



NATIONAL CENTER FOR BICYCLING AND WALKING

FORUM



ISSUE NO.
54

Above: The mayor want to force bicyclists onto the sidewalk? The Florida Department of Transportation has advice for Sunshine State communities on the subject. For details, see the article by Dwight Kingsbury on page 10.

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Readers' Forum

Freeways

■ Do you know if any states allow bicycles on their interstate highway systems?

Jean Wallace, Parks & Recreation Director, City of Hot Springs

<jwallace@cityhs.net>

(501) 321-6870 www.cityhs.net

Jean—

Thanks for your question. The answer is yes. Some states (like Montana, where I live) allow bicyclists without restrictions. Some (e.g., California, Oregon, and Arizona) allow bicyclists under certain conditions. For example, where the alternative is a dangerously narrow and busy truck route.

Oregon's law limits bike use to rural conditions (i.e., outside the Portland Metro area). Others (like Wisconsin, North Carolina, and Florida) don't allow bicyclists under any conditions.

For more information, check out Tom Ferrara's study, "Statewide Safety Study of Bicycles and Pedestrians on Freeways, Expressways,

Toll Bridges, and Tunnels," Dr. Thomas C. Ferrara, PE, September 2001. Check it out at:

<http://transweb.sjsu.edu/publications/BikesAndPeds.htm>

In the study, Ferrara reports on a survey of states and their policies, as well as crash data, etc. Hope this helps!

—John W.

PROBIKE / PROWALK 2002!!

It's time for the 12th International Conference on Bicycling and Walking, also known as Pro Bike/Pro Walk 2002. This year's conference will be held in St. Paul, Minnesota, from Tuesday, September 3, through Friday, September 6, 2002. We'll be bringing together the best and the brightest to set the course for walking and bicycling for the 21st century.

The program will reflect the growing broad base of interest in and support for walking and bicycling as key elements of livable communities. Don't miss this opportunity to share important ideas and information for making our communities more bicycle-friendly and walkable.

For more information, go to: <http://www.bikewalk.org/Conference/conference.htm>

Door2Door Rt. Planner

■ I have a couple of different GIS software and am interested in doing some volunteer work with any American groups that have digital data.

I look forward to hearing from you, or any group who are interested in collaborating.

Please visit:

<http://cyclemaps.com> for a taste of my work.

Quil Forbes, Publisher

<quil@cyclemaps.com>

NCBW FORUM 54

Editor John Williams

Publisher Bill Wilkinson

About NCBW Forum

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Teletype Feature headlines from our

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- Pro Bike/Pro Walk 2002 Schedule, Workshops Online
- NCBW Design Guide for Public Health Practitioners
- PennDOT Encourages Road Sharing
- America Walks to Recognize Pedestrian Advocates
- 2nd National Congress of Pedestrian Advocates
- Wisconsin Gov. Approves \$21 Million Enhancements
- Florida's Theo Petritsch to Leave Bike/Ped Job
- First Came the Highways
- AAAFTS Seeks Traffic Safety Pre-Proposals

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- Thunderhead Alliance Hires Sue Knapf of P.A.T.
- 'Intersections for All' Seminar at ITE Meeting
- UK Researchers on Walking

- FHWA/FTA Notice on Local Consultation
- UK Bike-Light Rail Research Request
- Albany, CA, to Get Road Diet

#47 6/21/2002

- Pro Bike/Pro Walk 2002 Workshops Now Online
- NCBW to Sponsor New MPO Workshop Series
- Cycling's Erl Wilkie Honored at Queen's Birthday
- Access Board Releases Draft R-O-W Guidelines
- Who's Your State Coordinator?
- Celebrate the Mass Central Rail-Trail!

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- Proposed MUTCD Update Includes Bike-Ped Changes
- Bike/Walk/Bus/Etc. Weeks
- Quebec's Ped/Bike Overpass

- Circuit Court Decision Lets Agencies Off Hook

#45 5/23/2002

- Pro Bike/Pro Walk 2002: Program Update
- Great Website: "Great Streets" Week to Tell Us About?
- Got a Bike/Walk/Bus/Etc. Path To Open
- Colorado's C470 Bike/Ped Path To Open
- New Jersey's Bill Feldman Retires
- Transport Concerns of UK Disabled People
- Scooter Trauma Studied by Pediatricians
- Marin Co. California Gets \$3m for Bike Freeway
- British Med Journal Focuses on "Road Wars"

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- PRO BIKE/PRO WALK 2002 Advocate Rates
- CA Bike-Ped Legislation Clears

Who's this famous bicycle educator?

Hint: this photo was taken at ProBike/ProWalk in Santa Barbara. Send your answer to the editor today! If you're right, we'll send you some sort of lovely little prize...

Meanwhile, no one has guessed the identity of our famous bike advocate. Here's his photo again...



Send answers to: John Williams, editor, NCBW Forum, 723 Defoe St., Missoula MT 59802; or via email to: <john@montana.com>

WE HAVE A WINNER!

Issue 53's photo ID quiz featured a photo of a famous traffic calmer. And the correct guess came from Bruce McDougall, a transportation planner with the City of Calgary. (In case you missed the photo, here it is, thanks to Michael Ozer.)



Bruce's guess? **David Engwicht** of Australia. Bruce adds "Two years ago I had the good fortune of taking a 2-day course from David. A fellow ahead of many when it comes to understanding the 'problem' of traffic and how some of it can be effectively addressed."

Congrats to Bruce! And we hope he enjoys his prize, an assortment of rare and valuable Forum back issues from the archives!

electronic newsletter, **CenterLines**.

