

The Brazilian Scenario for Bicycle Mobility is Changing



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▪ Abstract

Seven years ago the authors, commissioned by the Ministry of Transport, applied a questionnaire to municipalities where it was estimated that Brazil accounted for 350 kilometers (km) of infrastructure for bicycle use. In 2005, a study by the Ministry of Cities found this number had risen to 2.500 km.

Funding for projects and infrastructure for bicycle mobility has been provided for more than 60 Brazilian cities (around 3 million USD) since the Ministry of Cities (MC), through its National Secretary of Transport and Urban Mobility (SeMOB), launched the Brazilian Bicycle Mobility Program, BICICLETA BRASIL, in 2004.

Although the raise can be attributed to the BICICLETA BRASIL program funding and incentive, it is interesting to consider more municipalities were included in the second research and there is a country momentum, where the Civil Society has been demanding a participatory process about the Land Use Planning for the last decade and there was an important asking for Bicycle Mobility Infrastructure at the Conference of Cities, in 2003.

BICICLETA BRASIL program started training courses for municipal technicians. In August 2006, technicians from more than thirty Brazilian cities participated in the International Workshop on Planning and Designing of Bikeway Systems in Guarulhos, São Paulo. The training had the partnership of World Bank, Interface for Cycling Expertise (I-ce) LOCOMOTIVES program, Institute for Transportation and Development Policy (ITDP), GTZ Sustainable Urban Transport project (SUTP) and International Bicycle Consultancy (IBC) MOVILIZATION program.

Apart from offering more training, further activities include the Best Practices and the Cycling Planning Manual publications, and the creation of a Technical Department inside (SeMOB) to advise municipal technicians.

The authors have been actively participating in the process as technical and advocacy expertise for the MC and for municipalities.

▪ Introduction

With a population of more than 180 million inhabitants, Brazil has around 60 million bicycles and 34 million cars. But it has been a common sense among expertise, manifested in several meetings, that the number of bicycles in Brazil is higher than the estimated number above - because of the immense informal manufacturing (ABRACICLO, 2007; ANFAVEA, 2005). Although bicycle ownership does not mean bicycle use, it is easy to presume this private vehicle becomes the only alternative to low-income populations. According to INAE (2004), less than 40% of Brazilian families have access to a car. And as in India and China, the motorized vehicle ownership is at a big rise in the country - also the motorcycles market, this is in a booming in the recent years. The public transport sector is agonizing – losing their clients to the car and to the motorcycle and to informal public transport sector. In some cities of the country, the informal was encompassed by the formal, as the municipality was not able to deal with the big and complicated problem. According to the last *Census* of IBGE *Instituto Brasileiro de Geografia e Estatística* (The Brazilian Institute of Geography and Statistics www.ibge.gov.br), from the 46,3 million of Brazilian families, 43% rely on less than 1 minimum salary (144 Euro) per month. Considering the families relying in up to 2 minimum salaries, this number rises to 66,6% of our population (IBGE, 2000). Although the difference between South and North of Brazil are enormous (Southern/east showing a better standard of living) these numbers provide an overview of the scenario. With such an income, most Brazilians need to walk and cycle to achieve their daily accessibility needs, and some can afford to use the public transport. There is no national data about the number of bicycle users in the country; but bicyclists can be frequently seen in every small village and in the surroundings of the big and medium sized cities. The few data available reveal the main reason for using the bicycle as means of transportation is saving money. So, despite the lack of data, it can be claimed that a good part of the family members' cited above, use the bicycle for daily trips. The present paper gives an overview of most recent changes in the Brazilian scenario towards a better environment for cycling.

▪ An overview of the cycling policy arena in Brazil

The Government sector

• *GEIPOT, the beginning*

Thirty-three years ago the Ministry of Transportation (MT) started studying bicycle planning. In 1976, the *Empresa Brasileira de Planejamento de Transportes* (Brazilian Urban Planning Enterprise) most frequently known as GEIPOT, from the Ministry of Transportation, publicized the document *Planejamento Ciclovitário: Uma Política para as Bicicletas* (cycling systems planning: a policy for the bicycles), basically a cycling Infrastructure manual. This document was distributed to cities all over the country in the subsequent years of its publication. It was times of car industry booming and federal

