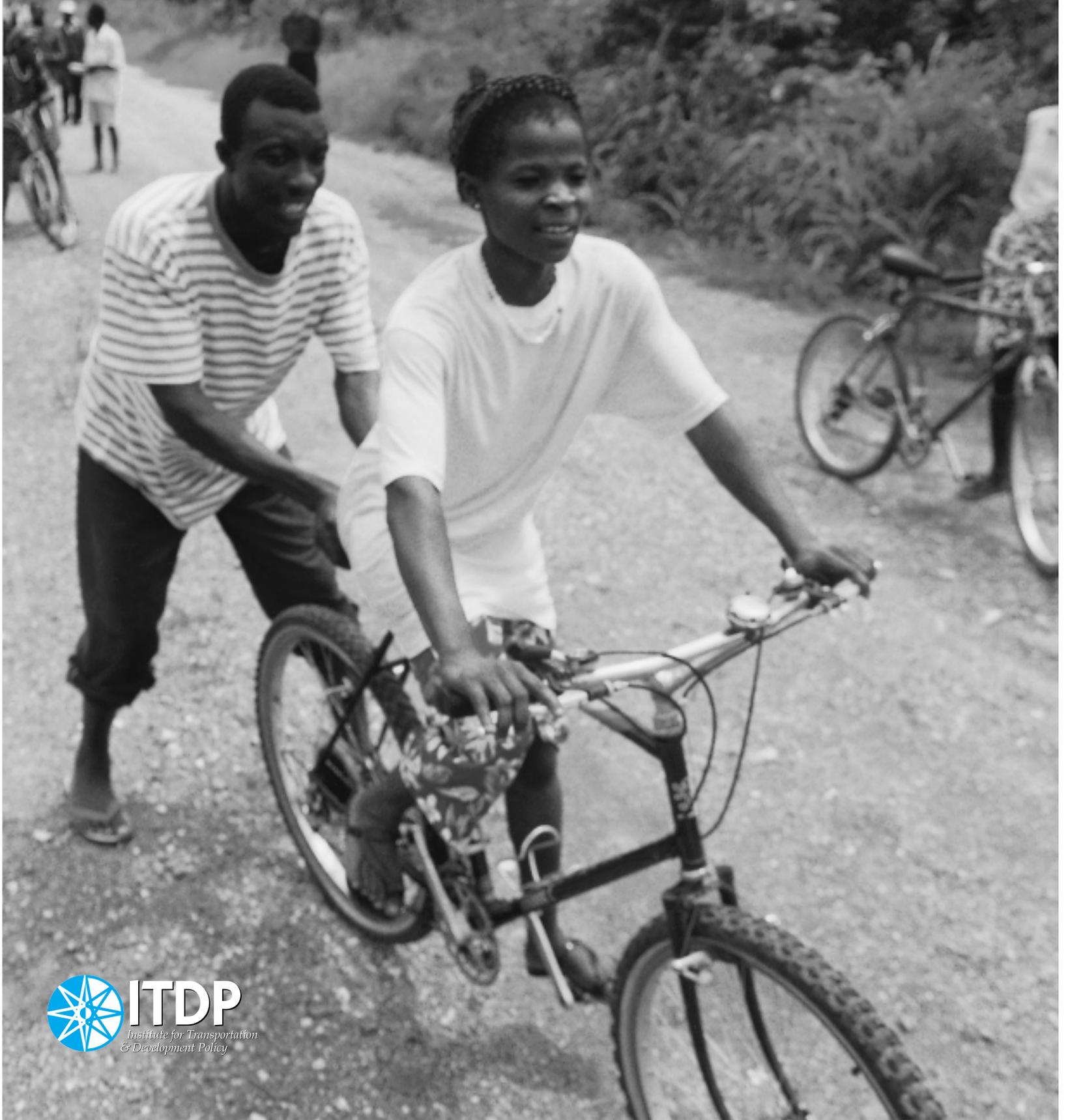


sustainabletransport

Fall 2000

Number 11



Is Globalization the Enemy of Sustainable Transport?

Many people have been asking what we thought of the World Trade Organization protests in Seattle and the World Bank protests in Washington this past April, and whether we were involved. We did not participate in Seattle, and we were not at the World Bank demonstrations, but at the World Bank's Transport Sector retreat in nearby Virginia. We have prepared an NGO statement on transport for the IMF's and World Bank's annual meeting in Prague this year, and we met last year with their Board of Directors to protest the International Finance Corporation's funding of the Corredor Sur highway in Panama. Some anti-globalization activists have told us these efforts are a waste of time. We obviously don't agree.

We prioritize our advocacy efforts in dialogue with environmental groups from Central and Eastern Europe (CEE) and developing countries. The World Bank remains an important influence in some regions. For transport, the WTO is overshadowed by the regional trade associations. Like governments, international institutions are vulnerable to corporate pressure at the expense of the

Free Trade takes advantage of weak environmental regulation, but rarely causes it.

public good, and are a legitimate arena of political struggle. They are not, however, the problem itself.

Environmental groups in Central and Eastern Europe are divided on the process of accession to the EU. Aided by lending from international financial institutions, the EU accession process is facilitating a Western takeover of Central European banks and real estate, which is rapidly accelerating a process of unsus-

tainable suburban sprawl. Investors are trying to grab what they can now, fearing the implementation of tighter, German-style land use regulations. ITDP is working with NGOs there to demand a better regulation of this process. We are also working to strengthen the enforcement of increasingly tough EU directives on tailpipe and ambient emission standards. The EU shot down some ecological taxes on trucking in Hungary, but it was because they were only imposed on foreign trucks. They could have been structured in a non-discriminatory way. Free trade takes advantage of weak environmental regulation but, rarely causes it.

In Asia, Asia Pacific Economic Cooperation's (APEC) Road Transport Harmonization Project has been more visible on transport issues than the WTO. While the oil companies blame weak motor vehicle emission standards, and the motor vehicle manufacturers blame weak fuel standards, there is openness to strengthening and harmonizing these standards. Weaker regulations in Indonesia, for example, have created an opening for Chinese two-stroke-engine motorbike manufacturers to sweep into the market, undercutting Honda and others trying to phase out two-stroke engines. India's entrance into the WTO led to an influx of international motor vehicle manufacturers into the Indian market, taking market share away from Hundustani Motors (makers of the old Ambassadors), Vikram and Bajaj. While these companies were indigenously owned, their vehicles were also heavily polluting. There is a clear need to develop health-based minimal international tailpipe emission stan-

dards, ambient air quality standards, fuel quality standards (particularly the global phase out of lead), and road safety standards. ITDP, SUSTRAN, and others will work to build a global political consensus around minimum global standards at the Commission on Sustainable Development meeting in New York in 2001, which will focus on energy and transport issues. We will then take these issues to the regional and international trade forums. But clearly, it is the absence of these standards and their enforcement that are the problem, not free trade itself.

Does free trade make poverty worse or alleviate it? Again, from the perspective of the transport sector, the evidence is ambiguous. In Africa, when tariff barriers were imposed on bicycles, it dramatically increased their cost and decreased their quality. This imposed very high travel costs on the poor. Infant industry tariff protection in Africa has not led to a competitive bicycle manufacturing industry. In Hungary, the city of Debrecen was planning to buy some very good quality used trams from Germany. Instead, they were pressured to buy some untested new trams by a Hungarian producer that were more expensive. The new trams were over one year late in delivery and had a host of mechanical problems. Thus, transit services for the poor suffered. Public transit operators face stiff competition from private transport, and allowing them to shop around for the cheapest, best quality vehicles can only help these systems compete.

Reducing tariffs and restrictions on the importation of used cars into developing countries has clearly had a negative impact on overall emissions by increasing the number of polluting vehicles on the road. But the tariff barrier is rarely in place to protect the environment, and it's a clumsy instrument. It

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would be much better for developing countries to use either US or European type-approval standards for imported cars, or to simply require all imported used vehicles to have their emissions tested and found in compliance with domestic tailpipe emission standards. Governments are reluctant to do this because they are afraid of making motorists pay for the emissions testing, or they don't want to adopt or set up type approval standards.

What about the World Bank? Has it changed its ways as a result of both the general protests and also more targeted efforts by ITDP? Thus far, the main transport sector effect of World Bank President Wolfensohn's increasing focus on poverty has been to increase lending for rural road projects. Overall road lending increased dramatically relative to rail and public transit. The evidence that rural road projects alleviate poverty is weak. Beneficiaries tend to be wealthier farmers who use trucks. Subsistence farmers are usually dependent on head-loading or wheelbarrows and carts, and rural roads only marginally affect these

modes. We would rather see the money going to water, (though with less of a focus on privatization), to health care, and to affordable and accessible housing, an area that the World Bank could support much more.

Despite the promising Global Road Safety Initiative, little has been done, as the corporate co-sponsors have been unwilling to finance anything.

Many of the World Bank's urban road projects, like the Guangzhou Urban Transport Loan, primarily funded inner urban ring roads that have dramatically increased air pollution in central urban areas. The World Bank has been increasingly using such loans to leverage pilot bus rapid transit systems, bike lanes, and traffic demand management measures, but too often, as in Guangzhou, these positive elements remain unimplemented, while the negative elements move forward. The World Bank and the other International Financial Institutions should simply not fund projects if an environmental assessment makes it clear that the project will drive areas into vio-

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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.

ITDP is a non-profit advocacy, research, 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.

Cover : Learning to ride in South Africa
Photo by Paul White



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News Briefs

California Dreaming in China Proves Lethal

While motor vehicle production in China rose tenfold from 1990 to 2000, period traffic related fatalities rose from around 50,000 to over 100,000 during the same period. Some 35% of the victims were cyclists. A recent study by Dr. Li Guohua and Dr. Susan P. Baker of Johns Hopkins found that 39% of cycling accidents were fatal, seven times the US rate. Head injuries were responsible for 79% of fatal accidents. Roughly 95% of cycling injuries came from collisions with trucks and buses.

Bicycle helmets, virtually unknown in China, would help. But helmet laws force the costs of traffic safety onto the victims. A study entitled "Safer Front Truck Design" (Chawla, Sharma, Mohan, and Kajzer; 1998) indicates that re-engineering truck and bus front-end designs can drastically reduce fatalities. Until now, truck and bus manufacturers

"We are starting a trend, common in Western countries, for rich people to move out of downtown, buy a car, and move to the suburbs. In the future, it will be common for people to drive 60 miles to work, just like in California."

-Zang Xinmin, Shanghai

have not agreed to the proposed modifications because they would increase their production costs. With motor vehicle use in China exploding, road accidents will reach epidemic proportions. If China enters the WTO, automobile import tariffs will drop from 80% to 25%, and foreign car companies will be allowed to make consumer loans. In the May 18, 2000 issue of the San Francisco



Used cars for sale in Quito, Ecuador. A movement is under way to overturn Ecuador's law banning imports of polluting used vehicles.

Chronicle Zang Xinmin, a high-ranking Shanghai official, stated, "We are starting a trend, common in Western countries, for rich people to move out of downtown, buy a car, and move to the suburbs. In the future, it will be common for people to drive 60 miles to work, just like in California."

-San Francisco Chronicle

Ford to Market Electric Bikes

This past July Ford Motor Company announced a new partnership with Currie Technologies, Inc. to market Currie's new electric bicycles in the Asian market. With more Asian cities cracking down on heavily polluting motorcycles, Ford is hoping that a niche exists for an electric bicycle. Ford also hopes that consumers of its electric bikes will eventually want its cars, as incomes rise. Electric bikes have met a less than joyous reception in the US. Eighty percent of retailers are lukewarm, reporting that sales are flat (1-2 e-bikes a month). High cost, upwards of \$1000, and cumbersome weight have inhibited sales. The Ford/Currie prototype is due out this fall and will cost between \$400, for the basic model, and \$1200 for the deluxe.

-Wall Street Journal

Quito Expands Bus Rapid Transit System

Quito, Ecuador's capital, is about to open another 4.9km line on its Eco-Via trolley-bus rapid transit system. At 25km, the new line will give Quito the second most extensive bus rapid transit system in Latin America, after Curitiba, Brazil. Meanwhile, Cuenca, Ecuador's third largest city, recently imposed tight restrictions on motorized traffic in its historical core, which was recently designated a World Cultural Heritage Site by UNESCO. On the outskirts of Cuenca, the local police have created a team of officers manning 30 bicycles to better patrol the 11 parks that line the city. At the same time, however, a movement is under way to overturn Ecuador's law banning imports of polluting used vehicles, despite recent studies indicating that Quito suffers US\$28.7 million annually in productivity and health losses from poor urban air quality. -Lloyd Wright

Car Free Day Held in Santiago de Chile

In June, private cars on six major arterials in Santiago were banned for a day. "The idea was to increase a 30-minute car drive to 60 minutes and decrease a

40-minute bus journey to 20 minutes,” said Gianni Lopez, Head of the National Environment Commission’s Santiago bureau. Twenty-five percent of car owners did not drive that day. Ciclistas Furiosos has also begun to organize monthly critical mass bicycle rides. Concern about air pollution is growing among Santiago’s 5 million inhabitants as children are painting brown skies in art class, Placido Domingo is canceling concerts, and schools are banned from holding physical education classes. With one million automobiles in a geographical location that traps smog over the city, residents dubbed the city “Santiasco” (“Smogiago”).

Bangladesh Bans Two-Stroke Engine Motorcycle Rickshaw Imports

On June 8, 2000 Bangladesh’s Finance Minister S.A.M.S. Kibria banned imports of three-wheeled vehicles with two-stroke engines. The ban has helped induce India’s Bajaj, maker of the most popular motorcycle rickshaws, to announce an end to its production of two-stroke three wheelers, and in July they released a four-stroke model that runs on compressed natural gas. Dhaka’s 50,000 two-stroke auto rickshaws, most used as taxis, are responsible for 35% of particulate and 50% of hydrocarbon emissions in the city. Mr. Kibria suggested that bank loans would be made available to auto rickshaw owners to convert their rigs to run on compressed natural gas. He also said that the Bangladeshi ban was incited by “a strong demand by the civil society for protecting the people from serious environmental pollution.” This decision comes on the heels of a Thai move to phase out two-stroke engines within the next year. –Sustran Network News

Pedal Express Co-op Begins Organic Food Delivery

Berkeley, California—Last March, Pedal Express (PE) formed a partnership with Berkeley Youth Alternatives to distribute organic produce cultivated on urban lots by local youths in zero-pollution vehicles. PE, a worker-owned co-op dedicated to zero-emission delivery, requires employees to walk or ride to work. The company even used work-bikes when moving its office. For the produce delivery, PE uses three cargo bikes, a recumbent flatbed tri-hauler with an 800 pound capacity, and two



U.S. public transit ridership posts biggest increase since 1960

front-end style delivery bikes with 200 pound capacities. The vehicles were designed and built by the Center for Appropriate Transport in Eugene, Oregon. PE also offers businesses a mail



Pedal Express organic food delivery

pick-up and delivery service as well as local book delivery from Cody’s, an independent bookstore in Berkeley. Everyone puts in 15-20 hours of riding a week, and after about 6 months/360 hours of riding employees become part owners of the company. The business is run by informal consensus, and wages and duties are divided equally among owners and workers. “Nobody is making a killing,” says Scheridan, but through its partnership with local groups like Berkeley Youth Alternatives and Cody’s bookstore, PE has proven itself as a viable, ecologically sustainable company.

–In Business Magazine

Tax Relief for Transit Riders Boosts Ridership

Maryland recently passed the biggest tax credit for transit riders in the US. For every \$60 a month in transit passes given to each employee, businesses can get \$30 in tax credits. The Maryland State tax break is additional to 1998 Federal tax breaks that gave businesses three ways to encourage clean commuting. The first allows up to \$780/year of an employees’ gross wages to be used for mass transit and ridesharing expenses. This results in a \$300/year savings for some employees, and employers save on payroll taxes. Businesses can supply or reimburse commuters with \$65/month in tax-free transit passes or vouchers. Also, employees who receive free or subsidized parking can “cash-out” the benefit in exchange for taxable income (\$2-3/day) or employee-provided transit passes.

