



Cycling a smart way of moving

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Commissioned by:
Hans van Vliet, Shimano Europe, Nunspeet, The Netherlands

Text:
I-ce, Interface for Cycling Expertise (Roelof Wittink, Jaap Rijnsburger, Danielle Wijnen, André Pettinga), Utrecht, The Netherlands
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Photo editors:
I-ce, Interface for Cycling Expertise: Danielle Wijnen

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SHIMANO
Closer to nature Closer to people



Cycling a smart way of moving

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Sustainable Mobility in an international perspective

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Shimano produced this brochure to provide you with a 'reader' with a quick update of the key elements related to cycling. The brochure was compiled in cooperation with I-CE (Interface for Cycling Expertise) in the Netherlands.

As a global producer of bicycle components for the worldwide cycling industry, Shimano took this initiative to inform specialists and other stake holders of the enormous potential that cycling can contribute to a more sustainable society.

Shimano wishes to support the development of cycling all the way from conducting a stake holders dialogue to providing experts with vision and expertise for creating a sustainable, non-motorized mobility future.



Introduction

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I-CE, Interface for Cycling Expertise provides knowledge and expertise for efficiently integrating cycling in urban planning processes and transport policy, taking into account the important roles of social, economic and ecological factors

The bicycle is a powerful vehicle for bringing about a more equitable society. Cycling makes a fundamental contribution to environmental planning, efficient traffic flows, urban quality and improved public health.

The authors of this brochure argue that in the interests of sustainable mobility there must be a worldwide endeavour to increase the share of the bicycle in the total number of transport movements.

In numerous European cities, the bicycle already accounts for 25% of all journeys. The bicycle's share in overall transport is far higher in many Asian cities, but policy for maintaining that position is limited. In Africa and Latin America, a larger share of cycling in the total transport flows will significantly improve the living conditions of the continents' populations.

If the role of the bicycle is to be optimized, the role must be integrally facilitated in urban development and transport planning. Economically, the returns on a dedicated policy on cycling are many times greater than the investments. This effect is intensified when the strategy is geared to all modes of transport. A noteworthy fact is that the combination of bicycle and public transport will lead to a reduction of motorized mobility and meet the demand for transport over distances in excess of 10 kilometres.

p2: Street situation, Bogotá, Colombia; photo: André Pettinga
middle: Smartfiets (Giant); photo: Shimano
below: Cycling in Japan; photo: Shimano





The World Mobility Forum can adopt the target of a 25% share of the bicycle in all transport movements. This will serve the interests of sustainable mobility in a way that unites the pursuit of social, economic and environmental goals. Many European and Asian cities have already reached this share and some have even doubled it. To achieve the target cycling must continue to be part of urban planning.

The target is a 25% share of all trips

In motorized countries

Roads and cities are becoming clogged up in motorized countries. In the European Union, 50% of all motorized journeys are over distances shorter than 5 kilometres, and 30% are less than two kilometres¹. This is where potential exists for replacement by cycled journeys. The bicycle gets you from door to door, makes you independent, relieves you of parking problems and is unquestionably the fastest mode of transport over short distances. In London, 67% of the population say they would cycle more frequently if the infrastructure were to be improved². The infrastructure has to meet the proper conditions. The quality of the facilities determines how much use people make of the bicycle, because research findings indicate that the climate or gradients are less important considerations.

Top: Rainwear is needed in the Netherlands or in Denmark (where the photo was taken) for only 7% of all biked journeys; photo: Danielle Wijnen.
Map: the share of the bicycle in several European cities.



In countries with low car ownership

The bicycle's share in transport movements is still very high in Asia. In Africa, people use the bicycle mainly in rural areas, while in Latin America the bicycle is particularly popular as a leisure pursuit. Distances are not the problem. Even in Lima, Peru, a city with 10 million inhabitants covering an urbanised area of 80 x 50 kilometres, journeys are mostly less than 7 kilometres³. In traditional cycling countries like

Besides walking, the bicycle is often the only practicable mode of transport (captive ridership⁶). Yet the purchase of a bicycle remains beyond the reach of one quarter of these people.

People live as close as possible to places where they are likely to find work. That is why slums are not



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the Netherlands, the bicycle occupies a high share in journeys up to 7 kilometres⁴.

In Dar es Salaam, Tanzania, journeys of 20 kilometres and more are no obstacle for people on bicycles. However, the lack of safety on the roads and fear of bicycle theft are problems⁵. The same problems occur elsewhere in Africa, in Latin America and in Asia.