First Capitol Hurdle

- Wisconsin Bike Fed Exec Director Steps Down
- Mayor Says 'On Your Bike' to Londoners
- Walkability, Highway Access Important to Home Buyers
- Need Images?
- UK Govt. Cycling Push
- Martin Pion Posts Susie Stephens' Crash Info
- Ped. Safety Research Online
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- The Segway: What Are the Planning Issues?
- Lung Association Grades Metro Ozone Levels

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- Ped Advocates in ME, NH, VT, MA, CT, RI — Get On TV!
- CA-DHS Funds Ped Advocates
- Bikes Up, Peds Down in NY/NJ/CT Region

• PPS Wins Award

- Health Promo More Useful than Med. Care?
- Champaign-Urbana to Get Accessible Ped Signals

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- Susie Stephens Remembrance to be Held Monday
- Portland (ME) Bike Plan
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- House Transportation Chair Pushes Radical Bill
- Charlottesville Yellow Bikes
- NY Bicycling Coalition Releases Manual, Plans Workshops
- Segway Coming to a Fed-Funded Walkway Near You?
- TBC's Cummins' Award
- CDC & PAHO Sponsor Active Cities Contest
- Bush's New Surgeon General to Focus on Exercise, Diet

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- 2002 National Bike Summit®
- "America's Walking" to a PBS Station near You?
- MD House Passes S'walk Bill
- TX Bicycle Coalition Gets \$3 Million for 'Safe Routes'
- Tax Break for Bike Commuting
- Study Links Air Pollution, Lung Cancer, Cardio Deaths
- TEA-21 Schedule
- Maine Bike Ed Hits Schools
- New Traffic Signal at SJSU
- Competition: Smart Growth in Transportation
- NY DOT goes Context Sensitive

#43 4/26/2002

- PROBIKE/PROWALK Countdown!
- Fed. Register: ADA Guidelines
- CT Buses: Pro-Bike Messages
- 2001 Bike, Ped Deaths
- Bikes Belong Helps Fund Hank Aaron Trail
- Physical Inactivity Dangerous

• Mtn Bike Leaders Meet at

- IMBA Summit
- NHTSA Offers Mini-Grants for Bike Safety
- Bikewalk VA Leaders
- Segway Senate Bill Update

CenterLines Archives

To view the issues listed here, visit:

http://www.bikewalk.org/back_issues.htm

For a free subscription to *CenterLines*, send a blank email to:

<CenterLines-subscribe@topica.email-publisher.com>



It's how you get there that counts



Individualised Marketing Program for Perth

courtesy of the Department for Planning and Infrastructure, Perth Western Australia

Photo courtesy of the Department for Planning and Infrastructure.

We don't tell people what to do ... we empower them by providing localised information, advice and encouragement relevant to their unique situation, and then leave the choices up to them.

What is TravelSmart?

TravelSmart is a world's-first initiative by the Department for Planning and Infrastructure to help preserve Western Australia's environment and quality of life.

By decreasing our reliance on cars we can reduce traffic congestion and improve air quality. Other benefits are reduced road trauma and improved health and fitness. Car use in the Perth Metropolitan Region is high by world standards — we make 63 percent of all our personal trips by car as the driver.

TravelSmart encourages a lot of people to make small changes in their travel behaviour — which makes a big difference over all. We have already produced some spectacular results.

TravelSmart works because there is the potential for change:

- *People average 19 car trips per week.*
- *There is a convenient alternative option available for almost half of all car trips made.*

We don't tell people what to do - we empower them by providing localised information, advice and encouragement relevant to their unique situation, and then leave the choices up to them.

TravelSmart Individualised Marketing is:

- *A successful, innovative travel behaviour change program*
- *Proven and sustainable (reducing car travel by 17%)*
- *Cost-effective (a benefit:cost ratio of 30:1 saving more than \$1 billion over 15 years)*
- *Popular with the community*
- *Applicable to all Australian cities*

Individualised marketing — How does it work?

Individualised marketing has its origins in Europe, developed and applied mainly to public transport by German consultant Socialdata, directed by Werner Brog. A pilot project in South Perth was the first application of individualised mar-

keting to public transport, walking and bicycle use. We use individualised marketing to inform people of their travel choices and motivate them to consider walking, cycling or using public transport as an alternative to their car.

We telephone almost every household in an area to identify those interested. We ask them what information they would like about walking, cycling and public transport and deliver personalised packages of information specific to their situation (e.g. local bus service timetables and local cycling and walking maps).

We may even visit their home, talk to them about using public transport and offer new users trial use with free tickets. If they wish, we can arrange a personal visit by someone with practical skills and knowledge of walking and cycling (including local facilities). We can also provide discount vouchers from local bike shops, or give them a "Heart Movers' Kit" to encourage them to walk more.

People who are already using public transport or cycling or walking regularly are encouraged to continue by rewarding them with vouchers and small gifts (e.g. a sports drink bottle). We also give them additional information if they want it.

What we achieved?

Individualised marketing has been successful starting with a pilot project in the City of South Perth in

1997. This project reduced car trips by 10%. The pilot project changes had been sustained when they were measured again one and two years after the project. From February to June 2000, we ran a large scale individualised marketing program in South Perth (pop. 35,000). Out of 17,500 households, we identified 15,300 with a contact name and phone number. We contacted 94 percent of these and 55 percent chose to participate in the program.

Evaluation of these projects measured behaviour change. (The results are for the whole program, including households that chose not to participate.)

Measured Behavior Change

Trips by	Change
Car-as-driver	↓ 14%
Public transport	↑ 17%
Cycling	↑ 61%
Walking	↑ 35%
Car kilometres travelled	↓ 17%

The 14 percent drop in car-as-driver trips cut the number of vehicle kilometres travelled by 17 percent. This was achieved by people changing to an alternative for just two trips each week. Overall, people did not reduce their travel; they still averaged 3.4 trips per person per day.

To measure sustainability of behaviour change, a program to undertake annual evaluation surveys (using travel diaries) over a period of 4 years, commencing in October

Individualised marketing has been successful starting with a pilot project in the City of South Perth in 1997. This project reduced car trips by 10%.



Socialdata Australia staff preparing personalised information packages for South Perth residents.

Photo courtesy of the Department for Planning and Infrastructure.

The second stage is presently being delivered to a further 120,000 people in the Perth Metropolitan Area.

2001, has been put in place. Results from the first survey (October 2001) show that the behaviour changes have been sustained. A further measure of behaviour change is the increase in bus boardings made within the City of South Perth. Monitoring of the Transperth electronic ticketing system has shown an average 26% increase in boardings over the first year following the program resulting in an additional 300,000 passengers.

TravelSmart benefits

For the community and individuals:

- *Less traffic, noise and pollution in local streets.*
- *Improved personal security (with more people on the streets walking and cycling).*
- *Savings in car running costs.*
- *Fewer road crashes.*
- *Improved health from physical activity (cycling and walking - including to and from the bus stop or train station).*
- *Reduced Greenhouse Gases.*

For the Government:

- *Increased public transport patronage and reduced rates of public transport subsidies.*
- *Traffic levels reduced to that of ten years ago, resulting in less pressure to build roads.*
- *Reduced pollution and Greenhouse Gas emissions from car usage - down by as much as 18 percent.*

For all of us:

- *A benefit to cost ratio of more than 30:1, worth over \$1 billion in savings to the community over 15 years.*

What people say

We asked participants what they thought about TravelSmart. Ninety percent were positive about the program.

