

# **Inter-organisational co-operation in improving access to activity centres by public transport**

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## **Abstract**

The accessibility to city centres and large attraction parks increasingly becomes an issue of concern for location owners. They seek possibilities to offer transport services as an alternative to car use. In doing so, co-operation with public transport companies is important. These companies do not yet have the culture and opportunities to develop tailor-made services. Institutional changes yielding more market incentives and good information sharing should help to bridge the gaps between these parties. In particular a shared view on the service level to be offered, based on investigation of visitors' preferences, should be the starting point for inter-organisational co-operation.

## **1 Introduction**

In the Netherlands, for some considerable time, the well-known problems related to growing mobility (traffic congestion, use of scarce space, environmental deterioration, decreasing access to economic centres) have been regarded as a responsibility of public authorities. Both entrepreneurs and drivers tended to consider themselves victims of increased car use, yielding an attitude of looking at local, regional and national authorities to solve these problems. Strategies for solution have long been dominated by building car-focused infrastructures (roads, parking facilities). Non-infrastructure strategies (such as e.g. selective pricing, causing behavioural changes, significantly improve public transport services, large scale business related transport management, or modal shift towards rail and water) have long received less attention.

Fortunately, the Second (1990) and the Third (2001) Dutch National Transport Structure Plan, accepted as the basis for public transport policy development, stress the relevancy of broad strategies based on the simultaneous application of various instruments. The Plan, compared to public policy plans in other Western countries, offers a new perspective on to the increasing problems of the transport system and the ways to cope with them (Banister, 1994). Analyses of the Plan however, reveal that the ambitions are (too) high and not always coherent and systematically formulated and co-ordinated. Moreover, the practical realisation of strategies appears to be extremely difficult. Nevertheless, since the second half of the nineties one can experience throughout society a growing awareness of the problem complexity, resulting in the acceptance of the need for applying a variety of steering instruments and an active involvement of many other actors outside public authorities. Incentives to this mental shift have been given by several institutional changes, reducing the traditionally important role of public authorities and strengthening private initiatives. This is in particular clear for the sector of public transport, but also in the field of infrastructure design, construction, maintenance and exploitation significantly changes are introduced.

The new mind-set in transport policy also effects the attitude of entrepreneurs with shopping, recreational or conferencing facilities regarding issues such as location decision making, accessibility for visitors and use of alternative transport modes. Many of these facilities are located at spots difficult to be reached by car, for instance in inner cities. The problem with inner cities and large entertainment parks is the enormous amount of cars to be parked at top-days. Due to that congestion at local roads is induced, time is lost for parking entrance and exit and unattractive walking distances to the gates of the park or the shopping malls occur. Hence, customers experience growing difficulty in reaching these locations. Increasingly, entrepreneurs are aware of the fact that they themselves have to take initiatives in order to offer visitors attractive transport alternatives to reach the destination. Access to the location becomes a part of the marketing mix for the activities employed at that location (Van der Elst, 1999).

This development yields many questions, such as: what do visitors prefer with respect to accessibility? What are strategies by the entrepreneur to react to these preferences? Can an ex ante assessment be made of the cost-effectiveness of these strategies? With who should be co-operated to implement certain strategies? Does this co-operation also imply new financial risks? Are there institutional barriers for these strategies? And so on. Since offering transport services generally is no part of the services offered by the entrepreneurs, these questions can only be answered adequately in co-operation with transport companies and (local) public authorities. This makes the issue of improving accessibility increasingly subject of an inter-organisational co-ordination challenge between parties with diverging interests. In this context, the public authorities' position of key actor is released in favour of private stakeholders' initiatives. Accordingly, decision-making processes adapt to these new roles.

This paper further explores these changing roles, focusing on the interaction between real estate managers, shopkeepers, public transport companies and

municipal authorities. The aim is to explore the complexity and to identify some pitfalls of new initiatives. The structure of the paper is as follows. In section 2 the problem of co-operation is more in-depth addressed from a theoretical perspective. In section 3 the analysis in section 2 is illustrated by the development of the Utrecht City Project (UCP). Since public transport companies play a special and crucial role in the context described above, the question whether they pick up the new challenges satisfactory will be addressed in section 4. Finally, some conclusions will be drawn in section 5.