centralization of power and resources – it was the militar federal government times (1964-1984). Few km of Cycle ways were built in the cities. In 1984 the manual was reprinted. GEIPOT was created in 1967 as a practitioners group to develop a series of studies in transport (as the counterpart of an international agreement) – at that time GEIPOT was an Inter-ministries group, the *Grupo Executivo para a Integração das Políticas de Transporte* (Executive group for the Integration of transport policies). Brazilian and international expertise should deliver a vast diagnosis of all the vial system of the country. It was also in the contract that a Brazilian technical staff would be created and trained in methodologies of transport planning, with emphasis on Master plan for cities, along with studies of economical and engineering viability. When this project finished, Brazil had formed a qualified expertise group that could attend municipalities and train their staff all over the country. In 1973, the Ministry of Transport creates the Brazilian enterprise of urban planning – *Empresa Brasileira dos Transportes Urbanos* - EBTU, together with the national funding for urban transport, *Fundo Nacional de Transportes Urbanos* - FNTU. For the first time in the history of transport in Brazil, the urban transport was recognized as a sub-system of the national transport system and the country set up a national policy for urban transport planning (GEIPOT, 2001). So, in 1974 GEIPOT was transformed in the Brazilian Urban Planning Enterprise, but kept the name GEIPOT. While GEIPOT was carrying out planning, researching and conceptual projects, EBTU used to hire executive projects, transferring money to municipalities, and to state and municipal transport entities. In 1986 all researching and planning staff from GEIPOT was compulsory transferred to EBTU, or induced to a “voluntary” quitting (MIRANDA, 2007).

Some achievements from this period were: (i) the federal guidance in urban transport, (ii) the dissemination of a transport planning culture, (iii) the implementation of several municipal transport managing/planning agencies, and (iv) the draw up of a team of good quality public technicians and public managers with experience in mobility planning (M.CIDADEDES, 2006e). In 1990, EBTU was extinct and the MT did not count on bicycle expertise technicians anymore. During the end of the eighties and the nineties, all the efforts of the federal government were to municipalize all the sectors, transferring the responsibilities and costs of health, urban traffic and transport (among other) sectors to the municipalities. But the transition was a process of quickly imposed responsibilities, but of a sluggish transferring of federal and state funds to the municipalities. Without proper training and adequate number of technical staff, the municipalities’ planning area was the one to suffer more. And in the federal level, no further programs, projects or publications by the MT were developed in the area of cycling mobility (MIRANDA, 2007).

It was only in 1999 that GEIPOT hired Architect Antonio Carlos de Mattos Miranda and Engineer José Carlos Aziz Ary, former GEIPOT/EBTU cycling systems’ planning expertise, to develop two projects: (i) to renew the Brazilian Manual on Cycling Infra-structure and, (ii) to make a study to identify the scenario regarding bicycle use and bicycle facilities available in Brazilian cities. The researching covered 61 municipalities. Among them, the most important capitals and the ones already famous for having some infrastructure. Technical staff from the cities provided the information. The results showed that in 1999 there were around 450 km of cycle ways/facilities in the country. Leading cities were Rio

de Janeiro and Curitiba with around 100km each. Most cities presented none or very few kilometres of infrastructure for cycling. The study also showed that data on bicycle usage is not a common item controlled by municipalities. Most cities do not collect data on this modal and also do not treat accident data regarding cyclists; the few cities that collected the data just collect them and do nothing with this information. Many cities do not separate pedestrian and cyclists' accidents data. GEIPOT delivered the printings of the diagnosis and the manual just before its extinction also in December 2001 (MIRANDA, 2007).

- *The role of the Ministry of Cities' SeMob*

In January 2003, the Ministry of Cities (MC) (www.cidades.gov.br), a novelty created simultaneously with the government of President Luiz Inácio Lula da Silva (labors party PT, 2003-2006), mark the return of the intervention of the federal government on cities' urban mobility policy/planning - through SeMob - *Secretaria Nacional de Transporte e Mobilidade Urbana* (National Secretary of Transport and Urban Mobility).

When the Ministry of Cities was created in 2003, the national traffic department DENATRAN was transferred from the Ministry of Justice to the MC. Since the Ministry of Cities/SeMob's policies are devoted to promote an improved urban environment for people (and not for cars), with better public transport, and more walking and cycling, we count on the empowerment of the MC to reduce DENATRAN's "motorized tendencies". In fact, changes for better occurred in the traffic area in recent years. The *Código de Trânsito Brasileiro – CTB* (National Traffic code law in ruling since January 1998), represents a step forward in many aspects when compared to the previous CNT – *Código Nacional de Trânsito*. This new law (CTB) brought to the municipality the responsibility of ruling and operating the traffic of the cities (formerly ruled by the state). This is a positive aspect reducing bureaucracy and providing more efficiency for changes and adaptations to the growing traffic.

- *CTB, the traffic code law - and the Bicycle*

CTB gave an upper status for the bicycle in the public way. In the article 58 it is claimed: "when cycle ways or cycle lanes are not available, the bicycle should ride on the right side of the public way, with preference over the motorized vehicles".

Although driver's behavior has not changed much, the law is there to be applied! Important to mention, the Brazilian law states that the main funding for traffic educational programs are provided by 5% of the traffic fines (that goes to big fund called FUNSET - *Fundo Nacional de Segurança e Educação de Trânsito* <http://www.denatran.gov.br/funset.htm>) and 5% of the DPVAT (seguro obrigatório de *Danos Pessoais causados por Veículos Automotores de vias Terrestres* – mandatory insurance for motorized vehicles' traffic injuries <http://www.dpvatseguro.com.br/>). Municipalities and the federal government have shown poor transparency on the application of these resources. Traffic education has not been addressed properly in schools and most school areas do not show the minimum infrastructure of traffic engineering to provide safety for scholars.