People said things like:

- *“Good way for people to ‘learn’ how to use a bus, something I hadn’t done for about 15 years!”*
- *“Yes, it got me started on cycling in the district.”*
- *“I found your material on walking most useful - I now frequent the local shop (I have cancelled newspaper delivery and walk to collect my paper).”*
- *“I have been encouraged to leave the car at home.”*

The Future

A staged program is planned to expand individualised marketing across half of the Perth Metropolitan Region involving 600,000 residents at an estimated cost of \$26 million. This is equivalent to the construction cost of seven kilometres of four-lane dual carriageway with shoulder.

The program is detailed in TravelSmart 2010 - A 10-year plan. The second stage is presently being delivered to a further 120,000 people in the Perth Metropolitan Area. The remaining stages will be delivered as funding becomes available

Potential partners for cost sharing include:

- *State Government*
- *Local Government*
- *Private sector (bus operators)*
- *Commonwealth Government*

The TravelSmart Jigsaw

TravelSmart programs reach people through many different routes. They can become involved through individualised marketing to their own homes (the generic name for this is “dialogue marketing”), or through workplaces, schools and major destinations (eg universities). We provide information, advice, support and encouragement.

Each individual is empowered to make the travel choice that suits his or her lifestyle and personal needs. Schools, businesses, local government and major destinations are encouraged to run their own TravelSmart programs.

Further Information

Planning and Infrastructure Administration, 441 Murray Street, Perth, Western Australia 6000

Phone: +618 9216 8000

Facsimile: +618 9216 8001

Email Contacts: www.dpi.wa.gov.au/contact/emailcontacts.html

TravelSmart website:

<http://www.dpi.wa.gov.au/travelsmart/>

Context Sensitive Solutions



As every cyclist knows, conventional traffic engineering has been elevated over the last fifty years — approximately since the advent of the Interstate Highway System — to the status of public policy, or even natural law. Instead of providing a means to attain goals set by the public and its elected officials, transportation engineers have gradually assumed responsibility for defining those goals.

Traffic engineers and other transportation professionals didn't start out to play such a role, but because of America's love affair with the automobile, because of the systematic acquisition by auto

makers through the '30's, '40's and '50's of private transit companies for the purpose of putting them out of business, and because of the negligence of local communities in making their own plans, the subordination of other public policy goals to traffic goals occurred imperceptibly over time. Now, however, this powerful pendulum has begun to swing the other way.

The purpose of street and road planning for two generations has been to serve the so-called "motoring public"—those of us who drive, when performing our role as motorists, and specifically as motorists who are interested only in getting from Point A to

Point B as fast as possible.

But the landscape that streets and roads traverse is, except in the countryside, full of people who are someplace rather than going someplace, and who have a right to go out on foot or by bicycle. Yet, with rare exceptions, transportation agencies have not recognized streets and roads as settings for private homes and businesses, as public places that give communities their character, or as transportation facilities for non-motorists.

Context Sensitive Solutions (CSS) — also called Context Sensitive Design (CSD) and Thinking Beyond the Pavement (TBTP) — is

An Opening Wedge in the Auto-Centric Culture?

*by Toni Gold
Senior Associate
Project for Public Spaces*

Traffic flow is a means to various ends — such as improved social, employment, business, cultural, and recreational opportunities — not an end in itself.

Photos: John Williams

This fundamental shift in thinking concerns both the place of motor vehicle traffic on our landscape and the role of traffic engineers in making public policy.

a movement both to make technical design standards more flexible, and to change the auto-centric culture that dominates most transportation agencies.

CSS makes a simple claim:

That communities neither can nor should be molded to the requirements of automobile traffic.

This fundamental shift in thinking concerns both the place of motor vehicle traffic on our landscape and the role of traffic engineers in making public policy. It rejects the assumption that traffic flow is more important than its surroundings — that, like the rain, it is a natural phenomenon that must be accommodated.

It repudiates the view that everything except motor vehicle traffic is merely part of the “surroundings,” and moves the would-be surroundings to the center of the picture. Traffic flow is a means to various ends—such as improved social, employment, business, cultural, and recreational opportunities—not an end in itself. CSS contends that it is these issues that should drive transportation decisions, and not the other way around.

This change to the most fundamental assumptions underlying transportation planning has many transportation profes-

sionals suffering from culture shock. Nevertheless, the Context Sensitive Solutions approach is here to stay. However, implementing such an extensive culture change requires new tools for highway engineers and project managers, and most of those new tools are not technical ones.

While it is true that a more flexible approach to road design is needed, transportation professionals also need training in: how to define problems more broadly; communications and consensus-building skills; and conflict-management skills. CSS training programs that address these needs are gaining in importance and spreading rapidly on a state-by-state basis, prodded by Federal legislation and by the Federal Highway Administration.

But it's a big job: one transportation leader estimates that it takes at least five years to change the culture of an agency as large as most DOTs, even with total commitment by senior management. Yet, at every level — national, state, local, and within the professional associations, CSS is rapidly becoming a new way of doing business.

Fortunately, CSS offers a new way for communities to approach or respond to transportation agencies. It is as much a process as it is a product (see sidebar on p.6

for the definition). Because it treats “public involvement” much more seriously than the usual checklist approach. Agencies trying to adopt CSS need responsible community partners. CSS allows them to be the “good guys” for a change.

Agencies less amenable to change — those that dismiss CSS as the latest fad in public administration, or as a dangerous lowering of standards, or as “caving in” to the public — misunderstand what CSS is. They may still need to be reminded of the existing federal mandates to assess community and environmental impacts, to provide environmental justice and to involve the public in decision making in all their projects.

As all community organizers know, “those who control the process, control the outcome.” The process can no longer be controlled exclusively by transportation agencies. Communities have rights in transportation planning — but communities must exercise them if they are to mean anything.

If communities have rights in transportation planning, they also have responsibilities. The principal responsibility is that the community have a vision for itself. If the community has spent the time planning for what kind of place it wants to be, it is prepared to respond constructively

One transportation leader estimates that it takes at least five years to change the culture of an agency as large as most DOTs, even with total commitment by senior management.

WHAT IS “CONTEXT SENSITIVE SOLUTIONS”?