## 2 Problems of co-operation

In the introduction it was argued that increasingly 'location-owners' (shopkeeper organisations, recreational businesses, congress centres and real estate companies) consider accessibility as an essential aspect of the service offered to visitors. Their attitude towards accessibility is shifting from passive to active and they are willing to pay for quality improvements. For instance, a big recreational attraction facility in the Netherlands (Dolfinarium Hardewijk) faces the problem that 80% of the 1 million visitors annually arrive by car. Therefore, recently an accessibility plan was elaborated in co-operation with public transport companies: NS-Reizigers (railway) and MIDnet (bus). The implementation of the plan however suffers from severe procedural problems (local authorities) and diverging interests of the transport service providers. Another example is the Efteling fairytale-park, taking initiatives to increase accessibility by running dedicated shuttle busses to the Efteling from various places in the Netherlands. Co-operation with public transport companies appeared to be very difficult. Another example is the policy to construct several Park & Ride facilities at the edge of city centres / urban areas (Whitfield and Cooper, 1998; Fradd and Duff, 1998). In some cases, these facilities are 'dressed-up' with additional services like grocery stores, fast food restaurants, and the like, in order to increase the attractiveness of parking at these places and using public shuttle services to for instance the inner city area. So far, only few of such facilities, combined with high quality shuttle services, are realised. Moreover, in several cases these facilities are wrongly located and the additional services appear to be less viable.

These examples indicate that the establishment of an effective and viable co-operation structure is quite difficult. There are several reasons for this situation, basically all related to different perceptions, interests and positions. *Firstly*, as indicated above, the mutual relationship between public authorities and public transport companies is changing rapidly, due to institutional changes (see e.g. Veeneman, 2002). These companies are increasingly challenged to operate as companies with full responsibility for their business results. Deregulation has increased the degree of freedom for enterprising behaviour substantially. On the other hand tendering of concessions seems to favour a growing stronghold over public transport by the public authorities. Consequently, the success of public transport development for the release of congested locations has become more dependent upon creative service development by the public transport companies

and the ability and willingness of public authorities to allow public transport companies to develop service in co-operation with the other parties mentioned.

*Secondly*, irrespective the growth in freedom for enterprising behaviour, public transport companies and public authorities are very supply-focused and are therefore less flexible in terms of transport services. This can simply be argued by the cost/benefit structure in public transport. Bundling and regularity, hence mass production with a low level of differentiation, leading to effective planning and efficient resource use, seem success factors for arriving at significantly improved business results. However, location-owners often face very different visiting patterns (different days in the week, different periods of the year, weather-dependency, special events) demanding for a large flexibility (tailor-made) in provided transport services. This does not fit well to the basic service focus of the transport companies and generates many discussions on what is good for the passenger/visitor.

*Thirdly*, local and regional authorities sometimes have to take initiatives to investment in conditions favouring public transport. There might be a need e.g. to create Park & Ride facilities, or to facilitate the intended quality improvement of public transport services by e.g. free bus lanes or priority in traffic regulation. Moreover, car-access to the area should be made less attractive (decreasing parking lots, increasing price of parking). Such measures are often subject of intensive public debate, e.g. because of the image of an unfavourable cost-effectiveness ratio of these investments.

*Finally*, there is a permanent discussion about who is the problem owner, who benefits from various measures and who should bear the costs. Is the visitor the one who has the problem and benefits from attractive alternative transport services, or is it the local authority facing less congestion with these facilities? Or is it the location-owner trying to be sufficiently competitive and market-attractive? It often happens, that due to this fuzziness, perceptions of the need for changing the state-of-the-art, differ substantially among parties: in general the claim for changing the situation by one party seems to be larger in situations where another party is assumed to bear the responsibility. Moreover, the question might arise whether a somewhat lower level of access is acceptable because of compensation by other features of the destination, such as exclusive shops or cultural facilities.

