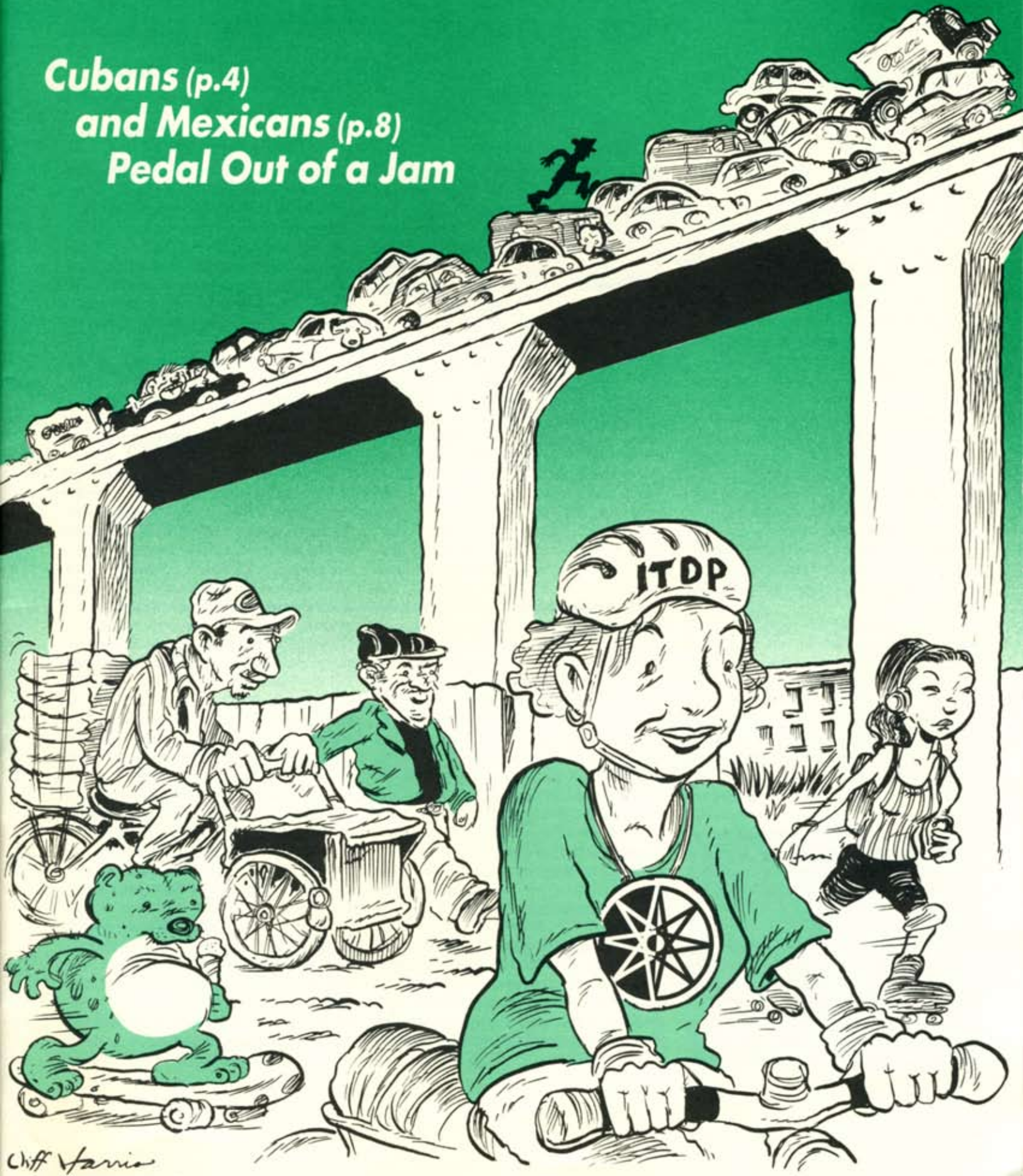


SUSTAINABLE TRANSPORT

Number 5

Fall 1995

**Cubans (p.4)
and Mexicans (p.8)
Pedal Out of a Jam**



Cliff Harris

ITDP Thinks Globally, Acts Globally

An Update of Recent Activities

Letter from the Executive Director

In the past winter and spring, ITDP's policy reform initiative was in Eastern Europe and Asia, bringing information to indigenous environmental and activist organizations about the role that Multilateral Development Banks were playing in encouraging motorization in their countries, and how they could work to change this. Here in the U.S., ITDP's efforts to reform the World Bank's transport sector lending are bearing fruit. As this newsletter goes to press, the World Bank's new Transport Sector Policy Review, called Sustainable Transport (we like the title!) will go before its Board of Directors for approval. This document will serve as a guide to World Bank transport lending. As a result of pressure from ITDP and others, this document was developed with input from professionals, citizens groups and NGOs from around the world. The World Bank deserves credit for making this an open policy making process.

The result of all this work? The new Policy Review, we believe, will represent a vast improvement over current World Bank transport sector lending policy and practice. For the first time, the new policy will officially recognize the importance of non-motorized transportation and supports its promotion. While still too privatization in the rail and public transit sectors, it at least now acknowledges the problems this will cause, and pushes for full cost recovery in the road sector as well. Finally, the document will recognize for the first time that continued unchecked motorization could result in dire consequences for the global environment.

Will this new policy have any impact on actual World Bank lending? This can only be ensured if NGOs around the world are willing to hold the World Bank accountable to this new, higher standard. ITDP is currently working to convince the World Bank to hold regional seminars

where it discusses with borrowing governments and NGOs how the new policy will affect lending practices in their country, giving NGOs a chance to voice their concerns about actual MDB activity in the region.

Hopefully, as a result of our efforts, the leverage of the MDBs will be used more consistently for their own self-stated goals of poverty reduction and environmental sustainability rather than for fiscal austerity and the promotion of motorization. There are indeed some signs of progress.

But the global motorization crisis was not created by the World Bank. Often, national governments are more than willing to let MDBs take the heat for policies which they would have implemented on their own. As ITDP's experience broadens in Central Europe and developing countries, it is becoming clear that many governments are far more enthusiastic about motorization than the MDBs. The Highway Lobby is rarely seen at the World Bank. They deal directly with governments. It is now at the national and municipal government level that the fight for a more sustainable transportation future is currently being lost.

As our efforts to reform the World Bank in Washington at the policy level have achieved much of what we set out to achieve, ITDP is increasingly turning its attention to empowering NGOs to organize national strategies to push for environmentally sustainable and equitable transportation in their own countries, passing on what experience we have gained here in the U.S. by fighting the most powerful Highway Lobby in the world.

In Poland, Hungary, and soon in the Czech Republic and Romania, ITDP is working with NGOs to forge national coalitions to press for transport policy changes at the local and national level. NGOs in these countries, where direct democracy is still a new idea, have

requested our support in organizing citizens movements to press for the introduction of bikeways, the preservation of public transit systems, controls on central city parking, and improving the level of citizen participation and input in the planning of major road infrastructure. The MDBs are sometimes adversaries, but sometimes they are useful allies in national reform efforts.

These cooperative efforts have already won some successes. ITDP, working with the Hungarian Traffic Club, forced the Budapest City Council to promise on national television that there would be no more public transit cutbacks in Budapest. Pressing hard on the World Bank from Washington and Budapest, ITDP played a role in convincing the World Bank to relax the cost recovery requirements on its loan to the Budapest Public Transit system, bringing much needed capital for track and rolling stock improvements. The loan also helps to force the implementation of a parking control scheme in Budapest. Speaking at a Conference in Bucharest, ITDP implored the heads of the Bucharest Public Transit and Metro Systems to pay attention to pedestrian and bicycle access to their systems, and not to waste all their money on expensive new metro lines while allowing the existing surface trolley and bus system to deteriorate. ITDP has also moved closer to convincing the Global Environmental Facility to embark on a major transport and the environment project for four cities in Central Europe. In the fall, we hope that we can facilitate the development of a viable GEF program for the CEEC.

Similarly, in Asia, ITDP has successfully begun a comprehensive sustainable transport initiative in Southeast Asia—a region where the motorization crisis is perhaps the worst. In partnership with the Asia-Pacific 2000 program under the United Nations Development Program in Kuala Lumpur, Malaysia, ITDP will be

C o n t e n t s

Number 5

Fall 1995

Articles:

<i>Cuba:</i> Havana Pedals Through Hard Times	4
Mobilizing Democracy in Haiti	6
Cycling Renaissance in Mexico City	8
<i>Poland:</i> Shock Therapy Short-Circuits Public Transit	12
<i>World Bank Finds Other Path</i> Upgrading Peruvian Mountain Tracks Puts People First	16

Features:

Letter from ITDP's Executive Director	2
News Briefs	10
New Titles	18
Bulletin Board	19

Cover and illustrations by Cliff Harris

working to develop a Sustainable Transport Forum composed of NGOs from the region, and will provide technical support to these NGOs in their attempts to influence regional, national, and local government officials to promote more sustainable transport policies. The Forum will also monitor and try to reform the Asian Development Bank and Japanese bi-lateral transport lending.

Through ITDP's continued monitoring of the U.N. Commission on Sustainable Development and our work with the Habitat International Coalition (HIC), we have successfully placed 'sustainable transport' and the 'right to access' as a central agenda item for the upcoming Habitat II conference to be held in Istanbul, Turkey next year. Through our efforts at the recent HIC annual meeting in Havana, ITDP has been placed on the steering committee of HIC's Habitat and the Environment Subcommittee, to contin-

ue to further the key transport-housing linkages in the Sustainable Human Settlement debate at the U.N.

ITDP's demonstration projects are also back on the front burner. ITDP has formed a new strategic alliance with the New Jersey-based Pedals for Progress, which specializes in the collection of both new and used donated bicycles, tools, and accessories. They are providing an increasing supply of materials to our projects, while our staff focuses on project development, implementation, training and follow up.