Half the world's population lives in cities. The majority of people are poor to very poor, with little means of support or prospects for the future. Equally low is the transportation buying power that they need to find work, generate income at alternating work locations, get to school or go to the hospital. In their livelihood system, the poor avoid paid means of transport.



disappearing out of wealthy city centres, as in Bombay and Nairobi, despite subsidised resettlement schemes. Cycling could be the missing link in these places. Cycling is faster than walking and makes relocation to the periphery an acceptable option.

To increase the proportion of cyclists, there is a need for:

- good cycling facilities between peripheral residential areas and business districts. This is a task for governments, development banks and donors, as part of subsidised rehousing and urban development;
- a 'small credit' system accessible to the poor for the purchase of a bicycle. With a properly established system of this kind, the recurrent costs will be lower than daily expense of public transport. This is a task and also an opportunity for the business community in association with civil society organisations that are committed to improving livelihoods.

Cycling must be seen as an indispensable tool for social and economic integration for the benefit of all participants in the urban economy.

Top: Pedestrians in Ghana, photo: Anke Rouwette
Below: The bicycle as a market stall, photo: I-CE (DW)

'What is the city but the people?'

(Coriolanus, Shakespeare, 1623)

'We cannot design an urban transport system unless we know what kind of city we want.' Stated by Mr. Peñalosa, who served from 1998 to 2001 as mayor of Bogotá, the capital city of Colombia. Mr. Peñalosa introduced cycle paths ('ciclo ruta'), walkways, he created parks, built schools and libraries and within three years established an efficient rapid bus system called the TransMilenio.



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Cycling and urban quality of life



Peñalosa outlined two extremes: urban sprawl and compact cities. A traffic system that leans towards the car produces a large urban sprawl. With high-density urbanisation, journey distances can be kept short. This creates sufficient support for public transport and creates mobility for people who do not own a car.

Moreover, a compact city provides greater space for pedestrians and cyclists, on streets, squares and in parks. Journeys are more pleasant and public spaces are places where people can spend time. After all, public spaces are ideally places where all kinds of people with differing lifestyles and backgrounds can come together and exchange ideas and products. The bicycle is an excellent means of transport for getting

to know a city and its people. When you ride through an old city centre, modern suburbs, along the river or through parks, you experience not only the space and images, but notably the people.

'The way we build our cities and organize city life can be a powerful tool for constructing a more egalitarian and integrated society. Where citizens lack so much in terms of amenities and consumption, it is quicker and more effective to distribute quality of life through public goods such as parks, plazas, sidewalks, than to increase the personal incomes of the poor. In public space we meet as equals, regardless of hierarchies.'⁷



The attitude of the people of Bogotá has changed within just a few years from 'nobody can do anything about it' to 'a sense of belonging and even pride and care for the city'. Indeed, social security improved considerably, among other things because of less vandalism.

A city with a traffic system aligned not only to the car, but importantly also to non-motorized traffic and public transport, has benefits for the environment. In Bogotá, air pollution went down and fuel consumption dropped by 10.3% by reducing car usage.



There will also be less noise pollution: motorized traffic is the principal source of noise. The Dutch Ministry of Housing, Spatial Planning and the Environment commissioned the National Institute for Public Health and the Environment (RIVM) and Netherlands Organisation for Applied Scientific Research (TNO) to conduct research into noise nuisance caused by motorized traffic. The findings showed that one out of every three adult Dutch citizens (about 3.7 million

people) is seriously bothered by the noise of motorized traffic. One and a half million people are regularly unable to get to sleep because of traffic noise⁸.



p6: top: Good quality of public space in Italy; photo: I-CE (RW)

p6 top left: photo: Shimano
p6 below: Meeting friends, Bogotá, Colombia; photo: I-CE (DW)

p7 top: Willemskade, Rotterdam The Netherlands; photo: Wim Haan
p7 below: Meet as equals, Bogotá, Colombia; photo: Andrew Wheeldon





Cycling is the most effective way of staying healthy. The number of people with health problems caused by an incorrect diet or too little exercise is achieving epidemic proportions. Within the foreseeable future, obesity will be the most common cause of death. Cycling for

30 minutes a day reduces the chance of cardiovascular diseases and diabetes by 50%⁹. Cycling comes top in the fitness chart, on the road or on a home trainer - at home, at a fitness centre or in a swimming pool.