In 1998, a national workshop about “integrating highway development with communities and the environment while maintaining safety and performance” was organized by the Maryland State Highway Administration, the Federal Highway Administration (FHWA); and the American Association of State Highway and Transportation Officials (AASHTO). A committee of some 40 organizations, including professional associations, local and state government, regulatory agencies, and safety, environmental, scenic, historic preservation, and bicycle groups helped define the direction and content of the conference. Called “Thinking Beyond the Pavement”, the conference attendees agreed on the following definition of CSS:

THE QUALITIES OF A CSS PROJECT:

- The project satisfies the purpose and needs as agreed to by a full range of stakeholders. This agreement is forged in the earliest phase of the project and amended as warranted as the project develops.
- The project is a safe facility both for the user and the community.
- The project is in harmony with the community and preserves environmental, scenic, aesthetic, historic and natural resource values of the area, i.e., exhibits context-sensitive design.
- The project exceeds the expectations of both designers and stakeholders, and achieves a level of excellence in people’s minds.
- The project involves efficient and effective use of resources (time, budget, community) of all involved parties.
- The project is designed and built with minimal disruption to the community.
- The project is seen as having added lasting value to the community.

THE CHARACTERISTICS OF THE CSS PROCESS

- Communication with all stakeholders is open and honest, early and continuous.
- A multi-disciplinary team is established early, with disciplines based on the needs of the specific project and with the inclusion of the public.
- A full range of stakeholders is involved with transportation officials in the scoping phase. The purposes of the project are clearly defined and consensus on the scope is forged before proceeding.
- The highway development process is tailored to the circumstances. A process is employed that examines multiple alternatives and that will result in consensus on approaches.
- A commitment to the process from top agency officials and local leaders is secured.
- The public involvement process, which will include informal meetings, is tailored to the project.
- The landscape, the community, and valued resources are understood before engineering design is begun.
- A full range of tools for communication about project alternatives is used (e.g., visualization).

when a transportation agency proposes a project. Rather than just say “no” or else accept what’s proposed, they can make a proposal back to the agency — for re-alignment, for bike lanes, for re-designed intersections, for widened sidewalks. And the agency is required to listen.

CSS, properly practiced, promises to use transportation projects to improve a community — from the point of view of bikers, walkers, business people, and residents, as well as motorists. The tremendous influence of transportation projects can

be turned from what is frequently a negative impact into a positive impact.

For this promise to be realized, it is local stakeholders that must get their act together as much as transportation agencies must embrace CSS in good faith over the long term. There’s still a way to go.

Toni Gold is a Senior Associate with Project for Public Spaces. She has special expertise in waterfront projects, urban parks, historic structures, commercial revitalization and transportation that builds communities.

For the past two years Toni has been directing a training program in Context Sensitive Design for the New Jersey Department of Transportation.

Project for Public Spaces, Inc. (PPS) is a non-profit organization specializing in the planning, design and management of public spaces through technical assistance, training and research. To learn more about PPS, go to www.PPS.org.

Local stakeholders must get their act together as much as transportation agencies must embrace CSS in good faith over the long term..

9 Florida DOT reasons against mandatory municipal sidewalk bicycle ordinances

by Dwight Kingsbury, Asst. State Pedestrian & Bicycle Coordinator

Proposals have occasionally been made in Florida to adopt municipal ordinances requiring bicycles to be ridden on sidewalks, where available. Municipalities are cautioned that...

1 The municipal ordinance would not apply to county or state roads within the city limits (these are not under municipal jurisdiction), and could result in considerable confusion among road users and enforcement personnel.



City street: Sidewalk use rule would apply.



State route: Sidewalk use rule would not apply.



2 Any municipal street on which bicycles were required to be ridden on the sidewalk would have to be so posted, on each block, with appropriate MUTCD signage.

3 Per bicycle kilometer, sidewalk riders are known to have significantly higher crash rates than road riders.



4 The practice is discouraged by AASHTO, for a long list of reasons enumerated in the *Guide to Bicycle Facilities* (1999).

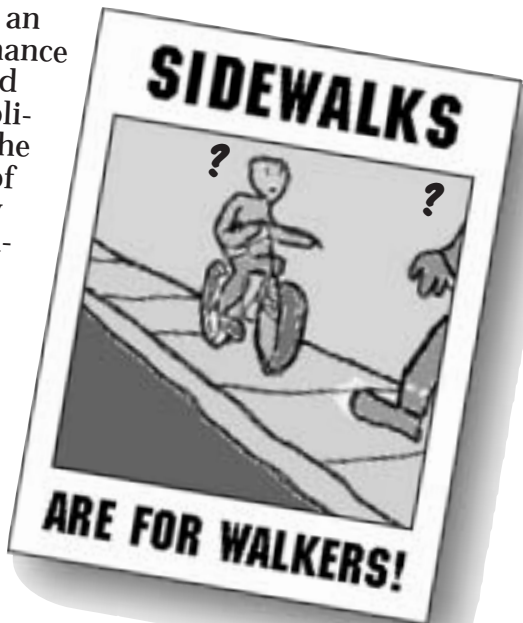


5 The practice is discouraged by the *Florida GreenBook*.



6 Sidewalk riding is discouraged by the safety literature, except for children.

Such an ordinance would complicate the task of safety educators.



7 Sidewalks would have to be available, sufficiently well maintained, and wide enough to minimize pedestrian conflicts. In effect, they would have to be designed to Florida's shared use path standards.



8 The municipality would bear legal responsibility for adequacy of sidewalk for riding.



9 The municipality would also be responsible for enforcement. If current traffic enforcement staffing is insufficient to enforce critical bicycle laws, such as the requirement for lights on bicycles operated at night, it would probably be insufficient to enforce a sidewalk riding requirement (at least without an increase in staff hours applied to bicycle enforcement).

This could result in additional legal consequences for the municipality (motorists, seeing signage, might assume no cyclists present, and be surprised to encounter them).



After consideration of these points, no municipality in Florida has, to our knowledge, chosen to proceed with such a measure.



Dwight Kingsbury is Assistant Pedestrian & Bicycle Coordinator for the Florida Department of Transportation (605 Suwannee Street, MS 82, Tallahassee, FL 32399-0450).
Phone: (850) 410-4920; email: <dwight.kingsbury@dot.state.fl.us>
Program website: <http://www11.myflorida.com/safety/>

cont'd. from p.13

In addition to the Miller bicycles, the museum organizers hope to exhibit a significant part of the bicycle collection of Jacques Graber, a collector in Sacramento who has long been involved with the development of the Davis museum. Additional bicycles and exhibit materials will be added as time, space and funding allow.

