasing spaces in the building's private car park. In this case, the employer may offer car park access to employees who previously had no parking entitlement.

Example: In the seventh arrondissement in Paris, an office building offered each of its 300 occupants access to its private car park, because the car park was too large. In consequence, 70% of the people working in this building came to work by car, as compared with 20% in the surrounding neighbourhood.

In other words, employees who previously commuted by other modes, are encouraged to travel by car: the private car park acts as an "attractor" when it has excess capacity.

2. INITIAL CONCLUSIONS

The solution is to create a certain number of “local parking pools”, probably managed by the Community, for general-purpose use by different buildings within walking distance.

This could be provided partly through roadside parking, with further general-purpose public car parks being built as required. These structures could be funded by various means.

Other benefits:

This strategy also brings 5 significant associated benefits:

- Savings in urban space and building requirements.

The Community can work with the variety and complementarity of demand: for example, shops and offices do not generate peak footfall on the same days of the week. Compared with private car parks, therefore, a lower level of parking capacity will be sufficient.

The gains in terms of building costs and urban space might be in the region of one third.

- Incentive for reduced car use

From the point of view of compliance with France's solidarity and urban renewal law, general-purpose parking spaces will be a good incentive to use the car less: if his car is parked 200 m away from rather than under the building where he works, an employee might choose to walk the 500 m to his office rather than driving.

- Control of a strategic asset

In political terms, control over these spaces will give the Community more power to implement its parking policy: choice of parking fees, quota system for certain user groups,....

- Enhanced visitor management

In terms of management, general-purpose public parking spaces are perfectly suited to people visiting office or apartment buildings. There are too few of these visitors (less than 20 spaces per 10,000 m²) for them to be managed through a private car park system: controlling the comings and goings of a few visitors in a private underground car park is difficult and costly.

- Economies of scale

The unit cost of providing public spaces can be reduced by the more functional nature of the structures and by economies of scale.

3. PRACTICAL CONDITIONS OF IMPLEMENTATION

To make an accurate estimate of the number of additional spaces that actually need to be provided to serve a building, given the general-purpose nature of public supply, actual parking demand will need to be specified for each category of building, expressed as a % of peak weekly demand in certain key periods such as:

- daytime on weekdays, i.e. up to 6 pm,
- evening on weekdays, i.e. after 6 pm until sometime during the night,
- nighttime on weekdays,
- daytime on Saturdays, i.e. up to 6 pm,
- Saturday evenings, i.e. from 6 pm to around midnight, and on Sunday. The choice of these latter 2 periods will essentially depend on the presence of significant leisure Hubs.

By aggregating overall parking needs at peak times for all the buildings in a planned neighbourhood, one can calculate the overall combined roadside and public parking capacity required for that neighbourhood.