Cycling and health



Recreational cycling

Only 5% of the physical exercise of Dutch citizens consists of sport, according to figures published by the Social and Cultural Planning Office of the Netherlands (SCP) and the Netherlands Organisation for Applied Scientific Research (TNO). Walking and cycling make a more substantial contribution to the amount of physical exercise in everyday life, like cycling to school or work, and doing the shopping by bike. Getting on your bike is a way of getting more exercise, enjoying the surroundings and meeting other people and, what's more, exercise and relaxation are remedies for stress.

top: Recreational cycling; photo: Shimano
middle: The island Ameland, The Netherlands; photo Wim Haan
below: Staying and selling on the beach, Dar es Salaam, Tanzania; photo: André Pettinga



Safety and pollution

Integration of the bicycle improves traffic safety. In Germany, the number of cyclists increased by 30% between 1975 and 1998, accompanied by a 66% reduction of the number cycling fatalities. The safety gains benefit all road users. Integration of the bicycle produces a better balance of the rights of all road users. Unless action is taken, the number of traffic deaths worldwide will increase from 1.2 million in 2000 to 1.8 million in 2020. An annual investment of 0.25% of gross domestic product in traffic calming measures and facilities for cyclists and pedestrians will cut the number of road traffic fatalities by 80% over a 20-year period.¹⁰

In most urbanised areas, motor vehicles are the main cause of air pollution and noise nuisance. In the Netherlands, the number of premature deaths caused by air pollution is five times greater than the number of people killed on the roads. In Austria, Switzerland and France, the health costs caused by traffic emissions amount to 1.7% of gross domestic product¹¹.

The bicycle

Bicycles come in all shapes and sizes. Riding comfort is a question of tailoring the quality specifications for the bicycle to fit the personal characteristics of the rider in combination with the infrastructure and cycling facilities. A great deal of potential still exists for improving this kind of quality.

In towns and cities with a high bicycle share in the modal split, a considerable amount of 'bicycle related labour' is observable. Being mostly private initiatives, all suppliers of repair services, bicycle part retailers, bicycle hire and bicycle taxis are important elements of cycling. Cycling is an income generator in many ways and governments have great responsibility for sustaining it.



Cycling and parking bicycles

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Developing countries need to devote attention to a good price/quality ratio and credit system that allows people to purchase a bicycle. For an awful lot of people, a bicycle represents a big investment, but one that also has a big return. District nurses in South Africa were able to increase the number of visits per day from 8 to 17¹², women in Uganda were able to increase their income by 25% and gained two hours per day thanks to bicycles. Regrettably, the quality of cheap bicycles is usually unnecessarily low. Institute for Transportation & Development Policy (ITDP) in New York has developed a demonstration project to show that quality and a low price are not incompatible¹³.

top: photo: André Pettinga

below left: Bicycle shop, Dar es Salaam, Tanzania; photo André Pettinga
below right: Cycle drums, Rotterdam, The Netherlands; photo: Danielle Wijnen

Parking cycles

Many people are reluctant to purchase or use a bicycle because they fear it will be stolen. This makes it very important to create bicycle parking facilities in the residential environment and at destinations (like marketplaces, health centres, places of employment, public transport stops and railway stations). The absence of parking facilities is a weak link in the 'bicycle chain'.

If there is an absence of bicycle parking facilities at or near homes, local parking solutions are an alternative. An example of such a solution is the 'bicycle drum', which can hold five or six bicycles, and local bicycle sheds at places like disused homes or workshops that offer space for many more bicycles.



What is cycling worth? This is a relevant question in China, where cycling remains the principal form of mobility. If children in the Netherlands were no longer able to cycle to school, for example, the costs of operating the bus system would increase by 1 billion Euro per year¹⁴. The same applies to a city with 1 million inhabitants with a 10% share of cycling in the modal split¹⁵. And this does not take into account the implications for the economy (fuel imports), environment (emissions) and space! Protection of cycling use is of high economic significance.



A strong combination

Urban development in China is undergoing a transition from compact cities with mixed land use to a monofunctional urban sprawl. The commuting distances between home and work are often too great to cycle. The explosive growth of motorized traffic has been at the expense of cycling mobility, even though this form of transport continues to be spatially and economically functional. The sprawl translates into fragmented accessibility of new districts: a small number of roads and public transport lines to serve a large catchment area at a high cost.

In countries like Japan and the Netherlands, the answer to this problem has been found in the bicycle/train chain mobility model. Public transport stations have been equipped with cycle parks and are connected to networks of cycling routes in the catchment area. With a share of 30-50% of the cycling in initial stage of transport, the reach and commercial basis of capital-intensive mass transit can be increased enormously.

