

## State of the Art Paper on Mobility Management in The Netherlands

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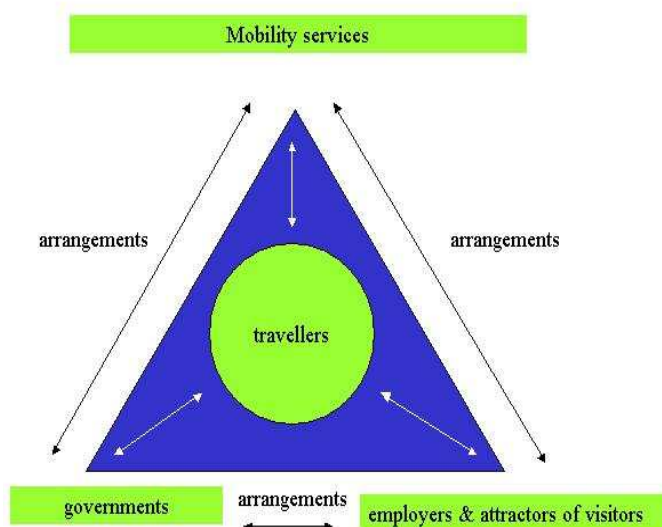
### 1 Introduction

*“Mobility management is the organisation of smart travelling.”*

In its Dutch translation -

*“Mobiliteitsmanagement is het organiseren van slim reizen”* - this slogan has been broadly adopted by MM-practitioners and policy-makers in the Netherlands.

The slogan reflects the organisational focus of MM, as well as the fact that the outcome should serve both the travellers' purposes as societal objectives. The focus is on the travellers' conditions and wishes and solutions are tailor-made. Authorities, employers, venues that attract large numbers of visitors, transport companies and mobility service providers cooperate in order to organise the conditions under which travellers can make smart choices (see figure). It is important to note that for authorities these conditions may comprise supportive policies with regard to land use, public transport, parking, cycling but also environmental licensing (see below). This paper describes the state-of-the-art of mobility management in The Netherlands, while focusing mainly on policy and organisational aspects.



### 2 Context

#### 2.1 Institutional context

The Netherlands have a 3-tier government structure (national government, 12 provinces, 443 municipalities). However since the 1990-ies seven Urban regions, each forming a conurbation, have a limited autonomy, in particular with regard to transport and land use policy. Provinces and Urban regions are responsible for transport policy and act as Public Transport Authority for regional and local public transport within their jurisdiction. Apart from the national road network, roads fall under the administration of either provinces or municipalities; Urban regions do not have direct responsibility for road administration. Some rural roads fall under the

administration of the Water Boards, which are responsible for water management within provinces.

The main outline for the current national transport policy is defined in the Mobility Policy Document (Nota Mobiliteit) that was adopted by Parliament in December 2005 and has the year 2020 as a planning horizon. It is a national traffic and transport plan under the Transport Planning Act. The Mobility Policy Document defines so-called "essential policy components" which, under the Transport Planning Act, must also be incorporated into the policies and plans developed by central government and the provincial, regional and local authorities.

Most of the funding for provincial, regional and local transport infrastructure and public transport operation comes from central government in the form of block grants. These grants are allocated to Provinces and Urban regions, which are responsible for allocating them to their own projects as well as to the municipalities within their jurisdiction.

As a consequence of decentralisation the implementation of Mobility Management policy falls under responsibility of the provinces, regions and municipalities. Central government's role is to secure institutional and legislative conditions and to promote and stimulate MM on the national level, amongst others through negotiating with the corporate sector (see below).

## **2.2 Historical context**

Although as early as the 1970-ies Dutch cities have developed and implemented sustainable urban transport policies - the city of Groningen was a pioneer with its Traffic Circulation Plan of 1977 - the development of Mobility Management on a national scale in The Netherlands finds its origins in the Second Transport Structure Plan of 1990 (SVV2). With this visionary national policy document The Netherlands positioned itself as a European front-runner with regard to transport demand management.

