

Is U.S. Clean Air Policy Promoting Bicycling?

Jon Orcutt

Tri-State Transportation Campaign & League of American Bicyclists.

Cycling advocates in the United States greeted passage of the Federal Clean Air Act Amendments of 1990 expectantly. The first revision of U.S. clean air laws since 1977, the legislation specifically mentioned improvements for bicycling among the measures states were encouraged to include in anti-pollution plans. The Amendments were followed the next year by significant funding – the Congestion Mitigation/Air Quality (CMAQ) program – specifically devoted to transportation projects that would support clean air plans. The CMAQ program was a part of the landmark Intermodal Surface Transportation Efficiency Act (ISTEA).

Anyone watching the U.S. transportation and cycling scene in the last 10 years knows that ISTEA has put bicycling on the map from both planning and project funding points of view. But how has the environmental program under ISTEA and its TEA-21 successor performed for bicycling? Are we getting all we can from it? And how about the Clean Air Act?

Unfortunately, the record shows that U.S. clean air programs have done relatively little for cycling in the past 10 years. Only 16 states have spent more than \$1 million in CMAQ funds for bicycle-related programs since states began receiving money under the program in 1992, and CMAQ has been worth over \$5 billion overall during that period. Even fewer states have included environmental benefits of bicycle transportation in the clean air plans they submit to the federal government.

1. Clean Air Act State Implementation Plans

The Clean Air Act Amendments of 1990 identified a range of “transportation control measures,” or TCMs, to reduce car use that states could create to contribute to reduction of motor vehicle air pollution. One such TCM identified in the law is “provision of paths, special lanes, lockers, showers, or other facilities designed to encourage walking and bicycling.”[1]

However, the lion’s share of emphasis in state efforts to comply with federal clean air mandates has focused not on reducing car trips, but on limiting peak emissions with vehicle tailpipe controls. The structure of Clean Air Act and U.S. Environmental Protection Agency regulations and deadlines more or less dictates this approach, which in some cases has led to justification of highway expansion on clean air grounds. This is the case despite recognition by some at EPA that continued growth in car use threatens to eliminate the pollution reductions that have been achieved through tailpipe controls. EPA has also historically been very timid in enforcing difficult elements of clean air laws.[2] The structure of state governments has reinforced the tailpipe emphasis, since state environmental protection departments, which have little say over transportation projects and spending, are generally the agencies that develop the state implementation plan for Clean Air Act compliance. In some cases, state environmental agencies appear not to trust their transportation counterparts to develop projects and plans that will reduce vehicle emissions.[3]

Moreover, the only enforceable transportation control measure in the Clean Air Act Amendments, a provision that could have increased cycle commuting, was repealed by Congress in 1995. The Clean Air Act’s “employer trip reduction” measure required large employers to implement workplace policies to reduce rates of solo car commuting.

In this environment, transportation control measures have played a small role in clean air planning, and cycling has been only a small factor among the TCMs states have adopted. Among 105 measures listed in a U.S. EPA TCM database,[4] six explicitly provide infrastructure to accommodate bicycling. Another 21 are workplace, municipal or regional trip reduction or commute options programs that appear to have some potential to encourage cycling. Of the latter, 10 are from southern California, where state laws mandate employer-based trip reduction and other TCMs.

2. CMAQ Spending

Created by the ISTEA of 1991 and enlarged in 1998’s TEA-21 legislation, CMAQ provides funding to areas designated by the U.S. Environmental Protection Agency as “non-attainment” or “maintenance” for levels of ozone or carbon monoxide, two air pollutants targeted for reduction by the federal Clean Air Act. In these areas, the CMAQ funds are to be used for projects that reduce ozone, carbon monoxide or particulate pollution.

Smaller CMAQ allocations are also made to states that do not violate Clean Air Act standards – CMAQ can be used for any purpose in these states, although many of them have directed the funding toward projects with some environmental justification.

Has CMAQ funding been used to promote cycling since the passage of ISTEA? Federal data compiled by the Surface Transportation Policy Project[5] indicates that cycling and pedestrian projects have accounted for a very small share – 1.58%, or \$83 million of \$5.3 billion – of total CMAQ spending since 1992.

In states with the worst air pollution (states that contain ozone non-attainment areas rated by EPA as “extreme,” “severe” or “serious”),[6] bike/pedestrian projects have accounted for an even smaller share – 1.29% (\$47 million of \$3.7 billion) – of CMAQ spending.