Maryland’s new legislation follows the successes of Minnesota’s 30% tax credit, and Washington State’s 10% tax credit. In Minnesota, the tax break helped shift 12.5% of commuters out of driving their cars alone. According to Michael Replogle of the Environmental Defense Fund, who helped push the bill through, “the Maryland Commuter Choice bill cuts traffic and pollution, boosts the use of transit, and adds to employee benefits, at a low cost to the employer. It especially benefits those with low wages that are more dependent on transit and ridesharing and least able to afford their commute.”

These tax breaks, along with new discounts for multiple rides in New York City pushed through by the

Photos: top, Paul S. White; bottom, Pedal Express

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Straphangers Campaign, contributed to a 4.5% national increase in public transit ridership over the last year, the biggest increase since 1960.

—Environmental Defense

World Bank to Lay Pipe in Cameroon

On June 6th the Executive Directors of the World Bank approved a \$193 million loan partially funding 300 oil wells in Chad and a 660-mile oil pipeline to the Cameroon coast. The decision was unanimous, save the Italian delegate's abstention. The loan leverages an additional 3.6 billion in private financing from Exxon-Mobil, Chevron, and Petronas, the Malaysian state oil company.

Friends of the Earth, together with Codebabik, an indigenous rights group, and Planet Survey, an environmental organization, joined by 18 other Chadian NGOs, have sought to delay the project. They are not opposed to oil extraction per se, only the way it has been handled. They fear the pipeline endangers Cameroon's tropical rainforest by opening land to logging and poaching. Potential spills also endanger river systems and coastal fisheries. Indigenous groups complain they have been excluded from the planning process, and there are claims of unfair compensation for land acquisition. The project has also increased tensions between the Bagyeli Pygmies and neighboring Bantus.

The World Bank's approval came despite reports of intimidation in Chad. Amnesty International has reported hundreds of unexplained civilian deaths in the Chadian oil regions, and threats by military officials against pipeline opponents are commonplace. One Member of Parliament who spoke out against the project was jailed for seven months.

Meanwhile, Cameroon has been named the world's most corrupt country for two years straight by Transparency International. Cameroon, which bears the brunt of the ecological dangers, stands to make \$20 million yearly; while Chad may see up to \$100 million a year at peak production—half its annual budget. The World Bank's Eric Chinje, from

Cameroon, said that structures have been set to ensure that 80% of Chad's oil revenues go to the poor, and the Bank has insisted on setting up a "first-of-its-kind" program in Chad to track the project's progress as it is implemented. Experts from Harvard are skeptical. They claim that both countries lack the necessary transparency or institutional structures to ensure an equitable distribution of oil revenues.

—Bretton Woods Update

Britain Opens National Bicycle Network

Britain's National Cycle Network was officially opened on June 21st with 5,000 miles of trails and bike lanes. The network is expected to double in length in the next five years. It grew out of a \$66 million grant from the Millennium Commission, funded by the national lot-



Cyclists on Britain's National Cycle Network

tery, and another \$242 million in matching donations. The network is graced with over 40 works of art by local artists that serve as benches, drinking fountains, mileposts, earthworks, lights, and entry gateways.

The network was designed to facilitate safe access to schools, train stations, and city centers, and to create bypasses around dangerous intersections. Plans are also underway to develop "rural

travel centers" along the network. A pilot travel center in Frome, Somerset, will facilitate ride-sharing in private cars and taxis, travel planning for individuals and organizations, real-time public transport information, and safe route information for pedestrians and cyclists.

—Sustran National Cycle Network News

Activists Beaten in Public Hearing on Indian Mega-Highway

Yavanika, Bangalore—On July 5 police violently arrested over 30 activists during a "public hearing" concerning the Bangalore-Mysore Infrastructure Corridor, a proposed mega-highway project in southern India. The super-highway cum real estate development, which will displace over 168 farming communities and appropriate 13,000 acres of farmland, is to be constructed by the U.S. firm SAB International and the Indian Kalyani Group. H.S. Doreswamy, a well-known Ghandian, was arrested after asking why information about the environmental and social impact of the super-highway had not been disclosed to affected populations. Siremane Nagaraj and activists from the pro-farmer grassroots organization Karnataka Vimochana Ranga (KVR) were also arrested. District Commissioner Sanaulla ordered the Special Striking Forces to arrest the activists, brutally kicking and dragging them to the Viveknagar Police Station. Leo Saldanha of Environment Support Group was injured in the melee. The Environment Support Group has since petitioned the Karnataka region's Chief Minister to dismiss Commissioner Sanaulla and withhold approval of the project until information and good-faith public hearings have been held.

—Sustran Network News

Old Buses Banned in Delhi

This April, the Supreme Court of India banned buses over eight years old from operating in New Delhi. Over 4000 vehicles were affected by the ban. While some 1000 vehicles were replaced by new compressed natural gas buses, the remaining gap in service created chaos for commuters. Bus companies complained that the ban based on vehicle age was arbitrary and they preferred conforming to Euro II standards, but proponents point out that monitoring is weak.

In other Indian mass-transit news, the first phase of the Metro Bus Project in Bangalore will add 600 Volvo buses to

the city's fleet of 2,200. The Indian government will ask the Swedish Development Agency to fund the purchase of the buses, which carry up to 270 passengers and use 3 articulated compartments. According to reports, Bangalore's already crowded roads cannot handle more than 2,500 buses.

—Sustran Network News

Metro Manila Phases Out Leaded Gasoline

The phase out date for leaded gasoline in Metro Manila was pushed up to April of this year, a full nine months before the date mandated in the new Philippine Clean Air Act of June 1999. The phase out was spearheaded by the Manila-based Lead Free Coalition, which said that positive support from local oil companies and the Philippine Department of the Environment were critical to the success. Resistance came from tricycle taxi drivers, who argued that the switch to unleaded gasoline was not suitable for their engines and would cause accelerated breakdown of their parts. In the end their threatened restraining order, injunction, and strike never materialized. Airborne causes irreversible neurological damage in children.

—Sustran Network News

Trans-Siberian Highway and Pipeline Threaten Snow Leopard

Siberian government officials voted this March to build a highway and gas pipeline through the ecologically important and sensitive Ukok Plateau that connects southern Siberia with China. "It will be the end of the Ukok," said Mikhail Shishin, President of the Russian Fund for 21st Century Altai. The high plateau hosts a complete sequence of altitudinal vegetation zones, and also supports many of the world's endangered species, including the snow leopard, one of the world's least studied large predators. Sacred to a host of indigenous peoples, and home to numerous archaeological sites, it was declared a UNESCO World Heritage Site in 1998. The road's construction will violate the Ukok Plateau's status as a "Quiet Zone" under the laws of the Altai Republic.

Russian scientists and environmental groups are calling for stronger laws to protect the Ukok, and have written letters of protest to the "Siberian Accord," the league of government officials sponsoring the road-pipeline plan. In addition to being an environmental threat, protestors say, the project, running through highland marshes, tundra, per-

mafrost, and mountain passes at 2,600 meters elevation, will incur astronomical construction and maintenance costs.

The Siberian Wilderness Campaign (www.pacificenvironment.org, or dmartin@igc.org) is looking for experts with experience in evaluating the environmental impacts of such road projects.

—Sustran Network News

Ho Chi Minh Highway Threatens 5000 Homes and a National Park

In May, the Vietnam Forum of Environmental Journalists voiced its concern that the Ho Chi Minh Highway project will do damage to the Cuc Phuong National Park in a forum in May. Financed by the Japan Bank for International Cooperation, the \$309 million highway will link National Highway 1 with several Ho Chi Minh City streets and with Hanoi Highway. Slated for completion in April 2005, the six-lane, 21.4km-long highway has already come under fire for the 5,214 Ho Chi Minh City houses it will demolish.

—Sustran Network News



Letter

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lation of ambient air standards. Environmental assessment should not be based on the unlikely assumption that a battery of non-mandatory mitigation measures will somehow be implemented.

The World Bank's pro-privatization ideology continues to create a barrier to increased lending in the public transit and rail sectors. Tellingly, the most successful public transit system improvements in the developing world in the last few years have been the Quito, Ecuador bus rapid transit system (see last issue) and the Kunming, China bus rapid transit system (see this issue). The Quito improvements resulted from a public sector takeover of a very badly run private bus system. As such, it would never have been eligible for World Bank funding. Both projects were made possible only through bi-lateral support (Quito from Spain and Kunming from Switzerland).

On the other hand, though World Bank spending on projects for non-motorized transport remains marginal, some projects have been real successes. Plans to scale up non-motorized transport pilot projects in Senegal and Guinea are very encouraging. Bank staff has argued forcefully for the need to retain good bike facilities in China, despite government opposition. They supported the Global Environmental Facility (GEF)-funded pilot bikeway project in Marakina, a city within Manila, the Philippines, the first GEF project to support NMT since ITDP managed to get the GEF eligibility rules changed. The World Bank's bike promotion projects in Lima, Peru, and Tamale, Ghana, have proven successful. With Dutch trust funds, the World Bank also sponsored traffic calming pilot projects in Dar es Salaam and Morogoro in Tanzania, and Nairobi and Eldoret in Kenya, which have been partially implemented. Some sidewalks and non-motorized vehicle lanes have also been included in several other urban transport sector loans around the world, notably in Indonesia, but they tend to be small in scale. The Bank is also sponsor-

ing a pilot cycle rickshaw modernization project in Bangladesh, but it doesn't seem to be going anywhere.

The World Bank and the IMF have also played an important positive role in encouraging an increase in fuel prices to market levels. Most NGOs and governments are unwilling to support fuel price increases, despite the disastrous long term ecological and equity ramifications. (see Howe, this issue). In short, the World Bank, other development banks, and particularly regional trade associations, remain useful forums for policy advocacy by environmental and social justice groups. Fighting globalization and global institutions per se is a dead end.

Finally, advocacy groups should not let the UN implementing agencies escape criticism. A review of the UNDP's transport portfolio indicates that over 60% of its projects went to civil aviation; hardly consistent with its mission to 'alleviate poverty'. Meanwhile, getting even minimal information on UNDP-funded projects is virtually impossible, and compares very unfavorably to the World

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From the small village of Chyne, the Prague skyline is clearly visible over a few miles of farmland. Surrounded by the rusting hulks of farming machinery, we talked to a farmer who lives opposite a dozen American-style single family homes recently built on the village edge. The new families don't know their neighbors, commute to Prague by car, and have trim lawns and large garages rather than vegetable beds and tractor sheds.

"My ancestors have lived in this village for 4 centuries," the farmer says. "What's going on here now is a paradox." The farmer makes a living growing hops and animal feed on 300 hectares of land he regained under the restitution process after the 1989 "Velvet Revolution." A member of the Village Council, he recently voted to approve another larger new housing development, on land sold by the Church to a developer, that will more than double the size of this 600 person village. He hopes the new development will bring roads and schools, and richer people from the city. Yet he insists that he wants to live in a village, not a suburb of Prague. He likes the quiet, the green. Yet already the local village shops are closing, unable to compete with the new shopping mall in nearby Zlichin, their owners now working as cashiers in the hypermarkets. Other villagers, he tells us, are less optimistic about the changes and vigorously oppose the new development. "Our village is more divided now than we were under the communists, when we all hated the same thing."

The Zlichin shopping complex is on the first out-of-town interchange along the D5 highway to Plzen (towards Germany). It already houses a Globus food market and Kentucky Fried Chicken drive-through on one side of the highway, and a Tesco and IKEA on the other. Without driving, it is nearly impossible to cross from the shops on

one side of the freeway to the other, some 200 meters away. Unlike many of the new megamalls, Zlichin is connected to Prague by public transport, but most shoppers drive. Of the twenty people we interviewed, only one couple came by bus (their car was being repaired). Adjacent to the shopping complex is a new cluster of office buildings, alongside the nearly completed Prague Outer Ring Road. Further out along the D5, and along many other Czech highways, logistics and warehousing centers are proliferating.

The first out-of-town hypermarket in the Czech Republic wasn't built until 1997, at Cerny Most, east of Prague. In 1998, only 4% of Czech families used hypermarkets. In two short years, the figure has risen to 25%. Now, the Czech Republic has 53 hypermarkets, and the figure is projected to double again in two more years. Close on their heels are new office complexes, piecemeal or do-it-yourself construction of new suburban homes, and soon, perhaps, more ambitious out-of-town residential developments. These changes are dramatically accelerating a decade-long 33% decrease in public transit use, and a 50% increase in car ownership.

"We Must Make Your Mistakes"

To Americans, this story seems depressingly familiar. It is far from obvious that CEE countries will avoid the mistakes of elsewhere. One regional planner told us:

"Czechoslovakia was an advanced country before the war, but our economy was depressed for 40 years. Now the economy is a top priority. We have to recapture our standing at the level of Western Europe, and these [hypermarket] projects bring in the investments to fuel that. We can't get to a Western standing without making Western mistakes."

Restraining sprawl still seems anathema to the Republic's post-1989 anticommunist values, where notions of political freedom are rarely distinguished from private ownership, consumer choice, and energetic entrepreneurship. Decades of Soviet rule left Czechs with a distaste for top-down government restrictions. Czech spatial planning, as a result, is increasingly decentralized and driven by the demands of the private sector and

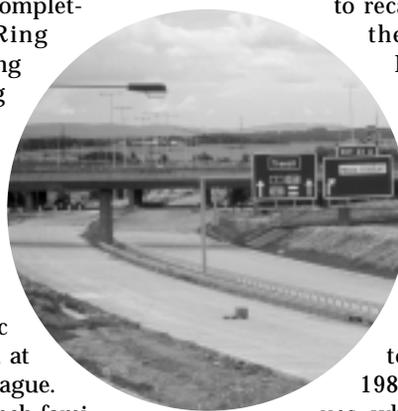
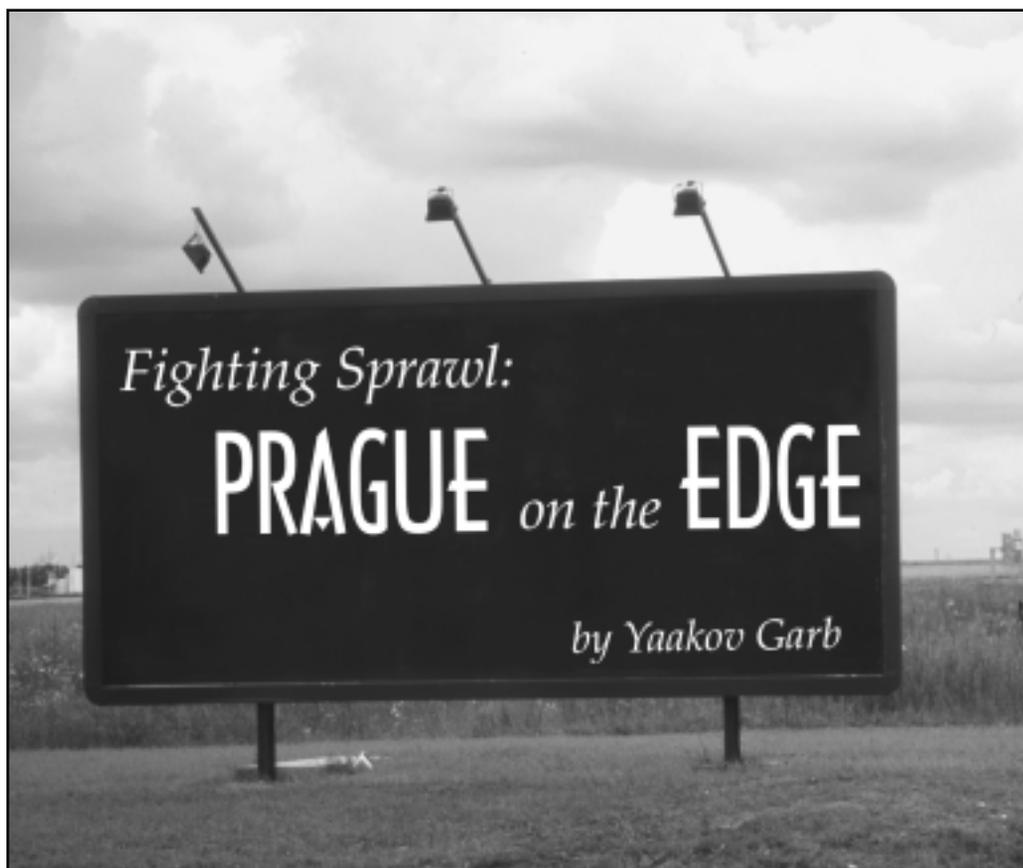


Photo above: An almost completed western section of Prague's "outer ring road," near Zlichin. Zlichin will be even more accessible once this is completed.