- *The participatory Master Plan process*

The Ministry of Cities is leading the Master plan process of the cities. Workshops, Courses and Seminars were developed to enlighten the MC's policy regarding the urban land: The Federal Law n. 10.257 of 2001, called *Estatuto da Cidade* (statute of the city) changed the chapters 181 and 182 of the Brazilian Constitution and gave a total new approach for the land use planning of the cities - considering the social function of the urban land and that the city must be an improved urban environment for people (and not for cars), with pleasant public spaces and parks, with better and accessible public transport, more walking and cycling facilities considering the universal design. The *Estatuto da Cidade* states that all the cities with more than 20.000 inhabitants must develop a Master Plan. Also, for cities with more than 500 thousand inhabitants, a Mobility Master Plan is mandatory, both according to a participatory process involving the community and the organized civil society. The municipalities will only receive funding from the Ministry of the Cities if they fulfill these requirements. Many cities already finished their Master Plan, others are still in the process.

- *National Urban Mobility Policy Charter*



The Ministry of the Cities has also generated a new National Urban Mobility Policy Charter, the *anteprojeto de lei da Política Nacional de Mobilidade Urbana Sustentável*, which was approved in the general meeting of the Council of the Cities (M CIDADES, 2006a). The *Estatuto da Cidade* already says that cycling, walking and public transport must be valorized, but in this law the Ministry of Cities has presented, it is also said that the car use must be restricted, as the aim of the national policy is to promote social inclusion, environmental sustainability, and to assure the participatory management and democratization of the public space.

- *Cycling facilities asked by Conference of Cities' delegates*

The MC led, in the first mandate 2003-2006 (and is leading, again in Lula's second mandate 2007-2010), a national democratic consultation to the citizen, through a series of *Conferências das Cidades* (*Conferences of Cities*) - a participatory process that starts with local conferences in the cities and where at the end of the local process, delegates are elected. State conferences also take place and state delegates are elected. At the first national "Conferência das Cidades", 80% of delegates referred they wanted cycling infrastructure in their cities. The very high demand for cycling infrastructure motivated SeMob (MC) to give continuity to the national cycling policy - legitimating the long time request of advocates and technicians involved in cycling.

In November 2003, in the headquarters of the MC in Brasilia, the capital of the country, the first national meeting to subsidize the national cycling policy took place. This was the first of a series of meetings. The objectives of these events were clearly stated as: "to discuss the current use of bicycle in Brazil, possible Federal Government and Civil Society roles to develop the policy for this modal and its inclusion in the urban sustainable mobility". At

these meetings, the name *Programa Brasileiro de Mobilidade por Bicicleta* (Brazilian Bicycle Mobility Program) was created, with the short name of *Bicicleta Brasil*.

- *The launching of Bicicleta Brasil*

Bicicleta Brasil was formerly launched by the MC on 22nd of November 2004, during the Carfree Day campaign, that was led by the MC, Ministry of Environment, Ministry of Education and Culture, and Ministry of Sports.



Ever since then, studies, projects and documents have been produced, as much as training and funding for infrastructure. Important to mention that in the courses, seminars, and meetings of *Bicicleta Brasil*, the bicycle advocates have been invited to participate in discussion panels with technicians and government officials; also presenting lectures.

In 2004, the Ministry of Cities also launched *Brasil Acessível*, (Accessible Brazil) program, a national policy to promote the universal design in transport facilities, buildings etc.

- *Researching*

As mentioned before, there is no national data about bicycle use as transport in the cities. In 2004, a study with 150 cities (out of 437 with more than 60 thousand inhabitants), by the MC in partnership with National Association of Public Transport (ANTP), and the National Bank of Economical and Social Development (BNDES), revealed that for daily trips cycling accounted for 3%, walking 35%, public transport 32% and cars 28% (M CIDADES, 2004).

In 2005, the MC developed a study with 277 municipalities and found out the number of kilometers of cycle ways; cycle lanes/facilities had risen to 2.500 km (M CIDADES, 2007). This represents an increase of 700% compared to the first study (in 1999 = 450 km), raising important reflections: (i) there was a mistake in the figures of 1999 - the authors believed they knew the cities which comprised infrastructure - there was a insignificant number of cities present in the first study (60 among 5.560 municipalities); (ii) in the recent years, there has been a significant raise in the public investments for cycling infrastructure, as a result of *Bicicleta Brasil* program funding and incentive and, as mentioned before, as a result of civil society claims and municipalities' investments.

- *Funding for Infrastructure*

The financial assignment for *Bicicleta Brasil* program was initially of R\$ 62 million (around 22 million Euros), being R\$ 2 million direct funding, to researches, capacity building, seminars, projects and for infrastructure; R\$ 60 million was intended to be provided as loan to municipalities. But the lending process was too bureaucratic, so very few cities were able to access it. *Bicicleta Brasil* provided direct funding for more than 60 municipalities to cover costs of projects and cycling infrastructure.

