# **Cycling in the Pacific Northwest**

## **Summary**

The Netherlands is a cycling country par excellence. In no other country does cycling contribute to the total amount of traffic like it does in the Netherlands. According to estimates published by the Dutch Ministry of Transport, Public Works and Water Management in 2007, cycling accounts for 27 per cent of all trips taking place in the country on any given day. Yet Dutch cities can learn a trick or two from North American cities like Vancouver (British Columbia, Canada) and Portland (Oregon, United States), which may not boast as many cyclists, but could certainly inspire us to take interesting, less obvious steps to promote cycling, precisely because their infrastructure, public administration and culture are so different from ours. That the prominent place the bike holds in Dutch society cannot be taken for granted is obvious from the fact that certain sections of the population, like immigrants and schoolchildren, are increasingly less keen to ride bikes. Cycling safety is another reason for concern. Actions taken to promote bike usage have proven to be quite effective. Research undertaken by the Dutch Social and Cultural Planning Office (2006) indicates that municipalities boasting good cycling infrastructure and a well-developed cycling culture have a larger number of cyclists (including immigrants) than other places. So it seems that even in a traditionally cycling-mad place like the Netherlands the number of cyclists may rise further.

During my study tour of North America I came across some forty aspects which proved to be either beneficial or detrimental to bike use in that part of the world. A number of these may be conducive to our own promotion of cycling, such as cheap infrastructure solutions and the sophisticated marketing programmes used, all designed to promote cycling. Furthermore, I found it interesting to see how North American policy-makers link cycling to local, national and international political themes like climate change, air quality and traffic congestion, and to personal issues such as body weight and health. Another notable feature of North American cycling policy is the way it caters to creative professionals, who are most likely to be drawn to the 'alternative lifestyle' that is cycling in North America. Finally, I was fascinated to learn what cycling means to various North American subcultures. On the other hand, I found it quite shocking to witness the negative aspects to which car-focused societies are prone; landscape pollution, noise and bad air quality can be found all over the United States and Canada. Experts warn that free public transport will decrease the number of people who cycle rather than drive to their destinations. Furthermore, it seems that linking cycling to a certain group identity may be off-putting to newcomers or outsiders. The same appears to be true for linking cycling to a specific national identity.

I would like to recommend the following things: (1) drawing up a position paper outlining all the benefits attendant on significantly increased bike use in the Netherlands; (2) choosing a subtle approach when promoting cycling among certain sections of the population; and (3) more fully integrating various government policies on politically and socially relevant issues which would benefit from increased bike use.

## Motivation

Cycling is an inextricable part of Dutch culture. It is such a regular part of our daily lives that we hardly ever think about its many advantages, like efficient use of available space, sustainability, environment-friendliness, road safety and health benefits (Page, 2005). We more or less regard these things as nice bonuses, rather than reasons to get on our bikes in the first place.

Yet a number of developments indicate that grabbing a bike to go somewhere is no longer the self-evident course of action it once was for the Dutch. According to the National Mobility Monitor, a document published annually by the Ministry of Transport, Dutch bike usage has gone down in recent years, although the number is still within normal ranges of fluctuation. Amsterdam schoolchildren of Turkish and Moroccan descent are less likely to cycle than their native peers and previous generations (Department for Research and Statistics, 2003). Fewer primary school pupils now walk or cycle to school, and according to the Dutch Road Safety Association, the number of schools holding road user examinations has declined to 50 per cent (2007). Although the number of general traffic accidents has decreased over the past few years, the number of accidents involving cyclists has remained virtually unchanged for several years (Ministry of Transport, Public Works and Water Management, 2007). Equally strikingly, cycling has not been explicitly proposed as a possible solution to the traffic congestion problem which has been a hot topic of discussion ever since the Ministry of Transport announced that the number of traffic jams had increased by 11 per cent over the course of one year. However, on a local and regional level, cycling-related solutions are being developed (e.g. intercity cycle routes), and the government is looking into cycling as a means to beat the traffic jams – see the Randstad Urgent project, a policy document outlining how to improve mobility and curb congestion in the Netherlands' densely populated Randstad area.