The regional planner's goal of finding harmony between economy, culture, and nature has receded, replaced by the growing power of private investors.

foreign investors.

Karl Maier of the Czech University of Technology in Prague illustrates the consequences of "demand-driven planning." He holds up a map of Prague, with the retail areas suggested by principles of good city planning marked in black. On top of this, he places an overlay, with the out-of-town megastores that have appeared in the last few years colored in

pink. The patches of pink form a rough circle where Prague's radial highways meet the municipal area's edge, and bear little relation to the black markings on the map underneath.

Planning in the Czech Republic is increasingly limited to local government control over building permits. Prague has a Master Plan, but outside of Prague there are scores of separate municipalities, and in the Brno region there are 136.

Developers, perhaps through middlemen, approach the town hall and town council of one of these municipalities to buy land and approve building permits. The developer might promise to provide some new infrastructure for the surrounding area, such as new access roads, or the maintenance of a kindergarten. Like elsewhere in the world, they may also offer bribes. If the town council agrees, the local plan is modified to include the proposed development. Then it is considered by the Ministry of Regional Development (formerly the Ministry of Industry). If approved, the project enters the corresponding regional plan, receives a permit, and can begin construction.

With Mayors desperate for increased employment, and increased revenues from taxes and land sales, developers can play competing municipalities against one another. If Prague hesitates to approve a hypermarket just inside city boundaries, developers can put it outside, a hundred meters away, in the jurisdiction of a village. Outside Prague,

land titles are clearer and there is less bureaucracy. According to one interviewee,

"A typical project in Prague could require 35 different permits. Compared to Prague itself, getting these in the surrounding villages is a piece of cake. There, everyone is motivated to make it happen, everyone knows each other, it's easy to solve everything. In Prague, people will use your project as a way of fighting each other."

Localized regulation, the disappearance of guiding principles, a lack of public investment, and the private control of the data necessary for regional planning are symptomatic of what Maier calls the "destatization" of planning. The regional planner's goal of finding harmony between economy, culture, and nature has receded, replaced by the growing power of private investors.

Factors Inhibiting Sprawl

There are, however, several remaining checks on sprawl. Agricultural zoning still places some limits on the conversion of farm land to other uses, though this varies from municipality to municipality. Banks, still unable to foreclose on home equity loans in default, remain reluctant mortgage lenders, and interest rates remain high. In the meanwhile, few people can afford to pay cash for their homes. As a result, people tend to build their own houses bit by bit over time on small parcels of suburban land, or small entrepreneurs raise a 30% down payment from 3 or 4 people, buy land, and build 3 or 4 homes near a village.

Many people are also reluctant to leave their rent-controlled apartments in the city, though rent-control laws were declared unconstitutional by the courts in July 2000, and they may soon be repealed.

Developers also remain wary of developing large projects of suburban single

family homes, as the purchasing power and taste for this kind of lifestyle remains unproven, and some projects have not performed well. European middle class tastes are different from those in the United States, and a larger home with a garden may not be sufficient to attract some families away from a still vibrant city like Prague. Said one cosmopolitan real estate professional,

"Living in the city is normal here. How can you go home after work to get changed before going out to the opera or for a drink with friends if you have to drive for 40 minutes each way? Living outside the city center is very limiting."



New American-style single family homes in the former agricultural fields of Chyne, 15 Kilometers from Prague

Central and Eastern Europeans also have a traditional alternative to the suburban commuting lifestyle: the country cabin (*chalupy* in Czech). Every Friday afternoon, roads are jammed with many of the 30% of Prague families that maintain a rudimentary country cabin. Today's busy urban professionals are visiting these country cabins less, but most are unwilling to sell them, either for sentimental reasons or lack of a market. Some are being converted to full time homes by retired people, who then rent out their Prague apartments. Those country cabins in commuting distance of

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Small shop owners are being devastated by the influx of big box retail, but are poorly organized. An organizing push on this front could make a big difference.

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cities could constitute a reservoir of properties easily converted to single-family suburban homes.

A New Anti-Sprawl Initiative

With the imminent explosion of chaotic suburban real estate investment, ITDP, working with the Clean Air Action Group in Hungary (CAAG), the Polish Ecological Transport Campaign (TET), and several groups in the Czech Republic, has begun a three year anti-sprawl campaign, thanks to support from the Rockefeller Brothers Fund. Czech groups working on sprawl-related issues include the Czech and Slovak Traffic Club, The Independent Environmental and Social Movement, Oziveni (Renewing Communities Through Greenways and Heritage

while the problems of sprawl are similar to the US, the mechanisms for fighting it will have to be different. In the US, most of the suburban land being developed is private land, while in the CEEC much of it is public. While tightening land use regulation in the U.S. is politically difficult, the resulting decrease in land values will be incurred by private land owners. In the CEEC, local governments, desperate for funds, are unlikely to regulate land use in a way that undermines the sale price they can receive for the land.

Rule of law is more robust in the U.S. Some new real estate developments have been blocked by demonstrating that they will drive an area into violation of ambient air quality standards. CAAG tried to stop the Aucham shopping center on the outskirts of Budapest using similar legal means, but the Hungarian courts proved to be insufficiently insulated from countervailing political influences. In Poland, similar legal considerations were no match to the appeal of cash. A new shopping center in Krakow, Carrefour, was blocked by the Municipality on the grounds that the capacity of existing roads was insufficient to handle the projected traffic increases. In the end, however, the public official was removed, the shopping center was built, and now the developer is demanding that the city widen the road.

for the most offensive proposed hypermarkets. These are generating the most local hostility, are the most visible expression of unregulated foreign capital, and the companies, which are mostly based in Western Europe or North America, are the most sensitive to negative publicity.

Key allies in this struggle will be environmental NGOs, small shop owners, and sympathetic government officials. Ambient air quality standards, currently being adopted as part of the process of accession to the EU, may create legal options that, if nothing, else will underscore the problems with this kind of development. In a few select cases we will explore whether these mega-developments do indeed generate sufficient traffic to violate ambient air quality standards, and, if so, such evidence will be used to help environmental ministries enforce the air standards, and to support any necessary lawsuits.

Government officials are facing escalating infrastructure costs, and could save taxpayers money by adopting compact city guidelines similar to those recently adopted in the UK. Since about 1993, projects proposed for out-of-town greenfield locations can only be approved if they have demonstrated that all other potential sites closer in have been exhausted. Prague has centrally located brownfield sites that remain underused, and may be able to employ mechanisms for limiting out-of-town developments, such as refusing access to the water, sewerage, and other utilities under municipal control. Small shop owners are being devastated by the influx of big box retail, but are poorly organized. An organizing push on this front could make a big difference. Greater region-wide coordination of planning could also help counter the localized fragmentation in which this kind of development flourishes.

Allies may also include some banks and bank regulators. Because the explosion of real estate development is already outstripping demand, the risk of a collapse in overall real estate prices is increasing. A collapse in real estate prices could create a banking crisis in the



IKEA and other large retail shops as viewed from the parking lot of Baumarkt supermarket, across the D5 Highway, on the outskirts of Prague.

Trails), Green Circle, Center for Transport and Energy, Czech Union of Nature Conservationists and the VIA Foundation for Local Initiatives.

CAAG and TET have already been involved in fighting sprawl for some years, and their experience indicates that

The mechanism of tradable development rights has been used to some effect in the US to compensate land owners who's land values would be compromised by development restrictions. In Central Europe this might also be tried, but with much of the land in public hands, public-sector versions of this mechanism would need to be developed.

The first push of the campaign will be focused on generating negative publicity



KFC at Zlichin Mall: Deep-fried hypermarket

already fragile CEEC banking system similar to the savings and loan debacle in the US. The better run private banks, and honest bank regulators, would like to avoid this. The real estate bubble is being further inflated by black marketers using real estate developments to launder illegally-earned cash. Certain provisions in the banking laws could

easily staunch this flow of illicit funds, and efforts in this direction are underway by the Financial Analysis Unit (FAU) in the Czech Ministry of Finance.

Allies may also include some of the more respectable international hypermarket chains themselves. For example, the Swedish/Dutch/Danish home furnishings company IKEA, active in the CEE, has worked to reduce pollution related to the production of their products, and even the transport and distribution consequences of a

business running over 150 stores in approximately 30 countries. But they have not yet been called to task for the environmental and social impact of predominantly locating their stores in ex-urban areas. It would seem a natural extension of their concerns to think of retailing alternatives that bolster, rather than sap, city center vitality.

Making hypermarkets accountable for their full environmental and social costs is only the first step. Other kinds of sprawl are intimately related, and imminent. To counter these trends, financial, legal, and political obstacles to city center revitalization and to brownfield use will also have to be overcome, and the real needs for improved livable housing will have to be addressed

The problem of sprawl in the CEEC is massive, the vested interests powerful, and our ability to influence them modest. But inaction at this critical time risks locking Central Europe into a US-style automobile dependency that will devastate the environment for decades to come. ♦

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EBRD Assists Flood of Hypermarkets into CEE Countryside

In recent years, the European Bank for Reconstruction and Development (EBRD) has pumped an astonishing \$3.2 billion into the Central and Eastern European real estate market, with 1999 representing a five-fold increase over 1998. The loans are going mainly to financial services firms like Heitman Financial and Trizek Hahn of Chicago, Pioneer Group of Boston, and Doughty Hanson of London which in turn make equity investments into diversified real estate holdings. They are also directly funding chain food superstores, like the Turkish Ramstore, which has moved heavily into Bulgaria and Russia. The EBRD invested in the Polus Center and the West End City Center in Budapest, and the massive Polus Center in Bratislava. Some of these projects have been criticized for encouraging suburban sprawl and playing little attention to rational land use planning, and all of them are threatening small businesses. According to one industry insider:

“There is indeed a need for improved retail in the region; however, the pace of expansion has been too fast, driven by reasons other than investment economics. This rapid expansion is mainly driven by big-box/hypermarket and multiplex operators with the outlook to establish long-term market share in a new market...many retailers and distributors are pouring into CE in order to show

their shareholders that they are indeed growth orientated. Of course developers and contractors are more than happy... As a result, you have too many groups trying to attack the region. Rapidly trying to penetrate the market and buy-up market share are 6 well capitalized international big-box/hypermarket groups, some 6 well capitalized international (down from 10!) multiplex operators, and some 5 well capitalized international DIY operators.

“For retail operators, there is some rationale for jumping in and getting established, even though the immediate profit outlook is weak. Local authorities are beginning to wake up to the fact that the rapid retail expansion is threatening traditional retailers and their city-centers, and the concern is that getting zoning and building permission may get as strict as it is in some Western Europe countries (ie. Germany)—so the idea is to jump in before the planning door shuts.”

That the EBRD is now be investing in an overheated real estate property market with equity investments should cause some concern among their Board of Directors, as real estate investments are notoriously volatile. The fact that these investments are also encouraging unsustainable urban sprawl and killing many small Central European private sector businesses would also seem at odds with the overall goals of this ‘development’ bank.



South Africans Swept Off Their Feet

by Paul Steely White

An Afribike Update

Since December 1998, ITDP's Afribike project has mobilized over 1,000 Southern Africans with bicycles and training. What's more, Afribike has successfully communicated the experiences of its beneficiaries to decision makers, marshaling new and unprecedented support for pro-bicycle projects from national, provincial, and local African governments, and from industry and international lending institutions.

In January 2000 Afribike established itself as an independent non-profit organization based in Johannesburg, South Africa. ITDP continues to provide support and technical assistance to Afribike as it undertakes advocacy and project work throughout Southern and Western Africa.

Funding for Afribike was made possible by the support of the International Foundation, Alternative Gifts International, the Marcia Brady Tucker Foundation, the Roy A. Hunt Foundation, and the Members of ITDP.

Mobilizing South Africa's Stranded Students

Because their only option is to walk, most primary and secondary school children in South Africa arrive to school late and tired. Many do not arrive at all. In some areas it is common for children to walk 10km each way. In the KwaZulu-Natal province, 37% of secondary school students walk further than 5.5 kilometers each way. That is over six miles per day of walking, a significant time and calorie expenditure that, according to school principals in the province, fatigues 70% of the students so much that learning is significantly compromised.

According to the KwaZulu-Natal Rural Mobility Study, "The most economic form of intervention would be in the form of supplying bicycles to assist scholars [students] in traveling to school." Indeed, at 1,000 Rand (US\$147) per year (or about 10% of average annual household income for one student) it is cost prohibitive for most families to send their children to school by public transport or mini-bus taxis. As a result, 89% of secondary students and 98% of primary students walk. While trip dis-

tances within the urban and peri-urban townships are shorter than in rural locales, student attendance and performance in these areas is similarly hampered.

In partnership with V3, an engineering firm, and local and provincial governments, Afribike is currently implementing several projects that will mobilize a total of 2,000 students by providing subsidized bicycles. The projects will simultaneously 1) train the students in riding, maintenance, and repair, 2) implement concurrent infrastructure improvements to improve the safety of the new cyclists, and 3) establish a local bicycle economy, creating sustainable local jobs in bicycle sales, repair, and related services.

Two of these student bicycle projects are based in Ugu and Uthekela, rural regions in KwaZulu-Natal. Another is in Ivory Park, an urban township located about 25km north of downtown Johannesburg and near South Africa's fastest growing suburb, Midrand, which also happens to be the site of ITDP's 1997 Workbike Demonstration Project. (See "Making Bikes Work For South Africa", Sustainable Transport #8)

The Pioneering Mzobe Brothers

The relative efficiency of bicycles vs. public transport and walking begs the question: Why aren't students cycling to school already? Indeed, a few already are. Despite hilly terrain, brothers Richard Mzobe and Lindo Mzobe, two teenage secondary school students in rural KwaZulu-Natal, ride their bicycles to school every day. Richard, 18, began cycling to school in February of 1999 after he purchased a used mountain bike. After witnessing his big brother's success, Lindo bought a used BMX bicycle. Today, Richard and Lindo each save about 1.5 hours per day that they used to spend walking. That leaves more time and energy for studies. Both are set on going to college.

Richard and Lindo overcame many obstacles. They saved up for several months, then took an expensive mini-bus taxi trip to Port Shepston (46km away) where the nearest bike shop is located. After purchasing their used bicycles (about US\$50) they then had to pay extra to fasten their bicycles to the top mini-bus taxi for the return trip. Richard and Lindo share one set of 3mm, 4mm and 6mm Allen wrenches,

tools that are rare in their community. In addition to enabling them to perform many of their own repairs, the wrenches double as a makeshift bike lock: each day they use their tools to lock their handlebars into an unrideable position, effectively deterring thieves. The busy highway that cuts through their community is the only route to school. The author, who rides daily from Brooklyn to Manhattan, was aghast at the total lack of a shoulder, high traffic speeds, and blind curves as he rode with them. Richard and Lindo hugged the edge of the road and pushed on as the author sweated.

Affordability; access to bicycles, tools, and spare parts; security, and unsafe routes must be addressed to enable more students to ride to school. Some past efforts to mobilize students with bicycles have yielded limited success because only bicycles were provided. In time, the bicycles fell into disrepair. Simply injecting bicycles into the community is not sustainable. Seeking to improve on past efforts, Afribike is providing skills training, establishing local dealerships, and improving safety.