Bridging these differences in perception and position is important for being successful in creating attractive services for large amounts of visitors to spatially concentrated activity centres. Evidently, the question is how to bridge. Van der Elst (1999) stresses the importance of breakthroughs in the contingency of the problem and the processes to cope with it. In relation to the contingency, it is important (a) to make differences in perception transparent what kind of (new) services for whom and when? (b) to reach an agreement on an operational view on accessibility (performance indicators and standards) and (c) to shift attention from an infrastructure approach towards a service level approach. Moreover, with respect to planning and decision-making processes, several strategies aimed at creating commitment among the key players have been suggested in policy and management literature (e.g. Kickert et al, 1997). From the analysis above with regard to problems of co-ordination, we learn that it is essential to feed

these processes with information (facts and figures) in order to eliminate mistakes, reduce fuzziness and, hence, enhance decision-making. Since we know that information imbalance between key players often appears to be an obstacle for progress, it seems in particular important to create in a specific case a platform of all key players for information exchange. This helps to improve shared problem recognition, to develop a sense of urgency for actions and to facilitate shared strategy development.

In the next section, some aspects of the co-operation problem are illustrated by the development of the Utrecht City Project (UCP), the Netherlands.

### **3 Illustration: Utrecht City Project**

The Utrecht City Project (UCP) is a plan for the functional and physical reconfiguration of the area around Utrecht central railway station. The present number of shops, cafes, offices, conference facilities and apartments will substantially be increased. The Utrecht central railway station is the largest node in the Dutch railway network. The station and its facilities have to be adapted to new developments, such as changes in the present rail services and the introduction of high-speed trains. UCP intends to enlarge the regional and national economic importance of the area, resulting in about 75 million visitors to the Utrecht central railway station yearly. It is clear that tackling the transport and accessibility problems of this scale is a major challenge.

In order to cope with this challenge, a Platform UCP has been created. Key players, such as the owner of the shopping mall called 'Hoog Catharijne', the railway station manager, different parts of the railway company, the city authorities and the owner of a large conference centre (Jaarbeurs), participate in the Platform. The Platform is the bases for public-private partnership in project development. Agreement has been reached that the Ministry of Transport will finance a part of the plan. The rest is partly financed by the municipality and partly by the private investors. Within the Platform, much discussion focuses on the accessibility of the node, but the parties have different perceptions of the problem and the potential solutions. The private parties put more emphasis on the car-accessibility, whereas the public authorities want to stimulate the access by high quality public transport. So, the question is relevant what accessibility means for different market segments of visitors and how to react to diverging preferences.

The potential visitor takes a variety of factors into consideration when taking a decision on visiting a particular destination. The part-worth utilities attached to these factors are combined to an overall utility for the destination. This overall utility is an indicator for the attractiveness of the destination. In case more than one destination is a serious option for the potential visitor, differences in utility (attractiveness) strongly influence destination choice. As noted before, the weight of the factor 'accessibility' as compared to the weight for other factors grows. The factor refers to the effort by a visitor to arrive at the destination. This effort is linked to e.g. travel time, travel costs, quality of information, comfort and pleasure. Consequently, the quality of the travel service from the place of

origin to the destination is important. For instance: frequently used rules of thumb assume that the ratio of travel time by public transport and travel time by car at short distances (agglomeration level) should not exceed 1.5. At longer distances, this ratio should drop to 1.1 to 1.2. In current practice, ratios for many OD-relations are often significantly higher.

In order to find out how much weight visitors attach to accessibility, or more precisely the underlying aspects, market segments have to be distinguished. In a preliminary analysis for UCP (Van der Elst, 1998), the following criteria for segmentation were distinguished:

- travel mode (car, public transport, multi-modal)
- trip motive (business, recreation)
- intended activities at the destination (work, conference, shopping)
- zone of origin.

In total 18 market segments were distinguished. Visitors were asked in a questionnaire to evaluate different aspects of accessibility. Moreover, interviews were held among location owners to ask their opinion about the standards (minimum or maximum level to be pursued) with respects to various accessibility aspects. The images resulting from the questionnaire appeared to differ in many respects from the images resulting from the interviews with the location owners in the UCP area.