With a "sustainable society" as a main objective, SVV2 defined very specific and quantified - but also very ambitious - targets for environment, safety, and accessibility for fixed dates in the future (1995 and 2010). In order to meet these targets, a broad package of measures was formulated, including "push" and "pull" measures such as road pricing, improvement of public transport, promoting cycling and mobility management. The package also included a restrictive land-use policy (the so-called ABC-policy), aimed to locate activities that generate much passenger travel (e.g. offices) close to public transport hubs.

As a consequence, in the 1990-ies the government actively promoted and supported various mobility management initiatives, including the creation of transport management centres (VCC's) that were to promote corporate mobility management (workplace travel planning), and of intermediary organisations for the promotion of cycling, tele-working, car-sharing etcetera.

However during the 1990-ies it became also clear that many high ideals presented in SVV2 were far from being realized. Partly because of high rising costs for infrastructure, partly because of a lacking institutional framework, but also partly because of lacking societal support for the change of travel behaviour that SVV2

envisaged to achieve and for the restrictive “push” measures that were to be imposed. And since the effectiveness of “pull” measures was limited without the complementary “push”, it became difficult to keep mobility management on the political agenda. The problems in accomplishing the SVV2-goals led to a re-thinking of national policy, to improvements of the institutional framework (including further decentralization of responsibilities for transport policy) and, eventually, to the current approach that has been set out in the new national policy document. This re-thinking process also implicated a re-positioning of mobility management as a valuable and cost-effective instrument for accommodating mobility and securing accessibility to cities.

The preparation of the new national policy document that was to be the successor to SVV2 took a long period, including an earlier draft being voted down by Parliament because of a perceived lack of ambition and focus. This period co-incided with a period of political instability, culminating in the new draft being formulated under a cabinet with changed political colours.

### **3 The position of MM in the national and regional policy**

#### **3.1 The national Mobility Policy Document of 2005**

A main plank of current transport policy is to improve reliability of travel times on the road as well as on the rail network, so that travellers will know what time they will arrive, and transport companies can deliver on time. Central government will strive to achieve reliable and predictable journey times from door to door. The target for 2020 is that in 95% of the cases travellers will arrive at their chose destination in time.

In order to achieve this, some basic principles apply:

- Optimise the use of existing infrastructure before new building;
- Decentralise where possible; centralise where essential;
- All parties involved must make a contribution;
- “Network approach”: integrating all modes of transport and networks.

These ambitions will be realised by investing in new and existing infrastructure as well as channelling mobility growth properly. Pricing policy is one of the instruments: the government intends to introduce a time and place differentiated charge for road use in 2011 at the latest. Another important instrument is mobility management: MM contributes to a more efficient use of infrastructure, amongst others by cycling policy, traffic information, parking policy (including P+R-facilities) and travel demand management. And at least as important is, that mobility management makes it possible to realise effects in the short term at a low cost.

The success of mobility management mostly depends on the joint efforts of both public and private parties. The developments of the last 15 years have shown how difficult this might be: different actors, different interests and different expectations make it hard to implement measures that really improve the accessibility of regions.

The challenge therefore is to anchor mobility management by all parties involved. In the Mobility Policy Document this challenge has been acknowledged:

- firstly by integrating mobility management in the regional *network approach*;
- and secondly, by getting mobility management on the agenda of the corporate sector as part of a *public-private* approach.

### **3.2 Mobility Management in the network approach**

#### *Network analyses*

In 2006 central government, the provinces, the regions and the municipalities carried out together so-called regional network analyses (NWA) for 11 regions in the Netherlands. The point of departure was that no distinction was made between administration domains. The analyses had to map out for each region the spatial development, the mobility development of all modalities and the resulting challenges for the period to 2020. Every analysis had to include a package with measures to improve accessibility. The main objective was to make the decision-making more integral and less fragmented. The network analyses were meant to be the basis for collective and regional agreements between central government, the provinces, the regions and the municipalities about effective solutions and finance. Joint budget allocation was part of the agreements.

In order to secure that the chosen packages would be as cost-effective as possible and not primarily focus on expansion of infrastructure, each network analysis had to elaborate six principles:

1. spatial ambitions and plans
2. new ways of paying for mobility
3. possibilities of mobility management
4. optimisation of public transport
5. possibilities of traffic management
6. need for new infrastructure

This requirement urged all parties involved to explore explicitly all alternatives before opting for new infrastructure. By including mobility management in these principles, its position was anchored in integral decision-making and, as a consequence, it shared in the joint budget allocation per region.