The Afribike Skills Course

Students are selected for the program based on the distance they travel to school and on their household's income. Those eligible to receive subsidized bicycles will first complete the Afribike Training Course. The course, led by Afribike Master Mechanic, Sam Soni, teaches preventative maintenance, rid-



Afribike Master Mechanic, Sam Soni

ing in traffic, group riding techniques and basic repairs. Mr. Soni will also help the students identify safe routes to school, and lead morning and afternoon "bicycle buses" (group rides to and from school) which will further instill safe and effective riding techniques.

Upon graduation from the course students will receive a voucher that entitles them to receive a bicycle, but only after 1) contributing R50 towards purchase and, 2) finishing 10 hours of "sweat equity" in the local Afribike dealership. After the sweat equity as been completed, the student may redeem their voucher at their local Afribike dealership.

Afribike's Containerized Dealerships

Afribike dealerships are franchised bicycle retail outlets that are owned and managed by local entrepreneurs selected and trained by Afribike. Dealership entrepreneurs are trained by professional bicycle mechanics and bicycle shop owners and operators like Archie Sipoyo of Archie's Bike Tech in Soweto. (Mr.



An Afribike dealership—a converted shipping container

Sipoyo also serves on Afribike's Board of Directors) Afribike dealerships, which include workshop and retail space, are housed in converted 20 foot shipping containers.

In addition to investing and keeping more project dollars within the community, the dealerships solve many problems encountered with previous bicycle hardware promotion projects. First, from a project point of view the dealerships provide a recognizable and locally controlled framework for project promotion, training, implementation and monitoring. Second, the dealership provides a sustainable mechanism to deliver ongoing service and spare parts, vital to keep new cyclists on the road. Third, the dealership provides a financially sustainable mechanism to meet future demand. Fourth, the dealership addresses the issue of job creation in areas where unemployment approaches 50%. Fifth, the dealership establishes an invested and sustainable local constituency and an organizational capacity

for cyclists' rights, safety, and infrastructure advocacy. Lastly, the dealerships give the cycling industry a real incentive to participate in the project, as new dealerships to them are outlets to sell their products.

In short, the dealerships represent a departure from previous bicycle promotion projects that have ignored these issues and simply provided free, subsidized or micro financed bicycles in isolation from private sector stakeholders. In 2000, Afribike plans to roll out three containerized dealerships, with 15 more planned for 2001.

Improving Safety with "Shova Lula"

Promoting cycling goes beyond the sustainable provision of bicycles and related skills. Safe and comfortable "cycling habitats", especially in urban areas, are vital. In Ivory Park, where urban traffic conditions are unsafe for cyclists, this includes the construction of dedicated cycle paths. "Shova Lula", which means "Push Easy" in the Tswana language is colloquial for cycling and the name of this planned bicycle infrastructure component.

Maikel Lieuw Kie Song, Afribike's Projects Director, designed these cycle paths under the auspices of the Research Centre for Employment Creation in Construction of Wits University and the Interface for Cycling Expertise (Jeroen Buis) from the Netherlands. These lanes are designed to offer cyclists a safe riding environment and access to the most important destinations in Ivory Park, such as schools, clinics, the main taxi station, municipal offices, and the soccer stadium. Getting the network built has proven difficult, as politicians and even some community members are skittish about embarking on an unproven concept. To overcome these obstacles, Afribike and ITDP are pursuing several strategies. An alliance with Slagment, a local producer of low-energy cement, has agreed to provide half of the cement required for the network.

The first draft of the cycle path design calls for approximately 4.6 km of bicycle paths, and it includes accommodations for future expansions into surrounding areas like Tembisa Township. The recommended design is for a 3m wide, concrete, two-way dedicated cycle lane with raised crossings at important intersections. Local contractors will employ-ment-intensive methods and low-energy

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cement to construct the lanes. The estimated cost of the project is 1.4 million Rand, approximately US\$200,000.

In rural KwaZulu Natal, Afribike has partnered up with V3 Consulting Engineers, who will assess the current infrastructure in the region and provide recommendations to improve accessibility and safety. Dedicated bicycle infrastructure is not yet in the cards for KwaZulu Natal; the current goals are to improve accessibility and safety at crossings of streams and major roads, and increase the visibility and awareness of cyclists with reflective material and signage.

Afribiking to Save the Black Rhino

South Africa's game reserves are home to several endangered and rare species including the black and white rhino, the rare mammal species of suni, samango monkey, the pangolin and the shy red duiker. In order to protect these species from poachers and monitor important biological indicators dedicated field rangers patrol the parks boundaries and sensitive habitat sites. Most rangers, bereft of transportation, walk several kilometers per day executing their daily duties.

Bicycles were identified as a crucial component in the fight to save endangered species, as they could provide rangers and wardens with a much-improved ability to patrol the park perimeter, as well as enable timely access to "problem areas" where poachers typically enter the reserves. Bicycling is better than walking because rangers are 3-4 times faster and enable a more active presence along reserve boundaries.

From June 18-21, 2000 Afribike provided 25 bicycles to 25 game rangers of the Ndumo game reserve, home to the endangered Black Rhino. The bikes were donated by Royal Mail, the United Kingdom's Post Office, which is donating its old stock to Afribike via Re-Cycle, a bicycle recycling NGO based in the UK. Sam Soni, Afribike's Master Mechanic and apprentice Kehn Hlagala trained the rangers in

riding and bicycle maintenance while Marko Ludeking and Erik Rouwette, two Dutch exchange students at the University of the Witwatersrand, helped out.

The mobilization of these first 25 rangers in the Ndumo is the first stage of a larger program in which Afribike hopes to mobilize 200 rangers in Ndumo and Umfolozi game reserves, both located in South Africa's KwaZulu Natal province. The larger program will also entail an outreach component in the local communities surrounding the reserves, where bicycles could enable access to markets, services and schools.

Afribike Senegal, Guinea and Ghana

Afribike is currently expanding the geographical focus of its work to the West African countries of Senegal, Guinea, and Ghana. Prior to project implementation, Afribike undertook a



Load carrying by bike in Ghana

one-week Afribike Training Course (for local project partners), and a one-week scouting mission to meet with local stakeholders, gather information, and devise strategies to increase cycling. (The reports of these missions are avail-

able on ITDP's website.)

In July 2000, Afribike will begin to implement projects in Senegal and Guinea with local NGO partners. The Ghana project will start soon thereafter. The projects include a number of innovative aspects including the sourcing of new bicycles based on technical input from local users, significant involvement of private-sector bicycle companies, widespread micro financing of bicycles via local NGOs and credit institutions, and in the case of Senegal, concurrent labor-based bicycle infrastructure construction. The projects in Senegal, Guinea and Ghana are being financed by respective national governments through loan agreements with the World Bank. †

Raymond Motshwane

22 December 1974 - 7 August 2000

Raymond Motshwane, captain of the Lotus/IBM Afribike cycling team, was struck from behind and killed by a hit-and-run motorist during a routine training ride near Johannesburg. Raymond's body was discovered face down a few yards beyond the shoulder of the road in some tall grass. Friends and police suspect that Raymond fell victim to an aberrant mini-bus taxi.

When he wasn't cycling, Ray was working in "the mines". In March 2000 Raymond expressed an interest in quitting the gold mines and joining his fellow team members on Afribike's mechanic training staff before taking South Africa's professional team up on their offer to join them in 2001, a first for a black South African.

At a recent cycling event in Port Elizabeth, Thibos Mashigo, Ray's close friend and teammate, recalls Ray saying:

"I want to be the first black South African cyclist to participate in international events. I do not want to be just another participant in a race, I want to be considered as a serious competitor...Cycling is not just a sport; it is a way of life."

Our condolences go out to Ray's family and friends who continue to ride on South Africa's dangerous streets for both necessity and joy.

Manila Makes Way for Bikeways, But for Whom?

by Ramon Fernan

Once completed, the Marikina Bikeways Network will be the first 50 kilometers of cycle paths in Manila. With some legs already completed or under construction, the network is a part of the City of Marikina's campaign to 'increase livability'. In a broader context, the network is a pilot project within the national government's Metro Manila Urban Transport Integration Project, which includes a World Bank-funded study of possible transport facility improvements in the metro area. The network is also receiving funding via a Global Environmental Facility (GEF) grant, an unprecedented first in accordance with GEF's new funding guidelines. As the network emerges, however, there are indications that it may not meet its stated environmental and social objectives, thus damaging the perceived efficacy of bike projects in general.

In 1998 the City of Marikina, one of the oldest cities within the fifteen-city confederation that comprises Metro Manila, began its 'livable city' campaign. So far, this beautification initiative has focused on relocating street vendors and inhabitants of informal settlements, but it has also passed ordinances to clear pedestrian walkways and promote walking. A centerpiece of the campaign is a park that extends along the Marikina River. Within the park is the central vein of the city's emerging bikeways network.

Marikina is not as congested as other cities within Metro Manila. Private car ownership stands at 15%, compared to 20% citywide. Cycle trips comprise only 1.1% of total trips, yet among factory workers 10% of commuting trips are executed

by bike. This relatively high incidence of utilitarian cycling, coupled with the fact that the majority of Marikina's population is low-income, would suggest a network design targeting existing and potential low-income utilitarian cyclists.

Unfortunately, the network is already in danger of becoming an expensive frill, primarily serving a minority of relatively wealthy recreational users. Construction to date has targeted only scenic paths along the river, and it is still not clear if pedi-

The bike network is already in danger of becoming an expensive frill, primarily serving a minority of relatively wealthy recreational users.

cab operators will be allowed to use the network upon its projected completion in 2003. If a goal of the project is to reduce present and future greenhouse gas emissions, then the cycling network should connect popular and pragmatic destinations that are of economic import to the majority of present and future users.

The initial planning team lacked prior bicycle planning experience, and only one is a practicing cyclist (the author). A recent metro-wide urban transport study undertaken by the Department of Transportation and Communications (DOTC) missed a crucial opportunity to collect new baseline data on non-motorized trips, and recommended spending billions of dollars on more roads.

The new design team has international expertise but input from cyclists themselves has been minimal. Focus groups convened to provide input about the network wanted to increase the safety of cycling, redress the taboo against female cyclists, be kept abreast of developments, and be consulted throughout the design and implementation phases.

Ramon Fernan is a Bicycle Advocate working with Bayk Aksyon and The Firefly Brigade, citizen's action groups in the Philippines promoting bicycling, clean air and habitable people-friendly urban environments. Bayk Aksyon conducts research and policy advocacy in support of its agenda to promote greater bicycling. The Firefly Brigade organizes the Tour of the Fireflies, an annual festive bicycle ride around Metro Manila for clean air and sustainable transportation, with hundreds of participants. The Firefly Brigade also has a Recycle-A-Bicycle program to provide bicycles to those who cannot afford them.

Clearly, a physical network designed in isolation will not lead to significant increases in cycling. A pragmatic, community-informed design approach, clear mechanisms for community participation, and other measures including Traffic Demand Measures (TDM) will be necessary to help ensure popular use of Marikina's bikeways. ♦

Sustainable Transport is now only published annually. Because of the growing use of electronic media, we are publishing an on-line magazine, *TransportActions*, which appears on our web site (www.itdp.org) three times a year. All issues of *Sustainable Transport* are also online.



A Breath of Fresh Air for Indonesia

The International Conference on Sustainable Transportation and Clean Air in Jakarta, Indonesia

The sudden collapse of the Soeharto dictatorship and the return of democracy in 1999 created a political opportunity to fundamentally change Indonesian transportation and environmental policies. After twenty-five years of using transport policy to maximize the wealth of the President and his cronies, a democratically elected coalition government has come to power, headed by the widely respected Abdurrahman Wahid, with the popular Megawati Sukarnoputri (the daughter of Indonesia's first President, Sukarno) as Vice President.

While economic health and investor confidence have yet to rebound, the changes in Indonesia are profound. Government officials to whom 'public participation' meant informing the public after a decision was already made, are now responding to an NGO community that is poised to make a major impact on transport and environmental policy.

ITDP and Swiss Contact Join Forces

ITDP teamed up with SwissContact to plan a major conference in Indonesia in the spring of 2000, a time when the new government would be looking for coherent transport policies. With a proven track record in more traditional transport and environment regulatory issues like vehicle inspection and maintenance systems, SwissContact provided a good balance to ITDP's strengths in NGO advocacy and transport policy reform. Together, we provided the necessary seed money to attract additional funding from the U.S. Asian Environmental Partnership (US AEP), the World Bank, U.S. AID, the DFID (UK), Canada, the Asian Development Bank (ADB), Swiss Agency for Development Cooperation, and GTZ (Germany). We also secured the political support from the Ministry of Communications (transport), the Ministry of Environment, and the Jakarta Metropolitan Government.

ITDP agreed to co-finance the conference in order to provide a forum for NGOs to discuss planned transport policies and investments. Indonesian NGOs formed themselves into a new sustainable transport coalition called Info-Trans which participated fully in organizing the conference, spoke at several plenary sessions, and set up exhibitions on becak (cycle rickshaw) rights and other issues. Hosted by Pelangi, Info-Trans' other key coalition partners include LPIST (Institute of Strategic Initiatives for Transformation), YLKI (the Indonesian consumers association), Walhi-Jakarta, Bandung and Surabaya, LEMKOHI (Green Consumers), ICEL (environmental lawyers),

Photo: Walter Ifook

UPC (Urban Poor Consortium), YLBH (legal aid society), ICI (Institute for Social Work Jakarta), and a dozen other organizations.

In preparation for the Conference, a small grant from Swiss Contact helped Info-Trans organize 4 preparatory workshops on transport and environment issues. ITDP and SwissContact both gave presentations at these workshops, which were attended by more than 50 people each. Out of these workshops, Info-Trans developed a well-articulated NGO position paper that was presented at the plenary and circulated among the press. The organization of the conference also created a rare opportunity for cooperation and communication among the donor community, many of whom were working on related issues but whose efforts prior to the conference were not well coordinated.

The Conference

The Conference was held from May 29 to May 31. It was opened by the Vice Governor, the Deputy Minister of Environment, and the head of US AEP. Some 225 people from 23 countries, a dozen government ministries and 12 international agencies, participated in the conference. Initially Indonesian government officials resisted the participation of some Indonesian NGOs involved in the becak issue, but ultimately ITDP and our project partners LPIST were able to stage an entire plenary on non-motorized transport at which LPIST called for an end to the becak ban in Jakarta. The conference also helped to encourage the Municipality of Jakarta to develop a pilot Non-Motorized Transport Project for Jakarta, which they presented. Some Indonesian NGOs also used the Conference to hold a small, peaceful rally by becak drivers.

The Conference made a set of concrete recommendations which prioritized the phase out of leaded gasoline, tightening emissions standards and inspection systems, the improvement of public transportation, the promotion of non-motorized transportation, and sustainable land use. The conference helped to persuade the Indonesian government to re-establish their lapsed commitment to a 2003 phase out of leaded gasoline. The NGOs used the opportunity to engage government officials as well as representatives of the World Bank, Asian Development Bank, JICA (Japanese International Cooperation Agency), GTZ (German Technical Assistance), on specific projects which these international agencies were funding.

Conference follow-up continues, including non-motorized transport advocacy in both Jakarta and Surabaya, and the phase out of leaded gasoline as promised by US



Indonesian women cyclists struggling alongside a van



Participants in the Third SUSTRAN General Assembly, Jakarta, Indonesia, June 1, 2000

AEP and US AID, which is proceeding with a World Bank commitment to focusing on the restructuring of oil and gas sector loans to make this possible. GTZ will continue to focus on their pilot bus corridors in Jakarta and Surabaya and a very good Traffic Demand Management plan for Jakarta. Swiss Contact will continue to focus on I/M systems. We hope that continuing support for Indonesian NGOs will also be forthcoming.

