



SURFACE  
TRANSPORTATION  
POLICY  
PROJECT



## Acknowledgments

Principal authors and analysts of *Share the Road* were Brian A. Cohen, Richard Wiles, and Christopher Campbell of Environmental Working Group; Bill Wilkinson of the Bicycle Federation of America; and James Corless of the Surface Transportation Policy Project. Allison Daly coordinated the release of *Share the Road*, with assistance from Laura Olsen. Molly Evans designed and produced the report.

We wish to thank the following individuals for their review of *Share the Road* in draft form: Alan Greenburg, Hank Dittmar, Bob Patton, and Bill Walker. Jackie Savitz of EWG provided editorial assistance, and Emily Headen helped coordinate distribution..

*Share the Road* was made possible by grants to Environmental Working Group from the Surdna Foundation, the Energy Foundation, the Bullitt Foundation, and the Joyce Foundation. The opinions expressed in this report are those of the authors and do not necessarily reflect the views of the supporters listed above. Any errors of fact or interpretation are the responsibility of the authors.

*Share the Road* Copyright © May 1997 by the Environmental Working Group/The Tides Center. All rights reserved. Manufactured in the United States of America.

## Environmental Working Group

The Environmental Working Group is a nonprofit environmental research organization based in Washington, D.C. The Environmental Working Group is a project of the Tides Center, a California Public Benefit Corporation based in San Francisco that provides administrative and program support services to nonprofit programs and projects. This and many other reports are available on the World Wide Web at <[www.ewg.org](http://www.ewg.org)>.

Kenneth A. Cook, President	1718 Connecticut Avenue, N.W. Suite 600
Mark B. Childress, Vice President for Policy	Washington, DC 20009
Richard Wiles, Vice President for Research	202-667-6982 (phone) • <a href="mailto:info@ewg.org">info@ewg.org</a> (e-mail)

## Surface Transportation Policy Project

STPP is a nonprofit coalition of more than 200 groups devoted to ensuring that transportation policy and investments help conserve energy, protect environmental and aesthetic quality, strengthen the economy, promote social equity, and make communities more livable.

Hank Dittmar, Executive Director	1100 17th Street, N.W. 10th Floor
	Washington, DC 20036
	202-466-2636 (phone) • <a href="mailto:stpp@transact.org">stpp@transact.org</a> (e-mail)

## Bicycle Federation of America

BFA is a national nonprofit established in 1977 to promote the increased safe use of bicycles for all purposes. In 1989, the BFA expanded its mission to include similar action in support of pedestrian safety and walking. Today, the BFA is working to create bicycle-friendly and workable communities.

Bill Wilkinson, Executive Director	1506 21st Street, N.W. Suite 200
	Washington, DC 20036
	202-463-6622 (phone) • <a href="mailto:bfa@igc.org">bfa@igc.org</a> (e-mail)

## To order a copy/World Wide Web

Copies of this report are available at a cost of \$20.00, plus \$3.00 shipping and handling and 6% sales tax for sales in the District of Columbia. Please send check or money order to Environmental Working Group, 1718 Connecticut Avenue, N.W. Suite 600, Washington, DC 20009. This report and many others are available on the World Wide Web at [www.ewg.org](http://www.ewg.org)

# Share the Road Arizona

We all remember the thrill of getting our first bicycle as a child, and the new freedom it gave us. This year, more than 100 million Americans will go for a bicycle ride, and continue to enjoy the thrill as they pedal along with their families, commute to work by bicycle, or just ride around town. Each year, more Americans take to the road on bicycles than ever before. Ten million more Americans ride bicycles today than rode in 1991 — a ten percent increase in just the past six years. Five million workers ride their bicycles to work — and twelve million more say they would if there were adequate bicycle facilities available.

Much of this increase is due to the Intermodal Surface Transportation Efficiency Act (ISTEA), the landmark transportation law passed by Congress in 1991. In the 18 years before ISTEA was passed, a total of \$40 million was spent on bicycle projects — just over \$2 million per year. Since ISTEA, the annual federal commitment to bicycles has increased one hundred fold. The Environmental Working Group's

analysis of Federal Highway Administration records reveals that since the beginning of fiscal year 1992, 13,622,000 dollars have been spent in Arizona to make bicycling more accessible and safer, 1% of all transportation spending. Nationwide, thousands of bicycle projects have been funded in all fifty states, and hundreds of miles of bicycle lanes and trails have been built.

