



Mobility consulting: influencing the location choice of different target groups

Category: Workshop “Role of the mobility manager”

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Mobility management: the current approach has clear limitations

Mobility management has become a very important and successful part of transportation policies. The main goal so far has been to achieve a modal shift by providing the public with information about alternative modes.

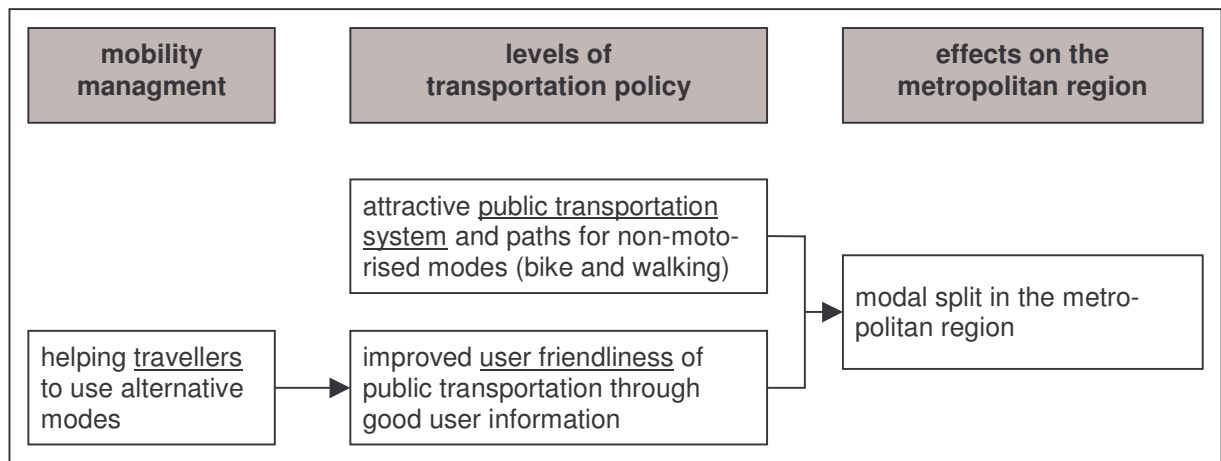


figure 1: Today's mobility management

The problem with this approach is that many people do not have an alternative to the private car because they are living in areas (mainly outside the city centre in suburban areas) where the quality of public transportation is poor and where long distances to shops and the workplace are common. If these places don't have access to public transportation, even the best mobility management approach will have little effect on the mobility behaviour.

The goal of a modal shift to public transportation and non motorised modes has clear limits in a land use structure characterised by low densities and disparate uses. To overcome these barriers mobility consulting has to move a few steps forward.