Since we can no longer count on Dutch children being brought up to ride bikes as a matter of course, it is interesting to look at countries where cycling has never been a big part of life, like Canada and the United States – two countries which differ from the Netherlands in terms of culture, scenery (more geographical relief), spatial planning, town planning and road-building. Thanks to these differences, Canada and the United States have come up with solutions which may not look applicable to the Netherlands at first glance, but from which our cycling policy may stand to benefit. Both Vancouver and Portland – the two North American cities I visited – are known in their respective countries for being cycle-friendly places which are actively promoting cycling. In short, cycling is not the alien activity there which it seems to be in other parts of North America.

Armed with a number of questions (previously evaluated in the Netherlands) regarding local cycling policies, I examined Portland's and Vancouver's cycling policies and cycling-promoting programmes, and examples thereof. During the course of my trip I spoke to forty policy-makers, scientists, representatives of NGOs, consultants, politicians, artists and civilians and attended meetings and events in both cities. Furthermore, I cycled, observed cyclists and had a look at the local cycling facilities. Towards the end of my trip, I tested my findings in three presentations given before about one hundred persons interested in these matters. I returned home with a number of recommendations which have by now been evaluated by Dutch experts.

# **Findings**Why and how do the authorities promote cycling in Oregon and British Columbia?

Cycling policy tends to be mainly a local affair in both Canada and the United States. In Portland the regional government, Metro, plays a major role in spatial planning, traffic and the environment. In Vancouver Translink, the transport authority for the Greater Vancouver metropolitan area, has a big finger in the pie, playing a prominent preparatory and executive part in the field of transport. In this capacity the two organisations play an important role in the planning of cycling infrastructure, together with municipal, county or provincial and state authorities. Both Vancouver and Portland have long-term municipal plans governing bike traffic. As part of these plans, local authorities are making streets and roads more cycle-friendly. In Portland, after first equipping important thoroughfares with cycle lanes, they have now linked several roads so as to create entire cycle routes. Usually these roads are linked by streets with low traffic density, some of which may only be accessible to slow traffic. In some cases these routes have been equipped with traffic lights serving cyclists, signposts and other

and connect for bicycles. Vancouver started with local street facilities, which were easier to implement there. Reallocation of road space away from cars proved to be more of a political challenge and has been done more recently. Both cities are currently experimenting with segregated cycleways. Especially in West Portland these might prove to be a safe alternative for the East side "bike boulevards".

marks indicating the presence of cycle lanes. The robust street grid in East Portland made it relatively easy to create these "bike boulevards", whereas in West Portland more challenges arose due to the hills and absence of grid. Newer neighbourhoods, with their capricious structure and cul de sacs are also more difficult to open up

When building new districts and regenerating older neighbourhoods, Portland (and to a lesser extent Vancouver) systematically takes into account safe routes for slow traffic, making sure there is easy and safe access to places like hospitals, universities, shopping centres and public transport hubs. Additionally, the two cities have created recreational routes (with special cycling facilities) for slow traffic, some of which either follow along or replace former railway tracks. Some of these attractive, quiet and green routes are suitable for commuter cycling. The routes are scheduled for expansion, but this is a time-consuming and costly process, due to the expropriation of property and the amount of administrative hassle involved.

Due to the low budgets available for the building and maintenance of cycling facilities, policy-makers have had to come up with inventive, resourceful and effective 'low-tech/low-cost' solutions which can be built and maintainted at little expense. Portland has been especially successful at this. Bridges and tunnels may constitute an obstacle to cyclists. Thanks to the county government, which is in charge of river crossings, Portland has successfully opened bridges to cyclists. Vancouver offers a shuttle service to help cyclists cross a major tunnel, though some experts feel it is a rather limited, unsatisfactory stopgap sollution. Both Vancouver and Portland allow cyclists to take their bikes on public transport (including buses) for no additional fare.

Both Vancouver and Portland have social marketing programmes designed to stimulate bike usage. Portland boasts the effective municipal 'Smart Trips' programme, which helps interested parties pick a transport modality that suits their purposes (which may or may not be cycling) and take all the steps required to start using it. For one person this may involve getting a map detailing all the cycle routes in the area, whereas another person may be taken on a guided tour by bike. Portland has adolescents from socially and economically disadvantaged backgrounds repair second-hand bicycles in community centres; they may then use these bikes to

find a job. Both cities have many NGOs and civil servants who are convinced that people must be encouraged to ride bikes more often and that cycling requires certain technical skills. They have an eye for perceived hindrances (e.g. safety issues, transpiration caused by exercise, hairdos suffering from compulsory helmets) and are on hand to provide safety advice and practical tips regarding personal appearance (e.g. what to wear when cycling, how to keep one's hair from getting tousled, how to minimise transpiration, etc.).