Program	Number of States	Number Municipalities	Funding million R\$ Euros	
OGU 2004/2005/2006	14	30	5,8	15,9
PROMOB	20	69	8,2	22,5
OGU & PROMOB	23	99	14	38,4

Source: M CIDADES, 2007

- *Cycling infrastructure x population*

The MC data shows that some cycling infrastructure is present in 277 municipalities:

Cities' population	Number of Municipalities	Km Cycling Infrastructure	Average Km of Cycling I.
2,5 to 60 thousand	111	474	4,3
60 to 250 thousand	103	843	8,1
250 to 500 thousand	36	490	13,6
500 to 1 million	15	165	11
> 1 million	12	484	40
Total	277	2500	8,8

Source: M CIDADES, 2007

An interesting way of thinking about the ranking of cities with (some) cycling infrastructure is to consider the centimeters of facilities (cycle ways/lanes/shared) per inhabitant. Considering the population, it is possible to say that Praia Grande, a small municipality in *Baixada Santista* – São Paulo, is the city with more centimeters of cycling infrastructure per inhabitant, although Rio and Curitiba present more than 100km of cycling facilities.

Order	Municipality	Population (IBGE – 2006)	Meters (Infrastructure)	Centimeters of infrastruct/inhab.	Order
1°	Rio de Janeiro – RJ	6.136.652	160.000	2,61	4°
2°	Curitiba – PR	1.788.559	119.000	6,65	2°
3°	Praia Grande – SP	245.386	77.000(*)	31,38	1°
4°	Teresina – PI	801.971	50.000 (*)	6,23	3°

Source: Oficina Consultores e Eng. Associados e Antonio Miranda, Teresina - April, 2007. (*) Including km still under construction. Pictures of cycling infrastructure in these cities can be seen in appendix 1

- *Training courses and documents on sustainable urban mobility*

The MC developed courses on mobility management in several cities of the country in the year of 2005 and 2006 - *Cursos de Gestão Integrada da Mobilidade Urbana*. The UnB - *Universidade de Brasília* (university of Brasilia) provided several most coaching staff for the courses.

The guidelines for sustainable urban mobility planning are summarized in a publication called *Caderno PLANMOB - Caderno de Planejamento da Mobilidade Urbana* (PlanMob brochure of urban mobility planning). This is a guide to elaborate the Mobility Master plan of cities (M CIDADES, 2006e).

Although by law only the cities with 500 thousand inhabitants and over are the only ones that compulsory have to deliver a Mobility Master Plan, the MC/SeMob have been proposing that cities with more than 100 thousand inhabitants do it also.

- *Training courses on Cycling Mobility*

In 2006, training courses on cycling mobility by the MC/SeMob were developed in the cities of Florianópolis -Santa Catarina State, and in Guarulhos – São Paulo State.

In Florianópolis it was organized by CICLOBRASIL group, from the State University of Santa Catarina-UDESC (www.udesc.br/ciclo) and the NGO Viaciclo (www.viaciclo.org.br),



with the participation of the municipality through the Urban Planning Institute IPUF (www.ipuf.sc.gov.br). Technicians and bicycle advocates participated. Trainers were Architect Augusto Valeri (MC/SeMob), Architect Antonio Miranda (independent consultant), and Engineer Jeroen Buis, from Interface for Cycling Expertise (I-ce www.i-ce.ifo), an activity of LOCOMOTIVES international program (www.i-ce.info/locomotives).

In Guarulhos, São Paulo, SeMob/MC training course was supported by World Bank and organized by the municipality, through its Secretary of Transport, in partnership with Pedala Brasil Institute (www.abradibi.com.br/pedala/index.html), I-ce (www.i-ce.info), ITDP (www.itdp.org), GTZ-SUTP (www.sutp.org), World Bank (www.worldbank.org), and Mobilization (www.movilization.org). These entities provided expertise to develop the course. Operational aspects were coordinated by Jonas Hagen (ITDP) and Carlos Felipe Pardo (GTZ-SUTP), while Jeroen Buis (I-ce) coordinated technical aspects. Antonio Miranda and Augusto Valeri were again part of the staff, among several other Brazilians. Giselle Xavier (UDESC/Viaciclo) and José Lobo (Transport Ativo) were also trainers talking about Bicycle Advocacy (<http://www.udesc.br/ciclo/?modo=workshop.guarulhos>). Other *Bicicleta Brasil* training courses and meetings are planned for 2007



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- *The Mobility Week 2006*

The Ministry of Cities/SeMob developed the Semana da Mobilidade (Mobility Week <http://www.cidades.gov.br/index.php?option=content&task=view&id=1881&Itemid=0>). The program consisted of a course on mobility management - *Curso de Gestão Integrada da Mobilidade Urbana* – and a seminar on sustainable urban mobility planning, which happened at the MC's headquarters, from 11th to 15th of December 2006, where cycling as means of transportation was one of the subjects addressed. Interface for Cycling Expertise, I-ce (www.i-ce.info), participated in the seminar, presenting the opportunities for Brazilian cities to join the Bicycle Partnership Program, BPP 2007-2010.