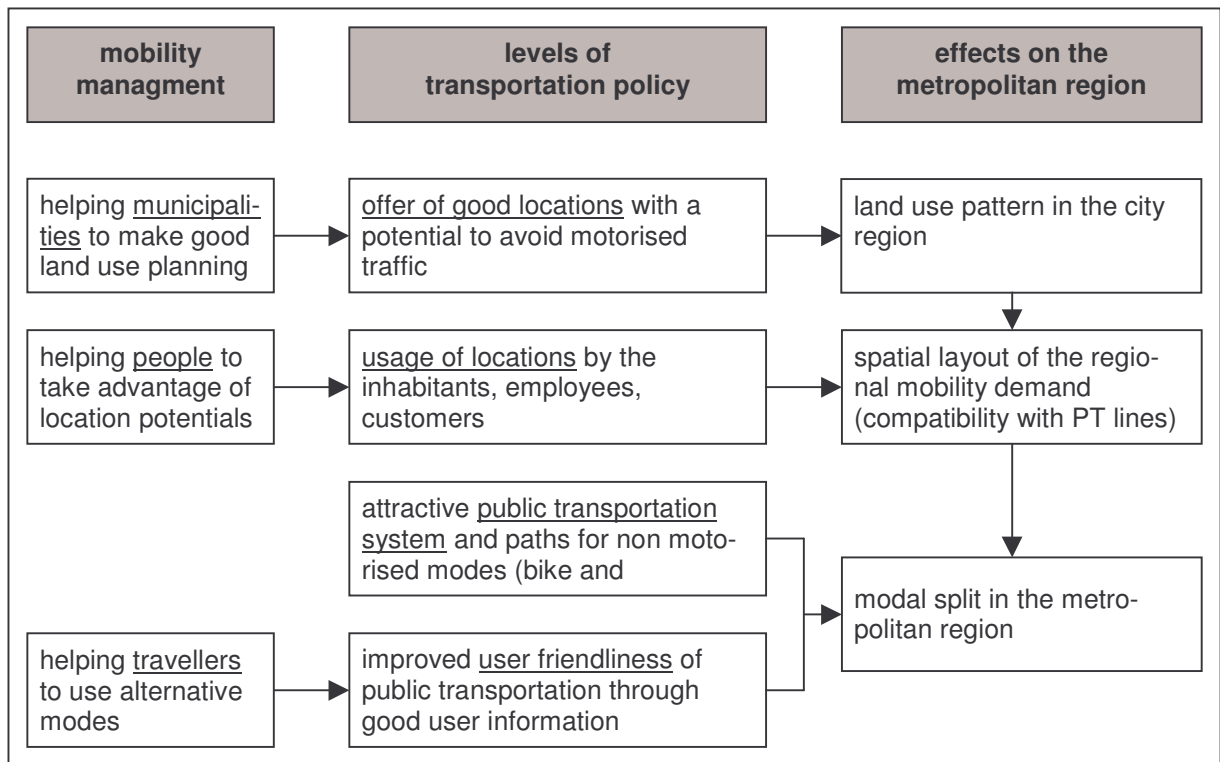


figure 2: Mobility management moving two steps ahead

More sustainable travel patterns can only be achieved by an integration of transportation and land use planning. Therefore land use and location decisions are the next logical step to further enhance the potential of mobility management.

The underlying relationship between transportation and land use

The constant increase of the travel distance is the major characteristic of travel behaviour that has to be kept in mind when designing strategies and solutions for future mobility. Over the past decades we saw an increase in the kilometres travelled whereas the total number of trips and the daily time budget spent for mobility remained nearly unchanged.

To achieve a mode shift from the car to alternatives is the most common goal for local transportation policies. It becomes clear that this strategy can only be successful if the trend of increasing travel distances can be stopped or at least significantly reduced. For that reason transportation planning and mobility management needs to be extended to those factors that actually contribute to an increased usage of the private car. Location and land use decision lay the ground for travel behaviour. In the suburbs, in smaller villages and in the countryside choices are often limited. In these areas people heavily rely on their own car. If households or companies relocate to places where there is no alternative to the car it is already too late to apply a mode shift policy.

Priority should be given to the development of areas where density, the mix of uses and access to the public transit system enables households to reduce motorised trips. A mobility management strategy doing so has to be twofold:

- It is necessary to achieve a land use pattern that reduces automobile dependence as much as possible by promoting those locations offering a real choice of transportation modes through nearby stores, jobs and services as well as an attractive public transportation. Mobility management therefore starts with consulting municipalities in their land use decisions (figure 2).
- Land use planning can only provide options, but there is no guarantee for a more environmental friendly travel behaviour of the people “moving in”. As much as land use planning decisions are a necessary prerequisite for modal shifts down the line, in the end the traffic effects are always caused by the people’s way of „living a land-use pattern“. Therefore people’s location and general travel decisions become the major focus of this second step. Mobility management has to „sell“ the advantages of mixed-use locations close to public transportation to the people by making visible the individual benefits of these locations (figure 2).

It is obvious that this approach is ambitious and goes far beyond the traditional area of transportation planning and mobility management. At the same time this kind of demand management can be very effective in the long run because it influences the background of future mobility.

intermobil Region Dresden

The strategy defined above is the basis for a demand management approach currently tested in the research project *intermobil Region Dresden*. This large project is part of the research programme “mobility in city regions” (“Mobilität in Ballungsraeumen”), funded by the German Federal Ministry for Education and Research. The project started in 1999 and will be completed in spring 2004. Dresden is the only city in Eastern Germany participating in this research effort. The city of Dresden has 460.000 inhabitants, the entire metropolitan region is home to 1.3 million people.

