THE Privatization OF Roads & Highways

HUMAN AND ECONOMIC FACTORS

Walter Block

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This book is dedicated to my fellow Americans, some 40,000 of them per year who have died needlessly in traffic fatalities. It is my sincere hope and expectation that under a system of private roads and highways in the future, that this number may be radically reduced.

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Foreword

Abolishing Government Improves the Roads

ook on the back of your ATM or debit card. Check your credit card, too. Whoever your bank is, on the back of the card you'll see the logos of other firms—Cirrus, Plus, Star, maybe others. Cirrus is an ATM network management system owned by MasterCard, Plus is owned by Visa, and so on. There is cooperation between companies, and the network managers are somewhat independent. For example, Visa debit cards often have a Cirrus logo on the back.

This means you can use your debit card, the one from your little, three-branch local bank, to get instant cash from an ATM clear across the country. Yes, each bank charges you a dollar or two. They should. A single ATM costs \$100,000 to install, costs money to maintain and manage (people have to put money in it and take money out daily), and it costs participating banks to hire Cirrus to move the money around.

More important is what we learn about the market's capabilities. One of the objections to privatizing roads is that we'd have to stop at a toll booth at every intersection. A five-minute commute to the grocery store would require, for me, three toll booths, seventy-five cents, and become an eight-minute commute, according to this objection. But it's not so, and here's why: Our time is worth a few pennies to us. Cirrus and Pulse would charge us, wild guess, three dollars a month or less to provide magnetically encoded stickers for our cars. Machines scattered about the roads, or sensors under the pavement, would record our comings and goings. That information would go to Cirrus and Pulse, and from them to our road providers. We might get three or four monthly bills, or just one, depending on the wherewithal of road owners. Some road owners, out in the woods, would still have toll booths, which would work perfectly well—less traffic and a slower pace of life make it no big deal. I use a toll booth occasionally in Atlanta, and the delay is only a few seconds.

Lest you think your money would be going up in exhaust fumes, remember that market firms, who must please customers to stay in business, provide everything better and less expensively than government, without that nasty moral hangover of forcing people to pay for things they may not use or want. Your gasoline price already includes forty to fifty cents per gallon in taxes for road building and maintenance. This means I'm paying twenty-five to thirty-three dollars per month for road use now. With privatization of roads, that cost would go down, probably considerably. It happens every time anything is moved from government hands into private hands.

There are other benefits that would follow road privatization. The private roads that exist now have fewer accidents than public roads, probably in part because they're better maintained: If private road builders let potholes remain, get reputations for high accident rates, or do repairs during rush hour, they have to deal with complaints and with people choosing other roads.

Pollution and pollution controls on automobiles would also be handled by road privatization. If auto pollution were to grow too thick, people living near the offending roads would sue the biggest, most obvious target: the road owners. Road owners would therefore charge higher fees for cars without up-to-date inspection stickers. Auto manufacturers would build pollutioncontrol equipment into cars, and advertise how cleanly they run. Automakers do this already, but under the gun of a government that mandates pollution levels and what kind of pollution controls manufacturers use. Without government interference, engineers would be free to compete to provide different technologies to reduce costs and improve horsepower while providing cleaner burning engines. With the inspection stickers being coded to your automobile's age, manufacturer, and model, there might be a separate pollution rider on your monthly statement. Drivers of new Hondas might see a discount, while drivers of old belchers would pay fees that might be higher than the road tolls themselves.

Isn't the market grand? I'm just one person describing likely market solutions; imagine how efficient solutions would become with 280 million minds working on the issue. Reality continues to provide apparent (but not real) obstacles in the mind of the statist: What about new roads, and the thorny problem of eminent domain? Again, the market comes to the rescue. First, since roads are already there, getting started would involve nothing other than entrepreneurs bidding to take over. (Who would they pay when they buy the roads? U.S. government creditors. Once the government sells all its land, the government's vote-buying debt might be paid off.) Even so, new roads are being built everywhere today, by developers who buy land and convert it to new uses.

Land alongside interstates is cheap in some places, and expensive in others. Widening rural interstates wouldn't be a problem. (There would be some correlation between road tolls and road quality/congestion.) Prices would be higher where road owners face little competition, such as in Alaska, but lower where people have alternatives. If prices for rural stretches of interstate get too high, people will use planes, trains, and buses, and road owners will be forced to lower their prices. If you think you're getting the interstate for free, think again: Those gas taxes mean you're paying one to two cents per mile now.

Anyone who wanted to build a new interstate would face the huge task of buying up land crossing perhaps hundreds of miles. Widening existing highways would be more likely. In Los Angeles and other large cities where traffic is consistently choked, road owners would have the incentive, and plenty of funds, to buy property along highways so they could widen them. Owners would also have incentives to improve interchanges, such as Spaghetti Junction in Atlanta. Roads would improve overall. (I interviewed a county road engineer years ago, and he told me they design circular entrance ramps deliberately with varying radii—experienced as odd changes in the curve, which force you to constantly readjust the steering wheel—to "keep drivers awake." How many of us have trouble keeping focused for fifteen seconds on a curving entrance ramp?)

Without having had forcible government the last two hundred years, would the interstate system have come about? We can't know, but we shouldn't care. Without an interstate system, we would still have plenty of commerce; probably more than we have now (when railroads were built—largely with the help of government subsidies—much of the land between the coasts was unclaimed, and thus open to use. Much would still be unclaimed today without government.) We have what we have. Abolishing government is the way to improve what we have.

And what about Cirrus et al. knowing your whereabouts? This possible privacy problem is already being solved by the market. First, most private roads likely would not even charge a toll. Streets in business districts would be maintained by local merchants, who would have incentive to keep the roads in good order and to allow free access. Residential streets, for their part, would not be so highly traveled that the residents would have an incentive to charge tolls. Hence, there would be no road sensors recording vehicles' movements in business and residential areas.

Second, the market already has developed digital cash, similar to a prepaid long-distance card. Just as you can now purchase long-distance telephone minutes anonymously at convenience stores, you would be able to purchase toll-road miles with cash, and stick the magnetic miles card under a fender. Road owners and transaction-management networks would never have to know who you are. This technology is already in widespread use. Only if you prefer to drive on credit, and be billed monthly by a network management provider, would there be any possibility of an electronic record of your whereabouts. And there would be a market even for this—for example, many young, single women, such as college students and young professionals, might desire that someone, somehow can always find out where they are.

But all these issues are concerns of mere technology. New products, services, and capabilities that flow from the digital revolution can make our lives more convenient and comfortable, but only if we're allowed to use them. The most important point here is that the facts of human life that recommend road privatization have nothing to do with technology. They arise from human nature—from the fact that we have unlimited needs and wants, and prefer to act voluntarily and peaceably to pursue them. The technology of the moment is irrelevant.

This is where Walter Block comes in. For the first time in one volume, he elucidates the human and economic factors that show that roads, and whatever parts of our lives depend on them, get better with privatization—just as does every other product or service you can name.

Mainstream economists have for generations voiced predictable objections to road privatization, such as externalities (e.g., pollution), eminent domain, and public safety. Walter shows in this book that, regardless of technology, the best solutions are possible, not to mention inevitable, only when property is truly and securely private. Block's unique contributions are his explanations of the mechanisms by which secure private property ownership ultimately solves pollution, safety, and other problems better than any system involving "public" property.

The classical economic sleight-of-hand used by generations of economists and government employees and agencies to justify continued government control of roads is undone handily with use of the right economic insights. Walter Block is today's leader in elucidating just those insights in just this context.

> Brad Edmunds Montgomery, Alabama

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A significant part of this book has previously been published. There will thus inevitably be some repetition in the pages that follow. But in view of the importance of the subject, and the desire to preserve these earlier publications, no attempt has been made to rectify this situation. I beg the reader's patience in this regard.

Introduction

ost people who read this book will dismiss it as the ravings of a lunatic. For I advocate the complete, total and full privatization of all roads, streets, highways, byways, avenues and other vehicular thoroughfares. And I am serious about this, deadly serious.

This is so far off the radar of public policy analysis and apart from the concerns of politicians, pundits, and commentators, that few people will take it seriously. Do not be one of them. Your very life may be at stake. For over 40,000 people die on the nation's roadways every year (see appendix), and you or a loved one might one day join this horrid list.