Many experts regard pushing back motor traffic as a way to promote other forms of transport, like cycling. In an effort to curb motor traffic, the city of Vancouver has closed certain parts of the grid (the characteristic pattern of perpendicularly intersecting streets and roads that characterises many North American cities) to motor traffic in favour of slower traffic. Furthermore, it has made both driving and parking a car relatively expensive, compared with Portland (and other cities). The city is considering implementing a road user charging scheme and insurance premiums determined on the basis of actual car use. Since the business community opposes plans to partly or entirely close roads to motor traffic, the latter is a politically sensitive issue. It does not help either that making it happen would involve some lengthy and fairly complicated procedures. For its part, the city of Portland has stopped building new motorways. The turning point came in the 1970s, with the remarkable transformation of Harbor Drive (now Waterfront Park).

Both Vancouver and Portland are considering introducing sponsored public bikes (so-called 'community bikes'), like the ones used in Paris and Vienna. However, this would involve certain troublesome practical, financial and legal issues, like liability in the event of accidents, compulsory safety helmets and the fact that the market is quite saturated when it comes to outdoor advertising (for which sponsored bikes would be an excellent medium).

What is in favour of cycling is the fact that community interest in the environment, livability, social coherence and dependence on fossil fuel has increased significantly over the past few years. Climate change and sustainable living are hot topics, especially in Vancouver. Canada's per-capita emissions of greenhouse gases are very high. Climate change, whose effects can be seen clearly in the country, frequently makes headlines. Vancouver's local authorities are promoting cycling as a cheap alternative to car use which will also improve people's health and increase livability and density. This is all part of an ambitious plan to increase ecodensity (http://www.vancouver-ecodensity.ca).

Most people I consulted considered local infrastructure unconducive to cycling, claiming it is not sufficiently bike-friendly. Other factors playing a part in the locals' reluctance to take up cycling include flagging investments in road maintenance (notably in Portland), the car-friendly way in which towns are laid out, the lack of road safety and the locals' attachment to cars and spacious homes. The latter is related to the high premium North Americans place on convenience and comfort (more on this later).

All over North America one can witness examples of unbridled low-density suburban development (sprawl) and its effects. Portland is one of few cities in North America which has passed sprawl-restricting legislation – the 'Urban Growth Boundary'. Sprawl increases people's dependence on cars and renders public transport rather inefficient. Many civilians and politicians alike would like to see urban sprawl curtailed. A combination of higher urban density and two-wheeled transport rather than four-wheeled transport would be a step in the right direction.

Portland likes to call itself the USA's No. 1 city for cyclists and is receiving praise for its achievements. It is very interested in the economic benefits associated with cycling: tourism, the bicycle-manufacturing industry, provision of services, and attracting creative professionals so as to boost life in the city.

How does scientific research contribute to the development of cycling policy?

Both the University of British Columbia (UBC) in Vancouver and Portland State University (PSU) in Oregon offer research programmes investigating alternative means of transport, like cycling and walking. Vancouver boasts the ambitious UBC-based 'Cycling in Cities' study (<a href="http://www.cher.ubc.ca/cyclingincities">http://www.cher.ubc.ca/cyclingincities</a>). UBC's Faculty of Medicine is investigating factors influencing the likelihood of people taking up cycling as a means of urban transport. For its part, Portland's School of Urban Studies and Planning is conducting a multi-faceted study into travelling habits which also involves cycling (<a href="http://web.pdx.edu/~jdill/research.htm">http://web.pdx.edu/~jdill/research.htm</a>).

What role do NGOs and the business community play in all this?