Thanks to ISTEA, the United States is on the verge of an explosion of bicycle ridership. A recent poll found that two out of three voters support the use of federal funds to build better bicycle facilities. Yet now, as Congress prepares to reauthorize ISTEA, this substantial progress is endangered. Several proposals sponsored by powerful members of Congress could reduce or even eliminate ISTEA's dedicated funding for bicycle programs. As our study indicates, these proposals would halt the progress we have made towards making our communities more bicycle friendly, and prevent us from stopping hundreds of unnecessary bicycle fatalities each year.

## **The “Road Gang’s” Proposals Threaten To End Support For Bicycles**

Some proposals before Congress would reverse our nation’s transportation policy and return us to the highways-only days by eliminating many of the gains made when ISTEA was passed in 1991. These proposals would make our communities less safe for bicyclists by gutting provisions of ISTEA known as the Transportation Enhancements and Congestion Mitigation and Air Quality Improvement programs. Most of these proposals are supported by the “Road Gang”, a collection of lobbyists for the highway, oil, and automobile industries, as well as many state Departments of Transportation. These proposals include:

- A proposal by Rep. Bud Shuster (R-PA), chair of the House Transportation and Infrastructure Committee, would allow the state Departments of Transportation to transfer 50 percent of the money for bicycle facilities and use it to build more highways or other programs instead, almost certainly returning transportation policy to the pre-ISTEA days when little money was spent on bicycle use and bicycle safety (BNA 1997).
- A proposal known as “STEP-21,” introduced in the House by Tom DeLay (R-TX) would gut the ISTEA law by turning the entire

program into a federal block grant — essentially eliminating the dedicated Transportation Enhancements and Congestion Mitigation and Air Quality Improvement (CMAQ) programs that have provided over \$1 billion for bikes since 1991.

- “STARS-2000,” legislation introduced by Sen. Max Baucus (D-MT) would also reshape ISTEA and reduce funding for bicycle-safe streets. In addition, this legislation would cut funding for the Congestion Mitigation and Air Quality Improvement Program by almost two thirds, from \$1 billion per year to \$387 million per year.

### **Congress Should Increase Support for Biking in ISTEA**

Slowly but surely, the landmark changes embodied in ISTEA are making communities more bicycle friendly. In addition to dedicated funding for bicycles, ISTEA requires the appointment of a bike and pedestrian coordinator in every state, the routine inclusion of bicycle plans in state and local transportation plans, and encourages public involvement in the development of these plans. As a result, ISTEA has increased public involvement in bicycle safety and bicycle-friendly community design, through a planning process that was non-existent before the law’s passage.

Although ISTEAs new planning requirements and funding programs have only been in existence for five years, hundreds of miles of bike lanes and trails have already been added to our communities. These facilities are almost certainly a factor in the increased number of people riding bikes. But there is still a lot of room for improvement. Indeed, with some modest improvements to ISTEAs to expand the development of safer communities hundreds of lives could be saved. Our analysis indicates that preserving and strengthening the pro-bicycling features of ISTEAs can encourage more bike use and make bicycling even safer. We found that:

- Between 1986 and 1995, a total of 257 bicyclists (26 per year) were struck and killed by motor vehicles in Arizona. And for every bicyclist killed by a car, another 88 suffer injuries — for a total of 2,262 bicyclists injured by cars each year in Arizona.
- A significant number (63 percent) of all bicyclists killed by cars in Arizona are killed in their neighborhoods, on local roads, collector streets, and minor arterials.
- 36.2 percent of all bicycle fatalities in Arizona involved children under the age of 18 — a total of 93 fatalities in the last ten years.

- Many children are also injured; for every child on a bike who is killed by a car another 100 are injured, for a total of 930 children injured by cars while bicycling in Arizona each year.

These data serve as indicators of the work that needs to be done, and of the vast benefits that will be achieved when our roads are made safer for bicycling. Some may be tempted to look at these data and jump to the conclusion that they — and their children — should stay off of bicycles because of safety concerns. This would be a mistake. Bicycling remains an activity that is good for our children, our health, and our communities. The real goals are to make bicycling more accessible and safer. The city of Davis, California provides an example of how this can be done. Davis began considering bicycle use and bicycle safety years before ISTEAs was passed in 1991. The city has built many miles of bike trails and lanes, implemented education and enforcement campaigns, and aggressively acted to reduce risks. As a result, more than 20 percent of trips in Davis are made by bike (many times higher than the national average), and children ride everywhere. Over the past ten years, no one has been killed in Davis California while riding a bicycle, proof that increased ridership and increase safety can go hand in hand.

Our analysis of federal highway spending records show that

in 27 states and the District of Columbia, less than one percent of all federal transportation dollars were spent on bicycle related projects. Only four states spent more than one percent. We need to preserve and strengthen ISTEA to help communities accommodate and encourage bicycling while reducing the current risks.