Do not be mislead by the oft made contention that the actual cause of highway fatalities is speed, drunkenness, vehicle malfunction, driver error, etc. These are only proximate causes. The ultimate cause of our dying like flies in traffic accidents is that those who own and manage these assets supposedly in the name of the public—the various roads bureaucrats—cannot manage their way out of the proverbial paper bag. It is they and they alone who are responsible for this carnage.

This does not mean that were thoroughfares placed in private hands that the death toll would be zero. It would not. But, at least, every time the life of someone was tragically snuffed out, someone in a position to ameliorate these dangerous conditions would lose money, and this tends, wonderfully, to focus the minds of the owners. This is why we do not have similar problems with bananas, baskets, and bicycles, and the myriad of other goods and services supplied to us by a (relatively) free enterprise system.

If the highways were now commercial ventures as once in our history they were, and upward of 40,000 people were killed on them annually, you can bet your bottom dollar that Ted Kennedy and his ilk would be holding Senate hearings on the matter. Blamed would be "capitalism," "markets," "greed," i.e., the usual suspects. But, in the event, it is the public authorities who are responsible for this slaughter of the innocents.

Is there anything of a practical nature that can be done to solve the problem in the short run? Probably not. But do not give up hope. Right before the decline and fall of communism in Russia and Eastern Europe, there were few who thought this scourge would soon be removed.

Another benefit of the present book is that it attempts to demonstrate the viability, efficaciousness, and, yes, morality, of the private enterprise system, addressing a difficult case in point. If we can establish that private property and the profit motive can function even in "hard cases" such as roads, the better we can make the overall case on behalf of free enterprise.

The book is organized according to the following plan. The basic theory of privatization, specifically as applied to roadways, is put forth. The case on behalf of commercializing this sector of the economy is made on the basis of improving road safety and decreasing traffic congestion. Next, this theory is applied to a whole host of related issues, such as automobile insurance, holding parades on public streets, and immigration. Our present institutional arrangements are characterized as socialistic. Then, we assume as a given the goal of privatizing traffic arteries, and instead focus on the very complex process of getting to there from here: what are the problems of transition, how would the authorities move from a situation under their control to market determination, etc.? The next part of the book is given over to dealing with objections to the foregoing. Critiques are launched at several commentators, including Gordon Tullock, Lawrence White, Herbert Mohring, and Robert Poole. This book concludes with an interview conducted with me by several Canadian libertarians.

Part I

The Theory

1 Free-Market Transportation: Denationalizing the Roads^{*}

INTRODUCTION

where a government to demand the sacrifice of 46,700 citizens¹ each year, there is no doubt that an outraged public would revolt. If an organized religion were to plan the immolation of 523,335 of the faithful in a decade,² there is no question that it would be toppled. Were there a Manson-type cult that murdered 790 people to celebrate Memorial Day, 770 to usher in the Fourth of July, 915 to commemorate Labor Day, 960 at Thanksgiving, and solemnized Christmas with 355 more

^{*}This chapter first appeared as Walter Block, "Free Market Transportation: Denationalizing the Roads," *Journal of Libertarian Studies* 3, no. 2 (Summer, 1979): 209–38. The author wishes to express a debt of gratitude to Charles G. Koch and Edward H. Crane III of the Cato Institute, without whose efforts this work could not have been undertaken.

¹The number of people who were victims of motor vehicle accidents in 1976, in *Accident Facts* (Chicago: National Safety Council, 1977), p. 13.

²The number of road and highway deaths in the decade, 1967–1976, in ibid.

deaths,³ surely the *New York Times* would wax eloquent about the carnage, calling for the greatest manhunt this nation has ever seen. If Dr. Spock were to learn of a disease that killed 2,077 children⁴ under the age of five each year, or were New York City's Andrew Stein to uncover a nursing home that allowed 7,346 elderly people to die annually,⁵ there would be no stone unturned in their efforts to combat the enemy. To compound the horror, were private enterprise responsible for this butchery, a cataclysmic reaction would ensue: investigation panels would be appointed, the justice department would seek out antitrust violations, company executives would be jailed, and an outraged hue and cry for nationalization would follow.

The reality, however, is that the government is responsible for such slaughter—the toll taken on our nation's roadways. Whether at the local, state, regional, or national level, it is government that builds, runs, manages, administers, repairs, and plans for the roadway network. There is no need for the government to take over; it is already fully in charge, and with a vengeance. I believe there is a better way: the marketplace. Explaining how a free market can serve to provide road and highway service, as it has furnished us with practically every other good and service at our disposal, is the objective of this chapter.

Before dismissing the idea as impossible, consider the grisly tale of government road management. Every year since 1925 has seen the death of more than 20,000 people. Since 1929, the yearly toll has never dropped below 30,000 per year. In 1962, motor vehicle deaths first reached the 40,000 plateau and have not since receded below that level. To give just a hint of the callous disregard in which human life is held by the highway authorities, consider the following statement about the early days of government highway design and planning:

³Data for 1968, in ibid., p. 57.

⁴Data for 1969, in ibid., p. 60.

⁵Data for 1969, in ibid.

The immediate need was to get the country out of the mud, to get a connected paved road system that would connect all county seats and population centers with mudless, dustless roads. These were the pioneering years. *Safety, volume, and traffic operations were not considered a problem*. But by the middle thirties there was an awakening and a recognition that these elements were vital to efficient and safe operation of the highway system.⁶

By the "middle thirties," indeed, nearly one-half million people had fallen victim to traffic fatalities.⁷

Rather than invoking indignation on the part of the public, government management of the roads and highways is an accepted given. Apart from Ralph Nader, who only inveighs against unsafe vehicles (only a limited part of the problem), there is scarcely a voice raised in opposition.

The government seems to have escaped opprobrium because most people blame traffic accidents on a host of factors other than governmental mismanagement: drunkenness, speeding, lack of caution, mechanical failures, etc. Typical is the treatment undertaken by Sam Peltzman, who lists no less than thirteen possible causes of accident rates without even once mentioning the fact of government ownership and management.

Vehicle speed . . . alcohol consumption . . . the number of young drivers, changes in drivers' incomes . . . the money costs of accidents. . the average age of cars . . . the ratio of new cars to all cars (because it has been suggested that while drivers familiarize themselves with their new cars, accident risk may increase)

⁶Statement by Charles M. Noble, distinguished traffic engineer who served as director of the Ohio Department of Highways, chief engineer of the New Jersey Turnpike, and was recipient of the Matson Memorial Award for Outstanding Contributions to the Advancement of Traffic Engineering. Charles M. Noble, "Highway Design and Construction Related to Traffic Operations and Safety," *Traffic Quarterly* (November 1971): 534; emphasis added.

⁷Accident Facts, p. 13.

... traffic density ... expenditures on traffic-law enforcement by state highway patrols ... expenditures on roads ... the ratio of imports to total cars (because there is evidence that small cars are more lethal than large cars if an accident occurs) ... education of the population ... and the availability of hospital care (which might reduce deaths if injury occurs).⁸

Further, David M. Winch cites another reason for public apathy: the belief that "[m]any persons killed on the roads are partly to blame for their death."⁹ True, many victims of road accidents are partly responsible. But this in no way explains public apathy toward their deaths. For people killed in New York City's Central Park during the late evening hours are also at least partially to blame for their own deaths; it takes a monumental indifference, feeling of omnipotence, absent-mindedness or ignorance to embark upon such a stroll. Yet the victims are pitied, more police are demanded, and protests are commonly made.

The explanation of apathy toward highway mismanagement that seems most reasonable is that people simply do not see any alternative to government ownership. Just as no one "opposes" or "protests" a volcano, which is believed to be beyond the control of man, there are very few who oppose governmental roadway control. Along with death and taxes, state highway management seems to have become an immutable, if unstated, fact. The institution of government has planned, built, managed and maintained our highway network for so long that few people can imagine any other workable possibility. While Peltzman puts his finger on the proximate causes of highway accidents, such as excessive speed and alcohol, he has ignored the agency, government, which has set itself up as the manager of the roadway apparatus. This is akin to blaming a snafu in a restaurant on the fact that the oven went out, or that the waiter fell on a slippery

⁸Sam Peltzman, *Regulation and Automobile Safety* (Washington, D.C.: American Enterprise Institute for Public Policy Research, 1975), pp. 8–9.