NGOs are cycling's main advocates and supporters. They play a vital and active part in promoting cycling in both Vancouver and Portland, advocating better cycling facilities and cycling infrastructure and marketing cycling to the masses. In Vancouver, the Vancouver Area Cycling Coalition (VACC), subsidised by the

municipal authorities and Translink, teaches commuters cycling skills, while another prominent advocate of cycling, BEST (Better Environmentally Sound Transportation), is collaborating with the local authorities to raise employers' and employees' awareness of the benefits of cycling as a form of commuter traffic. For its part, Oregon has its Bike Commute Challenge (a competition revolving around the number of times employees go to work by bike), organised by the Bicycle Transportation Alliance (BTA) and sponsored by local authorities and the business community. In addition to 'official' NGOs, there are many other organisations acting in cyclists' interests. Many of these are of a temporary and activist nature, frequently lacking in formal structure. Examples of such groups and their activities include the Portland Zoobombers (who ride their minibikes down the long, steep hills in the vicinity of the Zoo) and the monthly Critical Mass Tours (involving huge crowds cycling through the city centre, thus rendering other traffic virtually impossible).

As one might expect, those sectors of the business community which have a stake in the cycling industry (like bicycle retailers and bike hire companies) play their part in promoting cycling, sponsoring cycling events (about two thousand a year of them in Portland!) and contributing financially to the professionalisation of Portland's BTA. Bicycle retailing tends to be a highly specialised business. The 'bicycle repairman next door', a common phenomenon in the Netherlands, is considerably less common in North America. Both British Columbia and Oregon have consultants who advise and support the local authorities in developing and implementing cycling policy, like the Victoria Transport Policy Institute (VTPI) in British Columbia and Alta Planning in Oregon.

Despite a few success stories, local business communities in both Vancouver and Portland fear a decrease in turnover if streets are closed to cars in favour of cyclists. The Vancouver business community appears to be slightly more optimistic than its Portland counterpart, possibly because Vancouver's Commercial Drive boasts pedestrian-only days on which shopkeepers report their largest sales of the year.

### What is local cycling culture like in British Columbia and Oregon?

Both Vancouver and Portland have quite a few subcultures and groups for whom cycling is a way of life – a way to express their identity. Some of these groups are advocacy groups; others stress the recreational and social aspects of cycling. In some cases their purpose is to create a sense of togetherness, of companions in adversity finding support with each other. On the one hand, such groups may encourage newcomers to take up cycling themselves; on the other hand they may put prospective cyclists off as they tend to be so 'different' that budding cyclists may well be scared off. Therefore, NGOs and civil servants would like to establish a more diverse, utilitarian cycling culture, to which more people would be likely to be attracted. The existing pressure groups grew out of the locals' strong sense of engagement (engaged citizenry), which is especially prevalent in Portland. In its turn, this sense of engagement is a result of the widely held belief that civilians must tackle problems themselves, raising society's and politicians' awareness of those problems in the process. Sometimes members of subcultures and pressure groups end up having successful careers in NGOs, consultancies, policymaking or politics. However, such career switches require considerable skills which members of cycling-loving subcultures do not necessarily have, such as the ability to empathise with cycling novices and a business-like attitude.

Cycling is still considered a dangerous activity in both Vancouver and Portland. Fascinatingly enough, this reputation both attracts people (who then continue to break all the rules) and puts them off. Many people regard cycling as a sport or a form of exercise rather than as a way to get from one point to another. People on racing bikes give off a serious and competitive impression, which ties in nicely with the high premium North Americans place on athletic bodies (the body cult) and achievement. Not everybody likes that kind of thing, which makes cycling an unattractive activity for some.

Cycling in North America is clearly a leftist thing, although it ties in with conservative North American values like independence, freedom and the ability to manage for oneself. However, it seems that the convenience and comfort provided by cars exert a stronger pull.

How do the Canadian and American public regard government actions to promote cycling? Studies conducted in Vancouver and Portland indicate that the public likes the idea of cycling as an alternative means of transport; they would like to cycle more. They particularly like the idea of getting some exercise this way, with all the health benefits attendant on this. Most civilians do not object to the government investing more in cycling infrastructure. However, they do not seem to take into account the fact that this would involve higher taxes and measures to curb motor traffic, which experts deem necessary to achieve better cycling infrastructure. Most civilians appreciate the authorities' attempts to promote cycling. Portland's Smart Trips team is actually quite popular. Studies conducted in Vancouver and Portland indicate that there are many more potential cyclists out there than can be found on the streets today. Sadly, there are quite a few factors conspiring to keep them off

their bikes, many of which are beyond civilians' control. In both Portland and Vancouver, a perceived lack of safety has been found to be the main reason why people do not cycle more. And for good reason – Canadian cyclists are twice as likely to get killed in a road accident as their Dutch counterparts, whereas American cyclists are a whopping six times more likely to get killed on the road. Furthermore, North American cyclists are twenty to thirty times more likely to get injured than their Dutch counterparts (Pucher and Buehler, 2006, and Pucher and Dijkstra, 2003).