With the changes in Haiti, our Mobility Haiti project has been able to expand considerably (see Article in this issue). Our long term presence on the ground in Haiti has given us enormous credibility with the Haitian government, which has requested that we help them devise a national strategy for broadening our pro-

continued on p. 17

Sustainable **TRANSPORT**

is a publication of:

The Institute for
Transportation and Development Policy
611 Broadway, Rm. 616
New York, NY 10012

Tel. (212)260-8144 • Fax (212)260-7353
email: Mobility@igc.apc.org

Editors: Walter Hook, Brian Williams, Karen Overton, Ney Oliveira, John Griffin

Art Director: Cliff Harris

Board of Directors:

Keith Oberg, President
Inter-American Foundation

Matteo Martignoni, Vice President
International Human Powered
Vehicle Association

Walter Hook, Secretary
Executive Director, ITDP

Robin Stallings, Treasurer
Media Consultant

Michael Replogle
Environmental Defense Fund

Marijke Torfs
Friends of the Earth

John Howe
Professor, IHE Delft

Setty Pendakur
Chairman, NMT Task Force
Transportation Research Board,
Professor, Univ. of British Columbia

Ariadne Delon-Scott
Rivendell Cycles

Elliott Sclar
Professor, Columbia University

All views expressed in the articles in this publication are the views of the authors and not necessarily the views of ITDP. *Sustainable Transport* welcomes submissions of articles about non-motorized transportation and information about sustainable transportation activities worldwide, as well as letters and other comments.

ITDP is a non-profit research, dissemination, and project-implementing agency which seeks to promote the use of non-motorized vehicles (NMVs) and the broader implementation of sustainable transportation policies worldwide. ITDP is registered in the United States as a charitable agency eligible for tax-deductible contributions under the Internal Revenue Service code. Members include bicycle activists, transportation planners, economic development specialists, small businesspeople, environmentalists, and other professionals, primarily but not exclusively U.S. citizens.

Cuba:

Havana Pedals Through Hard Times

by Joseph Scarpaci and Annie Z. Hall

Cuba's political response to a changing world elicits strong emotions from its friends and enemies. Its streets appear trapped in time and its people constrained by forces beyond their control. At the peak of its alliance with the former USSR and its Eastern European allies, Cuba received nearly \$5 million in foreign aid daily. The collapse of the USSR in the late 1980s however, triggered draconian measures that now dominate Cuba's development and planning agendas.

This austere time, called the "Special Period in a Time of Peace," challenges the island's transportation system. Cuba must triage its use of petroleum — usually of high sulfur content bought on the spot market— because domestic supplies satisfy just one percent of its oil needs. Petroleum requires hard currency which is in scarce supply. Although it is only too willing to exchange sugar for oil (it continues to do so with Russia, but at increasingly unfavorable terms for the island) most petroleum purchases are targeted to public utilities, factories, and fueling tractors for sugar-cane harvests. Cuba's transportation system during these dire times is indicative of the radical turn the country has taken. Automobile and bus travel receive low priority.

If Cuba elicits strong emotions from most readers who hold polarized views of the Revolution, the beauty of Havana is sure to be a point of consensus. Situated on the Straits of Florida where 16th and 17th century garrisons guarded a harbor that was once coveted by corsairs and pirates, the Malecon seaside promenade figures prominently in postcard images of this tropical city. Havana's splendid colonial, modern, and Art Deco architectural styles have earned it a variety of names: "The Nice of the Caribbean," "The Paris of the Antilles, and the "City of Columns,"

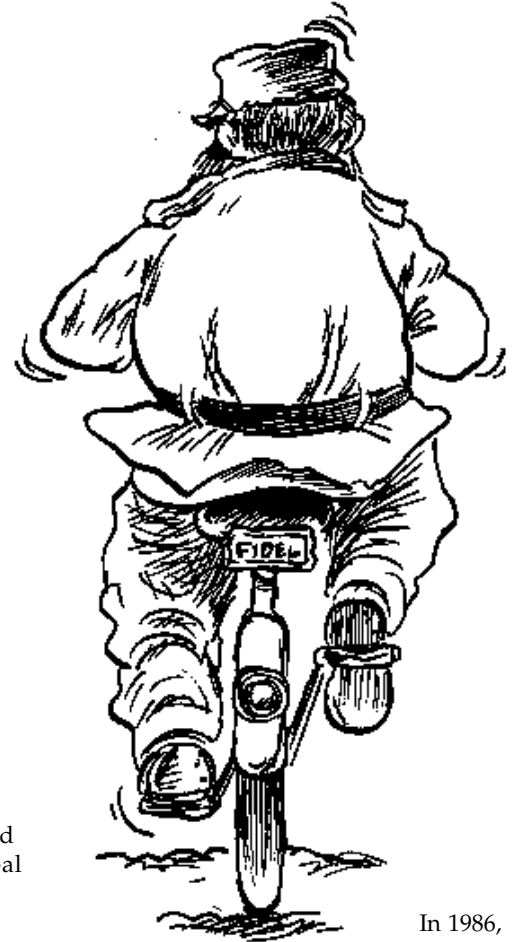
Joseph Scarpaci is an Associate Professor at Virginia Tech, and Annie Z. Hall is a freelance writer.

and Old Havana has been immortalized by Cuban writers such as Alejo Carpentier, Guillermo Cabrera Infante, Reinaldo Arenas, and Jose Lezama Lima. Havana had a special allure to foreigners who visited the city after the 1959 Revolution, with its old '57 Chevys, '49 Buicks, and other classics from an era when Elvis actually wore blue suede shoes.

Today, the four-lane Malecon carries more cyclists than automobiles. Bicycle commuters fret more about strong Northeasterly Trade Winds and the occasional wave that breaks over the sea wall than about bumper to bumper car traffic and air pollution which afflicts most Latin American cities. The Special Period has cleared Havana's streets of most of those gas guzzling 8 cylinder 'road hogs'; not by choice, but by the demands for fuel rationing, combined with Cuba's reinsertion into the global economy.

Cuban Transport: The Historical Record

Just over 2 million residents call Havana home, in a country of 11 million. Like many capital cities, Havana generates a disproportionate amount of the island's industrial output and holds the lion's share of the island's service economy. Once it was crisscrossed with a streetcar network that greatly expanded during the U.S. occupation (1898-1902) following the Spanish-American War. Preference for the automobile led to the demise of the streetcar in the 1950s, and since then automobile and diesel engine buses came to dominate. Since the 1960s Eastern European-designed buses have run through Havana's streets. By 1990, however, the number of bus trips and routes began declining.



In 1986,
Havana's
buses accounted

for 86% of total trips by motorized transport, and automobiles—never a significant mode of transportation, accounted for just 6%. Roughly half of the 200 buses in Havana are now out of circulation, and many bus routes have been eliminated, consolidated or cut back, making lengthy waits at crowded bus stops a multi-hour endeavor.

In the wake of this transportation crisis has come a huge increase in bicycles. In 1990, Habaneros used their roughly 70,000 bicycles mostly for recreation and sport. By 1993, Havana had 700,000 bicycles and 1000 cargo tricycles, mostly purchased from China. Today, bicycles are used mainly for commuting. Unlike in China, though, Cuba has not had a bicycle culture. No road space had been dedicated to

non-motorized vehicles before the 'Special Period,' nor were there traffic signs or data.

Havana Shifts to Bikes

With the Special Period, however, all this began to change. The Chinese models Phoenix, Forever, and Flying Pigeon can now be bought on installment plans for from between 60 pesos for students to 120 pesos for workers. In deflated 1995 real dollars, this ranges from \$1 to \$2 USD.

Some of the side-effects of the shift to the bicycle include less air pollution in Havana, greater commuting time for workers, and a proliferation of private sector bicycle repair and parking services. When Fidel Castro legalized more than 100 private sector occupations in July of 1993, employment in bicycle cottage industries grew rapidly. Tire repair services, bicycle parking lots, and mechanical repair shops continue to proliferate throughout Havana, and employ many workers idled by public down-sizing and factory closings. Last year the kind of bicycle taxis common in South Asia surfaced in the Vedado tourist district for foreigners seeking a ride along the Malecon or the tree-covered side streets of Vedado and Miramar. Tourists can also rent bicycles and jump into the fray themselves.

The big increase in demand for bicycles has had considerable spill-over effects on the Cuban economy. Although China has been the main supplier of bicycles to Cuba, Cuba is increasingly building more of its own bicycles and components. In 1990 the Giron bus factory in Havana was refit and retooled for the manufacture of bicycles. After its first year of operation it produced approximately 20,000 bicycles. Projected production for 1995 is 100,000 bicycles. Cubans can now manufacture all components except spokes, bearings, the rear hub and chains, and heavy-gauge seamless pipe, which come from Mexico. The Cuban 26" wheeled bicycle is about 15 pounds lighter than the 57 lb. Chinese models and better suited for multiple purposes than the 28" Asian wheel. Cuban bikes also come in a variety of colors (now in 12 tropical vari-

eties), and most use the all-terrain type straight handlebar.

Habaneros are only slowly adjusting to bicycle transportation. Until recently, most had not used the bicycle for other than recreational purposes. Riding in traffic—usually with hundreds of other cyclists rather than in automobile-clogged streets—has meant learning a whole new set of skills. Ignored stop signs, pot hole-ridden streets, tropical downpours, and other obstacles have produced numerous bicycle accidents and even a few casualties. In 1990, for instance, about 1/3 of the 306 road fatalities in Havana were non-motorized vehicle-related.

City officials, however, are working towards making Havana a safer city for cyclists. Today there are at least 26 kms. of non-motorized vehicle-dedicated lanes and cycle paths throughout Havana.

Havana's beauty is even more striking when seen gliding along on a two-wheeler. Although the city's roads were never heavily bogged down with automobile traffic, traveling around the city by bicycle for the foreigner is a beautiful experience. In the eyes of most Cubans, however, it is a mixed blessing. Most Cubans begrudg-

Cuba's free market economy has brought, and partly because locks are scarce.

Finally, Habaneros are exerting more physical energy on their commute at a time of food rationing when belt sizes are being ratcheted down. There is growing concern about productivity among laborers who on average confront a decreasing caloric intake. A taxing commute in a torrid climate can weaken some cyclists, especially the elderly. Some Habaneros who arrive at work hot, tired, and at a job site with few co-workers are unwilling to sacrifice so much for jobs that pay in pesos. Transportation difficulties and falling worker productivity only irritate the city's broader economic problems.

Inter-Modal Planning

The rise of this new, green, and ecologically sound means of transportation, however, brings other rewards. Havana officials offer a 'ciclo-bus', or bicycle bus that carries commuters from the huge post revolutionary suburb of Habana del Este (Eastern Havana) and their bikes to and from the central city. This is a safety measure to carry cyclists who would otherwise have to travel next to cars in a narrow and dimly lit tunnel running under the Bay of Havana. Flat bed trailers assist the ciclo-bus by shuttling thousands of cyclists through in 'rush' hours.