Ideally, the ultimate facility being discussed by planners would be much more than a traditional museum. The bicycle collection

would be its core, but as a resource center it could include some or all of the following:

- A bicycle information clearinghouse for research and general data, news, tips, lore, and archival material.
- A restoration room where bikes and artifacts could be restored in view of visitors.
- A meeting/class room for bike club gatherings or teaching courses in safe cycling, bicycle facility engineering, bicycle advocacy, and related topics.

- A museum store where the sale of appropriate educational materials, souvenirs and memorabilia would help support the center.

The museum organizers are earnestly seeking a permanent home for the collection. Ideal-

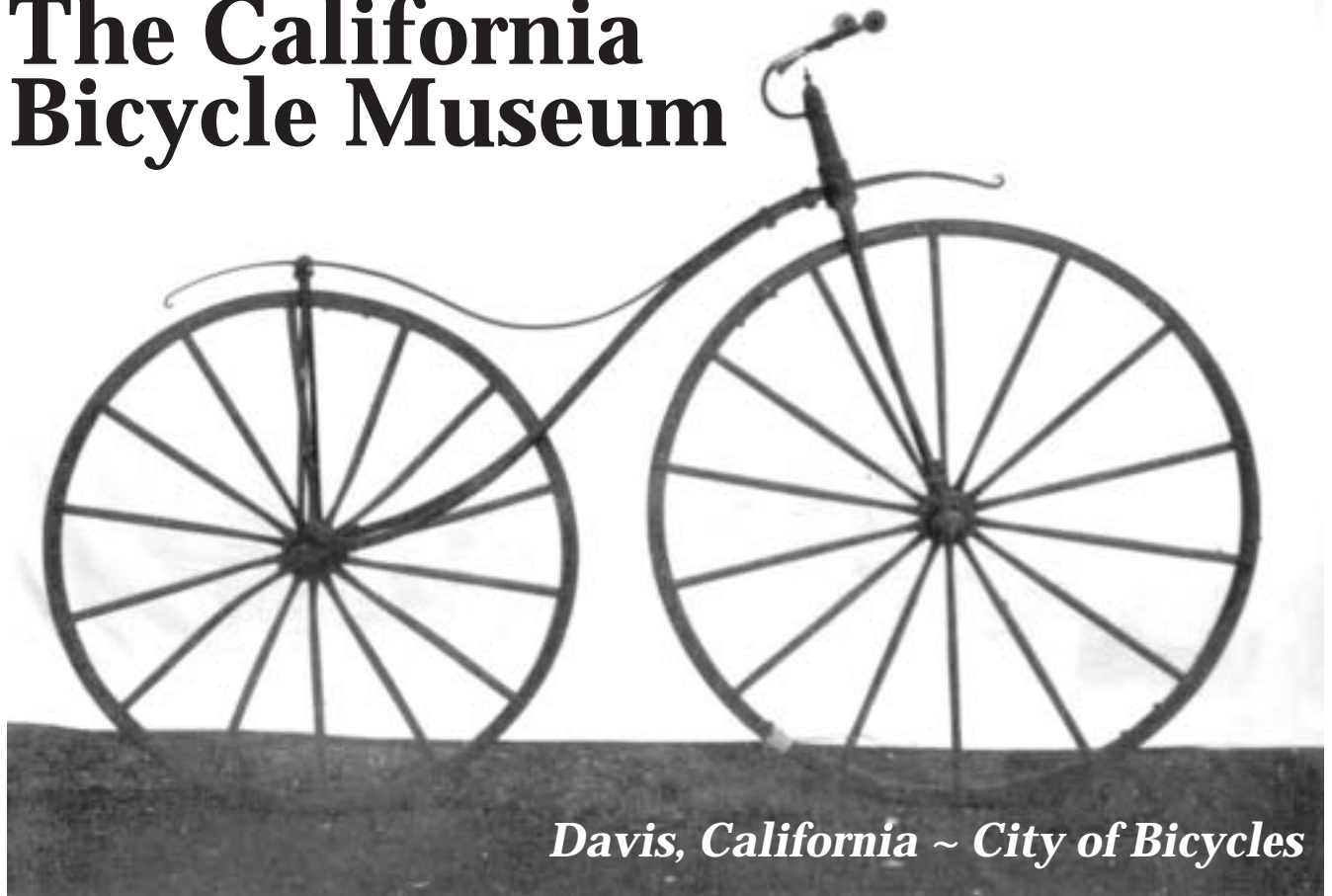
ly, the museum will be located in downtown Davis or on the UC Davis campus. If you are interested in finding our more about the California Bicycle Museum or are interested in helping out, please contact us at the numbers below:

Contacts

Tim Bustos, City of Davis Bicycle/Pedestrian Coordinator; e-mail <TBustos@ci.davis.ca.us> phone: (530) 757-5669.

David Takemoto-Weerts, UC Davis Bicycle Program Coordinator; e-mail: <dltakemotoweerts@ucdavis.edu> phone: (530) 752-2453.

The California Bicycle Museum



Davis, California ~ City of Bicycles

In the year 2000, UC Davis was awarded a \$440,000 Federal transportation grant to purchase the Pierce Miller collection of antique bicycles. The collection will serve as the nucleus of the only public bicycle museum in the western U.S., located in Davis, California, *City of Bicycles*.

The Miller collection consists of almost 70 vintage bicycles, most of which are pre-1900. The oldest, a Draisienne, is from the 1820s. Among the highlights are a 6-seat Stearns pacing tandem (and 4-, 3-, and two 2-seat tandems); several high wheels including an Eagle, a Star, and a Columbia; a sociable (side-by-side two-wheeler), several shaft-

drive bikes, wood-framed bikes (and a bamboo-framed machine); a rail bike; a Dursley-Pedersen; early examples of dual-suspension bikes; several velocipedes; an Ingo scooter; and much more.