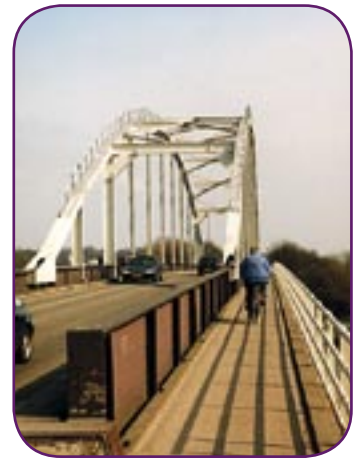


top: Parking bicycles, India; photo: Jaap Rijnsburger
below: Parking cycles next to a public transport station; photo: I-CE (RW)

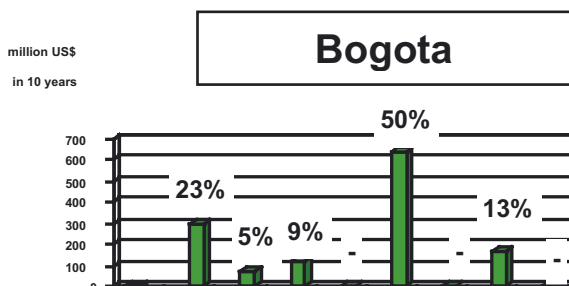
Investments in cycling produce a very high return. This is evident from studies that focus on construction and usage costs and the economic values of time, safety and environment.

The cost/benefit ratio of the implementation of the Bicycle Master Plan in Bogotá, Colombia, was 1:7,3. The costs and benefits were extrapolated over a period of 10 years.

The assumption was that daily use of the bicycle in the city would increase from 0.5% in 1999 to 5% in 2009. By 2004, the 4% milestone had already been reached.¹⁶



Economic significance



Most economic gains come from improved traffic safety. The second cost-saving is on parking space, followed by a reduction of the cost per person per journey and less environmental damage.

In the city of Morogoro in Tanzania, a study found the cost/benefit ratio to be 1:5. Only data concerning the costs of the vehicle and the time necessary to reach a destination were available for the study. Investments are necessary to retain in this city the high 20% share of the cycle and increase it to 25%. Without a cycling policy and with an increase of motorized traffic, the share of the bicycle would be halved because of increasing lack of safety, according to the research.

These calculations do not include numerous influencing factors owing to the absence of good data. For example, the average speed of rush

hour travel in cities dominated by the car is less than 10 kilometres per hour. Bangkok is missing out on one-third of its economic growth because of congestion. In Delhi, road capacity would double and journey time would be halved if separate cycle paths and bus lanes were to be built.

top right: Bridge in Utrecht, The Netherlands; photo: André Pettinga
below: On the road, Tanzania; photo: André Pettinga



Integration of cycling requires political support and a systematic approach. A vision of the significance of cycling must be combined with measures that fit into the local context. Institutionalisation is achievable through guidance, regulation, planning and design guidelines, research and data collection/dissemination and the co-ordination of activities.

The existence of cycling facilities of sufficient quality is crucially important to increasing the use made of bicycles. The Dutch design manual for cycle-friendly infrastructure, 'Sign up for the bike'¹⁷, introduced five main requirements for bikeway design. These requirements aim to offer cyclists the best possible facilities.



Quality is what matters



1 Safety
Bicycle facilities should make cycling as safe as possible.

2 Coherence
The bikeways should form a coherent network and have a consistent design.



3 Directness
The bikeways should offer direct and fast routes for cyclists.

4 Attractiveness
It should be attractive and pleasant to use the bicycle facilities.



5 Comfort
Using the bicycle facilities should be comfortable.



top left: Coherence; photo: Danielle Wijnen
top right: Safety, photo: I-CE (DW)
top middle: Directness; photo Danielle Wijnen
below left: Attractiveness, photo: Danielle Wijnen
below right: Comfort; photo: I-CE (RW)

One-third of all trips in Amsterdam takes place by bicycle. Copenhagen scores 20% and Berlin 10%. Following the example set by Amsterdam, other European cities (including capital cities) are developing bicycle plans. London intends to create 900 kilometres of strategic cycling routes. In 2003, Paris organised the European Velo-city conference called 'Reclaiming the City'. It is what people are pressing for: on June 6, 2004, no fewer than 250,000 Berliners demonstrated on the streets for greater respect for cycling.

Cycling in European capital cities

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Amsterdam, Copenhagen and Berlin stand out not only for their substantial shares of cycling in overall transport movements, but also because they have a larger number of streets with a 30 kilometres per hour speed limit. This speed allows safe road sharing. London and Paris have networks of cycling facilities, but their integration in the traffic systems leaves a lot to be desired in comparison with cities like Amsterdam and Copenhagen. Paris and London have both earmarked relatively large budgets for a catch-up operation¹⁸.



top: Berlin; photo: I-CE (RW)
left below: Paris; photo: I-CE (RW)
right below: London; photo: I-CE (RW)



Federal law requires the state departments of transportation in the USA to have a person designated as the state bicycle and pedestrian co-ordinator. The bicycling public can use the co-ordinator as contact person; this is the person who watches over bicycle and pedestrian issues and opportunities.



