

B. Bruce-Biggs. *The War Against the Automobile*. Dutton. 1977. Chapter 6.

"The existing American mass transportation system moves people with a speed, convenience, comfort, and flexibility quite beyond comparison. It is difficult even to conceive of a system better than the existing one, save only the present arrangement with its costs reduced. So let me first describe the present complex in some detail.

The American mass transportation system consists of three principal elements. First, part of the land area of the nation is dedicated as rights-of-way for the system. Sometimes these are unimproved dirt, but more often they are covered with gravel, concrete, and/or low-quality liquid hydrocarbons. Most of these thoroughfares are publicly owned—by municipalities, counties and states—and locally maintained. Almost all are open to the public; indeed they could be described as "communist" in their political economy—anyone may use them at will. Others are owned by public corporations that restrict access to users who pay for the privilege. There are about 3.8 million miles of these thoroughfares and they give access to almost all of the land in the United States. Still others are privately owned, and therefore subject to the normal rights of private property; however, in custom and practice any person who wishes may normally use them, because such public use is usually considered to be in the interest of the owner. The total length of the privately owned thoroughfares is not known—it probably approaches a million miles.

The second element in our mass transportation system is the 130 million individually operated vehicles. Almost all of these have four wheels with synthetic rubber tires and are individually powered by mechanisms that mix air and liquid hydrocarbons carried in the vehicles to produce kinetic energy. These vehicles can operate on any of the thoroughfares of the system, so that they have great flexibility of movement. In addition, they have modest capabilities to operate

cross country of the thoroughfares. The vehicle is operated by one person who, sometimes after negotiation with other people in the vehicle (they can also carry up to eight passengers, by usually one to four), decides where it shall go. He has control of the speed—between zero and one hundred miles an hour—acceleration, deceleration, route, destination, time of departure, and time of arrival. Provided a modest annual fee is paid to a state government, any vehicle can be operated on any thoroughfare.

Most individually operated vehicles are privately owned and maintained; that is to say, individual Americans actually possess these machines, paying for them with cash or through installment credit. The owners purchase the liquid hydrocarbons required to fuel them and the rubber tires necessary to make them roll, and are responsible for maintaining the machinery. Either the owners themselves do the maintenance or they engage independent small businessmen to do the work.

The third element in the American mass transportation system are the operators themselves. Approximately 125 million Americans, which is almost all adult Americans have a reasonable degree of competence in negotiating these vehicles on thoroughfares. Since they are performing this "labor," they do not charge themselves for it. The states consider it a privilege to be an operator of a vehicle—a privilege limited only to those individuals they license. However, this licensing procedure is very liberal (some say too liberal), and very few people are unable to learn the minimum skills necessary to operate the vehicles in a manner satisfactory to the state authorities. The operators are mostly trained by family and friends, so there is very little economic cost involved in this educational process. Public schools and private firms also train them.

The entire system is financed from a mixture of sources. The thoroughfares, being state owned,

are almost entirely paid for by direct levies on their users--fees for operators' licenses, fees for licensing vehicles, and taxes on liquid hydrocarbons and other products necessary to operate and maintain the vehicles. Public corporations collect fees for the use of certain water crossings and a few high-quality thoroughfares, particularly in the northeastern states.

The vehicles themselves are individually purchased through small businessmen who have franchises from the manufacturers of the vehicles. There are four major North American manufacturers and dozens of foreign manufacturers in Europe, Mexico, and Japan, whose vehicles are imported. Replacement parts and other supplies for the vehicles are provided by tens of thousands of manufacturers, distributors, and retailers.

The total cost of the system is enormous—no one knows how much nor can it even be accurately estimated. There are too many factors involved; for example, the thoroughfares, in addition to serving the needs of the operators of the vehicles, also act as yards and buffers for abutting property owners. The vehicles are used primarily for transportation, but also for recreation as well, and many of them have artistic or aesthetic value. The vehicles also serve as private rooms in motion picture theaters and restaurants—and even, it is said, as bedrooms. The operators themselves also have many other functions.

Moreover, the system is not merely an intracity personal transportation system, but an inter-city system as well. To further complicate the arrangement, the thoroughfares are used by many other sorts of vehicles—for moving goods and for carrying large groups of people within or between cities.