Havana's turn to the two-wheel machine is not a policy of choice, but neither were the 1973 OPEC oil price increases that forced American car manufacturers to produce more economically and environmentally friendly cars. Will Havana maintain its use of non-motorized transport once economic recovery sets in? The 34-year old U.S. boycott continues to make any imminent



Bicyclists in Havana

ingly accept it as the only way to get around. On the one hand, the rise in cycling is a rational coping mechanism during the Special Period, is environmentally friendly, and provides excellent exercise. On the other hand, commuting time has increased as many household heads drop off spouse and children, all packed onto one bike, at their various destinations. Bicycle theft has also increased, partly because of the new 'liberties' that

economic bonanza highly unlikely, especially considering the increasingly hostile U.S. foreign policy towards Cuba. Will the bicycle permanently replace the automobile? This seems unlikely. Regardless of how Cuba navigates its present economic storm, it is improbable that either the nation or its capital will revert back to the pre-Special Period levels of subsidized

continued on p.15

Mobilizing Democracy in Haiti

by Hugh Lewis

ITDP's Mobility Haiti project coordinator Hugh Lewis spent much of 1995 in the Artibonite Valley region of Haiti expanding the Mobility Haiti project. What follows is taken from his recent trip report.

With the restoration of the legitimate Haitian President Jean-Bertrand Aristide in late 1994, the violence and repression of the military junta has been replaced by Haiti's first democratically elected government. These changes have given Mobility Haiti a great window of opportunity to work with the numerous grassroots organizations in the country which are resurfacing and gaining ground against the repressive circumstances which undermined their ability to function for so long. Mobility Haiti is now able to provide human-powered transport to more people and organizations who daily face one of the most serious crises of basic mobility in the world. But working in newly democratic Haiti has not been free of adventures.

New Shipments of Bikes

Between October 1994 and January 1995, three containers of new and used bikes, accessories, parts and tools were sent from Miami to Port au Prince, Haiti from Pedals for Progress in New Jersey and ITDP. The project encountered considerable difficulties in getting the containers released by customs officials. Hugh had to spend an enormous amount of time getting the containers out of the port. Our Haitian partners, the Hospital Albert Schweitzer and the Borel Mission had both recently undergone significant staff and leadership changes, and responsibility for the project was left in limbo. Then there were significant changes in the rules over customs duties and clearance with the new government. Finally, new contracts were drawn up outlining the responsibilities of all project participants and Project Help secured the

release of the containers from customs. During these negotiations, Hugh learned that it would be easier to bring bikes in if they were in smaller quantities shipped as deck cargo packaged either in large crates or in deck nets to the smaller ports of St. Marc or Gonaives, both of which are closer to the Central Artibonite Valley, and where customs backlogs are less. Hugh also secured a used truck to bring the goods from the ports.

After securing the release of the containers, it was agreed that Project Help in Borel would pay all container fees incurred at the port and take care of truck-

few wheeled stretchers were built for the hospital. Providing more ambulatory vehicles for the hospital, however, has proven difficult due to the lack of access to specialized parts, lack of full-time in country staff with design experience, and lack of funds from the hospital to cover the costs.

The Laboratwa Esperanse, set up by ITDP and Project Help, is thriving, and the hospital is increasingly playing the role of one of several clients to the Lab. The Lab currently has three full time paid Haitian employees, each of whom was trained by ITDP. The Lab also has two apprentices who graduated in June and three more apprentices have just begun.

The shop repairs between two and five bicycles a day. Hugh trained the Lab's employees to make bicycle carts out of local materials and some donated children's scooters, which were extremely popular and generated enormous excitement among local farmers. The shop functions like a non-profit organization, selling bicycles to recipients at well below market prices but at prices which cover most of the shop's costs.

While the hope is that the shop will be able to cover all of the costs necessary for ongoing business operations by year end, after the current infusion of donated bikes and equipment is processed, achieving financial self-sustainability may require some changes. One of the strengths of the Lab was its skilled chief mechanic, Bos Holsen, and in April he left to take a more secure government job. The three remaining employees did not have enough work to keep them busy until the three containers cleared customs in June. For the future, a system of smaller, self-financing decentralized distribution and repair facilities run by the apprentices of the Laboratwa Esperanse is being developed.

The training of local Haitians to maintain and repair bicycles at the Laboratwa



ing to Borel, in exchange for receiving a large number of bicycles, parts and accessories out of the shipments. This still left ITDP with at least 50 bicycles to distribute at cost to grassroots organizations outside of the Laboratwa partnership.

Update on the Laboratwa Esperanse

Mobility Haiti's initial goal was to help the Hospital Albert Schweitzer's outreach to clinics and health facilities that traditionally have not been easily accessible to staff, and patients at these clinics have had trouble reaching the hospital. Roughly half of the bicycles sent by Mobility Haiti have gone to hospital staff for their extension work and other mobility needs, and a

has been a big success, and there is no reason why smaller facilities like the Lab could not be started in other Artibonite locations and eventually all over Haiti. Costs for establishing a small shop are low, and require only a minimal set of tools, several clamp stands, a grinder and a vice. The recent donation of several clamp stands should greatly facilitate the establishment of these facilities. The fundamentals of bike repair are easy to teach, especially since it is the vehicle of choice for many of the Artibonite's inhabitants, and being able to repair one's own transportation represents considerable freedom there. Follow up training of the apprentices of the Laboratwa, and any future installations like it, would help, however, since the trainees there didn't always fully retain the finer points of the craft.

Hugh also learned that the American way of repairing bicycles is not always the best way in Haitian conditions. Many Haitians have become quite adept at repairing things without access to specialty tools which would normally be used in American bike shops. Hugh often set aside his tools while Haitian mechanics and trainees demonstrated equally efficient, if unorthodox by U.S. standards, methods of repair.

A greater need is for teaching the basic principles of running a small business enterprise such as a bicycle-repair shop. For a "Mobility Haiti" shop to reach self-sufficiency, those managing the shop will have to be able to handle rudimentary bookkeeping, learn some simple advertising, improve shop efficiency and scheduling of a customer's bicycle repair, and develop pricing policies which reflect the real costs of the shop plus overhead.

New Haitian Partnerships

In the rest of 1995, and into 1996, Mobility Haiti will work to broaden the impact of its work. As ITDP delivers on its commitments to its Haitian partners, and the Laboratwa Esperanse is put on a more secure financial footing, ITDP will use more of its institutional strength to provide improved mobility to other NGOs and to set up smaller, more flexible assembly and repair facilities in other locations.

Out of the 50 or more bicycles remaining after meeting our promises to Borel, Hugh identified several other partners for Mobility Haiti. The MHC School and Orphanage in Ti Riviere do L'Artibonite,

is a facility complete with classrooms, a weaving and woodworking project and a dormitory that currently houses 23 orphans. After meeting with Met d'Linoise who founded the orphanage in 1938, it was agreed that several bicycles and trailers would be useful in their work distributing donated food to some of the local area's handicapped and elderly citizens which are usually delivered on foot.

The development of democracy in Haiti, especially in rural areas, is taking place through the work of small, well-organized networks, cooperatives and "groupmans". Mobility Haiti will also work with AGAPA (the Asosyasyon Goupaman Agrikol Peyizan Atibonit), an umbrella group comprised of numerous small agricultural organizations and cooperatives located in the Artibonite Valley.



Bike repair training session at Lafanmi Selavi

The majority of these groups have between 10 and 15 members. AGAPA operates from the towns of Ti Riviere de L'Artibonite, Verrette, Liancourt and their 2,240 members hail from many of the surrounding localities as well. Women make up 35% of the membership.

After consultations with representatives of the group, AGAPA was very excited about providing its 'animators' or organizers with bikes since they often cover long distances by foot. They were quick to point out the low environmental impact of bicycles and the possibility of bike trailers intrigued them. AGAPA was interested in 20 to 30 bikes and has agreed to pay a price for each bicycle to cover shipping and administrative costs. In addition, the group has offered free-of-charge two spaces along the main street in the town of

Ti Riviere where Mobility Haiti will help construct a micro shop space where training can first take place and then continue to operate a repair facility on whatever future site is chosen.

Mobility Haiti will also work with PDID, Pwoje Developmen Integre Desarmes, a well-organized and progressive development project located in Desarmes on the main road from Borel. While AGAPA gives "Mobility Haiti" more access to the level "heart" of the valley, Desarmes is a different region entirely. The road between Borel and Desarmes deteriorates significantly which gives all-terrain bicycles a distinct advantage over cars and trucks. Before the coup, the PDID's central complex housed cement-block and furniture-making micro-enterprises which were destroyed by the military. They have just recently been able to begin rebuilding and fundraising.

PDID is very interested in getting bikes to their 30 organizers who work on a full-time basis with the program, getting bikes to peasants and peasant "groupmans" near Desarmes and setting up a bike repair, production and training facility at the center. In addition, they offered Mobility Haiti an entire wing of an old cement workshop area, located 100 yards from the Desarmes market area where a micro bike shop could function.

Mobility Haiti will also continue working with Lafanmi SeLavi, a well-known center dedicated to the education of Port Au Prince's orphaned street boys. The organization, which provides services to the boys while helping them to mature into self-supporting adults, was established in 1986 by Father Jean-Bertrand Aristide, now President of Haiti. The center is able to house close to 100 boys. Two years ago, during the coup, the main part of the building was damaged but is now rapidly being rebuilt.

continued on p. 15

Cycling Renaissance in Mexico City

by Greg Green

Each morning, as the world's largest city awakes and its inhabitants begin the day, the streets and sidewalks fill to capacity with cars, buses and pedestrians. Everyone, from business executives to ordinary people suffer through gridlocked traffic and serious air pollution lasting most of the day. But the story of Mexico's bustling and beautiful capital is not all gloomy; it is also a story of resiliency and accommodation. As Mexico City continues to grow and transportation problems are becoming more pressing, bicycles are emerging as an effective way to bypass the perpetual gridlock and effectively distribute goods and services to the public.

People are turning to bicycles in Mexico City for many of the same reasons they are in other large cities around the globe, including the U.S. With traffic congestion near gridlock, bikes get around faster than cars, and the adventuresome are riding bikes. Though the streets of Mexico do present bicycle riders with many challenges, more and more residents have come to depend on these two-wheelers than ever before.