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Institutionalisation of cycling in the USA

This legal requirement was introduced in the 1990s and shot up the level of investment in cycling and walking in the USA by more than 2500% within six years. Walking and cycling were included in plans, funding was made available and projects became eligible. The current Transportation Equity Act includes a policy statement that bicycle and walking facilities will be incorporated into all transportation projects. To ensure funding, there are programmes for road safety, for urban development, for community issues and for high priority projects. A clearing house for information on bicycle and pedestrian issues has been established to support planning and design of measures¹⁹.

This evolution created a first critical mass of bicycle projects and bicycle infrastructure. A second move got under way with the recognition that cycling is the most practical way of defeating health problems. Minimal transportation choices contribute significantly to a sedentary lifestyle that is a primary factor in more than 250.000 deaths per year, or 25% of all chronic diseases and 10% of all deaths in the USA annually. As two-thirds of all adults are overweight and one-third obese, the focus in health programmes has turned towards environmental conditions and social circumstances²⁰.



top: photo: EU-PORTAL Photo-cd
below: Century Bike Tour
riders passing over the Brooklyn
Bridge; photo: Transportation
Alternatives™ NYC

‘Cycle paths are not a frivolity, they are an integral part of traffic and urban planning’, according to Enrique Peñalosa, former mayor of Bogotá.

Curitiba (Brazil) stands worldwide as one of the best examples of urban planning. Curitiba’s strategy focuses on putting people first and on integrated planning. This strategy was articulated by its visionary mayor Jaime Lerner and outlined in the city’s Master Plan of 1965.



Ciclovias in Latin America

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Integration of traffic management, transportation and land-use planning allowed the city to meet strategic objectives which sought to minimise downtown traffic, encourage social interaction by providing more leisure areas and pedestrian zones in the centre of the city and encourage the use of public transport and cycling in order to achieve an environmentally healthy city²¹.



Peñalosa has produced a similar vision for Bogotá and the city now ranks as the premier international example of integral urban and traffic planning.

The Bus Rapid Transit system, called TransMilenio, was a success in combination with other traffic measures like reduction of car usage, good cycling facilities and space for pedestrians. Since 1998, more than 300 kilometres of cycle paths have been created in Bogotá. This has seen use of the bicycle grow in just a few years from 0.3% to 4.4%. The number of robberies decreased, resulting in greater safety in public places.



Bogotá introduced the Ciclovía - recreational cycling on Sunday – as far back as 1974. Every Sunday morning, 120 kilometres of roads are closed to motorized traffic so that they can be used by cyclists, skaters and walkers. The Ciclovía has been copied throughout Latin America. The Ciclovía is a way for people to ride safely and freely through their streets while they exercise and have fun.

top and below: Increased use of the bicycle in Bogotá, Colombia;
photo: I-CE (RW)
right: photo: I-CE (DW)



Africa has two reasons for putting cycling on the political agenda. The first is the fight against poverty²², the second is urban renewal. Major cities like Cape Town, Dakar, Accra and Dar es Salaam have drawn inspiration²³ from the example set by Bogotá with a Bus Rapid Transit system in combination with a high quality network of cycling routes²⁴.



Accessibility and human dignity in Africa

In Cape Town, the city and the province have set two goals for transport policy: improved accessibility and dignified public spaces. The apartheid system exacerbated the problem of the large distances between the residential areas and places of work (and possible places of work). The human environment in the townships leaves a lot to be desired. Cape Town wants to give the population access to amenities close to home and close to the city. The residential areas must be made more attractive for economic activities. The residential environment must be dignified and must create scope for social activities and for developing a cultural identity. The transport system needs to be reliable and safe. The bicycle plays a central role in these plans.

In Dar es Salaam, Tanzania, the mayor, inspired by Bogotá, introduced a combined non-motorized traffic (NMT) and Bus Rapid Transit (BRT) system. This addresses the problem of the congested access to the city and its economic functions. I-CE has identified the integration aspects of NMT and BRT. They occur mainly in the complementary of cycles and BRT as modes of

transport for different purchasing power classes. With a re-profiling of the BRT route, it will also be possible to create high quality axes and crossings in the cycle route network. At the BRT stations, the cycle and pedestrian crossings can be created at the same time. For this integral design, Dar es Salaam has also drawn inspiration from the high-capacity bus system that exists in Delhi, India.

top left: Dar es Salaam, Tanzania; photo: André Pettinga
 top right: photo I-CE
 below: photo: Association for Advancing Low Cost Mobility (AALOCOM) Dar es Salaam, Tanzania



China and India are the countries where there is the most cycling and also where most cycles are manufactured. Yet investments in infrastructure largely ignore cyclists and pedestrians. Cyclists are banned from main roads in many cities. Constructing roads only for motorized traffic disregards the socio-economic reality that between 80 and 90% of all people walk, cycle or rely on public transport. A study conducted in Delhi revealed that this policy does not even promote the flow of motorized traffic.