Oregon, well-known for state and metropolitan governments that support cycling, led all states in CMAQ investment in bike/pedestrian projects, using over 20% of available CMAQ funds. The four other states investing over 5% of CMAQ funds in bike/ped projects are relatively rural with strong outdoor ethics, with the exception of Georgia, which spent just over 7% of its CMAQ monies on bike/pedestrian projects. Georgia has a strong cycling advocacy presence in Atlanta, its major metropolitan area. Georgia and Atlanta in particular have also come under strong pressure from national and local environmental groups because its ambitious suburban road-building plans conflicted with efforts to reduce air pollution.

Among the most polluted states, only three – New York, Rhode Island and Illinois – used more than 2% of their CMAQ funds for bike/pedestrian projects, ranging from 4.1% in New York to 2.9% for Illinois. Both New York and Illinois have strong cycling advocacy and transportation reform groups in their major metropolitan areas, which have secured measures of official support for the development of infrastructure for cycling. Connecticut, Louisiana, Maryland and New Hampshire used no CMAQ funds for bike/ped projects.

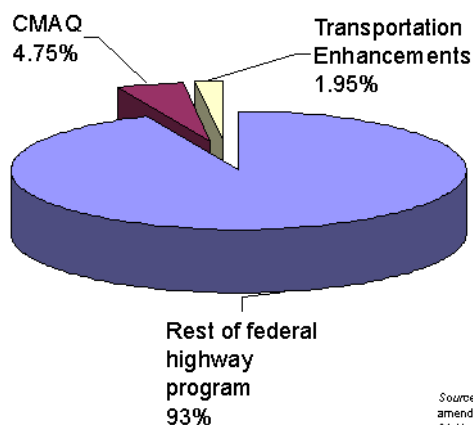
In dollar terms, New York spent the most, investing \$27 million of its CMAQ money in bike/pedestrian projects from 1992-2000. This level dwarfed the \$4.7 million spent by California, the only state receiving more CMAQ money than NY. Indeed, if New York’s CMAQ receipts and spending are removed from the national picture, bike/pedestrian projects’ share of total CMAQ spending falls from nearly 1.6% to 1.2%.

3. CMAQ spending in context

Although bike/pedestrian projects’ share of total CMAQ spending through 1999 has been small in percentage terms, optimists will point out that the program has been the source of \$83 million in spending on cycling and walking projects than might not have occurred otherwise. Moreover, monitors of federal transportation programs report that other ISTEA and TEA-21 programs – principally, the “Transportation Enhancements” program – have resulted in about \$1 billion in spending on bike and pedestrian projects since 1992.[7]

CMAQ and Enhancements

Shares of Federal Highway Program (TEA-21 Title I)



Source: Apportionment estimates from amended TEA-21, represented in TEA-21 Users Guide. STPP, 1998

Figure 1

Cycling advocates seeking a government commitment and a cycling infrastructure as strong and ubiquitous as that found in a country like the Netherlands note that spending on bike and walking projects never exceeded one percent of federal transportation spending (not even accounting for air travel-related spending) during the 1990s.[8] They also note that the

CMAQ program is currently more than twice the size of the Transportation Enhancements program, and is thus a critical future target for increasing U.S. investment in pro-cycling projects.

CMAQ Share of Federal Funds Invested in Cycling and Walking 1992-1999

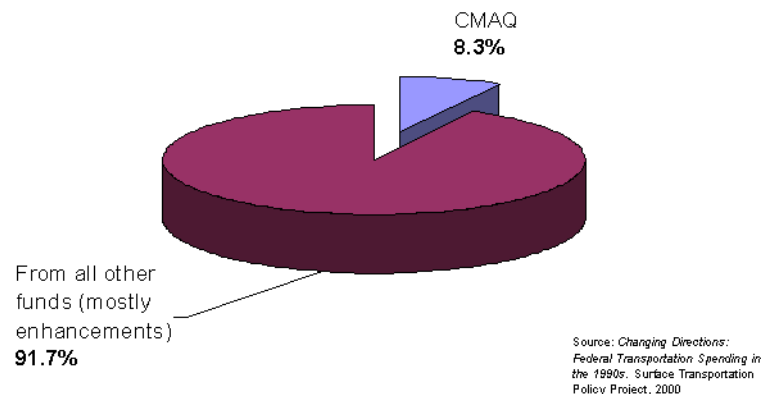


Figure 2

4. Possible Explanations, and a Look Ahead

Why haven't cycling projects won a stronger share of CMAQ funding?