The financial cost of this complex is huge: one can guess 10 percent of the GNP. This, however, would not appear too high, because the system described carries 94 percent of all intracity trips, and 80 percent of all trips to work. This is the

American mass transportation system. Of course, this is the auto-highway-driver complex. What is ordinarily called "mass transportation"—buses, subways, and railroads, which I call "collective transit"—moves only a tiny percentage of Americans. Every other method of moving people in or between cities is trivial by comparison. It is the automobile that moves the great mass of Americans, yet it is under attack today from a number of sources, informed and uninformed, idealistic and selfish.

The automobile-highway system is an unequaled complex of structures, machines, and techniques for maximizing the mobility of the individual American and American families. Everyone knows how good it is; in fact, most of us take it for granted. So it seems strange that over the last generation a concerted and comprehensive attack has been made on the auto-highway system by a small band of publicists and politicians. The number of these opponents of the automobile is very tiny, but they have been powerfully placed, and have strongly influenced—indeed dominated—public discussions of personal transportation in general, and the automobile in particular. As far as I can tell, no major publishing house in the United States has produced a book in favor of the car during the last generation. Published books have uniformly hostile, sometimes virulently so. (Some of the more notorious of these will be mentioned later.) Similarly, the intellectual or highbrow media as well as academia have been, on the whole, anti-car. And the popular press, which should know better, has accepted the general anti-auto line promulgated by what I see as the enemies of American mobility.

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"But I have been saving the biggest advantage of the autohighway system for last: It gives personalized flexibility. It goes where you want, when you want, by the route you select. You do not have to wait for it on a street corner or in a railroad station. You do not have to wonder if it is going to show up at all. You do not have to adjust your time of departure or arrival to suit the

plans of some employee of a private corporation or a public authority. You do not have to limit the choice of your place of living, working, visiting, or playing because of the limited service provided by a collective transportation system. You do not have to leave early to catch the last train or bus.

Because the highway system provides access to almost every point, you can go almost anywhere in these United States. If the preferred route is blocked or congested by some failure or by heavy traffic, you can select an alternate route. In theory, as well as in practice, the number of routes between any two points in the United States approaches infinity. In selecting a route, you are not committed in advance—you can change your mind. Furthermore, you may elect to make several stops along the way. In other words, you have control over your own mobility—this is the clincher. There are few things in our society, and fewer with each passing year, that offer us so much individual freedom."

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Footnotes:

"The most renowned of the anti-auto works are: John Keats, *The Insolent Chariots* (Philadelphia, 1958); Lewis Mumford "The Highway and the City," *Architectural Forum*, April 1958; Eric Larrabee, "Detroit's Great Debate: Where Did We Go Wrong?" *The Reporter*, 17 April 1958; Ralph Nader, "The Safe Car You Can't Buy," *Nation*, 11 April 1959; D. P. Moynihan, "Epidemic on the Highways," *Reporter*, 30 April 1959, and "New Roads and Urban Chaos," *Reporter*, 14 April 1960; Ralph Nader, *Unsafe at Any Speed* (New York, 1965); D. P. Moynihan, *The War Against the Automobile*, *The Public Interest*, Spring 1966; Jeffrey O'Connell and Arthur Myers, *Safety Last* (New York, 1966); Lewis Mumford, "The American Way of Death," *New York Review of Books*, 28 April 1966; Helen Leavitt, *Superhighway-Superhoax* (Garden City, N.Y., 1970); Kenneth R. Schneider, *Autokind vs.*

Mankind (New York, 1971); R. Buell, *Dead End* (Englewood Cliffs, NJ., 1971); John Burby, *The Great American Motion Sickness* (Boston, 1971); John Jerome, *The Death of the Automobile* (New York, 1972); W. H. O'Connell, *Ride Free, Drive Free* (New York, 1973); Emma Rothschild, *Paradise Lost: The Decline of the Auto-Industrial Age* (New York, 1973); Terence Bendixson, *Without Wheels* (Bloomington, 1974).

The Ladd-Lipset materials are from *The Divided Academy* (New York, 1975), *Chronicle of Higher Education*, 5 April 1976, and computer printouts kindly provided by Professor Ladd."

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