The air pollution in Mexico City has reached crisis proportions. The emissions from the 3.2 million private cars that ply the streets of Mexico City have so devastated the natural environment that one school teacher reports her children sometimes reach for grey crayons when asked to draw the sky. Environmentalist Beatriz Padilla who works promoting the development of solar cars and bicycle commuting reported just how thick the air can get: "I've seen the smog get so bad that there isn't just haze in the air. There are actually different densities of air swirling in the street and we don't even know what they are. Something must be done."

Mexico City's air pollution problems are aggravated by natural conditions. During the winter, thermal inversions often occur because pockets of cold, ozone and lead-laden air are pushed ground-ward as the sun heats the valley floor at day-break. This effect intensifies air pollution problems by displacing cleaner air with air heavier with contaminants. Mexico City's altitude is also part of the problem, as people have to breathe in more air to get the same amount of oxygen, which means they inhale more contaminants at the same time.

Non-Motorized Freight Transport

Mexico City residents are finding a way out of the gridlock through the increasing use of bicycles and other forms of non-motorized vehicles. Ice Cream and Coca-Cola, previously shipped in trucks which tied up traffic, are being replaced by hefty bicycle carts capable of carrying so much cargo stacked up

front that some daring riders have to try to look around to see where they are going!

Just after dawn each morning, fleets of bicycle carts leave bakeries to deliver the morning bread, and messengers roll through downtown to begin the City's morning business communications. In residential neighborhoods, peddlers offer convenient while-you-wait knife sharpening services from bicycles with small grinders mounted on the back. Ironically, auto mechanics cruise the city streets looking for breakdowns riding bicycles with tool sets mounted on the rear rack.

Five major newspapers printed near the congested center of downtown are turning more and more of their distribution over to bicycle delivery. All day, an endless stream of old and young

riders on Mexican-made Benotto indestructo bikes leave the loading dock of the newspaper *Excelsior* carrying papers piled up to five feet high on their rear racks. With surprising

One teacher reports her children sometimes reach for grey crayons when asked to draw the sky.

ease, they pass skillfully through the endless torrents of cars to get the daily paper to the public.

Just getting on a bike weighed down with so much cargo is a skill that veteran masters pass on to the newest kids on the block. People who have toured with a heavily-weighted rear rack and little weight in front know what an ordeal getting on a bike like this can be, pushing, rolling forward, taking a few quick steps alongside, swinging one foot over and hoping the wheels lay grounded long enough to actually arrive in the seat.

The paper deliverers are a community of people long expert at making the most out of very little. Life at the newspaper loading dock has the free-wheeling feel of a Sunday market. Between delivery runs, they sit and talk as tires are patched, deals are struck, and favors are exchanged and repaid.

Occasionally, one can spot a fearless veteran paper deliverer pedaling his hefty rig in the middle of four lanes of traffic—going against the flow. These workers are surprisingly at ease in Mexico City's congested traffic, and most insist that few serious accidents occur. Despite the obvious dangers of lugging their hefty cargo past so many unpredictable car doors, they never wear helmets.

Not far from the downtown newspapers, in the "zocalo" or town square, bicycle taxis are now increasingly popular for meeting the growing need to get around neighborhood gridlock. On weekends, families and couples line up at the city's massive cathedral to catch the next available bicycle taxi. For romantic couples, the bicycle-taxi harkens back to the days of horse-drawn carriages, when the weekend ritual of going out to see and be seen was best embodied in an open-air ride through town. Rides of an hour or more are available so that tourists and natives alike can view the attractions of the City, with the "bicitaxistas" serving as tour guides, following a route past the Alameda Central and the famed House of Tiles, now a Sanborn's Restaurant and Department Store.

Bicycle Unions

In the Mexican tradition, many bicitaxistas have joined a union. "The union's not a bad deal", said bicitaxista Javier de la Torre Andres. "We just pay 10 pesos (\$1.50) a day, and, like a



cooperative, they pay for new bikes and repairs."

Javier wears jeans, a walkman and a wide grin below his moustache as the sun casts a fierce orange glare across his bicycle carriage. One side of the carriage bears the insignia of the union and the back is adorned with a colorful ad for La Prensa, a major national newspaper. "La Prensa bought us 25 carriages so they could put their name on the back. None of us know what that would have cost, but it's a lot", Javier said.

Javier's been doing circles around downtown for a year and a half now and says he has yet to tangle with any passing cars, trucks or donkeys. In the downtown center, the growing presence of bicycle-taxis has become a fact of life.

Bicycles in Mexico City are seen by many who use them as a salvation. Javier says that for himself and his coworkers, bicycle-based employment is now a lifestyle deeply rooted as the union. He describes his job as a healthy way to meet a public need and make an honest living. Bicycle-taxis are a growth industry in a city which continues to grow. A whiff of the local air drives this point home. Bicitaxistas are not just alternative transportation, their wider use may become an absolute public necessity.

To preserve their health as they face the air pollution problem, bicitaxistas union members head "up to the mountains" in neighboring Tolcuna once a month to ride their bikes where the air is clean. "It decongests the lungs" they say. Conversation with Javier and other bicitaxistas bring out one commonality: they don't know or care what time of the day or year the smog is at it's worst, they just know it's always there.

Watching off-duty bottle distributors using their bicycle carts to carry friends through oppressively dusty streets for a wild Saturday night, I am reminded of the words of Ricardo, a great

cycle enthusiast: "We cyclists are like cockroaches and the rats that can survive nuclear war. You just blow the ash out of your nose and pedal on."

Bicycle Power

Public policies promoting bicycle use should be seen as part of the solution to Mexico City's air quality problem. The growing number of bicyclists represent an emergent political force capable of pushing for more environmentally sustainable transport policies. In 1991, a nascent bicycle-based eco-consciousness movement held a very successful 'bike to work' day. Since then it hasn't been repeated, but the effort is well remembered as the first time the bicycle movement visibly drew attention to the virtues of two-wheeled non-motorized transport.

Other approaches to the air problem have been tried, but have real limitations. A successful emission-cutting program was instituted in 1990 which requires that every car "rest" one day of the week, allowing only odd or even-numbered license plates on the streets any given day. The program's success

has been compromised, however, by drivers affluent enough to own a second car. Some have even suggested installing giant fans atop the mountains that ring the city to blow clean air through conduits to downtown areas where it is most needed.

But if Mexico City is ever to solve its air pollution problems, it will need to pay closer attention to making walking and bicycling safer and more viable, with better facilities for parking and riding. Making bicycling more affordable would also help. Rudiger Dombusch, a Professor of Economics at MIT, suggests that Mexico City remove the sales tax from bicycles. Policies such as these are important to solving Mexico City's air pollution crisis and making the City more liveable. ♦

**RAILWAY AND METRO BOOM
IN EAST ASIA**

While the lion's share of new transport investment into East Asia's burgeoning economies has been directed towards new road construction, hopeless traffic congestion is forcing Asia's governments to give rail and light rail another look. South Korea is planning a major new high speed rail link between Seoul, the capital, and Pusan, a major port. The line, which will move an estimated 80 million passengers a year at 300 kilometers per hour, is projected to be completed by 2001. Taiwan is also planning a high-speed rail link between Taipei and Kaohsiung, and Malaysia has plans for high speed rail service between Kuala Lumpur and Singapore, which could reduce the current travel time of seven hours to 90 minutes. China also wants to build a high speed rail line between Beijing and Shanghai at an estimated cost of \$10 billion, and plans to expand and upgrade its railway system, spending some \$47 billion.

Mass transit systems are also being built in Beijing, Shanghai, Tianjin, Qingdao, Shenyang, and Chongqing, and a light rail system will be built from Beijing to the tourist sites of the Ming Tombs and the Great Wall. Indonesia is planning a new metro in Jakarta, and Vietnam plans to build an elevated railway in Hanoi. Meanwhile, Kuala Lumpur, Taipei, and Bangkok are also trying to build light rail or metro systems, and Manila is expanding its existing system.

Some industry experts speculate that the popularity of expensive metros and high speed rail systems over more cost-effective dedicated bus, trolley, light rail, bicycle and pedestrian lanes on existing streets, is that they do not take road space away from private cars. Pouring public money into such projects can have a positive impact on the mode share of public transit in the long run, particularly in higher income countries. However, these expensive systems often take scarce public funding away from the proper maintenance of existing bus fleets, continued priority of buses and trams on the existing street network, and safe and convenient facilities for pedestrians and

bicyclists. High speed rail and metros also have enormous prestige value, unlike pedicabs and bicycles which in Asia are associated with the poor. Asian governments need to be reminded that bicycles and pedicabs, affordable and non-polluting, can be modernized as well. The rapid growth in the market for bicycles in China, Eastern Europe, and elsewhere in Asia, Latin America, and Africa may be a sign of the future, and not the past.

INDIA*World Bank Proposes
Rail Commercialization*

A World Bank report, *India Transport Sector: Long Term Issues*, released in March, makes recommendations which have sparked controversy in India. The report suggests several controversial changes, particularly a complete overhaul of the Indian National Railway, the world's largest. While not calling for outright privatization, it does call for the substantial reduction of public subsidies to passenger service, which will lead to substantial fare increases. It also proposes cutbacks in freight and passenger services to low-traffic volume rural areas. Finally, it recommends that the National Railway spin off rolling stock manufacturing to form a separate company in order to avoid conflict of interest.

The equity concerns of rail deregulation are real. Many low income people will face much greater travel costs. The Bank report tries to justify this on the grounds that the trains are not only used by lower income people, so a large part of this subsidy is actually benefitting higher income people. They argue that from an equity perspective the same funds could be better utilized elsewhere in a way more carefully targeted to the poor. While this may be true, the report is asking India's poor to give up an existing and certain subsidy in their rail system for a theoretical subsidy in some area which will probably never materialize, or will not prove to be politically sustainable.

The recommended reforms would

also lead to the loss of numerous jobs for railroad employees, and would have a serious adverse affect on rural communities. There is little doubt, therefore, that the recommended reforms would have adverse equity impacts.