⁹David M. Winch, *The Economics of Highway Planning* (Toronto: University of Toronto Press, 1963), p. 87.

floor with a loaded tray. *Of course* the proximate causes of customer dissatisfaction are uncooked meat or food in their laps. Yet how can these factors be blamed, while the part of restaurant management is ignored? It is the restaurant manager's job to insure that the ovens are performing satisfactorily, and that the floors are properly maintained. If he fails, the blame rests on his shoulders, not on the ovens or floors. We hold the trigger man responsible for murder, not the bullet.

The same holds true with highways. It may well be that speed and alcohol are deleterious to safe driving; but it is the road manager's task to ascertain that the proper standards are maintained with regard to these aspects of safety. If unsafe conditions prevail in a private, multi-story parking lot, or in a shopping mall, or in the aisles of a department store, the entrepreneur in question is held accountable. It is he who loses revenue unless and until the situation is cleared up. It is logically fallacious to place the blame for accidents on unsafe conditions, while ignoring the manager whose responsibility it is to ameliorate these factors. It is my contention that all that is needed to virtually eliminate highway deaths is a non-utopian change, in the sense that it could take place now, even given our present state of knowledge, if only society would change what it can control: the institutional arrangements that govern the nation's highways.

ANSWERING THE CHARGE "IMPOSSIBLE"

Before I explain how a fully free market in roads might function, it appears appropriate to discuss the reasons why such a treatment is likely not to receive a fair hearing.

A fully private market in roads, streets, and highways is likely to be rejected out of hand, first because of psychological reasons. The initial response of most people goes something as follows:

Why, that's impossible. You just can't do it. There would be millions of people killed in traffic accidents; traffic jams the likes of which have never been seen would be an everyday occurrence; motorists would have to stop every twenty-five feet and put one-hundredth of a penny in each little old lady's toll box. Without eminent domain, there would be all sorts of obstructionists setting up roadblocks in the oddest places. Chaos, anarchy, would reign. Traffic would grind to a screeching halt, as the entire fabric of the economy fell about our ears.

If we were to divide such a statement into its cognitive and psychological (or emotive) elements, it must be stated right at the outset that there is nothing at all reprehensible about the intellectual challenge. Far from it. Indeed, if these charges cannot be satisfactorily answered, the whole idea of private roads shall have to be considered a failure.

There is also an emotive element which is responsible, perhaps, not for the content of the objection, but for the hysterical manner in which it is usually couched and the unwillingness, even, to consider the case. The psychological component stems from a feeling that government road management is inevitable and that any other alternative is therefore unthinkable. It is this emotional factor that must be flatly rejected.

We must realize that just because the government has always¹⁰ built and managed the roadway network, this is not necessarily inevitable, the most efficient procedure, nor even justifiable. On the contrary, the state of affairs that has characterized the past is, logically, almost entirely irrelevant. Just because "we have 'always' exorcised devils with broomsticks in order to cure disease" does not mean that this is the best way.

We must ever struggle to throw off the thralldom of the status quo. To help escape "the blinds of history" consider this statement by William C. Wooldridge:

¹⁰Strictly speaking, this is far from the truth. Before the nineteenth century, most roads and bridges in England and the U.S. were built by quasiprivate stock companies.

Several years ago I was a student at St. Andrews University in Scotland, and I found that placing a telephone call constituted one of the environment's greatest challenges. Private phones were too expensive to be commonplace, so a prospective telephoner first had to accumulate four pennies for each call he desired to make, a project complicated by the absence of any nearby commercial establishment open beyond the hour of six or seven. Next, the attention of an operator had to be engaged, in itself a sometimes frustrating undertaking, whether because of inadequate manpower or inadequate enthusiasm on the switchboard I never knew. Finally, since the landward side of town apparently boasted no more telephones than the seaward, a long wait frequently followed even a successful connection, while whoever had answered the phone searched out the party for whom the call was intended. A few repetitions of this routine broke my telephone habit altogether, and I joined my fellow students in communicating in person or by message when it was feasible, and not communicating at all when it was not.

Nevertheless, the experience rankled, so I raised the subject one night in the cellar of a former bishop's residence, which now accommodates the student union's beer bar. Why were the telephones socialized? Why weren't they a privately owned utility, since there was so little to lose in the way of service by denationalization?

The reaction was not, as might be expected, in the least defensive, but instead positively condescending. It should be selfevident to even a chauvinistic American that as important a service as the telephone system could not be entrusted to private business. It was inconceivable to operate it for any other than the public interest. Who ever had heard of a private telephone company?

That incredulity slackened only slightly after a sketchy introduction to Mother Bell (then younger and less rheumatic than today), but at least the American company's example demonstrated that socialized telephone service was not an invariable given in the equation of the universe. My friends still considered the private telephone idea theoretically misbegotten and politically preposterous, but no longer could it remain literally inconceivable, for there we all were sitting around a table in the bishop's basement talking about it. It had been done. It might—heaven forefend—be done again. The talk necessarily shifted from possibility to desirability, to what lawyers call the merits of the case.

Like the St. Andrews students, Americans show a disposition to accept our government's customary functions as necessarily the exclusive province of government; when city hall has always done something, it is difficult to imagine anyone else doing it.

When an activity is being undertaken for the first time, the operation of the Telstar communications satellite, for instance, people keenly feel and sharply debate their option for public or private ownership. Discussion of the costs and advantages of each alternative accompanies the final choice. But once the choice is made and a little time passes, an aura of inevitability envelops the status quo, and consciousness of any alternative seeps away with time.

Today, most Americans probably feel the telegraph naturally belongs within the private sphere, and few doubt the Post Office should naturally be a public monopoly. "Naturally," however, in such a context means only that's-the-way-it's-beenfor-as-long-as-we-can-remember, an Americanized version of Pope's declaration that "Whatever is is right." Yet few could think of a convincing a priori rationale for distinguishing the postal from the telegraphic mode of communication. At least one Postmaster General could not: in 1845 his Annual Report prophesied intolerable competition from the telegraph and suggested it might appropriately be committed to the government. At that early stage in its history, the telegraph might conceivably have become a government monopoly for the same reasons the Post Office already was, but the mere passage of time has obliterated any consideration of whether they were good reasons or bad reasons.¹¹

¹¹William C. Wooldridge, *Uncle Sam, The Monopoly Man* (New Rochelle, N.Y.: Arlington House, 1970), pp. 7–9.

In advocating a free market in roads, on one level, we shall be merely arguing that there is nothing unique about transportation; that the economic principles we accept as a matter of course in practically every other arena of human experience are applicable here too. Or at the very least, we cannot suppose that ordinary economic laws are *not apropos* in road transportation until after the matter has been considered in some detail.

Says Gabriel Roth:

[T]here is a[n] approach to the problem of traffic congestion the economic approach—which offers a rational and practical solution. . . . The first step is to recognize that road space is a scarce resource. The second, to apply to it the economic principles that we find helpful in the manufacture and distribution of other scarce resources, such as electricity or motor cars or petrol. There is nothing new or unusual about these principles, nor are they particularly difficult. *What is difficult is to apply them to roads, probably because we have all been brought up to regard roads as community assets freely available to all comers.* The difficulty does not lie so much in the technicalities of the matter, but rather in the idea that roads can usefully be regarded as chunks of real estate.¹²

The highway situation can be improved substantially by visualizing the similarities between the highway problem and a host of comparable problems to which economists have applied some rather ancient ideas: namely, those of "good old supply and demand" analysis. (O.H. Brownlee and Walter W. Heller, "Highway Development and Financing," *American Economic Review* [May 1956]: 233)

The provision of highways involves basically the same problems as any other economic activity. Scarce resources must be used to satisfy human wants by the provision of goods and services, and decisions must be made as to how much of our resources will be devoted to one particular service, and who is going to make the necessary sacrifice. (Winch, *The Economics of Highway Planning*, p. 141)

¹²Gabriel Roth, *Paying for Roads: The Economics of Traffic Congestion* (Middlesex, England: Penguin, 1967), p. 16; emphasis added. See also:

Unfortunately, even those economists who, like Roth, call explicitly for a consideration of the similarities between roads and other goods are unwilling to carry the analogy through to its logical conclusion: free-enterprise highways and streets. Instead, they limit themselves to advocacy of road pricing, but to be administered, always, by governmental authorities.