For instance, it was found that the location owners accept a higher percentage of visitors by car or by public transport being unsatisfied with respect to information provision, than the visitors do. For the location owners a maximum of (on average) 27% unsatisfied car visitors and 40% public transport visitors appeared to be acceptable. However, the visitors themselves indicate maximum (average) percentages of respectively 8% and 36%.

Another difference in perception was revealed with respect to transfer times. Again maximum levels were investigated. The location owners in the UCP area indicate a maximum transfer time for travellers by public transport of 4 minutes (in case of shopping), 5 minutes (in case of going to work) and 3 minutes (in case of going to a conference in the UCP area). The visitors themselves, however, indicated maximum acceptable transfer times of respectively 11, 9 and 10 minutes (average figures). Moreover, it was found that the current transfer times on average were lower than the maximum acceptable level for the travellers.

Finally, a third example is the difference in perception of the quality of the service level with regard to facilities at the railway stations and parking facilities. On average about 20% of the visitors was not satisfied, which indicates more people to be unsatisfied than was indicated to be acceptable by the location owners.

Overall, various gaps between the preferences of travellers with regard to accessibility and the images held by location owners were revealed. This includes information to travellers, access for car users to parking houses or to public transport services, social safety, quality of facilities at transfer nodes, and travel time by car as well as travel time by public transport from the larger Utrecht agglomeration to the UCP area. A remarkable finding was that the key players in the UCP project assume more serious gaps between the actual



accessibility quality and the preferences of the visitors, than the visitors indicate. Since these key players heavily influence decision-making, these cognitive biases put a claim on the negotiation and decision making process between location owners, public authorities and transport companies. One conclusion is that decision takers need to improve their knowledge with respect to the accessibility preferences of visitors to the UCP area.

Apart from the need for knowledge improvement with respect to preferences (and thus the nature of the problem), it appears to be very difficult in the UCP project to make a shift in the discussion from measures at the level of infrastructure and traffic management, towards service concepts. Consequently, much attention is for instance paid at the number of parking lots, road capacity extensions and traffic measures. Instead, it might be much more productive to discuss performance of transport services in terms of the combination of frequency, reliability, information level, cost and comfort. In this respect, the idea of 'multi-modal chains' or 'seamless multi-modal mobility' has become a focus point in the discussions in the past years. Research indicates that co-ordination of tariff systems, information provision and inter-organisation of services is crucial for realising this type of services to the visitors (e.g. Gobits, 1998; De Vries, 1999). Such a focus clearly implies the need for a more customer-focused attitude of the transport providers. However, it also requires an active role of location owners with regard to e.g. providing real-time information and/or organising tailor-made transport facilities (such as bus shuttles, bicycles for rent) as addition to the mass transport services. And finally, it also requires a development directed towards thinking and co-operating in a regional context (Van der Maas, 1998).

From the interviews with the location owners in the UCP area it was concluded, that gradually the awareness about the need for thinking in terms of service level agreements between the key players grows. The regional focus has to be strengthened yet, for instance by accepting some new players in the Platform UCP (regional bus companies, representatives of some larger municipalities in the region). Clearly, there exists a tension between broadening a discussion in favour of better regional commitments at the cost of a lower process speed, and limiting the number of participants in favour of quick progress. Limiting the number of participant might however generate serious resistance after decisions have been taken. To solve this tension, a good process design is necessary. With regard to UCP, the structuring of the problem from a regional systems view is essential. Consequently, the discussions and strategy development cannot be limited to only a few key players. A systems view based on seamless multi-modal transport service concepts, in combination with improved insights in customers' preferences, should be the basis for specifying performance levels for accessibility to the UCP area (see e.g. Van der Heijden & Marchau, 2001).

In the following section, some special attention will be paid to the position of the transport companies. Until now, they often appear to be rather inflexible players in the game. Although understandable, this does not match very well the need for a customer-focused flexible attitude. The question is whether they can play their role better within the present institutional context

## 4 The public transport companies

It is obvious that in the complex arena of parties who become increasingly dependent upon each other, the public transport companies play a crucial role. These companies have a long record of mass passenger transport and have important resources to negotiate with municipal authorities and location owners. In fact, the future reaction of public transport companies to the needs of the location owners for innovative access concepts is critical for the success or failure of marketing strategies for these special areas that, amongst others, compete on the bases of innovation in accessibility. A first question is whether the public transport companies are sufficiently aware of their role and their present position? A second question is whether public authorities will understand the need for flexibility to define concessions for public transport?