- *The new Cycling manual*

The MC/SeMob asked Architect Antonio Miranda to renew the Brazilian cycling planning manual (he had been the author of GEIPOT versions, together with Eng. José Carlos Aziz Ary). The MC/SeMob version is called *Caderno de Referência para a elaboração de Plano de Mobilidade por Bicicleta nas Cidades* (reference brochure to the elaboration of the Mobility Master plan in the cities). The draft form was distributed in a CD version during the Mobility Week of the Ministry of Cities, in December 2006. The final version will be delivered in June 2007 and will be sent to municipalities all over the country. SeMob/MC staff discussed with I-ce, the possibility of developing a Brazilian-Dutch manual.

Bicycle Industry and Commerce sector

Brazilian bicycle industry and commerce formal market estimated the country had around 60 million bicycles in 2004. Some technicians estimate this number might be greater, as there has been an immense informal manufacturing (estimated to produce 60% of the current selling in the country). The formal market notifies that the bike-transport type represents the major selling with 53% of the total, while 29% are children and youngsters' type, 17% leisure (mostly Mountain Bike style) and 1% sport/competition. The Brazilian production of Bicycles is about 5 million units per year, putting Brazil as a global player in the international scenario of bicycle producers (ABRACICLO, 2007). Our formal bicycle production has been endangered by the immense illegal importing of low quality bicycle products, mostly very low cost components, together with the informal assembling and selling. This is the main reason that refrains the mass use of the bicycle in the country.

The bicycle production and commerce sector, leaded by the bicycle commerce association ABRADIBI (www.abradibi.com.br) and the bicycle producers association ABRACICLO (www.abraciclo.com.br) created, in 2005, the *Instituto Pedala Brasil* – IPB (<http://www.abradibi.com.br/pedala/index.html>), a non profit civil organization that can facilitate the deduction of 2% of the income tax from operational profits, if they invest in IPB's projects. The initiative represents an important step of the industry and commerce sector. This is the first time there is a joint venture to promote the bicycle use as transport. IPB has delivered one training course to municipal planners about cycling system planning *Programa de Apoio Municipal ao Planejamento Ciclovitário*, CICLOPAM, in Campinas, São Paulo on December 2006. IPB has planned several activities for 2007.

Bicycle Advocacy, the third sector gets organized

The role of Velo Mondial and Velo City Conferences and international NGOs

Efforts to improve bicycle-based mobility in Brazil were helped along enormously by contacts made and lessons learned during the Velo Mondial and Velo City Conferences. At these events, bicycle advocates met leaders of international programs that have since helped some Brazilian cities to develop a more comprehensive approach. The help came from the LOCOMOTIVES program, coordinated by I-ce Interface for Cycling Expertise (www.i-ce.info) from the Netherlands; ITDP Institute for Transportation an Development Policy (www.itdp.org); URB-AL network number 8, coordinated by the city of Stuttgart, that was later followed by contributions from the Movilization program, coordinated by IBC, the International Bicycle Consultancy (www.cyclinginfo.nl), also from the NL.

In January 2005, with the support of World Carfree Network (www.worldcarfree.net), Udesc and Viaciclo participated with a stand of bicycle advocacy in the World Social Forum (WSF) held in Porto Alegre - Rio Grande do Sul. In the WSF the milestone of UCB *União de Ciclistas do Brasil* (www.uniaodeciclistas.org.br) (Brazilian Cyclists' Union) was set, with the creation of *Forum Brasileiro de Mobilidade por Bicicleta* FBMB (Brazilian Bicycle Mobility Forum).

- *The beginnings of the Brazilian Cyclists' Union*



Since the end of the 90s, cycling as means of transportation has been promoted by UDESC State University of Santa Catarina, through the Extension program *CicloBrasil* group (www.udesc.br/ciclo), in partnership with Viaciclo - Florianópolis Cyclists' Union (www.viaciclo.org.br),

developing activities in several cities, states, and in the national level.

In May 2005, UDESC and VIACICLO organized the first Brazilian Bicycle Advocacy meeting in Florianópolis, as part of LOCOMOTIVES program (www.i-ce.info/locomotives).

In July 2006, together with Escola de Bicicleta (www.escoladebicicleta.com.br), CicloBrasil group/UDESC and Viaciclo, promoted the Second Bicycle Advocacy meeting in São Paulo, with support from São Paulo municipality and LOCOMOTIVES.

In November 2007, together with Transporte Ativo, CicloBrasil group/Udesc and Viaciclo are organizing the Third Brazilian Bicycle Advocacy Meeting that will happen from 23rd to 25th of November 2007 in Rio de Janeiro. In this meeting UCB *União de Ciclistas do Brasil* (www.uniaodeciclistas.org.br) (Brazilian Cyclists' Union) will be formally launched.