What reasons are there for advocating the free-market approach for the highway industry? First and foremost is the fact that the present government ownership and management has failed. The death toll, the suffocation during urban rush hours, and the poor state of repair of the highway stock are all eloquent testimony to the lack of success which has marked the reign of government control. Second, and perhaps even more important, is a reason for this state of affairs. It is by no means an accident that government operation has proven to be a debacle and that private enterprise can succeed where government has failed.

It is not only that government has been staffed with incompetents. The roads authorities are staffed, sometimes, with able management. Nor can it be denied that at least some who have achieved high rank in the world of private business have been incompetent. The advantage enjoyed by the market is the automatic reward and penalty system imposed by profits and losses. When customers are pleased, they continue patronizing those merchants who have served them well. These businesses are thus

Many of the characteristics that are held to make transportation "different" are in fact found in other industries as well, and . . . the same forms of analysis that are applicable in other industries can be utilized as well for transportation. Thus complementarity, or joint production, as between forward and back hauls, has its counterpart in the joint production of hides and meat from the same animal. Perishability is greater than from fresh produce, but less, in many cases, than for a newspaper. Congestion occurs in supermarkets, and externalities or "neighborhood effects" are pervasive. Customer time cost is involved in getting a haircut. (William Vickrey, "Review of Herbert Mohring, *Transportation Economics*" [unpublished manuscript])

allowed to earn a profit. They can prosper and expand. Entrepreneurs who fail to satisfy, on the other hand, are soon driven to bankruptcy.

This is a continual process repeated day in, day out. There is always a tendency in the market for the reward of the able and the deterrence of those who are not efficient. Nothing like perfection is ever reached, but the continual grinding down of the ineffective and rewarding of the competent, brings about a level of managerial skill unmatched by any other system. Whatever may be said of the political arena, it is one which completely lacks this market process. Although there are cases where capability rises to the fore, there is no continual process which promotes this.

Because this is well known, even elementary, we have entrusted the market to produce the bulk of our consumer goods and capital equipment. What is difficult to see is that this analysis applies to the provision of roads no less than to fountain pens, frisbees, or fishsticks.

A FREE MARKET IN ROADS

Let us now turn to a consideration of how a free market in roads might operate.¹³ Along the way, we will note and counter the intellectual objections to such a system. All transport thoroughfares would be privately owned: not only the vehicles, buses, trains, automobiles, trolleys, etc., that travel upon them, but the very roads, highways, byways, streets, sidewalks, bridges, tunnels, and crosswalks themselves upon which journeys take place. The transit corridors would be as privately owned as is our fast food industry.

¹³The present author wishes to express a debt of gratitude to the two trailblazers into this subject: Jarret B. Wollstein, *Public Services under Laissez Faire* (New York: Arno Press, 1974), and Murray N. Rothbard, *For a New Liberty* (New York: Macmillan, 1973), pp. 202–18.

As such, all the usual benefits and responsibilities that are incumbent upon private enterprise would affect roads. The reason a company or individual would want to build or buy an already existing road would be the same as in any other business-to earn a profit. The necessary funds would be raised in a similar manner—by floating an issue of stock, by borrowing, or from past savings of the buyer. The risks would be the sameattracting customers and prospering, or failing to do so and going bankrupt. Likewise for the pricing policy; just as private enterprise rarely gives burgers away for free, use of road space would require payment. A road enterprise would face virtually all of the problems shared by other businesses: attracting a labor force, subcontracting, keeping customers satisfied, meeting the price of competitors, innovating, borrowing money, expanding, etc. Thus, a highway or street owner would be as much a businessman as any other, with much the same problems, opportunities, and risks.

In addition, just as in other businesses, there would be facets peculiar to this particular industry. The road entrepreneur would have to try to contain congestion, reduce traffic accidents, plan and design new facilities in coordination with already existing highways as well as with the plans of others for new expansion. He would have to set up the "rules of the road" so as best to accomplish these and other goals. The road industry would be expected to carry on each and every one of the tasks now undertaken by public roads authorities: fill potholes, install road signs, guard rails, maintain lane markings, repair traffic signals, and so on for the myriad of "road furniture" that keeps traffic moving.

Applying the concepts of profit and loss to the road industry, we can see why privatization would almost certainly mean a gain compared to the present, nationalized system of road management.

As far as safety is concerned, presently there is no road manager who loses financially if the accident rate on "his" turnpike increases, or is higher than other comparable avenues of transportation. A civil servant draws his annual salary regardless of the accident toll piled up under his domain. But if he were a private owner of the road in question, in competition with numerous other highway companies (as well as other modes of transit such as airlines, trains, boats, etc.), completely dependent for financial sustenance on the voluntary payments of satisfied customers, then he would indeed lose out if his road compiled a poor safety record (assuming that customers desire, and are willing to pay for, safety). He would, then, have every incentive to try to reduce accidents, whether by technological innovations, better rules of the road, improved methods of selecting out drunken and other undesirable drivers, etc. If he failed, or did less well than his competition, he eventually would be removed from his position of responsibility. Just as we now expect better mousetraps from a private enterprise system which rewards success and penalizes failure, so could we count on a private ownership setup to improve highway safety. Thus, as a partial answer to the challenge that private ownership would mean the deaths of millions of people in traffic accidents, we reply, "There are, at present, millions of people who have been slaughtered on our nation's highways; a changeover to the enterprise system would lead to a precipitous decline in the death and injury rate, due to the forces of competition."

Another common objection to private roads is the spectre of having to halt every few feet and toss a coin into a toll box. This simply would not occur on the market. To see why not, imagine a commercial golf course operating on a similar procedure: forcing the golfers to wait in line at every hole, or demanding payment every time they took a swipe at the ball. It is easy to see what would happen to the cretinous management of such an enterprise: it would very rapidly lose customers and go broke.

If roads were privately owned, the same process would occur. Any road with say, five hundred toll booths per mile, would be avoided like the plague by customers, who would happily patronize a road with fewer obstructions, even at a higher money cost per mile. This would be a classical case of economies of scale, where it would pay entrepreneurs to buy the toll collection rights from the millions of holders, in order to rationalize the system into one in which fewer toll gates blocked the roads. Streets that could be so organized would prosper as thoroughfares; others would not. So even if the system somehow began in this patchwork manner, market forces would come to bear, mitigating the extreme inefficiency.

There is no reason, however, to begin the market experiment in this way. Instead of arbitrarily assigning each house on the block a share of the road equal to its frontage multiplied by onehalf the width of the street in front of it (the way in which the previous example was presumably generated in someone's nightmare vision), there are other methods more in line with historical reality and with the libertarian theory of homesteading property rights.

One scenario would follow the shopping center model: a single owner-builder would buy a section of territory and build roads and (fronting them) houses. Just as many shopping center builders maintain control over parking lots, malls, and other "in common" areas, the entrepreneur would continue the operation of common areas such as the roads, sidewalks, etc. Primarily residential streets might be built in a meandering, roundabout manner replete with cul-de-sacs, to discourage through travel. Tolls for residents, guests, and deliveries might be pegged at low levels, or be entirely lacking (as in the case of modern shopping centers), while through traffic might be charged at prohibitive rates. Standing in the wings, ensuring that the owner effectively discharges his responsibilities, would be the profit and loss system.

Consider now a road whose main function is to facilitate through traffic. If it is owned by one person or company, who either built it or bought the rights of passage from the previous owners, it would be foolish for him to install dozens of toll gates per mile. In fact, toll gates would probably not be the means of

¹⁴William Vickrey, "Pricing and Resource Allocation in Transportation and Public Utilities," *American Economic Review* (May 1963): 452; and "Breaking the Bottleneck by Sophisticated Pricing of Roadway Use," *General Motors Quarterly* (Spring, 1974): 24.

collection employed by a road owner at all. Now there exist highly inexpensive electrical devices¹⁴ which can register the passage of an automobile past any fixed point on a road. Were suitable identifying electronic tapes attached to the surface of each road vehicle, there would be no need for a time-wasting, labor-costly system of toll collection points. Rather, as the vehicle passes the check point, the electrical impulse set up can be transmitted to a computer which can produce one monthly bill for all roads used, and even mail it out automatically. Road payments could be facilitated in as unobtrusive a manner as utility bills are now.