Daisy Taylor

Bicycle taxis are being driven off

The impact of the recommendations on rail's mode share is more difficult to determine. On the one hand, higher fares and reduced service on less utilized routes will hurt rail's mode share in the short term. On the other hand, a financially-strapped railroad unable to make necessary investments into improved rail services is also likely to lose mode share, particularly in the long run. While the equity concerns are serious, if the railroad is expected to also be a welfare agency and an economic development agency while road passenger and freight services do not share

Transportation Briefs

these responsibilities, the ability of the railroad to compete with road-based modes is being constrained.

In the broader context of Indian transport sector reform, not reforming the rail system is also likely to have



Streets of Ho Chi Minh City.

adverse consequences. While rail remains unreformed, trucking has been deregulated and bus services are increasingly being privatized. Over 11,000 kilometers of privately-financed toll roads are planned over the next twenty years. Private contracting in the road sector is improving efficiency. Mode share in both freight and rail are shifting from rail to roads as a result. Meanwhile, financial projections for the rail system, while controversial, indicate an imminent financial crisis.

Ultimately, it would be better from the equity and the environmental per-

spective if India tried to resolve its financial crisis by first insisting on full cost recovery from road users, rather than through railroad restructuring. Car owners are also heavily subsidized but tend to be much higher income than rail passengers.

Second, the low-level fares should be preserved for low income people, but the burden of paying this subsidy should be gradually removed from the railroad to other government agencies. Third, employees laid off by restructuring should be guaranteed jobs in other sectors where they could be more productive. Once these issues were resolved, increasing the ability of the railroad to provide better service and compete with road based modes would receive wider public support.

HO CHI MINH CITY

Free-Market Bicycle Taxis Banned

Sadly, the cyclo (pronounced seek-lo), Vietnam's three-wheeled bicycle taxi, is being slowly driven off the streets of Ho Chi Minh City. In July of 1995, a new edict was passed, and enforced by traffic policeman, to drive the 37,000 cyclos out of the city centre. Authorities claim that the cyclos tie up "other traffic", such as motorcycles, trucks, buses, and a growing number of cars. What few traffic studies exist indicate that private cars because they consume so much more road space per passenger than pedicabs, are a much more severe source of traffic congestion. No similar restrictions have been placed on private cars, however.

The cyclo fills a critical niche in Vietnam's urban transport market. Already, shoppers are grumbling about how to get their groceries home from the market. Children and the elderly are particularly hard hit. Most say they will switch to mopeds, which are not only more polluting, they are also much more expensive.

Banning the cyclos is a bad business idea, particularly since Vietnam is very interested in increasing its tourist

income. There is no better way for a tourist to see Ho Chi Minh City than by cyclo, as the rapid emergence of similar pedicab operations all over Prague, Krakow, and other tourist Meccas demonstrates. A cyclo driver who attracts a regular clientele of foreigners can make \$100 a month, or four times the pay of local factory workers.

Strictly private operations, the cyclo's emergence in Vietnam was an early sign of economic liberalization. The recent crackdown is not a sign of progress but a crackdown on free enterprise.

OUAGADOUGOU, BURKINA FASO

Moped-Centered Mobility Has Unique Features

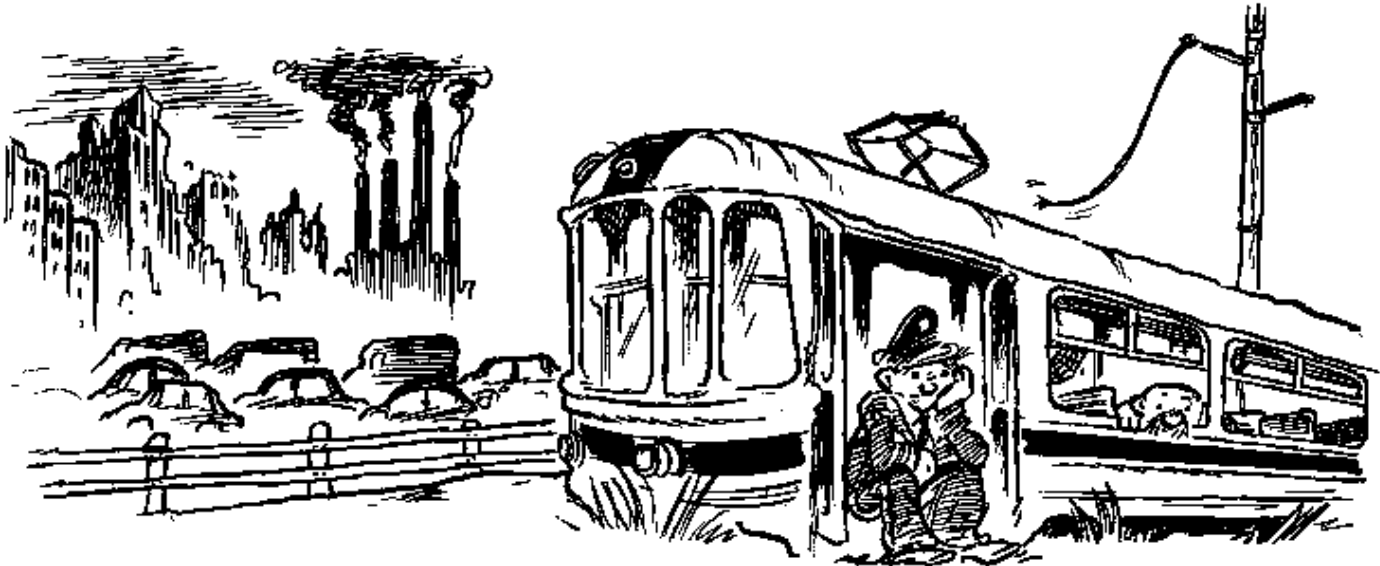
Ouagadougou is unique in Africa for having motorized not with the private car but with the moped. Moped-centered motorization has some interesting advantages. First of all, it's cheaper. Per capita income in Ouagadougou is under \$300 a year. Even the moped, at \$1000 for a new vehicle, is out of the price range of many people. But they are still far less expensive than a new car, and the secondary market makes them affordable to many. Secondly, the moped takes up far less space for parking and far less road space. Ouagadougou does not have the kind of traffic congestion faced by many of its automobile-dominated neighbors, and parking costs only a nickel a day. Gasoline costs are also a fraction of what it would cost to operate a private car. The fuel distribution business, being in such small quantities, is dominated by small, low income informal sector vendors who can enter the business with minimal start-up capital costs.

But the moped has some disadvantages as well. By 6:00 p.m. the city is enshrouded in a thick haze of pollution because of their small, inefficient engines, causing serious health problems. The noise is also a constant headache. With helmets virtually unheard of, safety is also a major problem. Casual observers report seeing several serious crashes a week.

continued on p.14

Poland: Shock Therapy Short Circuits Public Transport

by John Pucher



This article originally appeared as "The Road to Ruin" in Transport Policy, Vol. 2, No. 1, pp. 5-13, 1995

Radical economic reforms since 1990 have had important impacts on the sustainability of Poland's transport system. Increased political and economic freedom, access to Western consumer markets, reductions in government subsidies, increases in public transport fares and service cutbacks have all driven people away from buses and trams and into private cars. The result has been worsening air and noise pollution, congestion, growing transport-related injuries and fatalities, and increased travel costs and reduced mobility for the poor. Western countries have developed sophisticated environmental regulatory systems and procedures for democratic participation in the transportation and land use planning

John Pucher is an Assistant Professor at the Department of Urban Planning, Rutgers University

process, albeit with mixed success. In Eastern Europe, however, these systems are in their infancy, and governments are ill-prepared to deal with the dangerous external effects of growing motorization. There is considerable danger that irreversible damage will be done to Polish cities if current trends continue.

Urban Transport in Socialist Poland

Like most socialist countries, passenger transport in Poland was almost completely dominated by public transport, both for long and short-distance travel. In most cities, public transport accounted for 80-90% of motorized travel, with only 10-20% of trips made by automobile. It is not difficult to see why. Partly as a matter of socialist ideology, auto ownership and use were extremely expensive and difficult, while public transport was widely available and subsidized to such an extent that it was almost free.

While the end of communism came gradually in Poland, the economic reform program adopted by the democratically

elected government in 1990 was extraordinarily bold, entailing a rapid shift from a planned socialist economy to a decentralized market economy in what has come to be known as "shock therapy." Three aspects of this economic reform have had especially important consequences for Poland. First, "shock therapy" led to a sharp reduction in the subsidies to public transport which had enabled low fares. Second, the responsibility for local public transport was shifted from the central government to local governments, which are in dire financial straits. Third, in the early years of 'shock therapy' the lack of funds for upgrading or even maintaining existing public transport infrastructure led to less reliable service and more frequent breakdowns.

Official policy since 1990 has encouraged the maximum possible privatization of public transport firms themselves. Through a process of competitive tendering reminiscent of the situation in Great Britain, both public and private transport firms are required to submit bids to the

local governments for the right to provide service on specific routes. Public transport systems are also required to offer competitive contracts for repair and other services, with the goal of reducing costs and improving service quality.

While such privatization measures might eventually improve public transport services, many current impacts have been negative. Even in an affluent and technologically advanced country such as Britain, privatization of urban bus service has led to large fare increases, service cutbacks and alarming losses in ridership. A similar pattern can be seen in Poland, with fare increases and service cutbacks leading to ridership losses and a vicious circle of further fare increases.

Reasons for Changes in Travel Behavior

Sharp increases in public transit fares have accelerated the loss of public transit ridership since 1988. Equally striking, however, is the change in the price of public transport relative to the price of auto use. In 1988, the price of a liter of gasoline in Poland was eight times as expensive as a one-way trip by bus or streetcar (120 zł. vs. 15 zł.). By 1994, the price of a liter of gasoline was only about twice as high as the price of a public transport trip. Thus, the relative price of auto travel has fallen sharply while the relative price of public transport has risen. At the same time, gasoline rationing has come to an end in Poland, thus increasing the supply of gasoline for purchase by the motoring public.

Compared with Poland, the relative price of public transport increased even more in Eastern Germany between 1988 and 1992, with the ratio of gasoline price to a one-way trip public transport falling from more than 9:1 to less than 1:1. In the Czech Republic, the ratio fell from 9:1 to 3:1. The largest drops in public transport ridership occurred in eastern Germany and Poland, where the relative price of public transport increased the most, while ridership has increased in the Czech Republic, where the relative price of public transport increased the least.