- *Brazilian Critical Mass – BICICLETADA*

The critical mass group, Bicicletada (www.bicicletada.org), has been organizing manifestations every month in several cities of the country. Although in any city monthly rides are not massive (20 to 40 participants), the Brazilian Critical Mass has been making creative and educational activities to promote bike use.

In some of the recent masses in São Paulo, the participants placed pro-bike traffic signs on many streets. Besides the artistic approach, Brazilian Critical Mass rides always distribute educative pamphlets and (of course) rides bikes to occupy the streets and promote peaceful coexistence between drivers, bikers and pedestrians. In some cities a Commuter Challenge was organized receiving good media coverage. Rio's went national in the absolute audience leader TV and in the most important TV news from that channel.

In Rio it was organized by Mass riders and Transporte Ativo (www.ta.org.br). Another activity that was developed in some cities was the "Vaga Viva", transforming a parking spot on a little park, a temporary and symbolic human space. In São Paulo cyclists took over a city center square, placing signs and making it a meeting point of cyclists naming it as *Praça do Ciclista* (Byciclist's Square). This was also happened in Rio.

Dates and time of Bicicletadas in some cities and reports can be found in Bicicletadas' website. The blog *Apocalypse Motorizado* (<http://apocalipsemotorizado.blogspot.com>) (motorized apocalypse) from São Paulo maintain a playlist of videos from the critical mass rides in the city (http://www.youtube.com/view_play_list?p=858EF8C38710F448).



UM CARRO A MENOS

Brief comment about some cities from Southeast and Southern regions and the FD

Brasilia DF (Federal District) – Although very flat, the city is very much motorized, with huge arterial avenues full of cars and congestion. Brasilia is one of the cities that grew faster in the whole world, from 140 thousand inhabitants in 1960, when it was founded to more than 2 million (and considering the satellite cities, more than 3 million). But Brasilia is probably the only city in the country where motorists stop in the pedestrian crossings. The GDF (Government of the Federal District) started the Programa Ciclovário do GDF (GDF cycling program) in 2005 (<http://www.der.df.gov.br>) but only in 2007 that the executive projects and funding and the building of the cycle facilities started. The NGO that has been very active promoting cycling is Rodas da Paz (Wheels of Peace) (www.rodasdapaz.org.br).

São Paulo - The government of the city and the state of São Paulo have been taking initiatives towards cycling. In May 2006 a municipal executive group of cycling enhancement, Pró-Ciclista, was created. The group is formed by several municipal secretaries, and led by the Secretaries of Green and Environment, and Transport. ITDP has been collaborating with the municipality and the Pró-Ciclista group. In July the municipality supported the Brazilian Bicycle Mobility Meeting and presented their projects to the bicycle advocates. Studies, projects, field visits have happened and enhancement in the infrastructure and traffic signs have been implemented in small and disconnected existing bicycle paths. On February 2007 a new law was passed regarding cycling mobility that reassures Pró-Ciclista aims. For 2007, the city is counting on World Bank funding to create cycling infrastructure. Bicycle Advocacy is very strong in São Paulo. It started in the eighties with the Night Biker's Club (www.nightbikers.com) and currently there are several different groups of *cicloativistas*.

Rio de Janeiro - Rio has a specific department to take care of the *ciclovias*, and the project gets funding from environmental damage fines. Two hundred thousand *Cariocas* (Rio's inhabitants) use the bicycle as an everyday means of transport. This is 3 times more than 10 years ago. In 1994 it was 77 thousand trips made by bicycle. Considering the metropolitan area, it is 3,2% or 645 trips/day. Currently there are 148km of cycle paths and several bike-parking spread all over the city. *Transporte Ativo* (www.ta.org.br - bicycle advocacy group from Rio de Janeiro) has been very active, participating in the Cycle Planning Group of the city, *GT Ciclovias*. Together with IPP, *Instituto Pereira Passos*, the Urban Planning Institute from the municipality (www.rio.rj.gov.br/ipp), they've organized campaigns. Rio also participated in URB-AL network 8, and lately in Mobilization international program, to foster bicycle mobility.

Curitiba - The success with the BRT system inspired several cities worldwide. The city is also famous for the creation of a pedestrianized areas in the city center and urban parks. As for cycling, although 100 km of infrastructure was built in the 1980s, the process stopped and this system was never linked to the rest of the transport system, but rather

connected leisure areas and parks. The results are that people who use the bike to commute use the BRT bus ways and accidents have been occurring. Bike advocacy to push BRT technicians to implement bike-parking in BRT stations has elicited the response that people in Curitiba do not use bikes. In fact, there has been no implementation of that kind of modal integration because the city's transportation policy is based solely on strengthening the bus system. There is still a very big need to convince them of the importance of integrating the bicycle. Some NGOs/groups promoting bicycle use in the city are Ciclovida, an Extension program from the Federal University of Paraná UFPR, L&J consultancy on cycling expertise (<http://ljconsultoria.vilabol.uol.com.br/index.html>) and Mobilciclo (www.mobilciclo.org).