Then there is the eminent domain challenge: the allegation that roads could not be efficiently constructed without the intermediation of government-imposed eminent domain laws which are not at the disposal of private enterprise. The argument is without merit.

We must first realize that even with eminent domain, and under the system of government road construction, there are still limits as to where a new road may be placed. Not even a government could last long if it decided to tear down all the skyscrapers in Chicago's Loop in order to make way for yet another highway. The logic of this limitation is obvious: it would cost billions of dollars to replace these magnificent structures; a new highway near these buildings, but one which did not necessitate their destruction, might well be equally valuable, but at an infinitesimal fraction of the cost.

With or without eminent domain, then, such a road could not be built. Private enterprise could not afford to do so, because the gains in siting the road over carcasses of valuable buildings would not be worthwhile; nor could the government accomplish this task, while there was still some modicum of common sense prohibiting it from operating completely outside of any economic bounds.

It is true that owners of land generally thought worthless by other people would be able to ask otherwise exorbitant prices from a developer intent upon building a straight road. Some of these landowners would demand high prices because of psychic attachment (e.g., the treasured, old homestead); others solely because they knew that building plans called for their particular parcels, and they were determined to obtain the maximum income possible.

But the private road developer is not without defenses, all of which will tend to lower the price he must pay. First, there is no necessity for an absolutely straight road, nor even for one that follows the natural contours of the land. Although one may prefer, on technical grounds, path A, it is usually possible to utilize paths B to Z, all at variously higher costs. If so, then the cheapest of these alternatives provides an upper limit to what the owners along path A may charge for their properties. For example, it may be cheaper to blast through an uninhabited mountain rather than pay the exorbitant price of the farmer in the valley; this fact tends to put a limit upon the asking price of the valley farmer.

Second, the road developer, knowing that he will be satisfied with any of five trajectories, can purchase options to buy the land along each site. If a recalcitrant holdout materializes on any one route, he can shift to his second, third, fourth or fifth choice. The competition between owners along each of these passageways will tend to keep the price down.

Third, in the rare case of a holdout who possesses an absolutely essential plot, it is always possible to build a bridge over this land or to tunnel underneath. Ownership of land does not consist of property rights up to the sky or down to the core of the earth; the owner cannot forbid planes from passing overhead, nor can he prohibit a bridge over his land, as long as it does not interfere with the use of his land. Although vastly more expensive than a surface road, these options again put an upper bound on the price the holdout can insist upon.

There is also the fact that land values are usually influenced by their neighborhood. What contributes to the value of a residence is the existence of neighboring homes, which supply neighbors, friends, and companionship. Similarly, the value of a commercial enterprise is enhanced by the proximity of other businesses, customers, contacts, even competitors. In New York City, the juxtaposition of businesses, for example, stock brokerage firms, flower wholesalers, jewelry exchanges, the garment district, etc., all attest to the value of being located near competitors. If a road 150 feet wide sweeps through, completely disrupting this "neighborliness," much of the value of the stubborn landowner's property is dissipated. The risk of being isolated again puts limitations upon the price which may be demanded.

In an out-of-the-way, rural setting, a projected road may not be expected to attract the large number of cash customers necessary to underwrite lavish expenditures on the property of holdouts. However, it will be easier to find alternative routes in a sparsely settled area. Urban locations present the opposite problem: it will be more difficult to find low-cost alternatives, but the expected gains from a road which is expected to carry millions of passengers may justify higher payments for the initial assemblage.

Of course, eminent domain is a great facilitator; it eases the process of land purchase. Seemingly, pieces of land are joined together at an exceedingly low cost. But the real costs of assemblage are thereby concealed. Landowners are forced to give up their property at prices determined to be "fair" by the federal bureaucracy, not at prices to which they voluntarily agree. While it appears that private enterprise would have to pay more than the government, this is incorrect. The market will have to pay the full, voluntary price, but this will, paradoxically, be less than the government's real payment (its money payments plus the values it has forcibly taken from the original owners). This is true because the profit incentive to reduce costs is completely lacking in state "enterprise." Furthermore, the extra costs undergone by the government in the form of bribes, rigged bidding, cost-plus contracts, etc., often would bloat even limited government money outlays past the full costs of private road developers.

Another objection against a system of private roads is the danger of being isolated. The typical nightmare vision runs somewhat as follows: A man buys a piece of land. He builds a house on it. He stocks it with food, and then brings his family to join him. When they are all happily ensconced, they learn that the road fronting their little cottage has been purchased by an unscrupulous street owning corporation, which will not allow him or his family the use of the road at any but an indefinitely high price. The family may "live happily ever after," but only as long as they keep to their own house. Since the family is too poor to afford a helicopter, the scheming road owner has the family completely in his power. He may starve them into submission, if he so desires.

This does indeed appear frightening, but only because we are not accustomed to dealing with such a problem. It could not exist under the present system, so it is difficult to see how it could be solved by free-market institutions. Yet, the answer is simple: no one would buy any plot of land without first insuring that he had the right to enter and leave at will.¹⁵

Similar contracts are now commonplace on the market, and they give rise to no such blockade problems. Flea markets often rent out tables to separate merchandisers; gold and diamond exchanges usually sublet booths to individual, small merchants; desk space is sometimes available to people who cannot afford an entire office of their own. The suggestion that these contracts are unworkable or unfeasible, on the grounds that the owner of the property might prohibit access to his subtenant, could only be considered ludicrous. Any lawyer who allowed a client to sign a lease which did not specify the rights of access in advance would be summarily fired, if not disbarred. This is true in the present, and would also apply in an era of private roads.

¹⁵Says Rothbard:

The answer is that everyone, in purchasing homes or street service in a libertarian society, would make sure that the purchase or lease contract provides full access for whatever term of years is specified. With this sort of "easement" provided in advance by contract, no such sudden blockade would be allowed, since it would be an invasion of the property right of the landowner. (*For a New Liberty*, p. 205)

It is virtually impossible to predict the exact future contour of an industry that does not presently exist. The task is roughly comparable to foretelling the makeup of the airline industry immediately after the Wright Brothers' experiments at Kitty Hawk. How many companies would there be? How many aircraft would each one own? Where would they land? Who would train the pilots? Where could the tickets be purchased? Would food and movies be provided in flight? What kinds of uniforms would be worn by the stewardesses? Where would the financing come from? These are all questions not only impossible to have answered at that time, but ones that could hardly have arisen. Were an early advocate of a "private airline industry" pressed to point out, in minute detail, all the answers in order to defend the proposition that his idea was sound, he would have had to fail.

In like manner, advocates of free market roads are in no position to set up the blueprint for a future private market in transport. They cannot tell how many road owners there will be, what kind of rules of the road they will set up, how much it will cost per mile, how the entrepreneurs will seek to reduce traffic accidents, whether road shoulders will be wider or narrower, or which steps will be taken in order to reduce congestion. Nor can we answer many of the thousands of such questions that are likely to arise.

For one thing, these are not the kinds of questions that can be answered in advance with any degree of precision, and not only in transportation. The same limitations would have faced early attempts to specify industrial setups in computers, televisions, or any other industry. It is impossible to foretell the future of industrial events because, given a free-market situation, they are the result of the actions of an entire, cooperating economy, even though these actions may not be intended by any individual actor.¹⁶ Each person bases his actions on the limited knowledge at his disposal.

¹⁶F.A. Hayek, *The Constitution of Liberty* (Chicago: University of Chicago Press, 1960), p. 160.

Nevertheless, we shall attempt a scenario, though not for the purpose of mapping out, forevermore, the shape of the road market of the future. We realize that such patterns must arise out of the actions of millions of market participants, and will be unknown to any of them in advance. Yet if we are to consider objections to a road market intelligently, we must present a general outline of how such a market might function. We will now consider some problems that might arise for a road market, and some possible solutions.