The Surabaya Non-Motorized Transportation (NMT) Improvement Project

ITDP was asked by GTZ, the German technical assistance agency, to develop a non-motorized transport pilot project for their sustainable urban transport project in Surabaya, on the West coast of Java. Working with LPIST, ITDP selected two pilot areas with extensive walking, bicycling, and becak trips. We did a full array of trip surveys and traffic counts, mapped the few existing non-motorized transport facilities, and suggested priority improvements. The data collection led to some surprising conclusions.

More than 60% of very short trips are made by motor vehicle in Surabaya, while only 15% of trips of the same length are made by motor vehicle in Germany. (This in a country with incomes less than 1/50 of what they are in Germany.) As a result, the poor families in Surabaya spend upwards of 20% of their income on motorized trips, virtually all of which could be made for virtually nothing if non-motorized trips were safe. We also estimated that if the share of trips under 3 km made by cycling and walking were the same in Surabaya as in Germany, for these two small areas, the poor families in the pilot areas would save \$250,000 a year in bus fares and motorcycle operating costs, and CO₂ emissions would be reduced by 680 tons per year.

Working with civil engineer Dino Teddyputra, we developing a fully developed set of technical recommendations. LPIST formed a task force of government officials, NGOs, and interested parties to participate in the further refinement of the plans and to provide focal persons for implementation of the plan. Three workshops were held with Task Force members, in March, April, and May, 2000. The preliminary plan was completed by May 26, 2000, and the results were presented at the International Conference on Sustainable Transport and Clean

Air in Jakarta on May 31. On June 5, GTZ received the approval of the Regional Governor to proceed with the pilot project. While these developments are encouraging, ITDP and its partners will continue to work with the relevant politicians, agencies and municipal offices until the pilot project is actually implemented.

The Third SUSTRAN General Assembly

As the International Conference on Sustainable Transportation and Air Pollution convened NGOs from all over the region, the SUSTRAN Steering Committee used the opportunity to hold the Third SUSTRAN General Assembly. Info-Trans agreed to

More than 60% of very short trips are made by motor vehicle in Surabaya, while only 15% of trips of the same length are made by motor vehicle in Germany.

host the event. Info-Trans used the SUSTRAN meeting to hold a press conference where several leading international experts from SUSTRAN spoke on behalf of the issues prioritized by Info-Trans. Dr. Geetam Tewari of the Indian Institute of Technology/TRIPP and SUSTRAN-Delhi, Anwar Fazal of UNDP's Urban Management Program and President of SUSTRAN, Dr. Walter Hook of ITDP, Dr. Paul Barter of SUSTRAN, and Dr. Bambang Susantono of Info-Trans/Pelangi, all spoke to television and news media at length. The focus of the talk was on removing the ban on becaks, improving conditions for pedestrians and cyclists, and promoting lower cost alternatives to the metro project, (e.g. Curitiba-style express buses).

At the SUSTRAN meeting, memberships agreed to coordinate efforts on several initiatives, including input into the new ADB transport policy and the World Bank Urban Transport Policy, coordination of NGO advocacy efforts at the United Nations Conference on Sustainable Development (CSD) in 2001 in New York, cooperation with UNCHS on the establishment of an 'early warning system' for families threatened with relocation by major transport projects, and other projects.

Finally, Pelangi, on behalf of Info-Trans, agreed to take over the Secretariat from the Sustran Resource Center in Malaysia.

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Peñalosa Lets it *Ride*

by Sarah Donaldson

Bogotá's Mayor Stakes His Legacy on Sustainable Transport

Since by law a Bogotá mayor may serve only one term, Mayor Enrique Peñalosa has had only three years to implement the most ambitious sustainable transport plan in Latin America. Last February 24, Mayor

them to also hold car-free days. The "Bogotá team" (@World staff and local planners) beat out 44 other environmental projects to win the prestigious Stockholm Challenge Award this June. As media coverage of the car-free day

congestion, the bicycle can cover those short trips (up to 10 kilometers) at the same speed a car can, or faster. Finally, a vibrant bicycle racing culture in the city adds to the acceptability and visibility of cyclists.

For one Thursday, Bogotá's citizens forsook over 800,000 private cars, opting instead to walk, cycle, skate, or take the bus to work and school

With Bogotá's murder rate double that of New York, and air pollution the 4th worst in Latin America, Peñalosa's promise to make the city livable won him a three-year term, and the glib label "quixotic" in the popular press. A lover of cycling, Peñalosa campaigned in 1997 as a progressive urbanist who would transform the class-conscious, car-infested city into a space that fostered cross-class interaction and civic pride. Last February 24, the mayor proudly led a diverse entourage of cyclists on a morn-

Peñalosa banned all private automobiles from the city for the day to build popular support for an array of ambitious measures (such as a planned \$198 million bikeway system). For one Thursday, Bogotá's citizens forsook over 800,000 private cars, opting instead to walk, cycle, skate, or take the bus to work and school. This car-free day, "Bogotá Sin Mi Carro," was the first ever to occur in a major third world city. Facilitated by French-based @World Car Free Day Forum, the Bogota car-free day went further than a series of European car-free days in Paris, Amsterdam, Munich and Rome.

Despite rain, Bogotá's daylong respite from the automobile proved a resounding success. For the first day in decades, there were no traffic-related deaths in the city. Noontime pollution levels dropped 22 percent. Polled by the Bogotá daily *El Tiempo*, 80 percent of Bogotá residents judged the day a success and favored regular car-free days in the future. The success of the Bogotá experiment fueled a "Bogotá challenge" to other third-world cities, encouraging

was cast around the world, Bogotá assumed a leadership role among Latin American countries willing to experiment with transportation alternatives.

Increased car ownership and flagrant violation of traffic laws have made Bogotá's center city a frightening place to be during rush hour. The city's roads are poorly maintained, and buses, taxis, and over 700,000 privately owned cars move through them at a snail's pace every morning and evening. In the middle of the city's traffic jams, some of Latin America's worst, tempers often flare; Bogotá's drivers have become so aggressive that the city's last mayor employed miming actors to try to calm them.

Despite the threat Bogotá's cars pose to cyclists, the flat city, perched high in the Andes, is welcoming to the bicycle. Bogotá's climate is mild, and 77 percent of all daily trips in Bogotá cover fewer than 11 kilometers. Because of traffic

Cyclists using the first phase of Bogota's planned bike network





ing tour of the city, and the world took notice.

Bogotá's auto-free day is a small part of Mayor Peñalosa's agenda. It also involves a sidewalk widening project, a very successful daily odd/even license plate rotation, an urban greening tree replacement program, a "Transmilenio" public transit makeover, extended hours and mileage during the city's car-free Sundays, a traffic safety education initiative, a project to increase public park space, and a Dutch-advised plan for 300 kilometers of bicycle paths throughout the city.

Some of these ambitious plans are far from implemented, and their fate after Mr. Peñalosa leaves office this fall is far from clear. Moreover, their implementation has drawn criticism from both left and right. *Resistencia*, a Marxist periodical, called the mayor a "neoliberal vote-grabber" who cares more about the beauty of public spaces than the needs of his constituents. The renovation of downtown Bogotá's Plaza San Victorino relocated a convenient flea market to another part of the city, installing sculptures by Colombian sculptor Edgar Negret. His administration has also sponsored a draconian crackdown on poor street vendors. Peñalosa's proposal to buy an exclusive north Bogotá country club and transform it into a public park created political opposition from the other side, and more than a few citizens said the mayor's zeal had carried him too far when he dug up a cemetery to install a public soccer field.

The Mayor's transport initiatives have received mixed responses, as well. The Sunday "Ciclovía" ("Cycling Way"), where the city closes 70 kilometers of main roads for cyclists, skaters, and pedestrians, has been very popular. In good weather, Ciclovía brings up to a million cyclists into Bogotá's streets,

A lover of cycling, Mayor Peñalosa campaigned in 1997 as a progressive urbanist who would transform the class-conscious, car-infested city into a space that fostered cross-class interaction and civic pride.

mixing wealthy bikers from posh northern Bogotá with poorer riders journeying from southern neighborhoods. Though the car-free Sundays have existed since 1982 and were expanded by Peñalosa's predecessor, the current Mayor has drawn attention to Ciclovía by expanding its hours and making much of the civic mixing it fosters.

Also well-received has been the \$117 million Transmilenio project, promised before Peñalosa leaves office at the end of 2000. The project will consolidate Bogotá's buses into one publicly owned system consisting of 470 buses and covering 41 kilometers. Through dedicated bus lanes, installation of stops every 500 meters, and fixed salaries for bus drivers, the project seeks to increase bus safety, speed, and convenience, and to cut the average daily bus commute time by an hour.

Other measures, however, have been less popular. Last year, irate motorists and shopkeepers launched an impeachment campaign against the Mayor after he erected concrete barriers to keep drivers from parking on sidewalks. Environmentalists also take issue with the Mayor's proposed network of bike paths, because the plan requires hundreds of trees to be cut down. An editorialist for the Colombian financial daily *La Republica* labeled the \$178 million bike plan "an extravagant waste of money" that would take resources from city streets desperately needing repair. Indeed, the price tag, roughly half the total amount the U.S. spends annually on cycling infrastructure, seems extraordinary. The high price tag results from the fact that the plan conspicuously avoids taking lane capacity away from cars, creating all new parallel infrastructure. What's more, the only piece actually constructed thus far was incorporated into a road-widening project around a park. The path is not located in an area with much cycling, and is little used.

Using certain heroic assumptions, analysts from IBC Utrecht and the Institute for Cycling Enterprise (I-ce) in 1997

designed and implemented the pilot section of the bike network along with Colombian firm Restrepo y Uribe (RyU), concluded that the \$178 million spent on Peñalosa's entire 300-km project will return a benefit of over \$1 billion by 2009. This amount, due to reduced need for road maintenance and parking facilities, reduced congestion, cleaner air, improved traffic safety, and reduced cost to users, would produce a cost-benefit ratio of 1:7. But this begs the question of why it should cost so much.

Further, I-ce admits that RyU did not sufficiently study Bogotá's traffic conditions before the path and bike parking facilities were installed.

Still, the Mayor has done a lot to promote an alternative vision of Bogotá in a difficult political climate. When Peñalosa leaves office at year's end, it's anyone's guess what will become of this vision for Bogotá.

During this February's car-free day, former Colombian Senator Carlos Moreno de Caro, a mayoral hopeful, chose to link himself to the Peñalosa administration by leading more than twenty supporters on a rush hour campaign ride through the city. He was not taking much of a risk, after all. "Bogotá Sin Mi Carro" is one of the most widely accepted initiatives in Peñalosa's program, and the Mayor has rebounded from earlier, rockier political times (he was named 1999 Man of the Year by two leading Colombian newsmagazines). Caro's gesture suggests that Peñalosa's agenda may be viewed as a viable alternative to much of the chaos that plagues the capitol's comings and goings.

Eric Britton, of EcoPlan International, said recently: "We have had a lot of theory and posturing on all this (the "car-free city") for many years - but the team in Bogotá is actually moving actively and with deliberation in that direction." No mistake about it: the Andean city has plunged into a daring experiment with little apology. Call him demagogue or quixotic, this mayor has made his three years count. ♦

Opinion:

Oil Running Out, Heads Buried in the Sand

by John Howe



Oil is a slippery subject, but ignored at our peril. In October of 1998, *The Economist* predicted that oil would drop to \$5 a barrel. *Foreign Affairs* claimed that low oil prices would be a major economic problem in the new millennium. Then prices rose to over \$29 a barrel this year, and even

The Economist admits it was hopelessly wrong.

Oil prices are difficult to predict largely because they are driven by politics, rather than economics. A recent GTZ study of 160 countries by Gerhard Metschies (See New Titles) shows that while motor vehicle prices vary by a factor of 2:1, national oil prices vary by a factor of 100: 1. Fuel prices today bear only a weak relationship to underlying conditions of supply and demand. Eventually, however, prices will be forced to comply with underlying production conditions.

Curiously, the World Bank's seminal 1996 *Sustainable Transport: Priorities for Policy Reform* never discusses the sustainability of existing transport fuel sources. It does argue that fuel prices should cover both the costs of its production and the externalities that its consumption generates, and is generally supportive of increasing fuel taxation, but the risks to developing countries of increasing fuel scarcity are largely ignored, as if the magic hand of the market will solve its own problems. But the irrational array of pricing practices demonstrates that politics rather than markets primarily drive oil prices. Hence, any self-correcting market mechanism is unlikely to function. The economies of more and more countries are becoming exposed to the risks of fuel price volatility, and low-income countries are the most at risk.

The robust oil depletion model of US geologist King Hubbard, developed in the 1940s, recalibrated by Mackenzie of the World Resources Institute, suggests that growing world demand will meet declining supply somewhere between 2007 and 2019. Campbell and Laherrere, in the March 1998 edition of *Scientific American*, indicated 2010 as a more precise date for the inevitable scarcity-driven increase in oil prices. Such predictions are complicated by the unknown scale of undiscovered oil reserves and the volatility of growing oil demand, but declining oil reserves will eventually drive prices up until alternative energy sources are developed. While ultimately vehicle fleets are likely to switch to natural gas and/or hydrogen fuel cells, from the perspective of developing countries, the crucial issue is the cost and the political economy of this transition.

Europe's energy networks are already reasonably integrated and the gaps could quite easily be filled. Some of the densely populated and wealthy countries of Asia might also be brought together without too much difficulty. But there are many poor countries that could be devastated by either a rapid increase in the price of oil or a mandated energy alternative. They simply could not quickly develop an alternative distri-

Photo source: National Renewable Energy Laboratory, U.S. Department of Energy

Fuel subsidies mainly benefit wealthy motorists. Price increases are politically difficult, but not impossible, when introduced gradually.

bution network. With their financial and industrial weakness, the gestation period to do so is likely to be a decade or more. This implies that they should have already started. Instead, the problem is not even being discussed.

None of the alternatives will be either quick or cheap to introduce. All imply the replacement, or at least substantial conversion, of existing vehicle fleets, and the creation of a new fuel distribution system. According to the Umwelt Bundesamt, the enormous cost of hydrogen fuel storage and distribution makes it a much more attractive option for stationary energy consumers such as electric power and home heating than for motor vehicles. If few developing countries have indigenous motor vehicle manufacturing and oil refining capacity, even fewer will have the capacity to manufacture motor vehicles driven by hydrogen fuel cells, or the fuel cells themselves. The indigenous knowledge to repair such vehicles is also likely to be in short supply. The current degradation in the quality of spare parts that occurs in most developing countries, and the weakness of roadworthiness testing systems, could have disastrous safety consequences for hydrogen-powered vehicles. Then there is the issue of where you get the hydrogen. The most likely source is natural gas, which has issues of its own.

For a country like Kenya, that is entirely dependent on imported oil for its transport sector, converting to gas would at least utilize known and relatively simple technology. Setting aside the discomfoting fact that much of the world's supplies of gas are under the control of Russia and Iran, there remains the problem of distribution. Bulk import requires a \$100 million refrigerated tanker able to handle liquefied gas. And one may not be enough. Then there is shore-side infrastructure to handle and store the gas, before the thorny and expensive problems of countrywide distribution and fleet conversion are tackled.

Thus, while wealthy countries can probably afford this conversion, for low-income countries without either wealth or a significant industrial base, the situation is far more uncertain. Reducing dependency on oil now should be a matter of the utmost urgency in developing countries.

Currently, fuel prices are actually below the cost of production and distribution in some rich (Kuwait, Saudi Arabia) and in some poor and indebted countries (Belarus, Iran, Iraq, Indonesia, Nigeria, Tajikistan, Turkmenistan, Uzbekistan). Fuel prices with very high premiums can also be found among both very rich (Norway, Switzerland) and very poor (Burundi, Central African Republic, Rwanda, Uganda) countries. Thus, fuel prices bear no relation to the level of wealth of the country concerned, and can only partially be explained by whether it is, or was, an oil producer. The USA, for example, which currently imports in excess of 50% of its needs, continues to tax oil

lightly almost as though it was still a major producer.