While most projects in the “mobility in city regions”-programme are dominated by telematic solutions (“intelligent transportation systems”), *intermobil Region Dresden* is different in two ways:

- It is the only project that includes the suburban and hinterland communities in its approach.
- It supplements improvements in the transportation infrastructure through demand management.

The “technology side” of the project includes improvements in the infrastructure and operations (suburban rail systems, internet-based traveller information system etc.). The European Centre for Transportation and Logistics at the Technical University of Hamburg-Harburg adds land use planning and new forms of mobility management to this project.

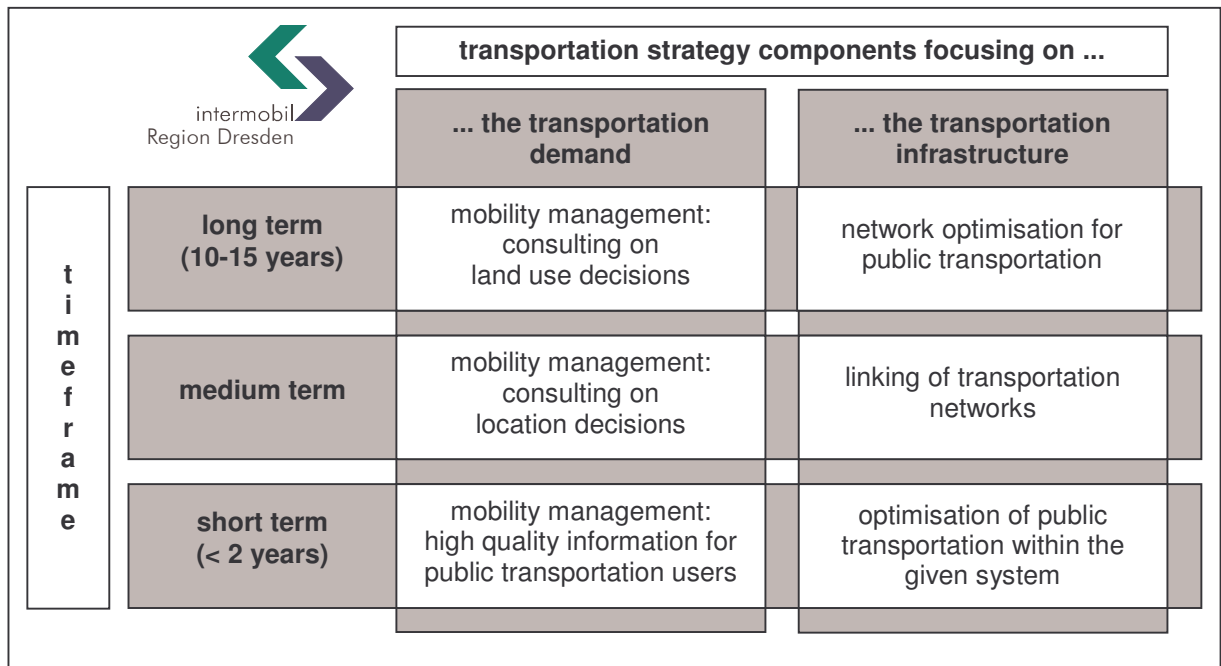


figure 3: Two-side-approach in the intermobil Region Dresden project

An extended concept for mobility consulting

Figure 4 shows four of the components of the *intermobil Region Dresden* project directly linked to the new fields of mobility management described above (figure 2).