Financial incentives obviously do not provide the only explanation for the modal shift from public transport to the automobile. Throughout the countries of Central and Eastern Europe, the automo-

mobile has become an extremely important symbol of freedom and social status. Many Eastern Europeans with quite modest incomes have purchased automobiles even though they do not need cars for their transport needs and cannot really afford them. Having an automobile is essential to showing that one does not belong to the lower class.

Many of the difficulties of public transport in Poland undoubtedly lie with the public transport systems themselves. Thanks to decades of massive subsidies, the monopolistic structure of the industry and an almost entirely captive ridership, public transport systems became extremely inefficient. At the end of the socialist era, labor productivity was low, per-unit costs were high, overstaffing was extreme, and the quality of service was low.

Problems of Increased Auto Use in Poland

Perhaps the most serious consequence of increased auto use in Poland has been the increase in traffic fatalities. From 1987 to 1991, the number of fatalities in automobile accidents rose from 4625 to 7901 and the traffic fatality rate per 100,000 population rose from 12.3 to 20.8. In addition, air, water and ground pollution have been severe problems in Eastern Europe for decades but were largely ignored by

Shock therapy led to higher fares, deteriorating maintenance and less reliable service.

communist governments who single-mindedly pursued the goal of fastest possible industrialization. On top of this legacy of environmental deterioration, increased auto use has especially exacerbated the problem of air pollution in Polish cities.

Traffic congestion is probably the most visible problem of increased auto use. In Warsaw, a typical rush-hour auto commute of 10 km. required 20 minutes in 1988; the same commute now takes 30-45

minutes depending on the rather erratic conditions. Finally, increased auto use has drawn away much of public transport's ridership, leading to losses in revenue, the need for fare increases and cutbacks in service. For the increasing number of Poles with an automobile, this may seem an irrelevant problem but it is causing ever more severe mobility problems for Poland's rapidly growing underclass.

Policies to Mitigate Poland's Growing Transport Problems

It is essential that urban transport policies in Poland be revised to take externalities into account, requiring travelers to pay the full costs of their travel choices. Only then will distortions in modal choice be avoided. Regulations against the use of cars without catalytic converters and the conversion to unleaded gasoline are also critical.

Parking policies are also key to the solution. Parking regulations are not enforced, and motorists are paying far less than the opportunity cost for using the land on which they are parked. Fees for parking should be high enough to reflect at least some portion of the congestion costs arising from auto use in densely developed central city areas and there needs to be a crack down on illegal parking through more frequent towing and higher fines. Successful parking control schemes have already been implemented in Wroclaw and Cracow, with positive results on the liveability of their central cities. These policies would help to traffic calm central cities, and combine well with other traffic calming measures, bicycle lane and parking development, and pedestrianization strategies for making the urban environment friendly to the public transit user, who is after all a pedestrian also.

With private cars increasingly clogging the street network for public transport, priority bus or tram lanes or high occupancy vehicle lanes could be increasingly effective methods of promoting public transit and reducing congestion.

There has been fierce opposition by Polish auto drivers to any sort of limits on their driving. That opposition has translated into political blockage of many local government measures to control auto use

continued on p. 15

Sustainable Transportation
News Briefs

continued from p.11

Many of the noise, pollution, and to some extent the safety problems related to mopeds and other intermediate transport technologies have simple, known, technical solutions which deserve to be explored. However, bicycles and other non-motorized technologies are even more affordable, don't generate the pollution, and have a better safety record in the proper conditions. Low levels of bicycle use indicate that safety for bicyclists and pedestrians is also a major concern.

BRAZIL

Motorization Explodes as Car Taxes are Lowered

The number of annual car sales in Brazil has nearly doubled between 1990 and 1995, from 713,000 a year in 1990 to over 1,400,000 a year this year. One major reason is that, in a concession to the nation's automobile industry, the government significantly reduced the taxes on the consumption of first time car buyers in 1992. The end of rampant inflation has also made commercial loans for auto purchases viable again. In order to accommodate the burgeoning traffic, massive new highways are being built at enormous cost, particularly in Sao Paulo, where many of the new roads are displacing thousands of favelados or slum dwellers.

With Brazil 85% dependent on imported oil, and spending at least 30% of its foreign exchange on oil supplies to private automobiles, such policies hardly seem consistent with the increasingly severe austerity measures being imposed by the new Government to curtail government spending.

PORTLAND, OREGON

Yellow Public Bikes Introduced

Portland, Oregon has introduced 100 yellow public bikes for downtown. Borrowing an idea once tried on a greater scale in Amsterdam, Portland's Yellow

Bike is free to be used by anyone who wants to use it. The city is now receiving a large number of private donations to expand the fleet, and so far none of the vehicles have been stolen, although a few have flat tires. While viewed with skepticism in crime-ridden cities like New York, the idea is catching on in small U.S. West Coast towns, some of which are planning to launch similar programs.

NEW DELHI, INDIA

New Developments in Bullock Carts

Senior Indian Government officials recently announced that there are nearly 25 million bullock carts plying the roads of the country. Back in 1981, Prime Minister Indira Ghandi stated, "In this jet age, people refer to bullock carts as symbols of the past. However, in India, animals provide more power than all of our power plants combined. Replacing them would entail a further investment of 25-40 billion dollars alone, over and above the loss to the agricultural sector of manure and cheap fuel."

Nevertheless, the old model of bullock carts consisting of just wood and iron has persisted, despite improvements in technology. For example, C-TARA (Centre for Technology Alternatives for Rural Areas) at the Indian Institute of Technology in Bombay has devised a cart fortified by steel rods, springs and shock absorbers to ride more smoothly and with less stress on the animal.

While most of these new and improved carts would cost up to only Rs 8,000, the government refuses to aid in their development while it is simultaneously providing loans of up to Rs 30,000 for motorized tractors, and millions of dollars in free rights of way to 10,000 kilometers of planned toll roads which

will be closed to non-motorized traffic. Given that India spends five and one half billion dollars on imported fossil fuels, this policy is indeed questionable.

NEW YORK, NEW YORK

Subway and Bus Fare Likely to Rise to \$1.50 as Service Declines

The Metropolitan Transportation Authority, facing severe funding cut-backs from the State Government as a result of Governor Pataki's tax-cut promises, is planning to raise the fare on buses and the New York City Subway to \$1.50 from \$1.25, making the subway fare more expensive than a gallon of gasoline for the first time in history. While the MTA is subsidized from toll revenues on many of New York's bridges and tunnels, this toll revenue is unevenly divided between suburb and city. The wealthy suburban commuter rail lines receive a higher subsidy per capita than the city's public transit system which is used predominantly but not exclusively by low and moderate income people. New York Mayor Guiliani's plans to make school



Rug merchant in New Dehli

children pay for their own public transit fares was finally defeated after an enormous popular outcry.



Poland

continued from p.13

either by restricting lane usage or parking in some cities. Of course, the congestion and parking problems may eventually become so severe that even auto drivers will agree that something must be done. Until now, however, there seems to be an almost allergic reaction to any government policy that even remotely resembles the hated controls associated with the communist era. This attitude does not bode well for the future of public transport in Poland since doing nothing means a failure to internalize the external costs of auto use, putting public transport at an enormous competitive disadvantage.

With municipal governments and public transit agencies facing severe fiscal crises, many urban public transport systems are going to have to engage in painful restructuring in order to remain competitive with automobile transport. But increased investment into more energy-efficient rolling stock and track is also critical to bringing down system costs and improving the competitiveness of public transit. The extensive tramway systems in many Polish cities, for example, are in terrible condition. Dilapidated tracks, vehicles and power systems lead to frequent breakdowns and speeds slower than buses. However, many parts of the tram lines are on exclusive rights-of-way and have the potential to provide fast, dependable service largely immune to traffic congestion. The modernization of Poland's tramway systems and provision of priority signalization at intersections would vastly improve the overall quality of urban public transport.

National government funds for one-time capital grants in both the road and public transit sectors are common in the West including the U.S., but are now primarily available only in the road sector and for the Warsaw Metro in Poland. A system of national capital grants for local public transit systems administered at the local level needs to be established. The ideal source of revenue for such a fund would be increased taxes and fees on auto use, such as gasoline taxes, congestion pricing, and vehicle registration fees. Local revenues for public transit support could ideally come from parking revenues and parking violation fines, or other road

Haiti

continued from p.7

After several preliminary meetings with Elien Joachim, LaFanmi's Director, it was agreed that Hugh and a mechanical trainer and advisor from Borel, Gregory Geffard would conduct a preliminary training session to gauge the boy's interest for a bicycle program. Although seminar participants were to be held to 10, nearly 20 boys managed to squeeze in to the teaching room and it was impossible to persuade them to leave!

Elien Joachim has requested a bike mechanic/Trainer to work at least part time at LaFanmi and he has agreed that the organization will pay a stipend to whomever is selected to cover food and lodging while they are in Port-Au-Prince.

Finally, Haiti's Ministry of Transport and Rural Development has expressed interest in ITDP's help in preparing a national level basic mobility needs assessment, which would give ITDP the opportunity to demonstrate the feasibility and viability of sustainable non-motorized transportation at the national level.

Conclusion

Working in Haiti in these times of political turmoil has not been easy, but it has been rewarding. Now that democra-

cy has been restored, ITDP has been able to broaden the scope of its Mobility Haiti project. By providing grassroots groups affordable, economically accessible and environmentally-friendly transportation, Mobility Haiti is playing a key role in empowering the indigenous NGO sector in Haiti. ITDP is open to working with all groups that share our commitment to promoting environmentally sustainable transportation and meeting the basic access needs of the poor. By increasingly working directly with indigenously-controlled grassroots organizations, Mobility Haiti will be better able to empower Haitians with the ideas and skills they need to meet their basic access and mobility needs.

Even with a wealth of background and historical information, it is often difficult to understand the complexities of Haiti. Haiti is a small country with a history that has given its people good reason to be suspicious of foreigners. Developing trust does not come easily, and can be easily destroyed, and maintaining the trust of the community makes all the difference to project success. ITDP's Mobility Haiti has been warmly welcomed to the Artibonite. We are trying as outsiders to understand and work with the realities there, and learn their methods of working. Through our work, Mobility Haiti is, slowly, becoming known and respected.



user charges.