Where fuel prices are subsidized, the possibility for smuggling also emerges. Nigeria's five immediate neighbors charge between 3 and 6 times as much per unit. The result, massive smuggling out of Nigeria and an inability to meet its own fuel needs. In June this drove Nigerian fuel prices up by 50%, resulting in a general strike across the southwestern part of the country. Similarly, fuel prices in Indonesia are about 1/5 of what they are in neighboring Singapore. Indonesia's debt is increasing by \$4 billion a year because its fuel prices are currently well below production costs. Despite domestic oil supplies, the state oil company Pertamina lacks the refining capacity to meet domestic demand, so it imports refined oil from Singapore and resells it at a loss. As a result, motor vehicle use and fuel consumption did not decrease in Indonesia in the last three years despite a collapse in per capita income from \$1200 a year to \$400 a year. To make matters worse, some black market businessmen are making

millions buying oil from Pertamina and re-exporting it to Singapore. In short, Indonesia's taxpayers and debtors are not only subsidizing fuel consumption in Indonesia, they are subsidizing fuel consumption throughout Southeast Asia.

Once introduced, governments are understandably reluctant to reduce fuel sub-

sidies. The governments of Ecuador, Indonesia, Nigeria (twice), Zimbabwe, Yemen and Venezuela, and arguably some European governments as well, have either fallen as a result of proposed fuel price increases, or withdrawn the proposed increase. While study after study shows that the majority of fuel subsidies are captured by the wealthiest minority, the fact that price increases are also passed on to the poor through higher travel costs and food price inflation makes the removal of fuel subsidies politically difficult, but not impossible. Metchies points out that when fuel prices are increased incrementally, to stay at world market rates, at no more than 10% of the pump price, there has rarely been a political disturbance. The 14 countries of the CFA Franc Zone in Western and Central Africa incrementally adjusted fuel prices to market levels in the midst of a 50% devaluation of their currencies with minimal political disturbance.

NGOs and anti-poverty groups are generally unwilling to speak out in support of fuel price increases because of adverse impacts on the poor. The official position of Info-Trans, the new sustainable transport coalition in Indonesia, is that fuel prices would not have to increase if the corruption at Pertamina were removed. While this is clearly untrue, (fuel prices are currently more than \$5 a barrel below the

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Zurich-Kunming Sister-City Project: Bus Rapid Transit Comes to China

by Ernst Joos

The city of Kunming is implementing a series of progressive land use and urban transportation changes unprecedented in China. Kunming's 'Public Transport Masterplan', with dedicated bus lines, new trams and clustered development arose via the Kunming-Zurich Sister City partnership. One element is a dedicated bus lane, which opened in April 99 and boosted operating speeds by 68%.

Kunming is the capital of the southwestern Chinese province of Yunnan. Home to 3.7 million inhabitants, the economy of the Greater Kunming Area has surged, like most of urban China during the past two decades. Kunming's exports and transborder trade with Vietnam, Laos, and Burma are exploding at 8% per year, but air and water quality is deteriorating rapidly. Sulphur dioxide from the burning of coal and diesel makes Kunming's air dangerously caustic. Dianchi Lake, a once a popular swimming destination, is today an infectious cesspool.

Kunming, like most Chinese cities, began vigorously promoting motorcars in the 1990's, with new highways, sprawling suburbs, bike bans and mandated pedestrian-free intersections. Scarce arable land was being chewed up by new low-density development, and the use of private motor vehicles—on average 10 times more polluting than a typical European car—skyrocketed. Given the almost exclusive focus on promoting motorcars, it was no surprise when Kunming's public transport system quickly deteriorated.

Through the Sister City project with Zurich, however, Kunming changed direction. Zurich helped show Kunming that an alternative, transit oriented 'vision' would yield 11% more fertile land available for agriculture, 30%-50% less air pollution and 25% cost savings as compared to the 'trend development' or sprawl scenario. (Feiner et al. 2000)

Following Zurich's Sister Act: A Master Plan Materializes

Zurich and Kunming's 'Sister Cities' relationship was brokered in 1982, but

did not mature for a decade, when influential Kunming planners witnessed Zurich's efficient public transport system firsthand. Shortly thereafter, the Kunming planners partnered with their Swiss counterparts to launch the Kunming "Public Transport Master Plan". The plan aimed to solve Kunming's growing transportation and environmental crises, but also sought, with funding from the Swiss Central Government and Zurich's provincial government, to establish Kunming as a model for all of Asia.

The 3-step Master Plan began by administering a transport questionnaire from which transport patterns for the years 2000 and 2020 were forecasted for different user groups. In the second step, possible solutions were tested and discussed, particularly the Metro, Elevated LRT, Modern Tram (LRT grade) and modern bus systems. It was found that the best solution combined a system of modern tram and modern bus, eventually augmented later with a "Rapid Short Range Passenger Railway", running on improved tracks of the State-run railway.

In the third step, a pre-feasibility study was undertaken for the first line of the suggested 11km modern tram system and a "Demonstration Bus Line" provided the public with an idea of a "high-quality-and-low cost" transit. The Public Transport Master Plan was handed over to the city government in April 1996. Many elected officials remained sceptical of the plan, as did Kunming's private taxi operators, who almost unanimously opposed the plan but stopped short of active opposition.

'Aims and Rules of a Modern Transport Policy'

Two seminars were held at two Sino-Swiss Symposiums co-organised by the Chinese Ministry of Construction. In attendance were representatives from the Ministry of Railways and several institutes and academies from 15 major Chinese cities. At the first forum (1996) drafts of "The Aims and Rules of a Modern Transport Policy" and the



Kunming's bus stop and intersection designs overcame problems experienced in China's other bus lane experiments.

Public Transport Master Plan were presented and discussed.

The "Aims and Rules of a Modern Transport Policy" consisted of transit-oriented land-use principles, pro-walking and pro-bicycle policy guidelines, and 'efficiency first' transportation planning strategies.

Site Visits Key to Mustering Political Will

The most powerful leader in Kunming is the Party Secretary, so gaining his support was key. The prospects did not look good: half a year before construction was scheduled to begin on the dedicated bus lanes he was still against it. After the Party Secretary visited Zurich, however, he was able to make the connections between transport policy and economic, ecological and social success. After this

China



visit the dam was broken. Three hundred new buses were purchased and construction began.

In addition to Zurich, Kunming's leaders visited several other European cities to experience modern trams, modern bus systems, inter-city heavy rail, protected historical areas and pedestrianised city centres. In short, they saw several modern cities operating efficiently with minimal reliance on the private motorcar.

Kunming's First Dedicated Bus Line

After building the necessary political support, a "Demonstration Bus Line" was established in Kunming in April 1999. The bus line was designed for easy future conversion into a tramline; reserved lanes in the middle of the street, stop islands, and bus priority at traffic lights were all included. Modern vehicles and a new time-saving ticketing system are

also part of the package.

The demo line connects the airport and some densely populated residential areas with the city centre. During the 1999 International Horticultural Fair it was the primary means of transportation

for the visitors. Consequently, 2000 will see the construction of three additional demo lines. When completed, these new lines will comprise the core of a modern, high-speed bus network.

Ridership on the demonstration line increased 13% since its inception. Average passenger handling time at stops decreased 59%, from 56 seconds to 23 seconds, while operating speed increased by 68%, from 9.6km/h to 15.2km/h. The city saved a lot of money because they could now serve the same number of passengers with 48% fewer buses.

The project also includes a strategy to preserve historic areas of Kunming and to mitigate increasing suburban sprawl.

Preserving Historic Areas

Historic areas, along with the central business district, central business axis, and pedestrian zones, were identified as the primary organizing element around which a public transport, bicycle, and pedestrian friendly city would emerge. For the healthy preservation of each one of these elements, a corresponding transportation solution was identified.

In order to preserve the historic areas, it was stressed that streets and places had to keep their narrow shape, and pedestrian paths (hutongs) shall retain their function. Concerning buildings, four main categories, with four respective protection schemes, were defined:

1. Preservation as a whole
2. Structure and appearance have to be preserved, to protect the appearance of the open space of the street.

3. New modern structures are allowed, but they have to follow the existing typology (especially concerning the number of floors).

4. New buildings must be integrated as thoroughly as possible.

Four months after finishing the historic town protection plan the city government ordered an interdiction for demolishing any old buildings in the section of the historic town. An ensuing "Methodical Protection Manual" was drafted, serving the newly planned "Historic Town Protection Bureau" as a guidebook. This bureau will profit from the experiences of other Chinese cities, and will engender the preservation of Kunming's cultural heritage.

Transportation Development and China's Future

The Kunming Railway Bureau is also encouraging the development of new satellite towns along one line, and a Rapid Short Range Passenger Transport System may be added.

The "Kunming Model" is showing cities throughout China and Asia how public transit improvements do not require massive capital investments. Seeing Zurich, capital of the richest country in the world, it was clear to Kunming's planners that the most efficient and modern cities are supported by strong, efficient surface public transport systems complemented with convenient pedestrian facilities, provisions for bicycle traffic, and efforts at historical preservation. ♦

Letter

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Bank, where extensive project documentation is now readily available.

ITDP Shifts Gears

For several years, ITDP has been shifting away from reforming the international development institutions as an end in itself, and moving towards the goal of improving transport and land use governance in the CEEC and developing countries. We have also been shifting away from shipping used bicycles from the U.S. to developing countries, towards projects which develop and strengthen the human powered vehicle

industry. These projects are increasingly undertaken in cooperation with large development institutions and the human powered vehicle industry. Finally, we have begun to work directly on some NMT infrastructure and safety planning projects. (See Indonesia Article)

Strengthening the Non-Motorized Vehicle Industry in Developing Countries

Africa

Since the poor don't have access to vehicles, roads are not enough to alleviate poverty. Since 1985, ITDP has provided free or low-cost used bicycles to tens of thousands of women, men and children in rural and urban areas throughout the

world. But shipping used bikes did not create a sustainable commercial supply of low cost vehicles in poor countries. The costs of collecting, storing, shipping, customs, handling, distributing, and maintaining the vehicles, when added up, were higher than the costs of shipping new bikes in bulk. Because the used bicycle stream is inconsistent, the recipient didn't really know what they were getting, so they didn't want to pay for product. For the same reason, larger funding agencies don't like to deal in used product. Hence, none of the projects were ever replicated on a large scale. As grant money and the energy for volunteerism dry up, so too ends the supply of vital spares and bicycles.

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Notes from Agra: Selling Modern Rickshaws

by Walter Hook

The following was adapted from W. Hook's report on his recent trip to Agra, India for the Cycle Rickshaw Improvement Project, a project of ITDP and AITD funded by U.S. AID and the Changing Horizons Fund. This report focuses on Agra, where ITDP has been working with Tri Chakra, (an NGO), Strategic Alliance, (an integrated marketing and communications company), and Lokayan, a social organization.

After five years of effort, on August 8, 2000, Sunil Kumar, the owner of Hari Om Cycle Mart, finally began to produce our newly designed modern cycle rickshaws. The assembly wasn't perfect, but all ten were produced in a single day. As the largest cycle rickshaw assembler in the Agra region, producing some 3000 vehicles a year, getting Hari Om to shift his production was key to project success. Getting there hasn't been easy.

The name Hari Om comes first from Hari, Sunil's uncle, and Om is from Sunil's father, a kind and down to earth man. Both Hari and Om shared our enthusiasm for producing a better cycle rickshaw. Mr. Om died this past summer, and we will miss him. Sunil, his son, has been more skeptical. He had the most to gain, but also the most to lose, from the project's success.

Hari Om mainly sells cycle rickshaws through financial middlemen coming from nearby towns who buy in bulk and pay cash. He doesn't assemble for the Agra market; this is done by small scale assemblers who are also involved in the risky though lucrative business of financing, charging as much as 50% interest. Sunil makes money from them as a near-monopoly supplier of their components.

While we liked the distinctive decorative steel plating, at 80kg Hari Om's cycle rickshaws were too heavy. With only a single speed, pedaling a couple of tourists back from the Taj Mahal is a brutal trip. An ultra-light titanium frame and Dura-Ace gear system would be great, but too expensive. Still, if they could get more passengers, we knew the owners would be willing to pay a little more for a better vehicle.

By April of 2000, our design team, Matteo Martignoni and G. Shyam had developed an 'Agra' model, and AITD had developed a "Delhi" model. The

Agra model, after extensive field trials, design refinement, and market testing, was commercially viable. It was cost competitive with the old vehicle, yet at 55kg weighed 30% less, had multiple gears, a much more comfortable seat, and a fully operational canopy. The gearing and lighter weight made it 20% to 30% easier to pedal. This translates directly into less calories burned by the operator. In the Agra context, this often means less hunger. Field trials showed that the owners earned at least 20% more with the vehicle, and attract a quarter of their passengers away from polluting motorized modes. Further, we had developed with Mr. Gupta of Shivati bicycles a mass-produced chassis that could be shipped at minimal cost all over the country.

The launch of the first 75 vehicles at the end of 1999 had attracted an enormous amount of press. Leading public officials threw in their support, promising financing and subsidies for 200 vehicles. U.S. AID was convinced that the new vehicles would spread all over India without any further work on our part. But four months later, no one had jumped into commercial production. The frame manufacturers wanted orders from assemblers, the assemblers wanted orders from the financial middlemen (or maleks), and the maleks were divided. One malek wasn't convinced the new vehicles would be popular. Another also owned a business that made the vinyl that covered the chairs in the traditional vehicles, which aren't used in the new design. He didn't want to see the new designs take off. Others were on the fence.

Hari Om had been given twelve frames, but he wasn't assembling. He needed a push from a competitor. Our shop steward, Ramesh Kumar, decided to turn entrepreneur, and began assembling the vehicles on his own account.

By early August, Ramesh was turning out two high quality vehicles a day. We now had a competitor for Hari Om, but his volume was not nearly enough to reach our target of 500 vehicles sold by September 30. And, like everyone else in Agra, he depended on Hari Om for components. Suddenly Ramesh found there was a shortage of critical parts.

Until Ramesh teamed up with one of the financial middlemen who control the market, he couldn't hope to compete. In 1999 the Agra Development Authority, (DUDA) had promised to finance 200 of the new vehicles, but responsibility for this was turned over to a "Social Organization". The "Social Organization" rounded up some 60 eligible applicants, but instead of financing the new vehicles, they decided to subsidize 60 of the traditional cycle rickshaws.

To keep the buying and selling at arms length from the project, we con-



tracted an integrated marketing and promotion company called Strategic Alliance to do the public relations and promotion for the vehicles. They had been responsible for the avalanche of publicity that the project had received. Strategic Alliance (SA) quickly learned that marketing cycle rickshaws in Agra is not like marketing new cars or soap. Many of the potential buyers were illiterate, and few owned televisions or read newspapers. Professional marketing and PR folks were not used to dealing with this strata of society, and it took some time to adjust and develop new techniques.

Initially, SA planned to avoid the large fleet owners and financial middlemen called maleks, who are often vilified in policy circles. Charging often very high interest rates or daily rental fees, maleks are often blamed for the poverty of the cycle rickshaw drivers. We had managed to get the cost of the new vehicle down to Rp.4300, compared to roughly Rp. 4000 for a traditional vehicle, but sold through a financial middleman, the cost would be as much as Rp.5500 if repaid in 8 months. To a certain extent this is the cost of giving credit to this highly transient community. Certainly, competition exists between these financial middlemen. Private banks were unwilling to lend to cycle rickshaw operators without a 300% guarantee from the project. Government

programs come and go, and require proof of residence, and if the wallah or anyone in his family had defaulted before, they are ineligible, permanently. Self-help groups could take loans collectively, but cycle rickshaw wallahs in Agra were reluctant to form such groups. For many, renting or borrowing from a malek is the only option.