But how did this work out in practice? Overlooking the results of the network analyses both the conclusions can be made that the glass is half full and the glass is half empty. Half full because every analysis pays attention to mobility management. One year before it was unthinkable that there would be nationwide attention for mobility management in The Netherlands and that mobility management would be part of decision-making. The network analyses showed large problems at specific locations or highways can easily be solved with mobility management measures. Especially the potential of mobility management for the highways was an eye-opener for many actors. Finally, the network analyses have resulted in concrete mobility management solutions in the regional agreements.

On the other hand, the network analyses made clear that still a lot of work has to be done. The network analyses were performed in a relatively short time. So it was quite difficult to analyse in-depth all relevant information. This was a problem in general. It also appeared that it is rather difficult to analyze door-to-door mobility with existing modelling.

### *Network approach*

The network analyses gave a lot of useful information. It was noted that all parties involved appreciated the integral and joint approach. This combination made it possible to make important steps in tackling regional mobility problems and related issues, like air quality for example. Therefore there will be a follow up in 2007 (and at the end maybe a structural follow up) of the network analyses: the network approach. Next to agreements about measures to be taken and topics to be analysed in depth, the regional agreements describe how per region the follow up will be organised. In 2007 the regional agreements will be updated.

The challenges for mobility management in the network approach for 2007 are threefold:

- Implementing measures of regional agreements
- Improving door-to-door analyses
- Integrating mobility management in the network approach

### **3.3 Mobility management: public-private approach**

#### *Mobility problems: a shared responsibility*

The corporate sector and institutions are expected to assume responsibility for ensuring that accessibility is maintained. The Mobility Policy Document states exactly what is expected from individual parties, authorities and the private sector. The following quote is a good example:

*“In any case, the municipalities in the municipal networks use the available instruments, such as the zoning plan, building permits or the environmental license, to make agreements with the corporate sector regarding applying mobility management. Tele-working and flexible work and office hours can also contribute to improve accessibility. The state is making efforts to ensure that business takes such initiatives. (.....) Municipalities make agreements with organizers of large events regarding measures (...) to prevent or reduce accessibility problems (.....).”*  
(Source: Mobility Policy Document: Towards reliable and predictable accessibility; Part III-Government Position, p. 122, English version)

#### *Role of central government*

The role of central government is to support such initiatives and to make them possible. At the same time it is necessary to make employers (and employees) aware of their responsibility. Making specific legislation for mobility management has never been an option, but making mobility management measures part of the Environment Management Act has been in question for longer time. However, up until last year the approach of central government was very non-committal. Consequently mobility appeared to be especially a public responsibility. With the Mobility Policy Document this has changed: by making committal agreements the shared responsibility has to be realised in practice.

Two observations are important when discussing the role of central government. First, there are different levels of the public-private approach, namely the national and regional approach. Central government mainly talks with employer organizations (for instance VNO-NCW, MKB Nederland) and rarely with employers themselves. Secondly, the public-private approach is also about providers of services and

products, for instance traffic information, web services and the possibility to hire a bike at stations (in The Netherlands known as: OV-fiets)

The Ministry of Transport has initiated some actions concerning the public-private approach, including:

1. Changing tax legislation; current tax legislation doesn't always stimulate teleworking and the use of other modes than the car by commuter. Last year some possibilities to improve this were investigated. The Ministry has implemented some improvements and is currently working on other proposals.
2. Stepping-up the discussion with the corporate sector by involving the SER (Social and Economical Council). The SER is the main advisory body to the Dutch government and the parliament on national and international social and economic policy. It represents the interests of trade unions and industry, advising the government (upon request or at its own initiative) on all major social and economic issues. In March 2006 the Minister of Transport asked the SER to give advice about mobility management. In December 2006 the SER published this advice. The SER endorsed the shared responsibility for mobility problems, confirming the importance of working together. In 2007 this will be worked out in joint actions. The industry has announced it will present concrete proposals shortly<sup>1</sup>.
3. Integrating transport in the Environmental Management Act; municipalities do not have many possibilities at the moment to force industry to make travel plans. The government has urged employers to commit themselves to making workplace travel plans. If this would not lead to satisfactory results, making workplace travel plans may become a requirement by law for companies to get an environmental license.
4. Subsidy scheme for innovation.