First, CMAQ was the largest funding program created by ISTEA that did not have a clear institutional link to existing state-level transportation agencies, the way older highway and mass transit programs did. My observation of transportation policy- and budget-making in the New York/New Jersey/Connecticut region suggests that, in this regard, CMAQ is the most "up for grabs" program to come out of the new federal approach to transportation, and demand and competition for CMAQ money in the large metropolitan areas is intense. The funding can be used for a broad array of project types, provided some air quality justification can be offered, and the amounts are large enough in the more polluted states to permit financing of fairly large capital projects.

On the other hand, tighter project guidelines and smaller funding amounts have made Transportation Enhancements the default funding source for bike and pedestrian projects. This has paid off for cycling in an important way, but there is a real danger that this will become institutionalized in the thinking of transportation agency decision makers and cycling communities, imposing a low ceiling on resources available to create a better, more attractive bicycling environment.

Cycling advocates and their allies need to fight for and win more CMAQ funding, but it seems clear that an appeal to the legalistic, tailpipe-oriented clean air planning by state governments will not by itself yield a greater resource commitment to cycling. A more fruitful avenue will be a political effort that taps into the broad environmental concerns of the American public, and perhaps transcends "bicycle advocacy" to embed cycling as an element in a broader quality of life agenda. In metropolitan areas, ambitions for better communities encompass the problem of too-heavy motor traffic, but they frequently emphasize traffic impacts on community design, character and safety far more than worries about air pollution. An appeal to these sensibilities should also help cyclists pursue other important funding possibilities, like state capital budget aid to municipalities and counties, and safety funds.[9]

Regarding the Clean Air Act, transportation control measures may make something of a comeback, if only where successful legal challenges have been made to transportation plans that worsen air pollution. Some of the newest TCMs, which have pro-cycling and traffic calming elements, are being developed in Atlanta as a consequence of the Environmental Defense Fund's transportation/clean air lawsuit there. EDF is also calling for an aggressive set of TCMs in Houston, where it is also mounting a Clean Air Act legal challenge to transportation plans.

States' Use of CMAQ Funds for Bicycle/Pedestrian Projects and Programs

Ranked by percentage of CMAQ spending for bike/ped projects

State	1993	1994	1995	1996	1997	1998	1999	Total	Total CMAQ spending, 1992-99	Bike/ped share
Oregon			324,515	378,232	4,036,690	667,399	4,707,053	10,113,889	48,272,450	20.95%
Montana		13,409	611,450		598,798	1,439,405	507,031	3,170,094	28,590,305	11.09%
Maine		12,000		13,800		1,175,193	176,349	1,377,341	19,288,665	7.14%
Georgia			1,118,103	894,138	1,351,927	1,598,604	1,450,351	6,413,123	91,546,074	7.01%
Colorado							952,000	952,000	17,162,353	5.55%
Washington	485,150	215,152	569,088	2,278,758	2,131,479	97,391	33,090	5,810,108	121,250,611	4.79%
New Mexico		76,917	710,000	159,562	300,000	200,000	200,000	1,646,479	37,906,884	4.34%
New York*	785,836			5,028,504	19,690,660	1,108,000	646,400	27,259,400	670,853,903	4.06%
Rhode Island*					80,000	976,714	496,000	1,552,714	46,242,377	3.36%
Illinois*		144,994	1,458,352	1,995,077	185,322	3,291,535	1,086,197	8,161,477	285,862,673	2.86%
Tennessee			299,537	171,217	400,000		196,000	1,066,755	42,957,120	2.48%
Wisconsin		125,200	18,896		750,700	400,000		1,294,796	64,298,024	2.01%
Indiana*						720,000		720,000	39,170,794	1.84%
Alaska						39,663	378,064	417,727	23,367,809	1.79%
Alabama		2,000	12,000		116,000		225,308	355,308	24,779,891	1.43%
Michigan				600,396		508,531	132,000	1,240,927	125,333,469	0.99%
Idaho			67,148	4,840	99,636		15,678	187,302	20,535,530	0.91%
Massachusetts*	900,800	31,874			136,000		800,000	1,868,674	208,051,801	0.90%
Florida*					1,165,971			1,165,971	152,668,015	0.76%
Delaware*							192,560	192,560	28,820,855	0.67%
Arizona	56,603		173,869	357,279				587,751	99,939,766	0.59%
California*		362,645	91,678	640,250	107,900	1,052,645	2,500,940	4,756,057	1,059,856,006	0.45%
Ohio	650,000		18,000					668,000	204,325,565	0.33%
Virginia*		139,905			154,724		49,315	343,944	107,424,835	0.32%
Texas*					173,640	57,500	1,003,114	1,234,254	393,232,034	0.31%
South Carolina				86,115				86,115	29,057,332	0.30%
Utah			75,050					75,050	30,955,777	0.24%
Missouri					80,000	38,400		118,400	52,322,157	0.23%
Nevada					28,000		16,334	44,334	26,114,967	0.17%
Nebraska			8,354			13,010		21,363	29,893,229	0.07%
North Carolina				26,946	8,420			35,366	71,925,871	0.05%
New Jersey*					110,000			110,000	348,074,294	0.03%
Arkansas								0	25,190,755	0.00%
Connecticut*								0	151,394,223	0.00%
Hawaii								0	20,465,332	0.00%
Iowa								0	37,580,787	0.00%
Kansas								0	26,460,158	0.00%
Kentucky								0	50,405,860	0.00%
									Total CMAQ spending, 1992-99	Bike/ped share
State	1993	1994	1995	1996	1997	1998	1999	Total		
Louisiana*								0	25,774,493	0.00%
Maryland*								0	139,544,545	0.00%
Minnesota								0	24,144,106	0.00%
Mississippi								0	32,447,681	0.00%
New Hampshire*								0	23,375,761	0.00%
North Dakota								0	26,536,806	0.00%
Oklahoma								0	35,692,458	0.00%
South Dakota								0	31,340,873	0.00%
Vermont								0	37,633,561	0.00%
Wyoming								0	27,012,840	0.00%
TOTALS								83,047,280	5,265,081,675	1.58%