Traffic offences are subject to strict legislation in North America. Cyclists who ignore stop signs are fined as heavily as motorists committing the same offence, and the fines can be astronomical. Some people consider this harsh treatment of cyclists unfair, pointing out that cyclists are more vulnerable than motorists and therefore more likely to pay a heavy price in the event of accidents. For some people these strict laws and their enforcement might be a reason not to take up cycling. Other safety precautions have been taken, as well. Portland has made cycling helmets compulsory for children under sixteen. In Vancouver all cyclists are supposed to wear helmets, although enforcement of the law is lax. Compulsory helmets are hardly a subject of discussion. Although cyclists can see their disadvantages, protection from harm appears to be the greater concern. Due to the relative vulnerability of cyclists and the North American tendency to sue for damages in the event of accidents, there is now a kind of lawyer specialised in cycling and liability: the 'cycling solicitor'.

Many politicians now pay lip service to the importance of cycling, claiming it should be a spearpoint of transport policy. However, there is some doubt as to their willingness to foot the bill for all the steps that will have to be taken to promote cycling. In addition, reduced access for cars (perceived or genuine) continues to be a hot topic in politics. Case in point: Burrard Bridge, one of Vancouver's main bridges, where a narrow slowtraffic lane used by cyclists and pedestrians alike was to be turned into a broad dedicated cycle lane. It was agreed that one car lane would be turned into a cycle lane. However, political support for these plans was later withdrawn. On the other hand, one Portland mayor candidate is explicitly seeking support from the 'cycling community', whose interests he promoted as an alderman. Due to politicians' and administrators' ambiguous attitude, it will be a while before the city's 'critical mass' of cyclists gets sufficiently numerous to force a breakthrough. Although civil servants and NGOs believe bikes account for almost 10 per cent of all transport taking place in the Portland city centre and in certain parts of Vancouver, cycling does not register in the cities as a whole, least of all in terms of commuter traffic. Bikes account for only 1.9 per cent of all commuter traffic taking place in the Greater Vancouver area. In the Greater Portland area the number is 0.8 per cent (Pucher and Buehler, 2006). However, a very recent census carried out in Portland indicates a sharp increase in bike use. Apparently bicycles now account for 3.5 per cent of all commuter traffic taking place in the city (Yardley, 2007).

## **Analysis**

This analysis will focus on several aspects either conducive to or hindering the promotion of cycling, and the extent to which they benefit or impede the acceptance of cycling. I have divided them into several categories: infrastructure, culture, safety and convenience, administrative aspects, tie-up with political themes, financial aspects, and public transport. Afterwards I will discuss the extent to which Dutch cycling policy may benefit from these aspects or be negatively affected by them. You will find the most beneficial and a few potentially harmful aspects listed below. For a complete overview, please turn to Appendix I<sup>1</sup>.

Seven aspects from which Dutch cycling policy might benefit considerably (in alphabetical order):

Accessibility/congestion. People at both sides of the political spectrum consider lack of accessibility and congestion serious problems. Cycling rather than driving a car constitutes one solution to these problems.

Attracting creative professionals. Many cities regard the presence of a 'creative class' as a prerequisite for vibrant city life. In order to attract creative professionals (who are more likely to cycle than most other North Americans), cities should market themselves as being bicycle-friendly places.

<sup>1</sup> I realise that these aspects are diverse and that they overlap. This intuitive, impressionistic approach may seem strange to people of a strong logical and scientific bent. My main sources were my conversation partners in the USA and Canada (see Appendix II) and my own personal observations in North America.

There are a number of aspects which are known to promote bike use. I either did not observe these in North America, or they are things over which potential cyclists have no control, like the weather, the lay of the land (hills, mountains) and the level of income. I have not included these aspects in the overview.