### *Regional initiatives*

The shared responsibility to tackle mobility problems has to be worked out in regional agreements between authorities and the private sector. First initiatives of this kind of agreements are emerging gradually in the Netherlands. One of the earliest arose in the Haaglanden urban region (the area around The Hague): in the autumn of 2002 an alliance of public and private actors, who were brought together in the so-called "Luteijn Committee" (named after its chairman), engaged to conduct a joint analysis of the problems and challenges in the region. A special element and probably an important success factor was that during this process two parallel competing problem analyses were conducted; one under the supervision of public, the other under the supervision of private actors. This resulted to converging conclusions about the problems and their urgency, to a shared set of goals and furthermore to a broadly supported program of measures that since 2003 has been managed by the so-called SWINGH task force<sup>2</sup>. Similar programs have been developed elsewhere in the country, such as the NEXUS-program in the Rotterdam region.

In particular interesting with regard to mobility management is the initiative under the SWINGH program to develop a "favourable market environment" for mobility services on a commercial basis. A broad group of employers and service providers have been involved in this process, but amongst the "leading supporters" is also the RABO-

<sup>1</sup> The report can be downloaded: [http://www.ser.nl/publicaties/default.asp?Desc=pers\\_20061215\\_1](http://www.ser.nl/publicaties/default.asp?Desc=pers_20061215_1)

<sup>2</sup> For more information: [www.swingh.nl](http://www.swingh.nl)

bank, who has been supporting various regional MM-initiatives. A pilot project is running now for tendering employee travel planning and services for a business park in the region.

The public-private approach is also reflected in the efforts of Rijkswaterstaat (RWS), the national road administration, to develop mobility management packages in order to reduce traffic problems during major maintenance and construction projects. Successful examples were the packages that were developed in collaboration with employers for the projects on the Amsterdam Ring Road A10 in 2005 and 2006. These included the issuing of a free public transport pass for employees of the affected areas, co-financed by RWS and the employers. The Treasury Department facilitated this by formulating a specific tax measure, which applies to similar cases. For the even more complex reconstruction works around the A2 motorway near Utrecht, RWS has engaged with local authorities and the companies in the affected area to develop mobility management packages and traffic measures in order to secure the accessibility of the area and the city as well.

#### **4 Implementation of MM at regional and local levels**

The re-gained momentum for mobility management is reflected in regional and local policy. Provinces, urban regions and municipalities have an important role in developing and realisation of the actual mobility management measures. In most cases the municipalities are responsible for the implementation of mobility management measures, as many mobility problems, e.g. around inner cities, in residential areas, or around business parks, have a local scale. Quite often however such problems exceed the local scale. In those cases provincial or regional governments get involved, e.g. if traffic to a large business park causes congestion on a main road, or if traffic to recreational destinations causes problems on the regional network.

Growing concerns about congestion and environmental impacts have caused local and regional authorities to become more eager to participate in regional mobility management projects. They are working on measures to get a cleaner air. Ten large cities have signed a covenant in order to introduce environmental zones with freight distribution and clean vehicles. Many mobility management projects are about hospitals and event traffic. Around schools the focus is more on safety than on mobility management, although mobility management is often a part of the approach.

In some front-running provinces, politicians are considering the necessity of mobility management in order to guarantee accessibility and liveability. They see a mission in raising awareness at the municipal level. The strategy of the province of Gelderland is to initiate and fund key projects. With the results the province wants to 'convince by showing'. KpVV and AVV have engaged with other agencies to facilitate further knowledge development and exchange (see below). Currently KPVV and AVV are developing an decision support approach to help authorities select the most adequate MM-measures.

Transport policy of local governments, certainly in small municipalities, traditionally is the domain of civil engineers. When it comes to behaviouristic themes like in mobility management, this often is a 'bridge too far'. If it comes to a certain priority, the experience with mobility management is small. Developing a mobility management scheme for hospitals or developing a park & ride facility is not the daily work, as most cities only have one or two hospitals. Therefore good access to knowledge is important.