The present situation in the field of public transport is characterised by institutional transition and due to that business uncertainty (Veeneman, 2002). The national government is releasing its hold on public transport and regional authorities are taking over. This decentralisation leads to a wide variety of institutional changes. The public control over the sector is changing from general regulation and subsidisation to a formal commissioning of public transport services, often through formal tendering procedures. Local authorities are looking for a way to make their new role work. Moreover, public transport companies are exploring the boundaries of their new role. They seem keen within the new institutional order to develop services that fit the needs of location owners. On the other hand they need to reorganise their business to improve the cost-income ratio, leaving little room for creative development of services.

Nevertheless, the recent institutional changes seem to offer better opportunities for developing inter-modal transport services and to improve the total service quality, from the perspective of the passengers. The massive changes in the sector make it possible to introduce more flexibility into the development of services. In stead of 'trip providers', these companies might develop towards 'access providers'. Such a development would very much resemble developments in freight transport, where various transport companies have transformed themselves into logistic providers. There are several examples indicating that the old supply orientation gradually shifts towards a more customer-oriented approach. Barriers between different services have been lifted in the services of e.g. public transport companies 'NoordNet' and 'Synthus' in the Netherlands. New service providers (among which car lease-companies) have come to the market, which offer seamless use of different types of transport (public transport, taxis, and rental cars) with the introduction of the so-called 'Odyssey'-travelcard. More and more location owners (convention centres like 'Jaarbeurs', attraction parks like 'Dolfinarium' and 'Efteling') have been able to provide some form of alternative transport for their visitors. These services are specifically tailored to the needs of their customers. And other than the traditional public transport operators have come in to the market to offer these services.



Such a shift from a mass transport perspective towards a service perspective is a welcome answer to the shift in the meaning of place from 'being there' to 'being easy to reach'. Traditional and new public transport companies are willing to offer the services, and visitors are serviced better as their wishes form the basis for their development. A major question is how local and regional public authorities will steer institutional changes to strengthen this development, or that their changed position with respect to public transport will generate the desire to have a firm grip over all public transport service development.

## 5 Conclusions

This paper addressed the complexity of inter-organisational co-operation in respect to improving accessibility to special activity areas, focusing on public transport services. Location owners are increasingly aware of the problems of local access by car and fear a lower attractiveness and a decreasing market share. Therefore, they are more and more willing to take responsibility and help to realise innovative concepts for accessibility. In terms of marketing, these innovative concepts can be considered as a part of the marketing strategy of the location owners.

This involvement requires co-operation with other organisations, in particular municipalities and public transport companies. This inter-organisational co-operation however suffers from diverging interests, lack of knowledge, information imbalance, fuzziness in problem boundaries and dynamic positions and responsibilities. Some of these aspects have been illustrated by the Utrecht City Project.

It was concluded that improving the knowledge about the market segmentation of visitors to the location and their variation in preferences is important to arrive at a more operational view on accessibility and the related standards/goals for the specific area on hand. Clearly, this operational view and the goals set by the key players should take into account the potential compensation by other functional features of the area. Important is not only to focus on the local infrastructure and traffic aspects. A focus on the regional position and pursued service level for access seems more productive. It offers the possibility to combine a great number of instruments to bring accessibility at a level requested by targeted customers. Involvement of other regional parties in these discussions and the according decision making imply a recognition of the systems dynamics at the regional level and improves the support for accessibility strategies shared by public and private stakeholders.

A crucial category of actors in this complex game is the category of public transport companies. Some special attention is paid to their position. The present situation is characterised by transition and institutional uncertainty. However, it is concluded that the recent institutional changes seem to offer good opportunities for developing inter-modal transport services and to improve the total service quality, from the perspective of the passengers. In stead of 'trip providers', these companies might develop towards 'access providers'. In particular this change would imply a major step forward.

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