Bike-on-bus schemes (possibly no additional fare). Being able to take bikes on board public transport helps cyclists surmount natural as well as infrastructural barriers. It improves the quality of longer journeys by public transport as it enables people to get to public transport junctions and back home in a fast, pleasant and independent manner. Furthermore, it is nice to be able to take one's bike on board public transport when the weather turns nasty or in the event of other unforeseen circumstances. Although expansion of this facility (which is at present rather limited in the Netherlands) is fraught with practical problems, it is an idea worth contemplating.

Climate change/emission of greenhouse gases. If more people grab a bike rather than drive a car, fewer greenhouses gases will be emitted. This will help even countries where cycling is already quite popular, like the Netherlands, achieve their greenhouse gas targets.

*Critical mass/number of cyclists.* Experts agree that the more cyclists there are, the safer roads tend to be. This is an additional benefit to having more cyclists on the road. This approach is as politically interesting for the Netherlands as it is for other, less traditionally cycling-minded countries.

Health/fitness/a healthy body weight/livability/air quality. It turns out that many people are unaware of the health benefits attendant on cycling, or of the fact that cycling may help them lose weight and contribute to improved air quality. There should be more emphasis on the fact that there is a connection between these things – that cycling to work or to the shops has a direct, demonstrably beneficial effect on people's health and body weight. Furthermore, it should be stressed that cycling rather than driving a car clearly improves livability (in that it reduces noise) and air quality in cities and villages alike.

Low-tech/low-cost solutions. Proper cycling infrastructure does not necessarily require radical and expensive changes to roads, nor expensive traffic signals or signposts. Cheaper alternatives include the clever linking-up of cycle routes as parts of networks, closing roads to motor traffic but keeping them open to cyclists, taking steps to reduce motor traffic in certain streets, providing cyclists with ways to cross barriers such as bridges, hills and tunnels, special shuttles which carry cyclists and their bikes from one place to another (e.g. from one end of a tunnel to the other) and sharing traffic lanes.

Special attention for practical objections of a personal nature. Not everyone is an experienced, tough, seasoned and fit cyclist. Furthermore, looking presentable is a prerequisite for most jobs. It is important that budding cyclists' insecurities regarding their level of fitness or the effects cycling may have on their appearance are taken seriously and obviated.

Subcultures. Subcultures cater to the human need to belong to one group while distinguishing oneself from other groups. Subcultures use certain items, honour certain heroes, observe certain rituals and tell each other certain stories in order to create group spirit. Cycling can constitute an important part of their identity. We might want to try and target specific Dutch subcultures, tailoring the image of cycling to these groups' experience and need to distinguish themselves from other subcultures. Several widely divergent groups could be targeted, such as inner-city teens of Moroccan descent and VVD [Dutch Liberal Party] voters. (According to Fietsbalans, published by the Dutch Cyclists' Union in 2007, few people ride bikes in towns where the VVD is well represented.) However, if cycling is targeted to such subcultures, newcomers may be put off, as many subcultures are close-knit units which may not seem too inviting at first.

I will now list three aspects which may pose a threat to cycling in the Netherlands (listed alphabetically):

Free public transport. Experts agree that people need safe, high-quality public transport rather than free public transport. According to a report published by the Dutch Cyclists' Union in 2007, public transport constitutes a rival to cycling. Then there is the fact that free public transport may attract less desirable customers, such as homeless people, drug addicts and pickpockets. It is important that policymakers take the undesirable consequences of free public transport into account when formulating their policies.

Linking cycling to a specific identity (national or otherwise). Explicitly linking cycling to a specific group identity can be a risky enterprise, as such a group identity may act like a barrier which can be hard to break down for newcomers or outsiders. The same is true for linking cycling to a national identity, no matter how obvious this might seem to the cycling-mad Dutch public. In fact, such a tie-up may be counterproductive

*Prioritising easy access by car.* Dutch society would do well to learn the lesson taught by North America, i.e. that more roads will only lead to increased suburbanisation, greater use of cars, more noise, more pollution,

more congestion, deteriorating air quality and livability, and an increasingly unhealthy population. Every now and then Dutch town planners, traffic planners and politicians prioritise motor traffic without being even aware of it. In the end, cyclists and pedestrians always pay the price.