The role of mobility management on the local level is fairly well illustrated by the results of a SWOT-analysis by representatives of local and regional authorities during a workshop that was organised by KpVV in 2006:

<b>Strengths</b>	<b>Weaknesses</b>
<ul style="list-style-type: none"> <li>- Much can be reached with a small budget</li> <li>- MM is cheaper than new infrastructure</li> <li>- MM connects transport policies with environmental and health policies</li> <li>- Reduction of space required for parking</li> <li>- Reduction of mobility expenses</li> </ul>	<ul style="list-style-type: none"> <li>- Perception that MM is not effective (fortunately this changes now)</li> <li>- It's difficult to get budget for small projects</li> <li>- MM sometimes lacks focus</li> <li>- Lack of priority at small municipalities</li> </ul>
<b>Opportunities</b>	<b>Threats</b>
<ul style="list-style-type: none"> <li>- Alternative means of transport are required because of environmental problems, increasing fuel prices, large road maintenance projects and pricing policy.</li> <li>- Obligation of mobility management (environmental law)</li> <li>- Political attention for MM</li> <li>- Many initiatives, certainly in the Randstad area</li> </ul>	<ul style="list-style-type: none"> <li>- Use of regional public transport is decreasing</li> <li>- Good mobility managers are scarce</li> <li>- Companies under 200 employees don't pay enough attention to mobility management</li> <li>- Business trips with your own car are an interesting means of earning money.</li> </ul>

Provinces and regional authorities can play an important role in getting the necessary knowledge at the right place. For this purpose, in some cases provinces have engaged to international projects. The provinces of North-Holland and Gelderland are participants of the current European OPTIMUM-2 project; the former as consortium leader. And the city of Rotterdam acted as consortium leader for the recently completed TELLUS project under the CIVITAS program.

### *Cycling policies*

Despite the increasing distances covered by the Dutch, the bicycle has retained its popularity. The bicycle is used for almost a quarter of all journeys. In fact for distances up to 7.5 km, the bicycle is the most popular means of transport. In 2005, 35% of all trips up to 7.5 km were made by bicycle. The Netherlands is the only European nation with more bicycles than people; on average, the Dutch own 1.11 bicycles per person.

As cycling is a dominant transport mode in urban travel in The Netherlands, it is mostly embedded in a separate domain within mobility policy, on the national as well as on the regional and local level. Recently the Ministry of Transport in co-operation with several organisations published a comprehensive brochure describing the state-of-the-art: "Cycling in The Netherlands", which is available at [www.fietsberaad.nl](http://www.fietsberaad.nl) > *rapporten*.

## 5 MM Knowledge Infrastructure in The Netherlands

As part of the decentralisation process the Ministry of Transport together with regional and local governments have founded the KpVV Knowledge Platform for Traffic and Transport [www.kpVV.nl], to secure access for provincial and local authorities to knowledge that is relevant for transport policy. Mobility management is a main theme for KpVV . Part of their work is running the EPOMM National Focal Point.

Besides KpVV, several agencies and organisations are involved in developing and disseminating knowledge with regard to the broad domain of mobility management:

- AVV Transport Research Centre [www.rws-avv.nl]: supports the Ministry of Transport with regard to transport policy, including MM. Being a part of Rijkswaterstaat (RWS), the national road administration, AVV also supports RWS in matters of implementation of MM;
- SenterNovem [www.senternovem.nl]: the agency of the Ministry of Economic Affairs, concerned with knowledge management with regard to innovation, energy, climate and the environment. Senternovem is in particular supporting in MM
- CROW [www.crow.nl]: national information and technology platform for infrastructure, traffic, transport and public space; specialises in making knowledge applicable in practice, in particular for road network managers;
- VM2: Association for Mobility Management [www.vm2.nl and www.slimreizen.nl]: founded originally as a coordinating organisation for the TMA's; nowadays acting with a broader scope as a mediator between the government and business and industry.