Florianópolis - Although counting on a continuous advocacy activity from CicloBrasil (www.udesc.br/ciclo) (since 1997) and Viaciclo (www.viaciclo.org.br) (since 2001), plus participating in international programs such as LOCOMOTIVES, URB-AL network number 8 and Mobilization, the city has not yet started to approach mobility in a sustainable way. Nevertheless the several loose cycle friendly initiatives, the city is advancing. There are around 22km of disconnected cycle ways (therefore, mostly used for leisure) and 2% of daily trips are made by bicycle. IPUF, the Urban Planning Institute has developed several projects of cycle ways and cycle lanes - some are under construction. There are new bicycle parking in 3 of the integrated bus terminals. But the transport scenario in Florianópolis is very peculiar. Several roads inside the island are state highways (the longest ones that cut the territory north-south and east-west), with no pedestrian and cycling facilities, although they are inserted in urbanized areas. Also, the bridges that connect the continent and the island are built and run by the state and (hilarious as it may sound) a federal highway makes the connection of the bridge to the continental roads. Therefore, since the year 2000, the university extension group and after 2001, also the advocacy group have put on efforts to bring along the State. In partnership with UDESC and Viaciclo, the State of Santa Catarina launched the State Sustainable Mobility Platform SSMP (http://www.deinfra.sc.gov.br/pcms/english_page3.htm) in July 2004. SSMP main programs are: *Cidades Amigas da Bicicleta* and Safe Routes to Schools. Apart from technical events, the *Cidades Amigas da Bicicleta* developed a video about cycling in the cities of Florianópolis, Blumenau and Joinville. The Safe Routes to Schools along State Highways study revealed that 14% of scholars go to school by bicycle (in one it was 21%). With ups and downs, the SSMP program is also advancing. The State Infrastructure Secretary – SIE, contacted us to inform we will make a State Carfreeday campaign and the II State Sustainable Mobility Conference in 2007 (the first SSMC was in 2004).

Porto Alegre - The city of Porto Alegre is going to implement a new BRT system and is currently making its Cycling Mobility Masterplan - 15km of cycle paths will be built this year. Studies on the urban surface train (Trensurb) regarding bike commuters were carried out and bike parking will be provided in their stations soon. Advocacy groups are getting organized and have been participating in the process. World Resource Institute - WRI (www.wri.org) created the CTS-Brazil to foster sustainable mobility initiatives in the city

and elsewhere. Universities have played a role also, the Federal University UFRGS through Lastran, the Laboratory of Transport Systems (www.producao.ufrgs.br) and the *Pontifícia Universidade Católica* PUC, participated, together with the municipality, in the Moviman program (www.eptc.com.br/moviman) from URB-AL.

Other Important entities in the transport scenario

• *National Entities related to Transport*

CNT - *Confederação Nacional do Transporte* (National Transport Confederation www.cnt.org.br). Devoted to defend the interests of transport companies and entities, it comprises the passenger, the road cargo, the independent passenger and cargo transportation section and the maritime transportation section. The Social Service of Transport, SEST and the National Training Service of Transport, SENAT (www.sestsenat.org.br), as well as the Institute of Transport Development – IDT (www.idt-cnt.org.br), are nonprofit civil entities of the CNT System. SEST-SENAT play an important role in traffic education.

ANPET – *Associação Nacional de Ensino e Pesquisa em Transportes* (The National Association of Research and Education on Transport www.anpet.org.br) represents the academic sector. The periodic publication of ANPET is *revista TRANSPORTES*. The best 10 academic papers presented in ANPET congress receive the CNT academic production prize and this becomes an academic book *Transporte em Transformação*. In ANPET annual congress 2005 in Florianópolis technicians and advocates managed to include a panel about cycling, but in general Non Motorized Transport (NMT) is not addressed. ANPET attributes this to the lack of good quality academic papers sent to their editorial board. What we think that comes closer to reality is that there are few “academic-type” people interested in cycling (as cycling is not a fashion subject as highways and logistics of cargo and public transport – these are very well funded areas, not cycling). But we can affirm a lot of good work has been done recently in the field. So we can say the academic sector is not addressing what is happening in the country regarding cycling.

Most recent approach of cycling to ANPET is the ongoing conversation with the organizers of CLATPU - Latin American Congress on Public and Urban Transport/ANPET congress. We are exploring the possibility of including a one morning session on cycling and Public Transport integration – a shared session of CLATPU/ANPET Congress 2007 (www.clatpu-anpet2007.com), that will happen from 18th to 24th, and the III Brazilian Bicycle Mobility (Advocacy) Meeting, from 23rd to 25th of November 2007, both in Rio de Janeiro.

ANTP – *Associação Nacional de Transporte Públicos* - The National Association of Public Transport (www.antp.org.br) is very active in Brazil. Together with The William and Flora Hewlett Foundation, ANTP started a program to promote Bus Rapid Transit (BRT) systems in Brazil, the program is called TEU Transporte Expresso Urbano (Urban Express Transport). Data from ANTP show a decrease in Public Transport use in 25% from 1994 to 2002. Also, that 50 million Brazilians do not move far from their neighborhood because

they cannot afford public transport. ANTP promotes the reduction in 50% of bus' ticket fare all over the country, applying for Federal Government subsidies.