#### Recommendations

Some of the above-mentioned aspects have been incorporated into the following recommendations:

## Drawing up a position document

I would recommend drawing up a position document outlining how Dutch society would benefit from a significantly increased (and seemingly attainable) level of bike use, paying special attention to subjects like air quality, noise pollution, health, traffic congestion, road safety, greenhouse gas emissions and the economy. One might also consider targeting the document to specific local groups and communities. Such a document should contain broad arguments palatable to both ends of the political spectrum, from which interested parties might draw examples when discussing cycling in social and political debates, policy documents and other products concerning these subjects.

## Subtly promoting cycling

When targeting specific sections of the population to promote bike use over car use, opt for a subtle, untraceable, low-profile approach which caters to the target group's wish to distinguish itself from other groups. This could involve special bikes and gear (items), events (rituals), role models (heroes) and deploying media frequently used by the target group (stories). Be prepared for potentially undesirable consequences.

## Linking themes and borrowing themes from elsewhere

Both current and future government policy should explicitly link cycling to other politically and socially relevant themes which would benefit from increased bicycle use. This is especially true for the social marketing component. The more frequently people hear a message, the more likely it is to stick, because of the power of repetition.

Loek Hesemans, November 2007

Appendix I: An overview of relevant aspects

Aspects		Vancouver, BC (Canada)	Portland, OR (USA)	Potential benefits to the Netherlands	Comments
Infrastructure	Low-tech/low-cost solutions		+	++	
	Dedicated bike lanes	+	+		
	Special facilities on bridges, in tunnels and near other physical barriers (e.g.	+	++	+	
	geographical relief)				
	Scenic routes	+	+		
G. It	Prioritising easy access by car Subcultures	-	-	-	A 1
Culture	Subcultures	?	?	++	Advantages and disadvantages
	Town planners	+		+	
	Traffic planners	-	-	?	
	Researchers	+	+	+	
	High premium on comfort and convenience	-	-	-	
	Body cult	?	?	?	Advantages and disadvantages
	Ecological awareness	+		+	
	Cycling events	+	++	+	
	Liability and culture of suing	+	+	?	
	Engaged citizenry	+	++	+	
Safety and comfort	Lack of safety	-	-	-	
	Critical mass: number of cyclists	+	+	++	
	Compulsory cycling helmets	?	?	-	Advantages outweigh disadvantages
	Legislation and enforcement	?	?	?	
	Attention for practical objections of a	+	+	++	
	personal nature				
	Cycling facilities	+	+		
Administrative aspects	Grassroots approach/activism/active communities	+	++	+	
	Activists turning politicians/consultants or otherwise getting engaged in administrative aspects		+	+	
	NGOs	+	+		
	Local authorities	?	++		Municipal civil servants were on strike in Vancouver
	Region/County/State/Province		++		
	Federal government		+		
Political themes	Livability/air quality	++	+	++	
	Health/fitness/a healthy body weight	+	+	++	
	Climate change /greenhouse gas emissions	++	+	++	
	Dependence on fossil fuel	+	+	+	
	Urban density/curbing sprawl	+	2	+	
	Linking it to group identity	7	?	-	Advantages and disadvantages
	Social coherence	+	+	+	
	Socially disadvantaged groups	+	+	+	
	Easy access/traffic congestion	+	+	++	
Financial aspects  Public transport	Tourism		+		
	Attracting creative professionals		+	++	
	Companies who have a stake in the cycling industry	+	+		
	Motorists' expenses (petrol, car park tickets)	+	-		
	Shopping streets closed to cars on certain days	+			
	Cycling consultants	+	+	+	
	Free public transport		?	_	Portland fareless
Public transport	Tree public transport				square: effect unknown
	Taking bikes on public transport (possibly no additional fare)	+	+	++	square, effect unknown
	Public transport junctions with special facilities for cyclists		+		
	Public bikes	?	?	?	1
	1 dolle dikes	1 4	1 *	Ι :	J

<sup>++ =</sup> Very positive effect + = Positive effect

<sup>? =</sup> Unclear or problematic

<sup>- =</sup> Negative effect 0 = No or no clearly discernible effect

# **Appendix II: References**

Alstead, R., You never bike alone, documentary, 2007.

City of Portland, Bicycle master plan, Portland OR, 1998.

City of Vancouver, 1999 Bicycle plan: reviewing the past, planning the future, Vancouver BC, 1999.

Department for Research and Statistics, Amsterdam op de fiets!, 2003.

Domela, L. Fietsen! Photographs by Laura Domela, 2005.