Since 2002 these organisations have joined forces in the "Knowledge Alliance for Mobility Management" in order to co-ordinate their knowledge management activities. One of the important activities is the annual National Conference on Mobility Management.

With regard to specific domains within MM, the following organisations are active in knowledge management and dissemination:

### *Cycling*

- Fietsberaad. Bicycle consultancy. Knowledge centre for local governments on bicycle policies [www.fietsberaad.nl]
- Fietsersbond. Cycling association [www.fietsersbond.nl]

### *Teleworking*

- The E-workforum [www.telewerkforum] encourages the use of teleworking in the Netherlands through three strategies:
  - 1) supporting the working at home;
  - 2) supporting off-peak travelling;
  - 3) supporting teleconferencing.

## 6 (Examples of) Best practices

### *Workplace Travel (“Corporate mobility management”)*

There is a long tradition in workplace travel in The Netherlands, with the VCC's (transport management centres) playing an important role since the 1990-ies. Today 8 regional VCC's are operating to help companies to implement mobility management. Their focus changed from 'telling companies that MM is good' and making travel plans towards a more professional way of implementing MM at sites with mobility problems. These VCC's are partially subsidised by provinces and urban regions. The largest VCC's are:

- Verkeer.Advies [[www.verkeeradvies.nl](http://www.verkeeradvies.nl)], Region of Amsterdam/North Holland
- VCC Rijnmond [[www.vccrijnmond.nl](http://www.vccrijnmond.nl)], Region of Rotterdam
- VCC Oost [[www.vccoost.nl](http://www.vccoost.nl)], Province of Gelderland.
- VenM Vervoer en Mobiliteit Advies [[www.venmadvies.nl](http://www.venmadvies.nl)], Province of Utrecht

There is still much attention for workplace travel. However it still is difficult to get cooperation at the level of business parks. Park management could provide solutions for this. Public transport to business parks still is problematic.

### *Business Park Goudse Poort, Gouda*

The business park is currently being restructured in order to become a Top 10 business site in the Netherlands. Project developers, the city of Gouda, the province of Zuid-Holland and the public transport company cooperated in order to increase the frequency of the bus line. By means of park management the companies co finance the bus line. The contribution is as high of the total ticket price for 5% of the employees. For this amount all employees receive a mobility card which allows all day free bus use.

### *Hospitals*

Almost every hospital in the Netherlands faces mobility problems. Many hospital sites start to implement mobility management in a successful way. At the Bronovo hospital in The Hague employers travelling by car have to pay for parking. The money is given to those who travel by bus or by bike.

In Apeldoorn, one of the hospital sites of the *Gelre Hospitals* had to extend. Residents objected because they were afraid of a traffic increase. The local government listened well: if the hospital shouldn't come with a mobility plan, the zoning plan wouldn't pass. This resulted in an innovative approach: specific functions where localised in neighbourhoods, which resulted in less traffic to the hospital site. Further more the visitor times were spread. This resulted in 30% less parking places and a huge reduction of costs. This required attention from the internal organisation of the hospital process: if a patient has visitors, the surgeon cannot perform an operation.

The province of Gelderland launched the portal [[www.bereikbaarziekenhuis.nl](http://www.bereikbaarziekenhuis.nl)] ('keep your hospital accessible'). The site is currently translated in English.

### *Road maintenance and mobility management in Amsterdam*

One of the more recent successful “varieties” of MM has been developed to tackle extra congestion during the current country-wide program of motorway maintenance and rehabilitation projects of RWS. As already mentioned in section 1.2, for several of these projects a public-private approach resulted to MM-packages for commuters. One of the examples is the project for the Amsterdam ring road during the summer of

2006, when parts of the motorway had to be closed because of road works. Despite the lower traffic volumes because of the holiday period, extra measures were required in order to reduce the discomfort for road users. A broad MM-package was introduced, most noteworthy of this being a mobility pass, which provided free public transit for some 30.000 commuting employees of the participating companies. Other measures were an extensive media campaign, web-cams near major orbital roads, personal travel advice, a special shuttle bus, reduced park rates at P+R sites and free use of Public Transport bikes. As a result of these measures, the share of public transport users among the participants grew from 23% to 42%. The share of car use decreased from 61% to 42%. When the road works were finished, it figured out that the market share of the railway company in commuter traffic to the business sites was grown from 14% to 16%.