1. Who will Decide upon the Rules of the Road?

This question seems important because we are accustomed to governments determining the rules of the road. Some people even go so far as to justify the very existence of government on the ground that *someone* has to fashion highway rules, and that government seems to be the only candidate.

In the free market, each road owner will decide upon the rules his customers are to follow, just as nowadays rules for proper behavior in some locations are, to a great extent, determined by the owner of the property in question. Thus, roller and ice skating emporia decide when and where their patrons may wander, with or without skates. Bowling alleys usually require special bowling shoes, and prohibit going past a certain line in order to knock down the pins. Restaurants demand that diners communicate with their waiter and busboy, and not go marching into the kitchen to consult with the chef.

There are no "God-given" rules of the road. While it might have been convenient had Moses been given a list of the ten best rules for the road, he was not. Nor have legislators been given any special dispensations from on high. It is therefore man's lot to discover what rules can best minimize costs and accidents, and maximize speed and comfort. There is no better means of such discovery than the competitive process. Mr. Glumph of the Glumph Highway Company decides upon a set of rules. Each of his competitors decides upon a (slightly) different version. Then the consumer, by his choice to patronize or not, supports one or the other. To the extent that he patronizes Glumph and avoids his competitors, he underwrites and supports Glumph's original decisions. If Glumph loses too many customers, he will be forced to change his rules (or other practices) or face bankruptcy. In this way the forces of the market will be unleashed to do their share in aiding the discovery process. We may never reach the all-perfect set of rules that maximizes the attainment of all conceivable goals, but the tendency toward this end will always operate.

2. If a Free Market in Roads is Allowed and Bankruptcies Occur, What will be Done about the Havoc Created for the People Dependent upon Them?

Bankrupt road companies may well result from the operations of the market. There are insolvencies in every area of the economy, and it would be unlikely for this curse to pass by the road sector. Far from a calamity, however, bankruptcies are paradoxically a sign of a healthy economy.

Bankruptcies have a function. Stemming from managerial error in the face of changing circumstances, bankruptcies have several beneficial effects. They may be a signal that consumers can no longer achieve maximum benefit from a stretch of land used as a highway; there may be an alternative use that is ranked higher. Although the subject might never arise under public stewardship, surely sometime in the past ten centuries there were roads constructed which (from the vantage point of the present) should not have been built; or, even if they were worth building originally, have long since outlasted their usefulness. We want a capacity in our system to acknowledge mistakes, *and then act so as to correct them.* The system of public ownership is deficient, in comparison, precisely because bankruptcy and conversion to a more valuable use never exists as a serious alternative. The mistakes are, rather, "frozen in concrete," never to be changed.

Would we really want to apply the present, nonbankruptcy system now prevailing in government road management to any other industry? Would it be more efficient to maintain every single grocery store, once built, forevermore? Of course not. It is part of the health of the grocery industry that stores no longer needed are allowed to pass on, making room for those in greater demand. No less is true of the roadway industry. Just as it is important for the functioning of the body that dead cells be allowed to disappear, making way for new life, so is it necessary for the proper functioning of our roadway network that some roads be allowed to pass away.

Bankruptcy may serve a second purpose. A business may fail, not because there is no longer any need for the road, but because private management is so inept that it cannot attract and hold enough passengers to meet all its costs. In this case, the function served by bankruptcy proceedings would be to relieve the ineffective owners of the road, put it into the hands of the creditors and, subsequently, into the hands of better management.

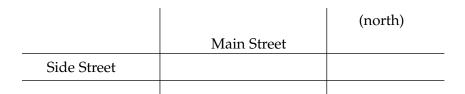
3. How would Traffic Snarls be Countered in the Free Market?

If the roads in an entire section of town (e.g., the upper east side of Manhattan), or all of the streets in a small city were completely under the control of one company, traffic congestion would present no new problem. The only difference between this and the present arrangement would be that a private company, not the government road authority, would be in charge. As such, we could only expect the forces of competition to improve matters.

For example, one frequent blocker of traffic, and one which in no way aids the overall movement of motorists, is the automobile caught in an intersection when the light has changed. This situation arises from entering an intersecting cross street, in the hope of making it across so that, when the light changes, one will be ahead of vehicles turning off that street. In the accompanying figure 1 (see below) a motorist is traveling west along Side Street. Although Side Street west of Main Street is chock full of cars, he nevertheless enters the intersection between Main Street and Side Street; he hopes that, by the time Main Street again enjoys the green light, the cars ahead of him will move forward, leaving room for him to leave the intersection.

All too often, however, what happens is that traffic ahead of him on Side Street remains stationary, and the motorist gets

Figure 1



caught in the middle of the intersection. Then, even when the traffic is signaled to move north on Main Street, it cannot; because of the impatience of our motorist, he and his fellows are now stuck in the intersection, blocking northbound traffic. If this process is repeated on the four intersections surrounding one city block (see figure 2) it can (and does) bring traffic in the entire surrounding area to a virtual standstill.

Currently, government regulations prohibit entering an intersection when there is no room on the other side. This rule is

Broadway	Main Street	
		Side Street
		Maple Street

Figure 2

beside the point. The question is not whether a traffic system legally *calls for* certain actions, but whether this rule succeeds or not. If the mere passage of a law could suffice, all that would be needed to return to the Garden of Eden would be "enabling legislation." What is called for, in addition to the proper rules of the road, is the actual attainment of motorists' conformity with those rules. As far as this problem is concerned, private road companies have a comparative advantage over governments. For, as we have seen, if a government fails in this kind of mission, there is no process whereby it is relieved of its duties; whereas, let a private enterprise fail and retribution, in the form of bankruptcy, will be swift and total. Another street company, and still another, if needed, will evolve through the market process, to improve matters.

It is impossible to tell, in advance, what means the private street companies will employ to rid their territories of this threat.

Just as private universities, athletic stadiums, etc., now enforce rules whose purpose is the smooth functioning of the facility, so might road owners levy fines to ensure obedience to rules. For example, automobiles stuck in an intersection could be registered by the road's computer-monitoring system, and charged an extra amount for this driving infraction, on an itemized bill.¹⁷

4. What Problems would Ensue for Each Street Owned by a Separate Company, or Individual?

It might appear that the problems are insoluble. For each owner would seem to have an incentive to encourage motorists on his own street to try as hard as they can to get to the next block, to the total disregard of traffic on the cross street. (The more vehicles passing through, the greater the charges that can be levied.) Main Street, in this scenario, would urge its patrons, traveling north, to get into the intersection between it and Side Street, so as to pass on when the next light changed. The Side Street management would do the same: embolden the drivers heading west to try to cross over Main Street, regardless, whether there was room on the other side. Each street owner would, in this view, take an extremely narrow stance; he would try to maximize his own profits, and not overly concern himself with imposing costs on the others.

¹⁷I owe this point to David Ramsey Steele, of the Department of Sociology, University of Hull.

The answer to this dilemma is that it could never occur in a free market, based on specified, individual, private property rights. For in such a system, all aspects of the roadway are owned, including the intersection itself. In the nature of things, in a full, private-property system, the intersection must be owned either by the Main Street Company, the Side Street Company, or by some third party. As soon as the property rights to the intersection between the two streets are fully specified (in whichever of these three ways) all such problems and dilemmas cease.

Suppose the Main Street Company had been the first on the scene. It is then the full owner of an unbroken chain of property, known as Main Street. Soon after, the Side Street Company contemplates building. Now, the latter company knows full well that all of Main Street is private property. Building a cross street to run over the property of Main Street cannot be justified. The Main Street Company, however, has every incentive to welcome a Side Street, if not to build one itself, for the new street will enhance its own property if patrons can use it to arrive at other places. A city street that has no cross street options does not really function as an access route; it would be more like a limited access highway in the middle of a city. The two companies shall have to arrive at a mutually satisfactory arrangement. Presumably, the Side Street Company will have to pay for the right to build a cross street. On the other hand, if the owners of Main Street intend to use it as a limited access highway, then the Side Street Company shall have to build over it, under it, or around it, but not across it. (As part of the contract between the two parties, there would have to be an agreement concerning automobiles getting stuck in the intersection. Presumably, this would be prohibited.)