States marked with an asterik contain extreme, severe or serious ozone non-attainment areas.

Source: Federal Highway Administration database sorted by the Surface Transportation Policy Project for its *Changing Direction* report.

Figure 3

And where Congress eliminated the Clean Air Act's "employer trip reduction" requirement in 1995, it did enact in 1998 a tax code change clearing the way for work-sites to use "cash in lieu of free parking" strategies to reduce car commuting. This is a change that could in effect lead to employers paying people to bicycle to work – bike advocates need to further explore this strategy and find municipal and business allies with whom to work on its implementation.

Notes

- 1 Clean Air Act Amendments of 1990 cited in Transportation Air Quality: Selected Facts and Figures, Federal Highway Administration, 1996
- 2 "Five Lessons from the Clean Air Act Implementation" David Driesen, Pace Environmental Law Review, Fall, 1996.
- 3 At a focus group convened by the Federal Highway Administration in 1996, a Massachusetts Dept. of Environmental Protection official questioned whether transportation projects selected by Massachusetts transportation officials for Congestion Mitigation/Air Quality funding had any air pollution reduction benefits, and a Washington, D.C. regional planner had similar complaints about the Maryland State Dept. of Transportation. Mobilizing the Region #84, Tri-State Transportation Campaign, 1996.
- 4 <http://www.epa.gov/oms/trans/traqtcms.htm>
- 5 Changing Direction: Federal Transportation Spending in the 1990s. Surface Transportation Policy Project (www.transact.org), 2000, supplemented by additional CMAQ spending and bicycle/pedestrian project data provided directly by STPP to Orcutt. I gratefully acknowledge the assistance of Michelle Garland of the Surface Transportation Policy Project in producing the CMAQ spending data on which much of this paper is based.
- 6 New York, Rhode Island, Illinois, Indiana, Massachusetts, Florida, Delaware, California, Virginia, Texas, New Jersey, Connecticut, Louisiana, Maryland and New Hampshire _ Transportation Air Quality: Selected Facts and Figures, Federal Highway Administration, 1996
- 7 Surface Transportation Policy Project reports \$1,082,000,000 in total federal spending (including CMAQ) for bike/ped projects from 1992-1999. See Changing Direction, op cit., page 9. The National Transportation Enhancements Clearinghouse reports that states "obligated" a total of \$2.51 billion from the ISTEA/TEA-21 "Transportation Enhancements" program through 1999, and that 53% of Enhancements projects are for cycling and/or walking (yielding about \$1.3 billion). See Transportation Enhancements: Summary of Nationwide Spending & Policies as of FY 1999, National Transportation Enhancements Clearinghouse (NTEC), 2000. "Obligation" refers to a formal commitment of federal funds to a project by a state department of transportation. It approximates what STPP refers to as "spending" in Changing Direction. However, the NTEC report referred to here spells out the difficulties of tracking and calculating expenditure of federal transportation dollars (Transportation Enhancements, page 2).
- 8 Changing Direction, page 13.
- 9 See Jon Orcutt, "Dollars for Traffic Calming: Creating Pedestrian Safety Local Aid Programs." 1996 Pro-Bike/Pro-Walk Conference Proceedings. Bicycle Federation of America.