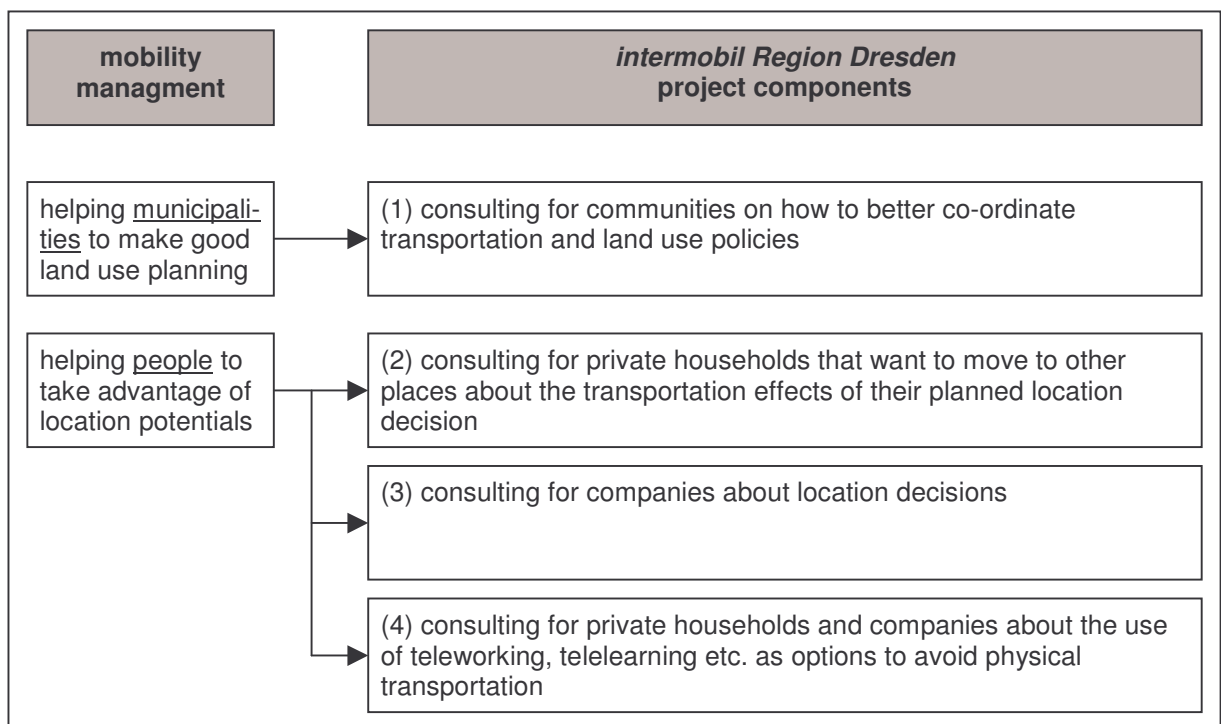


figure 4: Four of the *intermobil Region Dresden* project components in the new fields of mobility management

The following sections will describe these components in more detail.

Project component #1: consulting to communities how to better co-ordinate transportation and land use policies

The research team is in contact with a couple of municipalities to give advice on land use decisions. The experience shows that a lot of city officials and members of the local parliament are not completely aware of the effects of land use decisions on the traffic situation.

The team gives recommendations to local and regional planning officials about zoning decisions, general strategies for urban and regional development and transportation planning (e.g. park & ride policy, reorganisation of the local bus system etc.). One priority during the remaining time of the project will be the areas close to the stations of the suburban rail system (S-Bahn). These areas are often underused but they are often feasible for transit oriented development. The research team also organises round table discussions for officials from different communities to exchange information and experience.

The role of an external adviser can be compared with a consulting company or planning firm that is hired by the city to support certain planning activities. The difference is that in *intermobil Region Dresden* the research team and not the city administration is initiating the consulting process. But it is obvious that the consulting activities towards an integrated transportation and land use planning can be only successful if there is some kind of openness on the site of the city administration. One remaining problem with this external guidance is the total amount of measures, plans and strategies that could and should be addressed (from the regional to the local level of different municipalities); at this point it is still necessary to focus on key developments to be effective.

Project component #2: consulting for private households that want to move to other places about the transportation effects of their planned location decision

In a first step the research team aims to establish the traditional forms of mobility management in Dresden, which were non existent when the project started. So far *intermobil Region Dresden* initiated:

- mobility consulting for employees of the city administration Dresden
- consulting for the city administration of Pirna (population of 45,000 inhabitants, 15 km from Dresden) to support the inner city redevelopment
- mobility consulting for the microchip manufacturer “infineon”, this included the first introduction of a job ticket in Dresden
- mobility consulting for one of the two public owned housing companies in Dresden, this included a co-operation with car sharing

In the last two projects the research team brings together employers and housing companies so that apartments can be offered to employees close to their workplace.