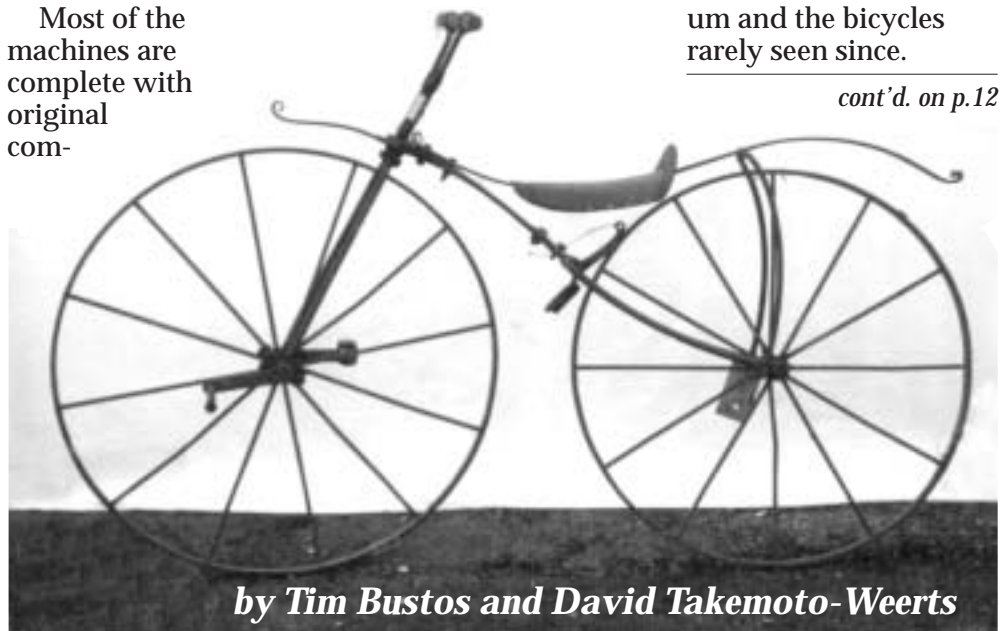
Most of the machines are complete with original com-

ponents, but all need some degree of restoration. The original grant will help cover some of that cost, which is already underway.

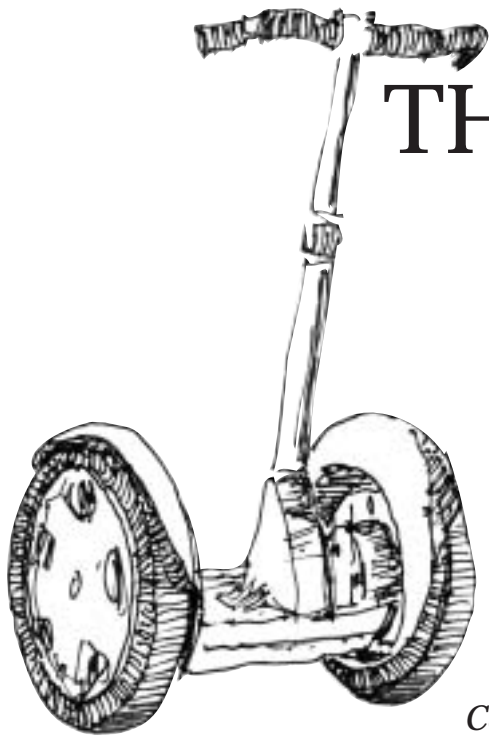
The collection was amassed by Pierce Miller, a well-to-do farmer/rancher near

Modesto, in the 1920s, and was displayed as part of a roadside transportation museum (alongside hundreds of vintage horse-drawn vehicles, antique cars, etc.). After Pierce died in the 1960s, the doors were shut on the museum and the bicycles rarely seen since.

cont'd. on p.12



by Tim Bustos and David Takemoto-Weerts



THE SEGWAY

From a Mountain Bike Police Perspective

*an interview with Kirby Beck of the
Coon Rapids (MN) Police Department*

With the recent introduction of the Segway Human Transporter and the marketing efforts directed at police departments, among others, we thought it would be useful to seek out a police perspective — particularly one from a well-known mountain bike officer. At a time when Americans are learning the costs of a sedentary lifestyle, it's worth noting that the Segway is seen by some promoters as a replacement for non-motorized travel. This should concern folks trying to encourage physical activity and the development of more "active community environments."

Over the years, mountain bike patrols have become a staple of many police departments and community policing using foot patrols has returned as a way to better bridge the gap between police departments and their constituents. That these developments have also help promote physical activity among officers by "getting them out of the cars" should be seen as an important benefit of such programs — a benefit not lightly discarded in the rush to adopt a new technology. —JW

Q: *The Atlanta Police are trying out the Segway as a possible replacement for walking the beat or bicycling. What do you think of the idea?*

Kirby Beck: Having heard and read much of the hype about how this new invention was going to change the world, I was very disappointed to see it was just another type of motorized scooter.

I think it is to Atlanta PD's credit that they are willing to try something new. It is yet to be seen if the Segway will be an effective policing tool and effective transportation device, or merely a slickly marketed toy.

Q: *Are there police duties that you can see the Segway performing better than bicycling or walking?*

KB: Having seen photos of people on the Segway, it appears to elevate users 6 to 8 inches. This may give officers a better view of their surroundings and activities. It seems it will work best on paved or smooth surfaces.

These Segways can reportedly travel up to about 12 mph. It would make it much easier for an officer to get to a call faster, with

less fatigue, than they would if they had to run or walk briskly. An officer should also be better in a pursuit against a running subject.

Typically, however, a foot beat officer is proactive and is not expected to respond to calls far away.

Q: *Are there police duties you can see the Segway performing worse than bicycling or walking?*

KB: I'm concerned about the limitations the Segway will face. Unlike a police bike, or even an officer on foot, it will likely not have the agility to get up and over urban obstacles like curbs, stairs, potholes, or non-paved surfaces. It will have to be exited, lifted or "led," and remounted to clear some obstacles. And a Segway weighs about 65 pounds.

I am concerned about how well an officer will be able to get through traffic on a Segway until they are recognized as a vehicle.

The amount of equipment an officer can carry appears to be limited, although it can come with on-board storage. It will also be limited by its battery power. With dead batteries it will be useless and will have to be secured somewhere, or pushed back to the station house. I've heard it can go nine to 14 miles on a charge.

Q: *Is the Segway likely to replace the bicycle?*

KB: I'm sure some downtown beat areas will try them in places they are using bikes now.

I'm not too worried about Segways replacing many bikes. The police bike is still much more versatile and accepted by motorists and pedestrians alike.

The places bikes can be used are far more numerous. The Segway may be an incredible device, but I believe that a bicycle is still one of the most ingenious devices for transporting people with unparalleled efficiency.

Q: *Segway lobbyists are working with legislatures around the country to allow the Segway use on sidewalks. What are your views of such attempts?*

KB: Here in Minnesota, the legislature has already made the Segway legal to use on sidewalks. I have a problem with vehicles of any type being ridden or used on sidewalks because most traffic laws do not apply to sidewalk users.