We knew the maleks had to have a stake in the new vehicle, or they would undermine the project. Similar efforts to modernize the cycle rickshaw in Bangladesh had failed because the project had tried to use new designs to simultaneously undermine the power of these local maleks. Lokayan, a social organization which had worked in the cycle rickshaw community for years, advised that fighting the maleks was counterproductive. Many cycle rickshaw operators do not want to own the vehicle, for fear of theft or other reasons. For those that do, interest rates are high, but credit is available. The maleks

also provide a certain amount of political protection from the police and hostile government officials. It is this last function which ultimately convinced Lokayan of the need for cooperation with the maleks, rather than confrontation. Besides, if the maleks feel threatened, they could kill the project.

So, the project team decided to encourage them to participate, while exploring other financing options as well. In mid-July, SA was contacted by their first interested financial middleman. He happened to be Sunil Kumar's nephew. The nephew agreed to take the whole lot of nineteen vehicles, and to pay in fifteen days. The nephew also wanted Ramesh to increase production, and he agreed to send two of his workers to Ramesh's shop the next day. Ramesh reluctantly agreed. We were uneasy. Somehow, Sunil Kumar still held the project in his pocket. Only if SA had concrete orders with financing in

their hands could they dictate terms to the assemblers.

Fortunately, SA had a marketing strategy. They started to organize highly publicized events. They organized an event in Mathura, the birthplace of Krishna, where a sample of the new vehicle was demonstrated to government officials, maleks, and wallahs. PR work ensured good press coverage. One of the financiers bought the demonstration vehicle, and two days later purchased two more and placed an order for a fleet of 20. This prompted another



The Commissioner of Agra and the District Magistrate inspect the new designs

local financier, a competitor, to buy one and place an order of ten.

They planned a much bigger event in Agra to correspond to my visit. They had me personally invite the Commissioner, the Chief Development Officer, the Mayor, the District Magistrate, and the Lead Bank Manager, all of whom agreed to turn up. SA wanted at least thirty vehicles on display at the event, so they could be sold immediately. We knew Ramesh could produce ten at the most.

With the big event planned in two days time, we visited Sunil Kumar. SA asked Hari Om to assemble 20 vehicles in two days. He already had 12 frames, and we would send the rest that day. SA guaranteed the sale of all twenty, if he could produce. Sunil smiled and shook on it. That night, he turned up at the shop and gave us the names of a half dozen other maleks who he said had been reluctant before but were now convinced. Hari Om's vehicles turned up in the late evening the night before the ceremony; eight in all, not the promised

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Seven hundred of the new vehicles were supposed to have been sold by September 30. Even if we hit the target, the project was likely to end. It was Independence Day in India, and maybe for us too.

twenty. The assembly was not of the best quality, but he had covered our plain wooden floorboards with the beautiful sheet-metal design work that gave the Agra cycle rickshaw its distinctive flavor.

The event was held at the Mayur Hotel Complex the next day, and was attended by the Mayor, the Commissioner, the District Magistrate,

sign them and hand them over to the relevant banks. Some forty cycle rickshaw wallahs and owners came to the event, and all told, SA managed to place all the vehicles we had, and take orders for another 50 or 60.

The next day, we went to Bharatpur, where Dr. Anand, the head of the Grameen Bank said his bank was ready to take 5 vehicles next week, and another 5 at a ceremony which SA would arrange for early September. Bharatpur has a world renowned bird sanctuary where motor vehicles are not allowed, and all cycle rickshaw operators have to be registered with the Forestry Department. The Grameen Bank would pay us for the vehicles and he would collect the money from the wallahs who only had to pay 15% down, and the rest in installments over an 18 month period at 15% interest. He said he'd like to replace the entire fleet at the bird sanctuary of 105 vehicles within two years time.

Then we went by to see the rickshaw wallahs at the bird sanctuary itself. They showed us a 100kg, monstrous two-headed cycle rickshaw 'innovation' that Hari Om had sold to them. When they saw what the new designs looked like, they crowded around and 70 placed orders for the new vehicles. "This will put Hari Om out of business!" they said gleefully. They asked us to tie up with a local assembler, and took us to meet him. The man operated a bicycle repair facility next to the central Bajaj stand in central Bharatpur. His shop was a two-meter square shipping crate with a tent flap in front for shade. He agreed to maintain the vehicles, and be trained how to do this, and was interested in exploring assembly. But I knew to make US AID's

production targets Hari Om would have to assemble some of their vehicles, like it or not.

Back in Delhi, we drove to a poor area in the Northeast. Here the streets are



Ramesh Kumar (left) in the shop



Sunil Kumar, Mr. Om, Matteo Martignoni, and Mr. Hari

crowded with rickshaws hand-painted in floral designs. We met with three maleks, one of whom owned a whole warehouse full of cycle rickshaws. He had bought ten frames of the Agra model directly from Shivati, and had begun his own assembly. He'd even made some further improvements in the axle. "Eventually," he said, "your new models will spread all over India. But it cannot be rushed. It will take a little bit of time."

Time we didn't have. The next day, I would meet with US AID. Seven hundred of the new vehicles were supposed to have been sold by September 30. Even if we hit the target, the project was likely to end. It was Independence Day in India, and maybe for us too. On the road back, the children were standing on the roofs of half-built houses flying kites. Embedded in the kite strings were bits of glass. The game is to twist your kite around another, so the glass cuts the string of your neighbor. For three years, US AID support has kept our kite aloft. If that string were cut now, would the effort to modernize the cycle rickshaw fly on its own, or fall to the ground? ♦

and the Lead Bank Manager, among others. The new Chief Development Officer, Mr. Bhuvnesh Kumar, had agreed to provide a 15% subsidy and loans for the balance for 300 vehicles specifically for vehicles generated by our project. Furthermore, he said, he would personally oversee the process, give the forms only to a person appointed by us as a formal liaison, and after we have collected the completed forms will personally

Photos: left, Matteo Martignoni; right, Walter Hook

Letter

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Rarely was a viable for-profit bike business left behind. We should have realized it would not be that simple. Even in the wealthy US, 80% of new businesses fail in the first few years. In low-income communities in developing countries, surviving as a start-up small business is incredibly difficult. Lacking capital, they find it difficult to get credit from banks, or generous payment terms from suppliers. Their clientele are relatively poor. Sometimes they lack business skills, technical skills, or relationships with suppliers. Until recently, we had not developed relationships with the bicycle industry to understand what it would take to make these start-up bike businesses survive.

Afribike is our best chance to overcome some of these past failings. While we again capitalized a shop with donated used bikes from the U.S. and England, it is now ready to incubate viable for-profit bike businesses all over South Africa. Afribike is now an independent NGO staffed by a diverse group of dedicated South Africans. Gustav Erlank, Afribike's Managing Director, who came to Afribike via his own experience in eco-friendly businesses, hatched the idea of creating bike business franchises. The franchise model dramatically increases the chance of

small business survival by giving the retailers easier access to credit, increased buying power with suppliers, and name recognition (which builds buyer confidence). Afribike has begun to set up bike shops in converted shipping containers that will eventually become for-profit franchisees owned and operated by local bike mechanics. On August 8, the first franchise opened in Kwa-Zulu Natal, and later this fall a second franchise will open in Ivory Park. (See Article, p. 12)

To help these businesses succeed, we have established much closer ties with the bike industry. Jay Townley, an industry stalwart who is involved with numerous bicycle industry and advocacy associations, and Greg Guenther, previously the CEO of Burley Design Cooperative, have both joined Araidne Delon-Scott of Specialized on our Board, and have provided ITDP with all sorts of industry-developed training materials about how to set up a successful bike shop. They have also provided us with key contacts within the bike industry, notably Derby Cycle Corporation, which operates Pro-Bike, a subsidiary in South Africa that has agreed to provide bikes at cost with generous terms to Afribike. Instead of sending used bikes, we will be using the generous support of the International Foundation and the Tucker Foundation to provide the necessary



Gustav Erlank of Afribike and Susanne Holste of the World Bank answering questions outside of Tamale, South Africa

guarantees to bike suppliers who will be paid back eventually by the franchisees. We will also provide 50% credit guarantees for buyers of the bicycles who join self-help groups, and will directly subsidize some low-income women beneficiaries with funds from Alternative Gifts International.

Asia

ITDP's Indian Cycle Rickshaw Project set out to modernize the cycle rickshaw design. Dozens of projects in the past had developed new designs, but none were ever commercially adopted. As of today, the project has already succeeded in developing a design that two major bicycle manufacturers are making, two commercial assemblers are assembling, and over 200 cycle rickshaw wallahs have purchased with their own money at

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The move was supported unanimously by the Steering Council and the Membership. The following day, Dr. Bambang Susantono met with Vice President Megawati Sukarnoputri on behalf of the Sustran Network and asked for her support on improving non-motorized transport and seeking lower cost alternatives to the metro, and other issues.

Info-Trans and the NGO community in general could not agree on whether to support an increase in fuel prices, despite the fact that the Sustran Steering Committee supports the increase in fuel prices in Indonesia. The

Indonesian NGOs feel that the additional funds going to Pertamina will only disappear in corruption, and the poor will end up paying more for public transport. Until the oil and gas sector is restructured and rid of corruption, and until a mechanism for direct subsidy of public transport can insulate the poor from fuel price increases, the NGO community in Indonesia is unlikely to support the increase of fuel prices.

The Campaign for Becak Rights

Meanwhile, advocacy to return becaks to Jakarta's streets continued. In the winter of 1998, ITDP began cooperating with LPIST to organize cycle rickshaw operators into associations in three pilot communities in Jakarta. The Urban Poor Consortium (UPC) had also built several associations around Jakarta, indepen-

dent of ITDP support. Community members were happy with the service, and with the added security that becaks operating in the area were known and registered locally. At the same time, talks were underway with the new Regional Parliament in Jakarta to rescind the law banning becaks in Jakarta, at least within certain districts.

Some strategic differences of opinion arose between most of the Info-Trans NGOs and the UPC (Urban Poor Consortium). UPC favored high-profile rallies of becak drivers, while LPIST and others felt efforts should be channeled instead to more traditional lobbying to convince the Regional Parliament to rescind the ban and local police not to enforce it. However, most of the NGOs joined UPC in organizing a major rally

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with President Wahid, who, it was believed, would ask the regional parliament to rescind the ban. As it turned out, the unpredictable President said the ban should be enforced, but that the becak drivers should receive compensation when their vehicles were taken away.

At this point, demonstrations turned ugly. UPC initiated an international letter-writing campaign with support from ITDP, SUSTRAN, and the US-based Environmental Defense Fund (EDF). EDF took the lead, and over 2000 letters were sent to the President and the



A hapless pedestrian avoiding a recently improved sidewalk in Surabaya

Governor asking them to rescind the ban. At the same time, UPC was employing increasingly confrontational tactics. It organized a demonstration blockading the Regional Parliament, which antagonized the Parliamentarians and the police. UPC also issued illicit operating licenses to the becak operators within their associations. This greatly antagonized local authorities and also angered many of the becak drivers, as a secondary market developed for these licenses under the mistaken assumption

that they were legally valid. These activities antagonized the Governor, who then called for a full crack down on becak operators, to be implemented by February 28, 2000. On February 28, 2000, a demonstration of becak drivers organized by UPC turned into a riot, and UPC head Wardah Hafidz was jailed for 3 days.

In the three districts where the becak unions organized by LPIST were operational, however, there were no troubles, as an agreement had been reached with

the local police to allow them to continue to operate.

Ultimately, the enforcement of the ban was again put off indefinitely, and today becaks continue to operate in Jakarta. ITDP and LPIST are trying to end the political log-jam over this issue by grounding it in a broader debate about the efficiency and safety of short-distance transport in general, and about the decentralization of decision-making. ♦

Energy Crisis

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international market price), the fact that the revenues generated by fuel price increases are unlikely to benefit the poor, and may well be stolen, makes fuel price increases politically unpalatable. Removal of subsidies is thus linked to the complex issue of oil and gas sector reforms. In India as well, anti-poverty activists have been vocal opponents of fuel price increases, though some environmentalists have supported increases in heavily subsidized diesel prices.

NGOs are unlikely to come down on the same side as the much-vilified IMF and the World Bank. The IMF and the World Bank have frequently included in structural adjustment lending a condition requiring fuel price increases and the restructuring (i.e. privatization) of the oil and gas sectors. Many residents in developing countries resent these institutions and argue that if a government chooses to subsidize fuel then that's its business.

However, aggregate world demand is clearly the sum of its parts. Aggregate fuel consumption, and the aggregate environmental effects of fuel consumption such as global warming, are clearly increased by the countries with low oil prices. The USA, for example, together with Canada, Mexico, and current Russia, charge only between a fifth and a third of the price of the top group of countries, but account for 35% of the

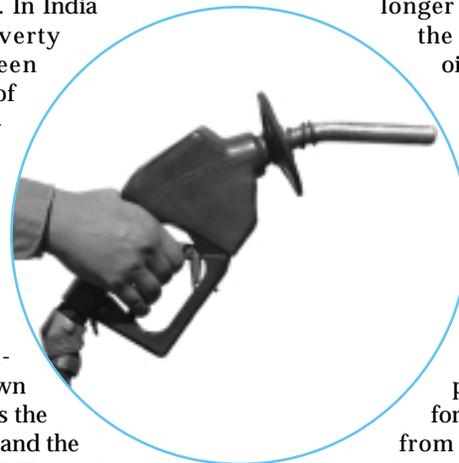
world's vehicles consuming petrol and fully 52% of those using diesel as a fuel. China, Indonesia, and India, three of the world's most populous countries, also have extremely low fuel prices and rapidly increasing motor vehicle use.

In these conditions, a major energy crisis appears inevitable, with the world's poorest countries again the main victims. The issue will not go away simply by ignoring it. The world's development organizations can no

longer ignore the fact that the likely disruption of oil supplies is now well within the lifetime of any major infrastructure investment, threatening benefit streams and loan repayment schedules. Nor should the NGOs, in good faith, continue to provide political cover for the rich who benefit from the current system,

while at the same time allowing the IMF and the World Bank to take the political heat for increasing fuel prices. Even heavily conditional support for fuel price increases could play a positive role in ending the irresponsible political logjam that continues to steer many developing countries closer to the economic and environmental precipice.