Optimizing traffic system in Asia

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The study noted that the expansion of roads is nearing breaking point. Therefore, the existing space must be used optimally. This requires separate facilities for pedestrians, cyclists and buses. These will be better able to handle bus and bicycle transport and produce 88% more capacity for movements by bus and 20-70% more movements by bicycle.

top and middle: In the absence of cycle paths and bus lanes, the larger part of the roadway is used for embarking and disembarking bus passengers and passing cyclists; photo: Transportation Research and Injury Prevention Programme (TRIPP), India
below: photo I-CE (RW)

It will also result in a 48% reduction in time costs due to 50% improvement in bus speeds, 30% improvement in the speeds of cars and two wheelers and 80% improvement over the present level of delays on a junction (where a flyover would cost 25 times more).

Additionally, the costs incurred through a lack of road safety will decrease

by 46% and street side selling and other services for road users can be better regulated. The conclusion is 'A well functioning road infrastructure must fulfil the requirements of all road users. If the infrastructure design does not meet these requirements all modes of transport will operate in sub-optimal conditions'.²⁵



ICLEI is an international association of local governments and national and regional local government organizations. ICLEI has more than 470 members that have made a commitment to sustainable development.



ICLEI operates with their members and other local governments through international performance-based, results-oriented campaigns and programs. Their campaigns and programs address local sustainability issues while protecting global common goods (such as air quality, climate, water), and link local action to internationally agreed goals and targets.

ICLEI, Local Governments for Sustainability

ICLEI helps local governments generate political awareness of key issues; establish plans of action towards defined, concrete, measurable targets; work towards meeting these targets through the implementation of projects; and evaluate local and cumulative progress toward sustainable development.

ICLEI provides information, delivers training, organizes conferences, facilitates networking and city-to-city exchanges, carries out research and pilot projects, and offers technical services and consultancy. Their basic premise is that locally designed initiatives can provide an effective and cost-efficient way to achieve local, national, and global sustainability objectives.



ICLEI's World Congress "Out of Africa: Local Solutions for Global Challenges" will be held February 27 - March 3, 2006 in Cape Town, South Africa.

Shimano is supporting a new ICLEI award initiative, the global Cities Enjoy Bicycles Awards for "outstanding local government initiatives that can show tangible results." The first two awards will be granted to a local government in the Africa and European region and the winners will be recognized at the 2006 ICLEI World Congress. Up to six finalists from around the globe will receive Certificates of Recognition. Other world regions will follow in 2009 and 2012.

"This project will encourage the creation of bicycle-friendly cities worldwide on a longer term," said Harald Troost, Shimano Europe's PR manager.

below: City of Portland's Local Action Plan on Global Warming in 2002, photo: City of Portland, ICLEI Member,

The transport system in the Netherlands is renowned worldwide. Not in the least for

the high proportion of bicycle transport (almost 30% share of all journeys) and the deep-rooted cycling culture in society. Authorities and agencies are setting an international standard when practising a cycling-inclusive approach to planning transport and managing traffic. Developing and developed countries alike consider the Netherlands a role model for modernization and sustainable development, in which the enormous demand for transport among the urban populations can be mitigated without ever increasing congestion and pollution.



I-CE, Interface for Cycling Expertise

Cycling inclusive planning amounts to a promise of urban and economic quality with controlled use of public space and investments. And there is the prospect of reducing the greenhouse emissions, accidents and health impacts caused by motorized transport.

With the statement that 'The Netherlands is not cycling paradise, but a cycling laboratory', I-CE, Interface for Cycling Expertise was founded in 1996 to be an interface between the international demand for cycling expertise and the cycling practice rooted in Dutch society. As an interface, I-CE provides assistance in two ways between demand and supply: by developing good practice and enabling access to source knowledge.

I-CE has become an expertise centre that supports capacity building for the planning and design of cycling-inclusive facilities in an urban policy and development context. I-CE delivers expertise to governments, expert institutions and lobby groups. An extensive network of experts in the Netherlands and abroad supports I-CE. I-CE initiates and participates in collaborative ventures such as Velo.Info, SUSTRAN networks in Africa and Latin America and Clean Air Initiatives for Asian Cities.