By law most legal sidewalk users — including bicyclists — are considered pedestrians and subject to pedestrian laws. Even though bikes, scooters, skates, and Segways may be used on sidewalks, they go much faster than someone on foot. Since they don't have to follow normal traffic patterns and direction, they will undoubtedly have

crashes where sidewalks intersect streets.

I believe that all vehicles should follow the same predictable rules the road to avoid conflicts and collisions. Few jurisdictions allow motorized bicyclists or scooters on the sidewalks. Why should we allow a Segway to do so just because the person is standing like they are walking?

I can see some value of these devices for disabled folks who are able to stand, but not walk. That may be an exception.

Q: *Are there other places Segways should be used (for example, bike lanes, shoulders, trails)?*

KB: I think they should use the same places that bikes are legally ridden. I feel the same way about inline skates, by the way.

Q: *Overall, what's your take on the Segway phenomenon?*

KB: I think it's a neat device, but I don't see it ever replacing motor vehicles in most homes, especially here in snow country. I'm not convinced many people will be willing to Segway to work in the rain, snow, or cold when an enclosed vehicle is available.

Moreover, urban sprawl is alive and well in many parts of the country. That does not make a Segway practical for commuting multiple miles.

Every day I hear politicians and others talking about how overweight Americans are becoming. Far too often they blame our American diet. When I was in Europe I saw people eating as many fattening foods as we eat here. The biggest difference I saw was more people were walking or biking as part of their everyday activity.

The Segway is just another device to keep people from getting the exercise they should. That goes for Police Officers also. Keeping weight off was much easier when I was on bike patrol every day than it is now that I am back in a patrol car.

Police officers need to keep fit. Unless the Segway's battery dies, and the officer has to carry it back to the station, I can't see it doing anything positive for the officer's fitness.

I understand that the Post Office is planning on using them too. That makes more sense, because postal workers are lugging heavy bags and often work areas where they have to walk to deliver mail.

I have two friends who are letter carriers, and they spend several hours a day on foot. The Segway may help them do their jobs faster and with less fatigue.

The Segway is just another device to keep people from getting the exercise they should. That goes for Police Officers also.

Officer Kirby Beck, of the Coon Rapids, Minnesota, Police Department, is an Effective Cycling Instructor and a founding member of the International Police Mountain Bike Association (IPMBA).

Deja vu

*Did the Swedes
create a cheaper
and healthier
“Segway”
decades ago?
Yes, and it’s
called the
“Rollator”...*

by Nick Thompson



As the Segway debate touches on disability and old people, I think folks may want to become familiar with Swedish “rollators.” Rare in the USA, millions of people are marching around behind rollators in other parts of the world right now.

In Scandinavia, where they originated some 30 years ago, rollators are as commonplace as bicycles and wheelchairs. Since the entire purpose is to extend the range of human mobility, I think pedestrian advocates will be interested, but before reading further, let me acknowledge my financial stake in the success, or failure, of these things. Over the last 10+ years, my family business has put 20,000 Swedish made rollators into American homes at \$364+ a pop.

For a quick image of a rollator, cross a grocery cart with a bicycle. It is a straightforward tubular steel frame mounted on 4 sizeable tires, with parts similar to a bike’s. I represent one brand. There are many, many manufactured versions. Try “rollator,” (a generic Swedish word translating roughly as walker with tires) in an internet search engine.

If you live in the U.S., you may have seen one or two of them especially if you spend time with progressive old people. The person gets behind it and walks with it. No motor. Nothing to ride. There is a built in bench, purely for resting. Basically, put an 80+ year old behind it, off they go.

Nick Thompson is President & Coach of NobleMotion, Inc. (“Home of the SUV for Pedestrians”) of Pittsburgh, PA. He can be reached via email at <info@NobleMotion.Com> or by phone at (800) 234-9255 (voice or fax). Website: <http://www.GainTerrain.com>

What prompts me to join the Segway debate is a comment I've heard numerous times:

"People who have trouble walking also have trouble standing and would much prefer (and be safer) traveling in a seated position."

My experience tells me quite the contrary. Walking is good even when it does not come free and easy. Turns out, many people can walk, want to walk, and will walk to all kinds of places, given the right tool for the job. This in the face of all sorts of challenges, and impairments, brought on by life.

Unfortunately, the common view expressed above is also shared by most top US health care professionals. Indeed, our sedentary culture leads us to think nothing of routinely planting large numbers of old people in electric ride scooters, wheelchairs, and TV recliners.

This does not happen in Sweden and it is really not terribly healthy. (It's unhealthy!)

My bone with Segway is how much effort goes into creating another ride-on product before remotely exploring more attainable, walking oriented directions. \$100 million would produce a huge number of good quality rollators.

So, as you consider Segway, consider the implications of the lowly rollator. Think about where you might want to go when you are 80 and how you plan to get there.

Our sedentary culture leads us to think nothing of routinely planting large numbers of old people in electric ride scooters, wheelchairs, and TV recliners.

Photos: (Left) A Segway user in Atlanta, Georgia (courtesy of Michael Ronkin); (Right) Tom Welch, using his Rollator at Redondo Beach, Calif (courtesy of Tom Welch).

This Just In...

Zero-Emission Vehicle to be Unveiled at Earth Summit

Revolutionary "Legway" powered by biomass fuels and consumes less energy per passenger mile than any known mode of transport — "With the exception of the chloroplast and possibly the clothesline, the Legway is the most affordable, useful, and environmentally-friendly invention known to man."

At the upcoming Earth Summit in Johannesburg, South Africa, researchers from the Institute for Transportation and Development Policy (ITDP) will unveil the "Legway," a \$150 zero-emission vehicle powered by biomass fuel. "While the vehicle can run on everything from trans-fatty acids to simple sugars and starches, our studies show that complex carbohydrates yield optimal performance," said Dr. Walter Hook, ITDP's Executive Director.

The Legway, (code-named "Jasmine"), is purported to consume less energy per passenger mile than any known mode of transport, including walking. ITDP researchers claim that the Legway can travel over 16 kilometers on the energy equivalent of a bowl of rice. Recent trials conducted in New York City and Accra, Ghana, showed that the Legway measures up to the Institute's performance claims. "While top speeds are in excess of 40 kilometers per hour, average

speeds are about 18 - 23 kilometers per hour," said Paul Steely White, the Africa Regional Director of the New York based Institute. "I've actually been using one to get to work and it works quite well, except that many motorists act strangely — as if a quiet, non-polluting vehicle does not belong on the road," added White.