Dutch Association for Road Safety (Veilig Verkeer Nederland), Op voeten en fietsen naar school, research and press release September 19, Utrecht, 2007.

Dutch Cyclists' Union (Fietsersbond), Fietsbalans, www.fietsbalans.nl, 2007.

Harms, L., Anders onderweg: de mobilitieit van allochtonen en autochtonen vergeleken, Sociaal Cultureel Planbureau (Social and Cultural Planning Office), SCP-signalement, November 2006.

Ministry of Transport, Public Works and Water Management, Cycling in the Netherlands, The Hague, 2007.

Ministry of Transport, Public Works and Water Management, National mobility monitor, The Hague, 2007.

Ozawa P.C., The Portland edge: challenges and successes in growing communities, Portland OR, 2004.

Page, M., Non-motorized transportation policy, in Button, K. J. and Hensher, D. A. (eds) Handbook of Transport Strategy, Policy and Institutions, Handbooks in Transport Volume 6, 2005.

Pucher, J. en Dijkstra, L. Promoting safe walking & cycling to improve health: lessons from The Netherlands and Germany. John Pucher and Lewis Dijkstra. American Journal of Public Health 93(9): 1509-1516, 2003.

Pucher, J. en Buehler, R., Why Canadians cycle more than Americans: a comparative analysis of bicycling trends and policies. Transport Policy 13 (2006) 265-279.

Punter, J., The Vancouver achievement: urban planning and design, Vancouver BC, 2003.

Yardley, W., In Portland cultivating a culture of two wheels, New York Times, November 5, 2007.

## **Appendix III: Persons consulted**

Bert Zinn, Ministerie van Verkeer en Waterstaat, The Hague, The Netherlands

Betty Rahman, Portland OR

Bill Stites, Portland OR

Bonnie Fenton, Vancouver Area Cycling Coalition, Vancouver BC

Chris Israel, Portland OR

Dan Bower, Portland Office of Transportation

Dan Kaempff, Metro, Portland OR

Darius Rejali, Reed College, Portland OR

Deanne Larocque, Better Environmentally Sound Transportation, Vancouver BC

Doug McArthur, Simon Fraser University, Vancouver BC

Gordon Price, Simon Fraser University, Vancouver BC

Greg Raisman, Portland Office of Transportation, Portland OR

Janet Price, Portland OR

Jennifer Dill, Portland State University, Portland OR

Jessica Roberts, Alta Planning, Portland OR

Jo Fung, City of Vancouver, Vancouver BC

John Mermin, Metro, Portland OR

John Richards, Simon Fraser University, Vancouver BC

Jonathan Maus, Bikeportland.org, Portland OR

Josef Oliveira Santos, Ministerie van Volksgezondheid, Welzijn en Sport, The Hague, The Netherlands

Karen Frost, Westside Transportation Alliance, Portland OR

Kay Teschke, University of British Columbia, Vancouver BC

Kim Foren, Portland OR

Laura Domela, Portland OR

Lenny Anderson, Swan Island Transportation Management Association, Portland OR

Lidwien Rahman, Oregon Department of Transportation, Portland OR

Linda Ginenthal, Portland Office of Transportation, Portland OR

Mark Ginsberg, Bikesafetylaw.com, Portland OR

Marni Glick, Portland Office of Transportation, Portland OR

Margaret Mahan, Better Environmentally Sound Transportation, Vancouver BC

Michelle Poyourow, Bicycle Transportation Alliance, Portland OR

Nani Waddoups, Portland OR

Pam Peck, Metro, Portland OR

Pat McGuire. Portland OR

Rex Burkholder, Metro, Portland OR

Ria Hilhorst, Gemeente Amsterdam, The Netherlands

Richard Campbell, British Columbia Cycling Coalition, Vancouver BC

Robert Ingram, Portland OR

Roger Geller, Portland Office of Transportation, Portland OR

Ron Wagner, Portland OR

Suzanne Anton, Vancouver City Council, Vancouver BC

Steve Hoyt, Portland Office of Transportation, Portland OR

Todd Littman, Victoria Transport Policy Institute, Victoria BC

Todd Boulanger, City of Vancouver WA

Todd van Hulzen, Amsterdam, The Netherlands

Tom Phipps, City of Vancouver, Vancouver BC