This mobility management shall serve as a basis for the next step. There the goal is to inform households about the possible transportation effects of an intended relocation. If households want to move to another location they are often not aware how the new location might affect their own travel behaviour. They often do not take into account that at a new suburban location the household might need an additional car or that the time budget and hence the costs for travel might be much higher. The

goal is to create this kind of awareness among households and to provide them with information about alternatives. So far mobility consulting started at the earliest after a move to a new location had taken place to provide the household with information about public transit. The new service intends to approach households in the stage of the location decision. Often a cheaper price of the new apartment or the new home leads to locations with poor transit access, but taking the costs of mobility into account would create a different picture. Here the co-operation with housing companies, realtors, banks etc. is a key element to have access to this target group.

Project component #3: consulting for companies about making location decisions

The objective is to give recommendations for companies that are considering a relocation within the region to direct them to places with good transit access. If a company is choosing a new location, transportation is only one aspect among a lot of different criteria. To establish a framework that allows to a certain extent to influence such location decisions it is necessary to create awareness for this topic amongst the municipalities, counties and chambers of commerce because they are the main contact points for companies considering a relocation.

Here the research project is in the stage of gathering all relevant information for this type of consulting activity. The first step is to establish a monitoring system for all available properties suited for business development. This information system is necessary to track appropriate locations and to compare different locations that might be suitable for a certain kind of business.

Project component #4: consulting about the use of teleworking, telelearning etc. as options to avoid physical transportation.

The project also deals with new forms of telecommunication such as teleworking / telecommuting, telelearning and teleshopping. These types of telecommunication have the image that they can substitute physical travel.

An original goal was to establish some kind of consulting service about these forms, as mobility consulting in the US is often also providing information on how to start telecommuting. In the US telecommuting is still regarded as a trip reduction strategy and a lot of states have programmes to somehow support or at least promote telecommuting.

Now it becomes less and less clear if teleworking can really contribute to a reduction of travel. This work package now deals with using telecommunication as basis for mobility consulting.

The Experiences with this concept so far

Intermobil Region Dresden is an ongoing project that will continue until spring 2004. This paper can only present preliminary results. The work completed so far concentrated on the analysis and on the development of the concepts. The remaining time will be mainly used for testing the concepts in practice. Not for all new applications experiences are already available but it can be said that the above

mentioned services and activities can contribute to a better integration of land use and transportation planning.

The implementation in this case is very much influenced by the special situation in East Germany. The region is facing high rates of unemployment and because of the poor economic situation there is a strong migration of workforce to West Germany. Most municipalities are experiencing a decline in the population. Currently the driving forces for further development are not as strong as they have been in the first half of the nineties. Priorities in the local policies are shifting.

One important point where the concept still needs further development is the question who should finance and run these additional consulting services in the future. The current mobility consulting services are normally run by the public transportation agencies, often with support from the city administration. In the case of the traditional services that concentrate on information about public transportation it is clear that the public transport provider can use these kind of service for marketing purposes and as opportunity to improve customer relationship. If the target groups are much broader defined it is not easy to find or establish an organisation that is willing to run a service where the benefits are only indirect and where the customer relationship is not as obvious. Unfortunately Dresden has no regional administration as it is available in some Western German metropolitan regions (e.g. Hanover, Stuttgart, Frankfurt) that could serve as a basis for this extended kind of mobility services.

There are several options available:

- extension of the existing mobility consulting services run by the public transit providers
- to establish a decentralised model where the different kinds of mobility services are linked to different organisations that have direct access to the different target groups
- to establish a new umbrella organisation for the new services

So far the project developed in a way that the above mentioned components of the extended mobility management are organised separately according to their target group. It remains open if it will be possible to implement an organisational structure that would guarantee a cost effective operation of the additional services. It would be definitely much easier to implement such kind of mobility service “only” in one city, but to address land use and location decisions requires a regional concept. But every regional approach faces the problem of competition between different municipalities within the same region.