### *Groningen city centre*

Groningen, host to the ECOMM 2006, is a compact city with ca. 180.000 inhabitants and has been a long-time pioneer with regard to sustainable transport.

Until 1977 the central market square was a five lane roundabout. Despite large resistance a traffic circulation plan was implemented. The city centre was divided into four sectors. Cars need to return to the inner ring road in order to get from one sector into another one. Bikes and buses can freely pass through all sectors. In the nineties the city centre needed a quality impulse. Therefore the shopping area was enlarged, the car free area was extended and a better walking circuit was created. Street parking places were removed and near the inner ring road new underground parking lots were built. A strict parking regulation has been introduced. In order to make the city accessible, a smart Park and Ride system has been developed. Groningen has a very keen and broadly supported bicycle policy, which is heavily integrated in the transport policy. Continuous attention for cycling led to a share of bicycle use of around 40%, high quality bicycle lanes, direct routes and good and cheap guarded bicycle parkings. Clean freight vehicles can use bus lanes if they combine freight deliveries to over ten shops in the city centre.

In order to change to regional modal split in favour of public transport, a regional co-operation has started. Groningen intends to reintroduce the tram in the city.

The results: a very liveable and almost car free city; increase of profits in retail.

Groningen is one of the best bicycle towns in the Netherlands.

The University Hospital wanted to move to a highway location, but under pressure of the city they remained in the city centre, where permission was given for extension.

On 4.000 employees there are only 400 parking places. Employees, who live in Groningen, have to make use of bus and bike. Commuters can make use of P+R facilities. Only specific groups like nurses working in night shifts can use parking spaces.

### *Parking in Utrecht residential areas*

Next to the Utrecht city centre the early 20<sup>th</sup> century residential areas suffered from parking problems. As parking in the city is expensive, inner city visitors liked to park free in the neighbourhoods nearby the city. The areas impoverished. An experiment was started in the late eighties in order to fill the gap between politics and residents and to incorporate environmental policies in residential areas. Cars and litter were the biggest problems. A system with parking permits was introduced, in order to get rid of cars and traffic without relations to the area itself. The parking space was used for new playing grounds, bicycle parkings and green spaces. Only one parking permit

per household was allowed. Special bicycle parking facilities have been created and can be found in many Dutch towns by now. Nowadays the neighbourhoods are very child friendly and liveable. The area is very popular and the housing prices are high.

#### *Schools and mobility management: the Dutch road safety label*

School-going children have to learn to behave safely in traffic. This is a responsibility of parents, schools, communities and provinces. Seven provinces and 625 schools work together on permanent traffic education. The Road Safety Label is a quality mark for schools giving attention to safety. An education method and a website have been developed. The method focuses on theory, behaviour and skills. Furthermore schools and municipalities take traffic measures to increase safety and to promote walking and cycling. Arrangements with the police have been made about supervision around schools. Twice a year meetings are organised for teachers and parents. When children pass the exam distinctively, may visit the mayor!

#### *Events and leisure*

Most large events take place in cities with good accessibility by public transport. Travel information and combined tickets and entrance help to reduce car use. Many cities require a mobility plan in order to get an event permit. The city of Amsterdam made a good arrangement with a large cinema. When the last film ends, there's a possibility to use the last metro service. This means there's always a possibility to use public transport. At events and leisure sites measure to reduce traffic peaks are successful. Special event programs before and after the real event help to spread the traffic.

#### *Park and Ride*

In the 1990-ies the government promoted the development of P+R facilities near railway stations and public transport stations and stops along subways and major axis. Initially the use of these sites was lagging behind, but today many sites are well used. Many cities do have P+R sites or are planning them.

Provinces and urban regions also promote and develop P+R. The Province of North-Holland developed 17 new sites in 2001. The region of Rotterdam is building 18.000 new parking spaces at P+R sites between now and 2020.