Two steps are therefore essential to avoid this possibility. First, we must recognize the impending energy problem and the need to timetable the introduction of alternatives. Second, we need a worldwide pricing agreement to conserve existing supplies of oil for as long as possible so as to create a sensible transition period. An additional gain from such actions is that profligate consumption makes no environmental sense either. ♦



NEW TITLES

American Council for an Energy-Efficient Economy's Green Book: The Environmental Guide to Cars and Trucks, Model Year 2000. John DeCicco, Jim Kliesch, and Martin Thomas, 2000. American Council for an Energy-Efficient Economy, 1001 Connecticut Ave., N.W., Suite 801, Washington, D.C. 20036. Tel. (202)429-0063
email: ace3pubs@ix.netcom.com

Automatic Fare Collection. International Association of Public Transport (UITP), 2000. Dorian ANGOTZI, Sales of Publications and Advertising Officer, UITP, avenue Herrmann-Debroux 17, B-1160 Bruxelles, Belgium. Tel. ++32 02 663 66 46.
email: publications@uitp.com

Can Rail Pay? Light Rail Transit and Urban Redevelopment with Value Capture Funding and Joint Development Mechanisms. Jan Scheurer, Peter Newman, Jeff Kenworthy with Thomas Gallagher, . Institute for Sustainability and Technology Policy, Murdoch University, Perth Australia.
<http://www.wistp.murdoch.edu.au/ligtrail/istp.html>

Car Free Cities. J.H. Crawford, 2000. International Books.
email: i-books@antenna.nl
www.antenna.nl/i-books

Cleaner Cars-Fleet Renewal and Scrappage Schemes. European Conference of Ministers of Transportation, 2000. 19 rue de Franqueville, F-75026, Paris, France. Tel. 33 (0) 1 45 24 81 67.
www.oecd.org/bookshop

CO2 Emissions from Transport. European Conference of Ministers of Transportation, 2000. 19 rue de Franqueville, F-75026, Paris, France. Tel. 33 (0) 1 45 24 81 67
www.oecd.org/bookshop

Cutting Your Car Use. Anna Semlyen, cartoons by Andy Singer, 2000.
www.greenbooks.co.uk

Divorce Your Car-Ending the love affair with the automobile. Katie Alvord, 2000. New Society Publishers, P.O. Box 189, Gabriola Island, B.C. VOR 1X0, Canada.
www.newsociety.com

Economic Benefits of Cycling. Interface for Cycling Expertise, 2000. Predikherenstraat 17, 3512 TL Utrecht, The Netherlands. Tel. +31 30 230 45 21.
email: i-ce@cycling.nl

Edu-Bike Africa—Learner's Workbook. Althea Kemp, edited by Andrew Hofmeyr. Education Africa, Private Bag X13, Pinegowrie, 2123, Gauteng, South Africa. Tel. (011)888-6043. **email: mailbox@educationafrica.com**

Engineering-Economic Analysis of Automotive Fuel Economy Potential in the United States. David L. Greene and John DeCicco, 2000. American Council for an Energy-Efficient Economy, 1001 Connecticut Ave., N.W., Suite 801, Washington, D.C. 20036. Tel. (202)429-0063.
email: ace3pubs@ix.netcom.com

The European Investment Bank: Accountable Only to the Market? A Report by the CEE Bankwatch Network in cooperation with the Heinrich Böll Foundation, Brussels Office, 1999. 28, rue le Titien, B-1000 Brussels. Tel. +32-2-7434100.
email: brussels@boell.de
www.boell.de

External Costs of Transport: Accident, Environmental and Congestion Costs in Western Europe. UIC, Paris, 2000. FAX +33 1 4449 2029. www.uic.asso.fr

Faring Badly: The Gender Aspects of Travelling. Teena Gill, 1999. PANOS News Service. www.oneworld.org/panos/news/35nov99.htm

Fuel Prices and Taxation. Gerhard P. Metschies, 1999. Deutsche Gesellschaft für Technische Zusammenarbeit (GTZ). www.gtz.de

Human Power—Technical Journal of the IHPVA. International Human Powered Vehicle Association, 2000. IHPVA, P.O. Box 1307, San Luis Obispo, CA. 93406-1307. Tel. (805)545-9003.
email: hp@ihpva.org

Improving Conditions for Non Motorized Transport in Surabaya, Indonesia. GTZ, ITDP, LPIST, 2000. The Institute for Transportation and Development Policy.
email: mobility@igc.org

Investment in Transportation Infrastructure 1985-1995. European Conference of Ministers of Transportation, 2000. 19 rue de Franqueville, F-750126, Paris, France. Tel. 33 (0) 1 45 24 81 67.
www.oecd.org/bookshop

Leisure Traffic-Unlimited Growth? Swiss National Science Foundation, NFP41, CHF 29. FAX +41 31 325 5058.
www.snf.ch/nfp41

Organisation of Transport and Quality of Service. International Association of Public Transport (UITP), 1999. Dorian Angotzi, Sales of Publications and Advertising Officer, UITP, avenue Herrmann-Debroux 17, B-1160 Bruxelles, Belgium. Tel. ++32 02 663 66 46.
email: publications@uitp.com

Online Transportation Demand Management (TDM) Encyclopedia. Victoria Transport Policy Institute, 2000.
www.vtpi.org/tdm

Passenger Information. International Association of Public Transport (UITP), 2000. Dorian Angotzi, Sales of Publications and Advertising Officer, UITP, avenue Herrmann-Debroux 17, B-1160 Bruxelles, Belgium. Tel. ++32 02 663 66 46. **email: publications@uitp.com**

Pollution Lineup: An Environmental Ranking of Automakers. Candace Morey, Roland Hwang, Jim Kliesch, and John DeCicco, 2000. American Council for an Energy-Efficient Economy, 1001 Connecticut Ave., N.W., Suite 801, Washington, D.C. 20036. Tel. (202)429-0063. **email: ace3pubs@ix.netcom.com**

Productive and Livable Cities—Guidelines for Pedestrian and Bicycle Traffic in African Cities. Compiled by Marius de Langen and Rustica Tembele, 2000. **email: kli@IHE.NL**

Rural Accessibility Planning Tool. 2000. Helps communities and local organizations identify their access problems and propose solutions. Dr. Fatemeh Ali-Nejadfard, Senior Technical Advisor, Access and Rural Employment, ILO/ASIST, P.O. Box 210, Harare, Zimbabwe. FAX +263 4 759427.
email: assist@ilo.org

continued on p. 30

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Safe Routes to School—Step by Step. Ellen Cavanagh, 2000. Transportation Alternatives, 115 W. 30th Street, Suite 1207, New York, NY 10001. Tel. (212)629-8080.

email: saferoutes@transalt.org

Safety In Road Traffic for Vulnerable Users. European Conference of Ministers of Transportation, 2000. 19 rue de Franqueville, F-750126, Paris, France. Tel. 33 (0) 1 45 24 81 67.

www.oecd.org/bookshop

Street Design Guidelines for Healthy Neighborhoods. Dan Burden, 2000. Center for Livable Communities.

Tel. (800)290-8202. **www.lgc.org/clc/**

Sustainable Transport Policies. European Conference of Ministers of Transport, 2000. 2, Rue Andre Pascal, 78778 Paris Cedex 16, France.

email: ecmt.contact@oecd.org

TAKING STEPS: A Community Action

Guide to People-Centred, Equitable and Sustainable Urban Transport. Written and compiled by A. Rahman Paul Barter and Tamim Raad, 2000. SUSTRAN Network. P.O. Box 11501, Kuala Lumpur 50748, Malaysia. Tel. +(60 3) 2274 2590.

email: sustran@po.jaring.my

Transportation for Livable Cities. Vukan R. Vuchic, 1999. Center for Urban Policy Research, 33 Livingston Avenue, Suite 400, New Brunswick, NJ 08901-1982. Tel. (732)932-3133 x.555.

email: hardie@rci.rutgers.edu

Transportation Research Board Publications. TRB's catalogue of publications runs the gamut from "Enforcement of Environmental Mitigation Commitments in Transportation Projects: A Survey of Federal and State Practice" to "Travel Behavior and Passenger Travel Demand Forecasting." For a full catalogue go to:

www.national-academies.org/trb/bookstore/

Urban Public Transport Funding.

International Association of Public Transport (UITP), 1999. Doriano ANGOTZI, Sales of Publications and Advertising Officer, UITP, avenue Herrmann-Debroux 17, B-1160 Bruxelles, Belgium. Tel. ++32 02 663 66 46.

email: publications@uitp.com

Urban Structural and Modal Split. International Association of Public Transport (UITP), 1998. Doriano ANGOTZI, Sales of Publications and Advertising Officer, UITP, avenue Herrmann-Debroux 17, B-1160 Bruxelles, Belgium. Tel. ++32 02 663 66 46.

email: publications@uitp.com

Urban Transportation and Traffic Policies: The Challenge of Coexistence in Developing Countries. Eduardo A. Vasconcellos. Transportation Quarterly, Vol. 54, Winter 2000, Washington, D.C.

You Don't Always Get What You Pay For—The Economics of Privatization. Elliott D. Sclar, 2000. Century Foundation Books. **www.centuryfoundation.org**

Letter

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a price which returned a profit to the producers. Commercial adoption has thus already begun, and we hope it will reach a scale of over 700 vehicles commercially bought and sold in Agra and Delhi by the fall. (See Article, p. 24)

Towards the end of 2000, ITDP plans to initiate a project to replicate the Indian success in Jogjakarta, Indonesia, in cooperation with Institute for the Support of Strategic Initiatives (LPIST) and Gadjah Mada University. Partial funding has been secured for this from Jay Harris, and we hope the New Land Foundation will also support this. Again, direct work with the local cycle rickshaw manufacturers and the Indonesian bike industry is critical to the project's success. Some continuation in India is also not out of the question.

Improving Transport and Land Use Governance

ITDP's work with sustainable transport advocacy groups continues to focus on Asia and Central and Eastern Europe. The enclosed article on Indonesia gives a thorough update of our efforts there. In Central Europe, ITDP has just initiated a major anti-sprawl campaign with the Hungarian Clean Air Action Group, the Polish Society for Ecological Transport, and several groups in the Czech

Republic. (See article on the Czech Republic) The local advocacy groups there have developed sophisticated methods for fighting for sustainable transport policy, but have asked ITDP to help develop mechanisms to deal with the massive influx of Western-style shopping centers and office parks.

ITDP has also initiated work in South China. Thanks to another generous grant from the Rockefeller Brothers Fund, ITDP began working this spring with the Guangdong Consumers Association and the Guangzhou Urban Transport Planning Research Institute to build public support for a set of traffic demand management measures that grew out of the World Bank loan for the Guangzhou inner ring road. We will focus initially on pedestrian improvements in workshops this fall. We also researched the implementation of that loan and found the very dangerous precedent that the loan went ahead despite the clear impact of driving the city of Guangzhou into further violation of Chinese national ambient air quality standards. We are completing a case study that will make specific proposals to the World Bank directors which would avoid these problems in the future.

Concluding Comments

ITDP grew very fast over the last year, with our projects and commitments roughly doubling in size, and the funds we were able to leverage for our part-

ners around the world grew even faster. ITDP would like to welcome Dr. Yaakov Garb, who joins ITDP to oversee much of our Anti-Sprawl Campaign in Central Europe; John Ernst, who oversees our Asia programs; Lloyd Wright, who has agreed to represent ITDP from Quito, Ecuador, and Noah Budnick, who joins us as Administrative Director. ITDP also welcomes Jon Orcutt, of the Tri-State Transportation Campaign, who became our new President in January. A heartfelt thanks to Dr. V. Setty Pendakur who will remain on our Board. A big welcome to Jay Townley, of the Bicycle Retailers Education Conference and the National Bicycle Dealers Association, who joined our Board this year. A heartfelt thanks to Keith Oberg, who left the Board this year to become Vice President of Pedals for Progress. Keith put in more than 10 years as both a President and Board Member of ITDP, and his insights and leadership gave ITDP much of its moral compass over the years. Support from individual contributors remains our pride and joy. Thanks also to the Rockefeller Brothers Fund, U.S. AID-India, the Umwelt Bundesamt, GTZ, the International Foundation, the Tucker Foundation, the Changing Horizons Trust of the Tides Foundation, Alternative Gift Markets, the World Bank, the New Land Foundation, the Roy A. Hunt Foundation, the Seattle Foundation, the Maine Community Foundation. ♦

BULLETIN BOARD

Interbike - Las Vegas, Nevada, US, 24-27 September 2000. International bicycle industry's annual exposition. Tel. (949)376-6161/FAX (949)497-9502. www.interbike.com

BTAC Bike Show - Toronto, Ontario, Canada, 1-4 October 2000. Tel. (514)393-1132/FAX (514)393-9513

Environmentally Sustainable Transport - Vienna, Austria, 4-6 October 2000. Futures, strategies, and best practices. www.oecd.org/env/ccst/est

Railvolution - Denver, Colorado, US, 4-8 October 2000. Annual rail conference. www.railvolution.com

CABDA - Rosemont, Illinois, US, 6-8 October 2000. World Cycling Exposition. Tel. (708)798-2004/FAX (708)798-2208

Cities for Cyclists Annual Meeting - Gent, Belgium, 12-13 October 2000. Cities for Cyclists Secretariat c/o Dansk Cyklist Forbund, att. Tanja Gronvall, FAX +45 33 32 76 83 [email: cfc@dfc.dk](mailto:cfc@dfc.dk)

UITP Melbourne 2000 Public Transport Conference Event - Melbourne, Australia, 8-13 October 2000. Includes both International Union of Public Transport (UITP) Light Rail Conference and the Asia/Pacific Congress and City Transport Exhibition. www.lightrail2000.vic.gov.au

Bicycling Australia Show 2000 - Melbourne, Australia, 13-15 October 2000. Bicycle industry trade show. Tel. 61-2-4225-9111/FAX (61-2-4225-7422. www.bicyclingaustralia.com

Smart Urban Transport—Using Transitways and Busways - Brisbane, Australia, 17-20 October 2000. Tel. +617-38541611/FAX +617-38541507 [email: ozaccom@ozaccom.com.au](mailto:ozaccom@ozaccom.com.au)

Port Cities and Sustainable Development: 7th Cities and Ports International Conference - Marseilles, France, 6-9 November 2000. Denis Davoult, International Association of Cities and Ports, 45, rue Lord Kitchener, 76600 LE HARVE, France. Tel. (33) 2 35 42 21 94 [email: ddavoult@aivp.com](mailto:ddavoult@aivp.com)

Regional Policy Seminar on Transport and Communication Challenges for Urban Local Governments in the 21st Century - Kuala Lumpur, Malaysia, 8-10 November 2000. www.2.itjit.ne.jp/~citynet

XI Pan-American Conference in Traffic and Transportation Engineering - Gramado, Rio Grande do Sul, Brazil, 19-23 November 2000. Dr. Luis Antonio Lindau Tel. +55 51 316 3596/FAX +55 51 316 4007, [email: panam@orion.ufrgs.br](mailto:panam@orion.ufrgs.br), www.ufrgs.br/panam

4th International Workshop: Transportation Planning & Implementation Methodologies for Developing Countries—Transportation Infrastructure - Bombay, India, 5-7 December 2000. [email: tpmdc2k@civil.iitb.ernet.in](mailto:tpmdc2k@civil.iitb.ernet.in), www.iitb.ernet.in/

Australia Walking the 21st Century—An International Walking Conference - Perth, Western Australia, 20-22 February 2001. John Seaton, Tel. +61 8 9313 8680/FAX +61 8 9320 9497 [email: jseaton@transport.wa.gov.au](mailto:jseaton@transport.wa.gov.au)

bike-on - Frankfurt, Germany, 27 February-2 March 2001. Another meeting point for the international bicycle industry. Tel. +49 (0) 69 75 75 - 5896/FAX +49 (0) 69 75 75 - 6533. [email: bike-on@messefrankfurt.com](mailto:bike-on@messefrankfurt.com)

Managing Your Road Assets - Melbourne, Australia, 19-21 March 2001. Margaret Husslebee, ARRB Transport Research Ltd, Tel. +61 3 9881 1578/FAX +61 3 9887 8104, www.arrb.org.au

International Exhibition of Public Transport—City Transport 2001 - London, England, 21-24 May 2001. www.uitp.com

54th UITP International Congress - London, England, 20-25 May 2001. UITP, Avenue Herrmann-Debroux 17, B-1160 Brussels, Belgium. Tel. (32-2) 660 1072. [email: administration@uitp.com](mailto:administration@uitp.com), www.uitp.com

Transed 2001: Towards Safety, Independence and Security - Warsaw, Poland, 2-5 July 2001. 9th International Conference on Mobility and Transportation for Elderly and Disabled People. [email: transed2001@idn.org.pl](mailto:transed2001@idn.org.pl)

9th World Conference on Transport Research (WCTR) - Seoul, South Korea, 22-27 July 2001. The Korean Transport Institute, 2311 Daehwa-Dong, Ilsan-Gu, Koyang-city, Kyonggi-Do, 411-410, Korea. [email: wctr@cis.koti.re.kr](mailto:wctr@cis.koti.re.kr), www.koti.re.kr/~wctr

Velo-City - Edinburgh and Glasgow, Scotland, 17-21 September 2001. Tel. 0141 287 9039, www.velo-city2001.org

Fourth Conference of the Eastern Asian Society for Transportation Studies (EASTS) - Hanoi, Vietnam, 24-26 October 2001. [email: easts@sa2.so-net.ne.jp](mailto:easts@sa2.so-net.ne.jp), www.ichini.cv.titech.ac.jp/~easts/

Carfree Institute - by train from Amsterdam to Venice, September or October 2001. Hosted by the Carfree Institute. [email: postmaster@carfreee.com](mailto:postmaster@carfreee.com), www.carfreeinstitute.org/

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