ITDP is already working to convince cities to build special infrastructure for the vehicles--measures they think are justified given the claimed environmental and social benefits. The development of the technology behind the revolutionary invention is mysterious and intriguing. A rudimentary version of the Legway can be found buried in Leonardo da Vinci's Codex Atlanticus. The technology was partially rediscovered in the late 1800's, applied in the emerging aeronautics industry, and then forgotten as the automobile age got underway.

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Selected Listings from CenterLines, our e-newsletter...

Transportation and Community and System Preservation Pilot Program FHWA's 3rd year report (2001) highlights accomplishments and lessons learned under the Transportation and Community and System Preservation (TCSP) Program.

www.fhwa.dot.gov/tcsp/3rdyrprt.html

Walking and Cycling Track Networks in Norwegian Cities Subtitled "Cost-Benefit Analysis Including Health Effects and External Costs of Road Traffic," by Kjartan S‘lensminde, Institute of Transport Economics, Oslo, 2002.

www.toi.no/toi_Data/Attachments/887/sum_567_02.pdf

Bikeability Checklist Subtitled "How bikeable is your community?," it's a new publication from the Pedestrian and Bicycle Information Center and the National Highway Traffic Safety Administration.

<http://click.topica.com/maanozaaShOib1NP4Wb/>

Toward a Multimodal Level of Service Analysis PDF of a Powerpoint presentation by Douglas McLeod and Martin Guttenplan of Florida DOT.

<http://click.topica.com/maamn6aaR7Mmb1NP4Wb/>

Thinking Beyond the Pavement New website on context sensitive design from *The Project for Public Spaces*. "Looks beyond the pavement to the role that streets and roads can play in enhancing communities and natural environments"

www.pps.org/CSS/cssonline.htm

Development of a Cyclist Route Choice Model Subtitled "Combining Geographical Information System technology with route environment measures to predict cyclist route choice to the University of Queensland." Paper by Neil Hutchinson. Available as a Word document from the author at:

<AROC2@brisbane.qld.gov.au>

Liveable Neighbourhoods - Street Layout, Design And Traffic Management Guidelines Traffic management guidelines published by the Western Australian Planning Commission.

www.planning.wa.gov.au/publications/liveable/LNTMG.pdf

World Transport Policy & Practice Volume 7, Number 4 contains numerous articles on pedestrian issues by authors like Mayer Hillman, Rodney Tolley, Ian Ker and Werner Brog. Available free as a pdf file at:

<http://www.ecoplan.org/wtpp/>

Increasing Physical Activity Through Community Design

A Guide for Public Health Practitioners

by W.C. Wilkinson, N. Eddy, G. MacFadden, and B. Burgess.

In healthy communities — not just in the movies — walking and bicycling are a normal part of daily life. The Centers for Disease Control and Prevention (CDC) call these kinds of places Active Community Environments (ACEs). They recognize that providing for active living through community design is a health issue.

This guide tells you how to help create places for people to walk and bicycle. This doesn't just mean special trails, though those might certainly be an important element of an overall plan. Creating an active community environment means taking a look at the broader scope of where there are and aren't opportunities to safely walk and bicycle. It involves land use design, retrofitting the transportation infrastructure, funding and much more.

Although this guide is written for public health professionals, others community leaders, local planners and transportation agency officials, and citizens can also benefit from reading it because poor community design affects the health of the entire community. The increased awareness each of us brings to the problem is another step towards the solution.



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Bicycle Safety Education Resource Center *New web site with bicycle safety education information, a searchable database of training materials, a guide to identifying training needs, and a "Good Practices Guide."*
<http://www.bicyclinginfo.org/ee/fhwa.html>

A Bibliography of Trail and Recreation Issues *Extensive bibliography from the International Mountain Bicycling Assn.* www.imba.com/resources/science/biblio.html

Building Better Trails *Subtitled "Designing, Constructing and Maintaining Outstanding Trails" International Mountain Bicycling Association, 2001*
www.imba.com/resources/trail_building/trailbuilding_basics_index.html

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In the 1950's Albert Einstein was rumored to have dabbled with the technology as he was developing his Theory of Relativity. Why has it taken so long for the invention to surface? Some point to powerful corporate interests who have benefited from the suppression of Legway technology: the oil and automobile industries, and big-box retailers.

While most fully equipped versions of the Legway cost \$300 - \$500 (and even over \$1,000 for sportier models), ITDP has been working with top designers in China and the U.S. to develop models that are affordable for the African market. "We think we can get the price down to about \$60 per vehicle, which would make the Legway ideal for the developing world, helping millions access schools, jobs, clinics, and markets," stated White.

White waxed on, decrying increasing urban car use that, "...is congesting streets, increasing respiratory illness among children, and isolating the non-motorized majority." Dr. Yaakov Garb, an ITDP scientist, qualified the Institute's claim that the Legway is a zero-emission vehicle. "Though a tiny amount of CO2 is released, and an occasional incomplete burning of the biofuel can result in methane and sulphur emissions, these discharges are miniscule...rendering the Legway a virtual zero-emission vehicle." Dr. Garb noted that the transport sector is the fastest growing source of Greenhouse Gas Emissions.

Dr. Garb also pointed out that that other "alternative" vehicles that claim zero or low emissions, such as electric or hydrogen fuel cell vehicles are actually very polluting, due to 1) highly toxic production processes, and 2) the electric power that must be generated to charge them. "With the exception of the chloroplast and possibly the

clothesline, the Legway is the most affordable, useful, and environmentally-friendly invention known to man," continued Dr. Garb.

Dr. Hook, in response to a question regarding the barriers to full commercialization of the vehicle, replied, "The Legway is the only affordable alternative to fossil-fuel transport...there are only three barriers to the widespread commercialization of the Legway." Hook enumerated the three barriers as:

- 1) *Safety. "The Legway works best on traffic-calmed, tree-lined streets with special lanes."*
- 2) *Status. Because the Legway is inexpensive, the bourgeois may shun it. "Automobile congestion is killing city economies. People have to make the decision to be either upwardly mobile, or actually mobile."*
- 3) *Sprawl. The Legway works best in dense communities, where average trips are below 10km. "Trips farther than this are best bridged by high-quality public transport systems, for which the Legway can act as an effective feeder mechanism."*

The Legway: The affordable, practical alternative to fossil-fuel transport.

For more information on this revolutionary device, visit the ITDP's website at: www.itdp.org or contact the author, Paul Steely White, Director, Africa Programs, Institute for Transportation & Development Policy (ITDP), 115 W. 30th St. Suite 1205, New York, NY 10001; voice: (212) 629-8001; fax: (212) 629-8033.

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