Experience in the U.S. and Western Europe shows that once a public transport rider is lost to the automobile, it is almost impossible to win that rider back. Now is the crucial time to preserve and improve the existing public transport systems in Eastern Europe before more damage is done. They should not be sacrificed on the altar of supposedly sacred market principles. Fair competition in the marketplace is not possible until state support is balanced between modes and the external costs of auto use are internalized. Until then, government support to public transport will be essential to prevent a serious distortion in modal choice, which would have disastrous consequences.◆

Havana

continued from p.5

fossil-fuel driven transportation.

Politics and shifts in global political alliances often produce unintended outcomes. Cycling through the rolling hills of Havana reveals the tenacity of Cubans in the face of extreme adversity. It also highlights the practical aspects of simple, sustainable transportation. Bicycle lanes continue to be added, and after six years of bicycle commuting, Habaneros are as likely to welcome lightweight alloy bicycles as cheap gasoline vouchers—even if they could get spare parts for those old '57 Chevys.◆

World Bank Finds Other Path

Upgrading Peruvian Mountain Tracks Puts People First

By Paul Guitink

The World Bank and the Inter-American Development Bank have given the go-ahead to a \$300 million Rural Roads Rehabilitation and Maintenance Project for Peru. The project includes several innovative elements which will better target lower income beneficiaries and improve its long term environmental impact, including significant funds for upgrading village-level footpaths and tracks that are used primarily by pedestrians and human and animal-powered vehicles. The overall project focuses on secondary feeder roads that provide key links to the primary road system, and the inclusion of local tracks in the project provides important recognition that non-motorized transport plays a key role in an integrated transportation system. Identification, prioritization, design, construction and maintenance of improvements will be done by the communities, with the participation of all stake holders. By using community participation to plan the improvement of local paths, the project represents an innovative attempt to target infrastructure investment to the basic mobility needs of low income people.

Furthermore, local micro-enterprises and small contractors will be given training in labor-based road rehabilitation and then hired to rehabilitate and maintain the rural roads included in the project. Normally, roads are rehabilitated using bigger firms with capital-intensive methods, which has less direct benefits for the poorer people in the project area. This labor-based method will greatly increase the number of jobs and the development of skills for low income people in the project area.

The project will also improve local village streets in about 300 villages to reduce the negative environmental impact of dust, which has been linked to respiratory illnesses.

The village-level infrastructure network supported by the

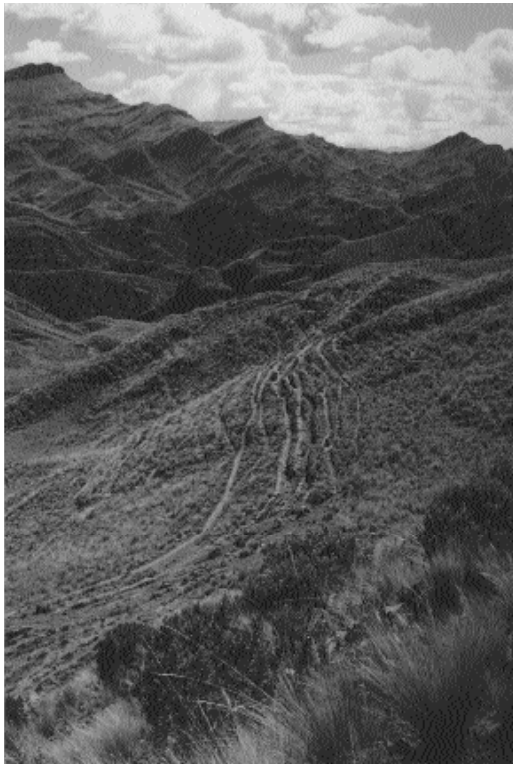
project links remote communities to their fields or farms, and markets. It is primarily used for human and animal portage of agricultural inputs and outputs, and household-related trips. A typical small farmer in remote areas has diverse mobility needs. Farmers must go first to their fields and farms, then to their villages, then to local towns, and sometimes to larger market towns. While in the past many projects focused only on the main inter-city network, a large portion of rural people's basic mobility needs are met by non-motorized modes using the unclassified local network. The underdevelopment of this network represented an important barrier to the development of small farmers. Interventions under the project are not limited to path and track improvements but can also include the provision of common storage facilities near the roadside to develop an efficient intermodal transport system that combines farm-roadside non-motorized transport with roadside-market motorized transport.

The local track component of the project will be implemented in two phases. Phase I will select five pilot sites located in two of the poorest areas where village-level infrastructure is to be improved under the "main" project, thus creating an integrated and continuous farm-to-market network. The pilot areas will be selected by a team of local stakeholders and involved agencies known as the Project Implementation Unit (PIU), based on how to maximize the number of beneficiaries, the impact on agricultural production, terrain characteristics, current transport patterns and the level of community interest.

Phase II, starting 18 months after the first phase, will expand the project to all areas covered by the "main" project. At this point, the method of selecting and planning local track and facilities improvements will be based

on lessons learned from the first phase.

In both phases, the communities will select and implement the sub-projects with the technical assistance of a national consultant or NGO. Development of sustainable institutional capacity at the community level to prepare, implement and manage similar projects is included in the project. Training programs for the community organization will familiarize them with commercial practices required to manage and use allocated funds, to identify priority interventions and to ensure project sustainability.



Mountain trails in Peru

Paul Guitink is the Non-Motorized Transport expert with the World Bank.

Letter

continued from p.3

ject to the national level and integrating non-motorized transport into their infrastructure development plans. Project Director Hugh Lewis is currently in Haiti.

In South Africa, ITDP has developed a plan with the Soweto City Council to set up a bicycle and cart parking, rental, repair, and purchase facility at the Soweto Commuter Rail Station. Based on the Dutch model, but in a low income neighborhood, the project will not only provide vehicles for small micro-businesses so dearly needed in South Africa, but also will maintain and improve the viability of the commuter rail system and decrease travel times for Soweto residents who have to walk long distances to reach the rail terminal. If the project catches on in this high-profile location, it may prove a model for all of Africa.

ITDP's Women's Mobility Project in Mozambique is also back on track with the generous support of contributors to the Alternative Gifts Market. Doubling the promised number of bicycles, two containers of bicycles, parts and accessories were shipped this September to Mozambique to help the members of AMRU, a women's organization, set up small businesses.

The requests for ITDP's help, however, are rapidly outstripping the money we have available to provide this support. Our heartfelt thanks are extended to the Turner Foundation and the New Land Foundation who have renewed their long-time support our work, to the Environmental Protection Agency for

financing a much needed project recommending changes in World Bank loan assessment guidelines, and finally to the Rockefeller Brothers Fund, who's support for our Eastern Europe project has been vital.

We are pleased to note that many of the articles in this issue of Sustainable Transport have been written by our members, and we encourage more members to get involved. If you work in any of the areas that we are working and can offer assistance to our campaigns, let us know.

Finally, ITDP's Board of Directors and staff wish to welcome our newest Board members who were elected at a Board Meeting in January of this year, prior to the ITDP 10-year Anniversary Party held in Washington, D.C. They are: Ariadne Delon-Scott, currently working with Rivendell Cycles and previously with Bridgestone Cycles, U.S.A.; John Howe, Professor of Transport at IHE-Delft University, Delft, Holland, an internationally renowned expert in human-powered transport in Africa; and V. Setty Pendakur, Professor of Urban and Regional Planning at the University of British Columbia in Vancouver, Chairman of the Transportation Research Board's Global Task Force on Non-Motorized Transport. We'd also like to thank Harriett Parcels for her years of support as a Board Member. Special thanks to Karen Overton and Robin Stallings for their hard work organizing our 10-year anniversary party, to Paul MacCready, and everyone who participated in the celebration. ♦

Walter Hook
Executive Director

Peru

continued from p.16

Training programs will build on existing capacities and practices of communities and will pay special attention to the participation of women.

As World Bank funds are in an internationally exchangeable currency, they will primarily be used to cover materials needed for the project which are not locally available, including small equipment for labor-based road construction and rehabilitation.

Community participation also means that communities will be responsible for ongoing maintenance of the improved facilities. Maintenance standards will be established in close collaboration with the communities and only those communities with proven track records of adequate routine and periodic maintenance of the improved village-level infrastructure will be eligible for replacement of worn-out equipment or follow-up projects.

The success of this project will be judged based on the performance of the sub-projects and their impact and interaction with the improvements in the main project which focuses on secondary roads. Furthermore, measuring the economic benefits on the lives and economic position of the low income beneficiaries will be one of the first attempts by the World Bank to include impacts on non-motorized transport in economic assessment criteria. The results of this assessment will also be used to develop guidelines and best practices for future projects.



Pedals for Progress

Every year, we Americans buy 12 million new bicycles and junk five million old ones, leaving them abandoned and unused in basements, barns and garages. Few of us want to throw old bicycles away; we recognize they have value, and we are reluctant to add to the waste stream. Pedals for Progress offers a simple solution to this problem and has established a viable means for recycling these bicycles and lessening our impact on our own landfills.



Pedals for Progress has sent bicycles to Nicaragua, Eritrea, Ecuador, the Dominican Republic, and to ITDP's projects in Haiti and Mozambique. To support PFP, send your check or write to :

Pedals for Progress
86 E. Main St.
High Bridge, NJ 08829

NEW TITLES

Downward Mobility? A Critique of the World Bank's Transportation Sector Lending. Hook, W., Knecht, T., and Zegras, C., 1995. To order, write The International Institute for Energy Conservation, 750 First Street, NE, Suite 940, Washington, D.C. 20002 or call (202) 842-3388 or FAX: (202) 842-1565, or email: iiec@igc.apc.org.

A Citizens Guide to Effective State Air Quality Planning for Transportation. 1994. Write The Task Force on Transportation and the Environment, 1875 Connecticut Ave, NW, Suite 1016, Washington, D.C. 20009, or fax 202-234-6049.

Bike Cult: The Ultimate Guide to Human Powered Vehicles. Perry, D., 1995. Called the Whole Earth Catalogue for bicyclists, this compendium has something for all bike enthusiasts. Write the publisher: Four Walls Eight Windows Publishers, 39 W. 14th St., Rm. 503, New York, NY 10011.

Intelligent Transportation Systems for Sustainable Communities. Replogle, M. Write to the Environmental Defense Fund, 1875 Connecticut Ave, NW, Washington, D.C. 20009, or fax 202-234-6049.