In the village of *Zuidhorn* in the province of Groningen the new development of a town hall and a police station created a chance for redevelopment of the area around the railway station in combination with a park & ride facility. Now it's possible to travel further by train to the nearby city of Groningen. The bus lines, which formerly ran through the village, now finish at the station and offer a transfer possibility. Despite a cutback in budgets for public transport, these lines can continue to operate. The use of this multifunctional transfer area is growing. Bicycle facilities are currently lacking place and trains are getting crowded. The intention is to extend the park & ride facility and to let express trains halt in Zuidhorn.

#### *Car sharing*

The Car sharing association [[www.autodate.nl](http://www.autodate.nl)] develops and promotes car sharing in the Netherlands since 1995. Nowadays car sharing is visible in all large cities, with 4 companies providing services and with Amsterdam on top. Car sharing started as a topic in cities with parking problems and public transport cities. Since a few years, the number of cars is growing again. Car sharing is also available in suburbs and in small villages.

	Number of municipalities with car sharing	Number of cars (2006)
<25.000	24	30
25.000-250.000	55	288
>250.000	4	769
Totaal	83	1087

### *Carpooling*

Figures show that active policies encourage carpooling. The Province of Fryslân (Friesland) enlarged the capacity of parking space at carpool places with 90% between 1997 and 2006. The use increased equally. Carpool places are a good marketing instrument to encourage carpooling. Campaigns have a similar effect. In the Rotterdam Region an awareness campaign helped to double the number of users, without adding new parking facilities.

### *Commercial initiatives*

Many (semi) commercial companies offer interesting services for travellers. Some examples:

- Mobility mix [[www.mobility.mix.nl](http://www.mobility.mix.nl)] mobility card for business travelling
- OV-fiets [[www.ov-fiets.nl](http://www.ov-fiets.nl)]. popular rental bike for use in combination with public transport using a very smart rental system.
- Trappers ('pedals') [[www.trappers.net](http://www.trappers.net)] Earning towels and other stuff by cycling to work
- 9292OV [[www.9292.ov](http://www.9292.ov)]. Provides travel information in public transport. Provides services to business, e.g. a planner which compares travel times in car and public transport.
- Velotaxi [[www.velotaxi](http://www.velotaxi)] funny bike taxi used for events and city promotion.

## **7. Summarising**

Mobility management has gained new momentum in Dutch transport policy because of its great potential to tackle mobility problems. However, it is crucial for the success of mobility management to make clear agreements about who will do what, when and how. These agreements must be indisputable about expectations, roles and finance. Especially managing the expectations is necessary; diverging expectations will lead to disillusionment and subsequently to the end of cooperation and agreement. As a result of the national policy, as set out in the Policy Document on Mobility of 2005, mobility management has been anchored in the planning framework and the decision process as one of the crucial elements the regional network approach. The regional and collective agreements between state, provinces, regions and municipalities are the regional frame, which gives a short-term, midterm and long-term perspective of mobility in relation to spatial and economical development. Most importantly, a financial frame as well.

At the regional and local level, attention for mobility management is growing – again; as well among policy makers as among private parties. Many initiatives have been taken in the past, but not always with success. Authorities and other parties involved have learned from the past and start to implement mobility management in a better way. More and more initiatives from private parties are emerging. Public-private arrangement will make the effects of mobility management visible on the street. Without commitment from both public and private parties, measures like travel demand management or P+R won't have effect. The challenge now is to make plans and initiatives more integral in order to create structural changes of behaviour.

### **Appendix: some relevant documents in English**

*Policy Document on Mobility*, Ministry of Transport, Public Works and Water Management, 2005,  
downloadable from  
<http://www.verkeerenwaterstaat.nl/english/130%5Fmobility%5Fpolicy%5Fdocument/>

*Cycling in the Netherlands*, Ministry of Transport, Public Works and Water Management, 2007,  
downloadable from  
[http://www.rws-avv.nl/servlet/page?\\_pageid=117&\\_dad=portal30&\\_schema=PORTAL30](http://www.rws-avv.nl/servlet/page?_pageid=117&_dad=portal30&_schema=PORTAL30)

*Where there is a will, there is an effect*, KpVV, 2006,  
downloadable from  
[http://www.kpvv.nl/templates/mercury.asp?page\\_id=1587](http://www.kpvv.nl/templates/mercury.asp?page_id=1587)