In providing assistance to developing countries, I-CE has created targeted programs for civil society organizations (LOCOMOTIVES) and cities (Bicycle Partnership Program). For the European and international market, I-CE provides:

- technical assistance for policy formulation, planning, engineering and design
- interactive training of cycling-inclusive capabilities
- research into international cycling issues
- cycling-related documentation and its dissemination.

middle: Roelof Wittink, executive director: photo: Enrique Peñalosa
below: Workshop André Pettinga, Xi'an, China; photo: Gladys Frame



For the empowerment of low-cost mobility initiatives in developing countries, I-CE, Interface for Cycling Expertise created LOCOMOTIVES, the Low Cost Mobility Initiatives Support Program. From 2003 through 2006, Dutch Development Cooperation (DGIS) is supporting LOCOMOTIVES as a international civil society development program.



Eleven civil society organizations in nine countries in Africa, Asia and Latin America have developed skills to interact with urban development processes. They are facilitating low-cost mobility in the capitals and other major cities. The countries and cities in which the LOCOMOTIVES CSOs have built constituency for cycling-inclusive planning and facilitated concrete interventions are Brazil (Florianopolis), Colombia (Bogotá, Bucaramanga), Ghana (Accra), India (Delhi, Pune), Kenya (Nairobi, Kitale), South Africa (Cape Town), Sri Lanka (Kurunegale, Galle), Tanzania (Dar es Salaam) and Uganda (Jinja, Iganga). In the capacity-building process, the CSO partners involved governments, universities, urban stake holders, beneficiary groups and local experts.

LOCOMOTIVES partners intervene in the city processes through their own specific and local activities. The program also identified and elaborated cross-cutting issues, which will be published by the end of 2006:

- Cycling advocacy and campaigns
- Integrating Non-Motorized Transport (NMT) in Bus Rapid Transit (BRT) systems
- Strategic Cycling Planning
- Cycling data collection
- Ridership issues: bicycle affordability; cycling to school



The LOCOMOTIVES program has developed into an international civil society organizations partnership for cycling-inclusive cities, which will continue to develop as part of I-CE's Bicycle Partnership Program.



middle: photo: André Pettinga
below: Delhi, CSO exchange during GM LocoMotives 2006; photo: I-CE (JR)

The international reputation of the cycling-inclusive planning of transport and management of traffic in the Netherlands is similar to the fame the country enjoys in water management. Whereas water management is regarded as a core competence, cycling is still missing on the international policy agenda of the Netherlands. I-CE wants to change this situation through the Bicycle Partnership Program (BPP).



Bicycle Partnership Program (BPP)

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The Bicycle Partnership Program aims to support 50 cities in Africa, Latin America and Asia in achievement of their development goals on poverty reduction, environment and sustainability through cycling-inclusive city planning and transport management. To this end BPP mobilizes in Dutch society the required knowledge, personnel assistance and financial aid. Leaders act as cycling ambassadors who put international political weight behind the local ambitions.

BPP is concluding arrangements with cities with a cycling-inclusive ambition so as to give them access to international facilities for cycling-inclusive planning and design of infrastructure and facilities. Preconditions are a supportive development policy up to 2010, the involvement of cyclists and beneficiaries and a commitment regarding the local share in the financing of the process.



The BPP cities are acting as pilots in regional networks, which means the experience gained with cycling-inclusivity will benefit other cities. For this there is cooperation with regional networks, such as the Clean Air Initiative for Asian Cities (CAI-Asia). BPP supports the establishment of sustainable

transportation networks like SUSTAN-Africa and SUSTAN-LAC (Latin America). BPP hosts LOCOMOTIVES, the international network of civil society organizations for low-cost mobility.

In BPP I-CE also interacts with national ventures, such as:

- Bicicleta Brasil, the national cycling strategy of the Ministry of Cities in Brazil
- FIFA 2010 South Africa, cycling-inclusive planning on the road to hosting the soccer world championship
- Indian LOCOMOTIVES, India's CSO network for integral urban transport policymaking.

I-CE is concluding arrangements for the provision of support from the Netherlands by:

- deployment of cycling experts from municipalities and consultancies
- internationalization of Dutch standards and manuals
- international university cooperation for cycling-inclusive research and education
- fundraising for low cost mobility organisations and cycling projects
- transfer of bicycle parts and assembly technology

top: Delhi, cycling density; photo: I-CE (JR)
top left: photo: André Pettinga

Mission statement

The European Cyclists' Federation (ECF) is pledged to ensure that bicycle use achieves its fullest potential so as to bring about sustainable mobility and public well-being. To achieve these aims, the ECF seeks to change attitudes, policies and budget allocations at the European level.

The ECF will stimulate and organise the exchange of information and expertise on bicycle related transport policies and strategies as well as the work of cyclists movement.