Reconciling Transportation, Energy, and Environmental Issues: The Role of Public Transport. Proceedings of a Conference in Budapest, Hungary, June 1994. Good collection of articles focusing on Eastern Europe. Proceedings from the 1995 Conference in Bucharest, Romania may also be available. Write to the International Energy Agency, 2 Rue Andre-Pascal, 75775 Paris, CEDEX 16, France.

"Motorization and Non-Motorized Transport in Asia: Transport System Evolution in China, Japan, and Indonesia," Hook, W. and Replogle, M. *Journal of Land Use Policy*, Vol. 12. Write to ITDP for a copy. \$5.00.

"A Review of the Transport Policies of the Multi-Lateral Development Banks in Central and Eastern Europe and Their Environmental Consequences: A Case Study of Poland," Speakman, D., 1995. Write to the Polish Ecological Club, ul. Pilsudskiego 8, 31-109 Krakow, Poland.

"Integrating Pedestrian and Bicycle Factors into Regional Transportation Planning Models: Summary of the State of the Art and Suggested Steps Forward," by M. Replogle, 1995. Write to the Environmental Defense Fund, 1875 Connecticut Ave, NW, Washington, D.C. 20009, or fax 202-234-6049.

"SIP's, Sanctions, and Conformity: The Clean Air Act and Transportation Planning," by J. Anderson and A.

Howitt, [forthcoming]. Good survey of the impact of the Clean Air Act Amendments on transportation planning in the U.S. Useful lessons for developing and CEEC countries. *Transportation Quarterly*, Summer 1995.

Railways, Energy, and the Environment. K. Gwilliam, Z. Shalizi, and L. Thompson, 1994. Write to the World Bank-TWUTD, 1818 H St, NW, Washington, D.C. 20433. Ask for Report TWU-6.

Roads and the Environment: A Handbook. 1994. The World Bank-TWUTD, 1818 H St, NW, Washington, D.C. 20433. Ask for Report TWU-13.

Railway Reform in the Central and Eastern European Economies. P. Blackshaw and L. Thompson, 1993. Write to the World Bank-TWUTD, 1818 H St, NW, Washington, D.C. 20433. Ask for Report WPS-1137.

Transport for Urban Development in Hong Kong. Timothy Hau, University of Hong Kong. To order, Write: ITDP, 611 Broadway, RM. 616, New York, NY 10012 or call (212) 260-8144. \$5.00.

Transport and Communications for Sustainable Development. Dr. Roberto Camagni and Roberta Capello, Politecnico di Milana and Prof. Peter Hijkamp, Free University of Amsterdam. To Order write ITDP, 611 Broadway, rm. 616, New York, NY, 10012 or call (212) 260-8144. \$5.00.

Challenges Facing Urban Transport in Asia. Mr. M. Rahmatullah, The Economic and Social Commission for Asia and the Pacific, The United Nations, Bangkok, Thailand. To order write ITDP, 611 Broadway, RM. 616, New York, NY, 10012 or call (212) 260-8144. \$5.00.

Moving People - Transport Policy in the Cities of Brazil. Douglas Poole, Marcus C. de Melo and Regina S. V.M. Pacheco, 1994. For more information call IDRC publications at (800) 274-4488.



BULLETIN BOARD

Velo City. Sept. 26-30, 1995, Basel Switzerland. European Equivalent of the Pro Bike/Pro Walk conference. Attracts hundreds of the world's premier bicycle transportation engineers, planner and advocates. Contact : Postfach, CH-4124 Schonenbuch, Switzerland. TEL: (01141)61-4817869.

City-Trans Asia '95, 21-23 Sep., 1995, Singapore. Sponsored by the Ministry of National Development, Singapore. Very expensive and corporate oriented. For more information, contact Amsterdam RAI, International Exhibition and Congress Centre, P.O. Box 77777, NL-1070, MS Amsterdam, Europaplein, NL-1078 GZ Amsterdam, TEL: (31 0 20-549-1212 or FAX) 310 020 646-4469.

The Eastern Asia Society for Transportation Studies Conference, September 28-30, 1995, Manila, Philippines. Contact Ms. Fujita H., Secretary to Association EASTS, c/o Prof. Inamura H., Dept. of Civil Engineering, Tohoku University, Aoba, Aoba-ku, Sendai, 980, Japan, FAX: 81-22-268-3689; Email: INAMURA@PLAN1.CIVIL.TOHOKU.AC.JP

"Effective Financing of Environmentally Sustainable Development", World Bank's Third Annual Conference on Environmentally Sustainable Development. October 4-6, 1995, Washington, D.C. At the National Academy of Sciences and the World Bank. For details, call 202-473-9361, fax 202-522-3224, email ASECK2@worldbank.org, or write 1995 ESD Conf, Office of the V.Pres. for Env. Sust. Development, The World Bank, 1818 H St., NW, Washington, D.C. 20433.

Bicycle Federation of America - Advocacy Training. The BFA is organizing five regional action weekends to help U.S.-based state and local advocates effectively pursue long-range bicycle and pedestrian plans developed under the Intermodal Surface Transportation Efficiency Act (ISTEA). The workshops are as follows: Boulder, CO., Sept. 9-10; Madison, WI., Sept. 16-17; Pittsburgh, PA., Sept 23-24; Atlanta, GA., Sept. 30-Oct. 1; Davis, CA., Oct. 14-15. For details, contact BFA at tel:202-463-6622, fax:202-463-6625, email: bfa@igc.apc.org, or write to 1506 21st St. NW, Suite 200, Washington, D.C. 20036

Third Substantive Session of the Preparatory Committee for Habitat II, February 12-23, 1996, New York, New York. Contact the Habitat Focal Point: Mr. J. Mungai, United Nations Centre for Human Settlements (HABITAT), P.O. Box 30030, Nairobi, Kenya, TEL: 254-2-62-3719; FAX: 254-2-62 3080.

CODATU VII. February 12-16, 1996. 7th Conference on the Development and Planning of Urban Transport in Developing Countries, , New Delhi, India. CODATU, focusing on Urban Transport in Developing Countries, brings together the leading experts from more than 30 countries, and more than 150 papers are scheduled to be presented. Contact Olivier Degeorges, Secretary General, CODATU Association, 22 rue d'Alsace, 93200 Levallois-Perret, France. Tel: (331) 47 39 36 86; FAX: (331) 47 39 36 85. Regional Seminar on

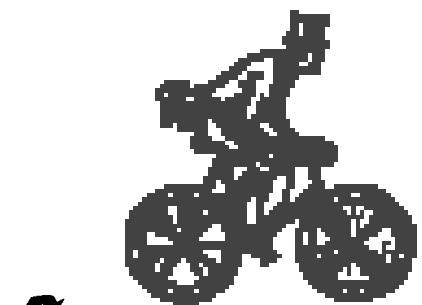
Megacities Management in Asia and The Pacific, Manila, Philippines, sponsored by the Asian Development Bank and the Urban Management Programme for Asia and the Pacific (UMPAP). Contact: Mr. Asad Ali Shah, Manager, the Asian Development Bank, TEL: 632-711-3851 or FAX: 632-741-7961.

HABITAT II, June 3-14, Istanbul, Turkey. United Nations Conference on Human Settlements, Contact United Nations Centre on Human Settlements, Nairobi, Kenya, P.O. Box 30030, TEL: 254-2-230800; FAX: 254-2-226473.

"Towards Sustainable Transport", March 25-28, 1996, Vancouver, Canada. OECD International Conference, hosted by the Canadian Government and the Province of British Columbia. This conference is concerned with the assessment of long-term goals for transportation that are consistent with sustainable development and the identification of policies and measures that might be adopted to achieve these goals. For more information, please contact Mr. Russ Robinson, Environment Canada, Transportation Systems Division, 351 St. Joseph Blvd., 13th Floor, Hull, Quebec, Canada K1A 0H3, FAX: 1-819-953-7815.

ITDP

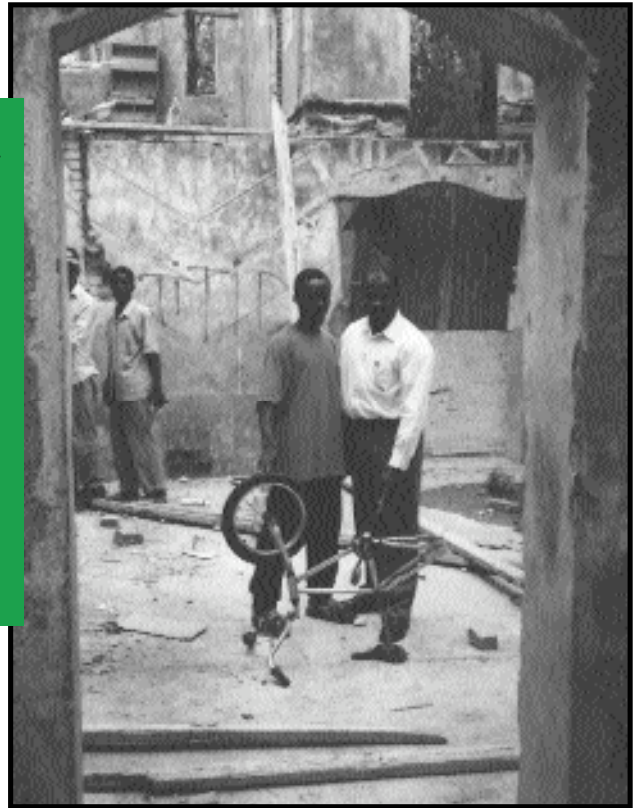
welcomes advertising
of products and services
consistent with our mission.
Call (212) 260-8144
for information.



Printed on recycled paper

Sustainable *Transport*

We need your support! Your tax-deductible donations have not only helped to send several containers of donated bicycles to newly democratic Haiti and Mozambique and train mechanics there, but they have also convinced larger donors to do the same. Meanwhile, our work with NGOs in Asia and Eastern Europe has empowered them to join us in the fight against automobile-dependence. Help keep the wheels of the 'velo'-lution turning with your contribution and help!



Yes, I support ITDP's efforts! Here is my donation of:

\$20 \$35 \$50 \$100 \$250 Other

From:

Send your tax deductible contribution to:



611 Broadway, Rm 616
New York, NY 10012



611 Broadway, Room 616
New York, NY 10012

Non-Profit Org.
U.S. Postage
Paid
New York, NY
Permit No. 6323