### **Where Are Bicycle Fatality Rates The Highest?**

The national average bicycle fatality rate between 1986 and 1995 was 3.4 bicyclists per million individuals. In Arizona, the fatality rate was 7, ranking it 2nd in the country.

Among metropolitan areas in Arizona, Yuma, AZ had the highest fatality rate (8.4 fatalities per million), followed by Phoenix, AZ and Tucson, AZ.

The counties with the most fatalities were Maricopa County, Pima County, and Coconino County.

## Bicycle Safety in Arizona

**Table 1. 257 bicyclists were killed and many more injured by automobiles in Arizona between 1986 and 1995.**

Total number of bicyclists killed by cars (1986-1995):	257
Estimated number of bicyclists injured by cars (1986-1995):	22,616
Annual bicyclist fatality rate per million population (1986-1995): (National average is 3.4)	7.0
Percent of all auto related fatalities involving bicyclists (1986-1995):	2.9%

**Table 2. Children aged 18 and under account for 36% of all cyclists killed by cars in Arizona.**

Number of bicyclists 18 and under killed by cars (1986-1995):	93
Estimated number of bicyclists 18 and under injured by cars (1986-1995):	9,300
Percent of bicycle fatalities involving children aged 18 and under (1986-1995):	36%
Percent of U.S. population aged 18 and under (1990):	28%
Relative risk for children age 18 and under:	1.3

**Table 3. ISTEA has provided needed funds for bicycle safety and bicycle access.**

Total Federal Highway Spending (1992-1996):	\$1,429,513,666
Total federal spending on bicycle safety and access (1992-1996):	\$13,621,856
Percent of spending on bicycle safety and access (1992-1996):	1.0%

**Table 4. 63 percent of all bicyclists killed by cars in Arizona are killed on neighborhood streets.**

Road Type	Percent of bicyclists killed by cars*
Major Roads:	
Interstates:	2 %
Freeways/Expressways:	0 %
Primary Arteries:	32 %
Neighborhood Streets:	
Minor Arteries:	27 %
Collectors:	13 %
Local Roads:	22 %

**Table 5. Counties in Arizona where the most bicyclists were killed by cars, 1986-1995.**

County	Number of bicyclists killed by cars (1986-1995)	Estimated number of bicyclists injured by cars (1986-1995)
Maricopa County	164	14,432
Pima County	39	3,432
Coconino County	10	880
Mohave County	9	792
Yuma County	9	792

**Table 6. Metro Areas in Arizona with the highest fatality rates for bicyclists killed by cars (1986-1995).**

Metropolitan Area	Metro area population 1990	Number of bicyclists killed by cars (1986-1995)	Annual bicyclist fatality rate per 1,000,000	Estimated number of bicyclists injured by cars (1986-1995)
1) Yuma, AZ	106,895	9	8.4	792
2) Phoenix, AZ	2,122,101	164	7.7	14,432
3) Tucson, AZ	666,880	39	5.8	3,432
<b>Statewide Total</b>	<b>3,665,228</b>	<b>257</b>	<b>7.0</b>	<b>22,616</b>

\* Note: Percentages may not add to 100 percent due to incomplete data on road type in the bicycle fatality database.

Source: Environmental Working Group. Compiled from U.S. Department of Transportation, Federal Highway Administration data. Bicycle fatality data is from 1986-1995; spending data is from 1992-1996.

The Environmental Working Group is a non-profit environmental research organization based in Washington, D.C.  
Phone: (202) 667-6982 • Fax: (202) 232-2592 • Email: info@ewg.org • Web: <http://www.ewg.org>



## Bicycle Safety in Arizona Metro Areas

**Table 7. Bicycle safety in metropolitan areas in and around Arizona.**

Metropolitan Area	Metro area population 1990	Number of bicyclists killed by cars (1986-1995)	Annual bicyclist fatality rate per 1,000,000	Estimated number of bicyclists injured by cars (1986-1995)
Phoenix, AZ	2,122,101	164	7.7	14,432
Tucson, AZ	666,880	39	5.8	3,432
Yuma, AZ	106,895	9	8.4	792
Statewide Total	3,665,228	257	7.0	22,616

Source: Environmental Working Group. Compiled from U.S. Department of Transportation, Federal Highway Administration data. Bicycle fatality data is from 1986-1995; spending data is from 1992-1996.

The Environmental Working Group is a non-profit environmental research organization based in Washington, D.C.  
 Phone: (202) 667-6982 • Fax: (202) 232-2592 • Email: [info@ewg.org](mailto:info@ewg.org) • Web: <http://www.ewg.org>