Public Transport in Brazil is in the competence of the municipality, meaning the city can operate or transfer this responsibility. In some cities, the municipality operates it, in others, it is the private sector and in some others, it is a combination of these two. In the last 10 years, public transport has been facing a decline in number of trips/day. Some of the reasons for that are: 1) more people are walking (monetary reasons); 2) more people can afford to buy cars (cheaper cars available and financing or leasing); 3) more people are riding motorcycles; 4) more alternative transport is available (Vans, most informal).

ANTP has a vast list of own researching, books, documents and publications. Delivers a weekly on-line bulletin, and a monthly periodic, *revista MOVIMENTO*.

GT Bicicleta from ANTP - *ANTP counts on a Bicycle Working group, GT Bicicleta* (gtbicicleta@antp.org.br). On February 2003, GT Bicicleta from ANTP organized a Seminar called *Pedestres e Ciclistas (pedestrians and cyclists)*. At that time GT Bicycle was leaded by Sergio Bianco, our dearest Architect and Advocate for Bicycles inside ANTP and ANPET, who passed away in 2006. Bill Presada, bicycle advocate from Bike Brazil Association (www.bikebrasil.com.br), is the current leader of the working group. Last 19th and 20th of April, GT Bicicleta organized the National Seminar *Bicicleta e a Mobilidade Urbana no Brasil* (the bicycle and the urban mobility in Brazil) that happened in Santos, São Paulo. The Dutch NGO Interface for Cycling Expertise (I-ce) participated in this event presenting the opportunities for cities to participate in the Bicycle partnership program - BPP (www.i-ce.info). At the end of this meeting, technicians and advocates signed a letter that was named *Carta do Gonzaga* (Gonzaga's letter – the name of the neighborhood where the hotel of the seminar was located). The letter was addressed to the Minister of the Cities (and it was really submitted to the MC protocol after this meeting) asking him to rise 20 times the amount of resources to cycling infrastructure that the MC/SeMob provide to municipalities. Considering last years funding, it would be possible to build only 50km of cycleways annually. The letter asks for funding to the construction of 1000km/year. I-ce experts at the event considered the Brazilian seminar/technicians' "talk" too much focused in infrastructure for cycling and parking, almost "ignoring" the several other different measures to create a better environment for cycling.

▪ Final Considerations

It is possible to announce that Brazil is really moving towards more cycling (although the ever growing motorized traffic and infrastructure designed for car traffic flow).

The Ministry of Cities through its National Secretary of Transport and Urban Mobility, SeMob, is changing the cycling policy arena in Brazil for better.

It is easy to find out that if the process of demanding for cycling infrastructure by the municipalities keeps on growing, and the MC provides more funding and incentive, like it has been in the recent years, there is space for training and consultancy in this country.

There is an evident lack of researching and data about cycling in Brazil. Cycling researching methodology is needed (academic and field/practical).

Most of our population can afford to have a bicycle. Giving priorities for cyclists (and not just in the paper) would change our society and reduce the gap among social classes.

Our Bicycle Industry and Commerce sector is strong. The Brazilian production of Bicycles is about 5 million units per year, putting Brazil as a global player in the international scenario of bicycle producers. With the help of Europeans, we could fight the formal and informal "import" of the low quality bicycles and pieces.

Our Bicycle Advocacy sector is growing and getting organised. We will launch the Brazilian Bicycle Union in November 2007.

Essential to highlight the importance of International NGOs/entities/programs like I-ce/LOCOMOTIVES, ITDP, GTZ-SUTP, IFRTD, WRI, URB-AL, Mobilization, World Carfree Network, SUSTRAN LAC, among others, that have supported advocacy activities and have helped in the training of our technicians.

Contacts made and lessons learned during Velo-City Conferences helped a great deal to improve bicycle-based mobility in Brazil.

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■ Appendix 1

• Cycling Infrastructure in some Brazilian cities



João Saldanha Cycle way – RJ



Leme and Copacabana seafront cycle way

Rio de Janeiro



Rio de Janeiro bike network with the places where pictures were taken.

Source: Claudia Tavares IPP/Rio, International Workshop Guarulhos August/2006



Belen River border cycle way Curitiba

Curitiba – PR



Bike-route along a public park in the city center of the Curitiba – 1999.



Cycle lane along CBD street in Curitiba



Cycle way along the SP-66 highway



Commuter cyclists in SP-66 h. cycle way

Praia Grande – SP



Praia Grande seafront cycle way



Bridge cycle way



Commuter cyclists

Teresina – PI



Commuter cyclists crossing the railway that cuts the cycle way at this point



Pomerode's main street cycle way



The cycle way under construction

Pomerode – SC



The existing Cycle lane turned into a Cycle way and the sidewalk was enhanced