European Cyclists' Federation (ECF)

Aims and Objectives of ECF

- To promote and encourage cycling in the countries of Europe as an economic, efficient, healthy and environmentally friendly means of transport and recreation. The ECF shall act as a federation of member groups throughout Europe.
- To raise the status of cycling and to promote recognition of the benefits of cycling for both individuals and society as a whole.
- To encourage consideration of cyclists' needs in Europe in all aspects of transport planning and management, environment, safety and health, and promote cycle-friendly conditions throughout Europe.
- To support member groups on matters of national and international importance relating to the aims of the ECF.
- To undertake research on matters relating to cycling, transportation, environment and safety.
- To enhance the information and advice available to member groups and thus assist in their activities nationally and internationally.
- To promote the exchange of information and expertise between member organisations.
- To make available services of member organisations to individual members of member organisations in other countries.
- To hold conferences on a regular basis in Europe in order to discuss matters relating to cycling, transport, environment and safety.
- To provide information and expertise in order to raise the awareness of specific groups: international bodies and institutions, politicians, planners, manufacturers/trade groups, bicycle holiday agents/tourism authorities, environmental and transport groups with regard to cycling and its benefits and needs.



photo: Anieta van der Kolk

Velo Mondial's mission is to bring about an enhanced quality of life worldwide by creating 'dignified human space for cycling and walking in urban areas'.

Working strategically on a wide variety of programs with organisations representing consumers, experts, governments and industry, Velo Mondial seeks to bring these four platforms together wherever possible, and to work especially with local, regional and national governments.



Velo Mondial

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Velo Mondial works globally on issues that can be achieved readily at local level, and gives direction to decision-makers. In this way the status of the cycling can be raised and the benefits that it brings can be fully realized.

Velo Mondial –Winner of the third prize in the prestigious Energy Globe 2005 Category Air - was founded in Amsterdam after the second World Cycling Conference. Their Global 'Master Plan for Cycling' focuses on setting up focal points of 'Movers for Mobility' everywhere, and to increasing the number of bicycle-friendly communities worldwide.

Cities are invited to sign the Charter for Bicycle Friendly Communities, and after having benchmarked their

status, they will be awarded bronze, silver, gold or platinum awards for their bicycle-friendliness. Many mayors have already signed and include amongst others: Berlin, Bursa, Cape Town, Chandigarh, Copenhagen, Dar es Salaam, Dublin, Islamabad, Katmandu, Washington, Miami Beach. Try this city benchmarking test at www.velo.info, the data base for cycling expertise run by Velo Mondial that specifically provides both professionals and elected representatives with the best tools to improve the environment for cycling.



Vélo Mondial



Velo Mondial runs the 2006 World Cycling Conference in Cape Town and organizes seminars, trainings, innovative cycle infrastructure, benchmarking projects, international cooperation and R&D of novel ideas.

top: Walking and cycling in Tanzania; photo: André Pettinga
below: Car Free Day, Cape Town; photo: I-CE (RW)



Federal Ministry
of Transport, Building
and Urban Affairs



Velo-city 2007 Velo.Info

From 12-15 June 2007 Munich hosts representing Germany the Velo-city Conference.

With its theme 'From Vision to Reality' delegates from all over the world will be invited to the Gasteig, the culture, training and meeting centre.

Concurrently, Munich is faced with the same challenges and opportunities that face other metropolises worldwide. There for, Munich would like to continue strengthening the advantages of bicycle transport and significantly increase the cycling share of transport in its city.

Velo-city should make an important contribution to this and create an international communication platform for decision makers in the economic, political and administrative arena for the successful promotion of bicycle transport in daily and leisure travel.

Participants of the Velo-city Conference 2007 will be offered a great programme with plenary sessions, workshops, poster sessions, exhibition, bicycle fair, Street Life Festival etc.

Velo.Info is a web-based centre and the most comprehensive European source of information on planning for cycling, containing high-quality expert knowledge.

The high-level objective of Velo.Info is to bring all international stakeholders together to create greater synergy effects of expert knowledge. Velo.Info will provide an opportunity for cities to improve their support for bicycle planning in order to achieve the benefits that cycling offers.

The website provides information about the following subjects: Accessibility & Mobility, Young people, Economics, Transport, Environment, Health, Promotion, Planning, Safety, Education and Training, Urban efficiency, Leisure and Tourism.

The website includes a benchmarking tool that allows a city to compare itself with almost 40 European cities.

The Executive Board of Velo.Info is provided by Velo Mondial. The other partners that developed Velo.Info make up the Supervisory Board. The European Commission financially supported the development of Velo.Info.

Websites for more information:

Shimano: www.shimano-europe.com/cycling

I-ce, Interface for Cycling Expertise: www.i-ce.info

European Cyclists' Federation (ECF) : www.ecf.com

ICLEI, Local Governments for Sustainability: www.iclei.org

Velo-Info: www.velo.info

Velo-City 2007 Munich: www.velo-city2007.com

Velo Mondial: www.velomondial.net

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SHIMANO

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