Since original ownership by the Side Street Company would be the same analytically as the case we have just considered, but with the names of the companies reversed, we may pass on to a consideration of ownership by a third party.

If the intersection of the two streets is owned by an outsider, then it is he who decides conflicts between the two road companies. Since his interests would best be served by smoothly flowing traffic, the presumption is that the owner of the intersection would act so as to minimize the chances of motorists from either street being isolated in the intersection as the traffic light changed.

This analysis of the ownership situation concerning cross streets and their intersections will enable us to answer several other possibly perplexing problems.

5. How would Green Light Time be Parceled Out under Free Enterprise?

Of course, most street owners, if they had their choice, would prefer the green light for their street 100 percent of the time. Yet, this would be tantamount to a limited access highway. If it is to be a city street, a road must content itself with less. What proportion of red and green lights shall be allotted to each street?

If all the streets in one neighborhood are owned by one company, then it decides this question, presumably with the intention of maximizing its profits. Again, and for the same reasons, we can expect a more effective job from such a "private" owner, than from a city government apparatus.

In the case of intersection ownership by a third party, the two cross street owners will bid for the green-light time. *Ceteris paribus*, the presumption is that the owner of the street with the larger volume of street traffic will succeed in bidding for more of the green-light time. If the owner of the larger volume street refused to bid for a high proportion of green-light time, his customers would tend to patronize competitors—who could offer more green lights, and hence a faster trip.

A similar result would take place with two street owners, no matter what the property dispersal.¹⁸ It is easy to see this if the larger street company owns the intersections. The larger company would simply keep a high proportion (2/3, 3/4, or perhaps

¹⁸We assume away here the presence of psychic income phenomena. See Walter Block "Coase and Demsetz on Private Property Rights," *Journal of Libertarian Studies* 1, no. 2 (Spring, 1977): 111–15.

even 4/5) of green light time for itself, selling only the remaining small fraction to the intersecting side street. But much the same result would ensue if the smaller road owned the common intersections! Although the relatively lightly traveled road company might like to keep the lion's share of the green lights for itself, it will find that it cannot afford to do so. The more heavily traveled street, representing a clientele willing and able in the aggregate to pay far more for green light privileges, will make it extremely tempting for the small street owner to accept a heavy payment, in order to relinquish most of its green light time. In other words, the customers of the main street, through indirect payments via the main street owner, will bid time away from the smaller number of customers using the minor street. This principle is well established in business, and is illustrated every time a firm sublets space, which it could have used to satisfy its own customers, because it receives more income subletting than retaining the premises for its own use.

The provision of staggered traffic lights (the lights continually turn green, for example, as an auto proceeding at 25 mph. approaches them) may present some conceptual difficulties but, again, they are easily overcome. Of course, there are virtually no problems if either one company owns all the roads, or if the main road (the one to be staggered) is continuously owned. The only question arises when the side streets are continuously owned, and it is the main avenues which are to receive the staggered lights. (We are assuming that staggering cannot efficiently be instituted for both north-south and intersecting east-west streets, and that staggering is better placed on the main roads than the side ones.)

Under these conditions, there are several possible solutions. For one, the main avenues, being able to make better use of the staggering system, may simply purchase (or rent) the rights to program the lights so that staggering takes place on the main roads. The side roads, even as owners of the intersections, would only be interested in the proportion of each minute that their lights could remain green; they would be indifferent to the necessity of staggering. Since this is precisely what the main roads desire, it seems that some mutually advantageous agreement could feasibly be made.

Another possibility is that the main roads, better able to utilize the staggering capabilities which intersection ownership confers (and perhaps better able to utilize the other advantages bestowed upon their owners) will simply arrange to purchase the intersections outright. If so, the pattern would change from one where the side street corporations owned the intersections to one in which these came under the possession of the main street companies.

Still another alternative would be integration of ownership. We have no idea as to the optimal size of the road firm (single block, single road, continuous road, small city, etc.), so thoughts in this direction can only be considered speculative. With regard to the ease of coordinating staggered light systems, however, it may well be that larger is better. If so, there will be a market tendency for merger, until these economies are exhausted.

Let us recapitulate. We have begun by indicating the present mismanagement of roads by government. We have claimed that improvements, given the status quo of government management, are not likely to suffice. We have briefly explored an alternative—the free market in road ownership and management and shown how it might deal with a series of problems, and rejected some unsophisticated objections. We are now ready to examine in some detail how private road owners actually might compete in the market place.

HOW PRIVATE ROAD OWNERS MIGHT COMPETE

On the rare occasions when the feasibility of private road ownership has been considered by mainstream economists, it has been summarily rejected, based on the impossibility of competition among private road owners. Seeing this point as almost intuitively obvious, economists have not embarked on lengthy chains of reasoning in refutation. Thus, says Smerk, rather curtly, "Highways could not very well be supplied on a competitive basis, hence they are provided by the various levels of government."¹⁹

Economists, however, are willing to expound, at great length, upon the need for the conditions of perfect competition, if efficiency is to prevail in the private sector. One of the main reasons the idea of private enterprise for roads has not been accepted is the claim that perfect competition cannot exist in this sphere.

A typical example of this kind of thinking is that of Haveman. Says he:

A number of conditions must be met if the private sector of the economy—the market system—is to function efficiently. Indeed, these conditions are essential if the private sector is to perform in the public interest. . . . [I]t is the absence of these conditions which often gives rise to demands for public sector [government] action.²⁰

These conditions of perfect competition are widely known: numerous buyers and sellers, so that no one of them is big enough to "affect price"; a homogeneous good; and perfect information. One problem with the strict requirement that an industry meets these conditions, or else be consigned to government operation, is that there is virtually *no* industry in a real-life economy that would remain in the private sector! Almost *every* industry would have to be nationalized, were the implicit program of Haveman followed. This is easy to see once we realize how truly restrictive are these conditions. The homogeneity requirement, by itself, would be enough to bar most goods and services in a modern, complex economy. Except for thumb tacks, rubber bands, paper clips, and several others of this kind, there are

¹⁹George M. Smerk, *Urban Transportation: The Federal Role* (Bloomington: Indiana University Press, 1965), p. 228.

²⁰Robert Haveman, *The Economics of the Public Sector* (New York: John Wiley and Sons, 1970), p. 23. For a telling criticism of the "control over price" confusion, see Murray N. Rothbard, *Power and Market* (Menlo Park, Calif.: Institute for Humane Studies, 1970), pp. 87–90.

hardly any commodities which do not differ, even slightly, in the eyes of most consumers. Perfect information bars even the farm staples from inclusion in the rubric of perfect competition. This can be seen in a healthy, functioning, Chicago mercantile exchange. If there were full information available to all and sundry, there could be no such commodities market.

Not "affecting price" also presents difficulties. No matter how small a part of the total market a single individual may be, he can always hold out for a price slightly higher than that commonly prevailing. Given a lack of perfect information, there will usually (but not always) be someone willing to purchase at the higher price.

Therefore, the objection to private roads on the ground that they are inconsistent with perfect competition cannot be sustained. It is true that this industry could not maintain the rigid standards required for perfect competition, but neither can most. In pointing out that *perfect competition* cannot apply to roads, we have by no means conceded that *competition* between the various road owners would not be a vigorous, rivalrous process. On the contrary, were we to allow that perfect competition could apply to roads, we would then have to retract our claim that vigorous competition could also ensue. For perfect competition and competition in the ordinary sense of that word (implying rivalry, attempts to entice customers away from one another) are opposites, and inconsistent with each other.²¹

In the perfectly competitive model, each seller can sell all he wants at the given market price. (This is the assumption that each perfect competitor faces a perfectly elastic demand curve.) A typical rendition of this point of view is furnished by Stonier and Hague:

The shape of the average revenue curve [demand curve] of the individual firm will depend on conditions in the market in which the firm sells its product. Broadly speaking, the keener

²¹Cf. Israel Kirzner, *Competition and Entrepreneurship* (Chicago: University of Chicago Press, 1973).

the competition of its rivals and the greater the number of fairly close substitutes for its product, the more elastic will a firm's average revenue curve be. As usual, it is possible to be precise about limiting cases. One limiting case will occur when there are so many competitors producing such close substitutes [the perfectly competitive model] that the demand for the product of each individual firm is infinitely elastic and its average revenue curve is a horizontal straight line. This will mean that the firm can sell as much of its product as it wishes at the ruling market price. If the firm raises its price, then, owing to the ease with which the same, or a very similar, product can be bought from competitors, it will lose all its customers. If the firm were to lower its price, it would be swamped by orders from customers wishing to take advantage of its price reduction. The demand—and the elasticity of demand—for its product would be infinite.²²

Under these conditions, competition in the usual sense of opposition, contention, rivalry, etc., would be completely lacking. Where is the need to attract the customers of other firms to oneself if each so-called "competitor" can "sell as much of its product as it wishes at the ruling market price?" Why go out and compete if one is guaranteed all the customers one could possibly want? If "competition" is supposed to indicate rivalrous behavior, one would think that "perfect competition" would denote a sort of super-contentiousness. Instead, through dint of misleading definition, it means the very opposite: a highly passive existence, where firms do not have to go out and actively seek customers.

Again, we can see that rejecting the possibility of perfect competition for a roads industry is by no means equivalent to conceding that there can be no rivalrous competition between the different road owners. Paradoxically, only if perfect competition

²²Alfred W. Stonier and Douglas C. Hague, *A Textbook of Economic Theory*, 3rd ed. (New York: John Wiley and Sons, 1964), p. 104.

were applicable to roads might we have to consider the possibility that the process of competition might not be adaptable to highways.

In contrast to the passive notion of perfect competition, which has held center stage in the economics profession for the last few decades, there is a new comprehension of competition, in the *market process* sense, that is now drawing increasing attention.

Instead of concentrating on the maximization of ends, assuming given scarce means, as does the Robbinsian²³ notion of perfect competition, the market-process view makes the realistic assumption that the means, although scarce, are in no way given; rather, knowledge of them must actively be sought out. The allocation of scarce means among competing ends is a passive procedure when the means and the ends are known. All that need be done can be accomplished by a suitably programmed computer. But the active seeking out of the ends and the means in the first place is a task that can be accomplished only by entrepreneurial talent: active, not passive. The entrepreneur, denied his crucial role in the perfectly competitive world view, takes center stage in the market-process conception.

Instead of merely economizing, the entrepreneur seeks new and hitherto unknown profit opportunities; not content to allocate given means to already selected ends, the businessman blazes new trails, continually on the lookout for new ends and different means. States Israel Kirzner, one of the pathbreakers in this way of looking at our economy:

We have seen that the market proceeds through entrepreneurial competition. In this process market participants become aware of opportunities for profit: they perceive price discrepancies (either between the prices offered and asked by buyers and sellers of the same good or between the price offered by buyers for a product and that asked by sellers for the necessary

²³See Lionel Robbins, *An Essay on the Nature and Significance of Economic Science* (London: Macmillan, 1932).

resources) and move to capture the difference for themselves through their entrepreneurial buying and selling. Competition, in this process, consists of perceiving possibilities of offering opportunities to other market participants which are more attractive than those currently being made available. It is an essentially rivalrous process . . . (which) . . . consists not so much in the regards decision-makers have for the likely future reactions of their competitors as in their awareness that in making their present decisions they themselves are in a position to do better for the market than their rivals are prepared to do; it consists not of market participants' reacting passively to given conditions, but of their actively grasping profit opportunities by positively changing the existing conditions.²⁴

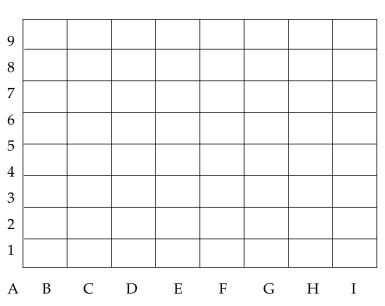
It is this *competitive market process* that can apply to the road industry. Highway entrepreneurs can continually seek newer and better ways of providing services to their customers. There is no reason why street corporations should not actively compete with other such firms for the continued and increased tolls of their patrons. There may not be millions of buyers and sellers of road transport service at each and every conceivable location (nor is there for *any* industry) but this does not preclude vigorous rivalry among the market participants, however many.

How might this work?

Let us consider, for the sake of simplicity, a town laid out into sixty-four blocks, as in a checker board (see figure 3). We can conveniently label the north-south or vertical avenues A through I, and the east-west or horizontal streets 1st through 9th. If a person wants to travel from the junction of First Street and Avenue A to Ninth Street and Avenue I, there are several paths he may take. He might go east along First Street to Avenue I, and then north along Avenue I, to Ninth Street, a horizontal and then a vertical trip. Or he may first go north to Ninth Street, and then east along Ninth Street to Avenue I. Alternatively, he may follow

²⁴Kirzner, *Competition and Entrepreneurship*, pp. 122–23.

Figure 3



North

any number of zigzag paths: east along First Street to Avenue B; north along Avenue B to Second Street; east again, along Second Street to Avenue C; north on C to Third Street, etc. Additionally, there are numerous intermediate paths between the pure zigzag and the one turn.

These possibilities do not open an indefinitely large number of paths, as might be required by the dictates of perfect competition. However, they are sufficiently numerous to serve as the basis for rivalrous competition, where one road entrepreneur, or set of entrepreneurs, seeks to offer better and cheaper channels for transportation than others.

Let us consider the traffic that wishes to go from the junction of First Street and Avenue D to Ninth Street and Avenue D. (Intersections can be seen as whole towns or cities, and streets as actual or potential highways.) If Avenue D is owned by one firm, it might be thought that here, no competition is possible. For the best route is obviously right up Avenue D from First to Ninth Street. Even though this is true, there is still potential competition from Avenues C and E (and even from B and F). If the Avenue D Corporation charges outrageous prices, the customer can use the alternative paths of C or E (or, in a pinch, to B or F, or even A or G, if need be). A second source of potential competition derives, as we have seen, from the possibility of building another road above the road in question, or tunneling beneath it. Consider again the management of Avenue D, which is charging an outrageously high price. In addition to the competition provided by nearby roads, competition may also be provided by double, triple, or quadruple decking the road.

The transportation literature is not unaware of the possibility of double decking roads, tunneling, or adding overhead ramps. For example, Wilfred Owen tells us:

The Port of New York Authority Bus Terminal helps relieve mid-Manhattan traffic congestion. Approximately 90% of intercity bus departures and intercity bus passengers from mid-Manhattan originate at this terminal. The diversion of this traffic on overhead ramps from the terminal to the Lincoln Tunnel has been equivalent to adding three cross-town streets.²⁵

John Burchard lauds double decking as follows:

On one short span of East River Drive [in New York City] there are grassed terraces carried over the traffic lanes right out to the edge of the East River, a special boon for nearby apartment dwellers. The solution was perhaps triggered by the fact that space between the established building lines and the river was so narrow as to force the *superposition of the north and south lanes*. But this did not do more than suggest the opportunity. Applause goes to those who grasped it, but none to those who

²⁵Wilfred Owen, *The Metropolitan Transportation Problem* (Washington, D.C.: Brookings Institution, 1956), p. 119.

with the good example in view so consistently ignored it thereafter.²⁶

From Burchard's limited perspective, it is indeed a mystery that some should have taken this step and that, once it was taken and proven successful, it should not have been emulated. From the vantage point of a market in roads, the mystery disappears: one bureaucrat stumbled, out of necessity, onto a good plan. Having no financial incentive toward cost minimization, no others saw fit to expand this innovation. On the market, given that it is economical to double deck, there will be powerful forces tending toward this result: the profit and loss system.

An authoritative reference to double decking was made by Charles M. Noble, former Director of the Ohio Department of Highways and chief engineer of the New Jersey Turnpike Authority:

It seems clear that, ultimately, many urban freeways will become double or triple-deck facilities, with upper decks carrying the longer distance volumes, possibly with reversible lanes, and probably operating with new interchanges to avoid flooding of existing interchanges and connecting streets.²⁷

It is impossible to foretell exactly how this competition via multiple decking might work out in the real world. Perhaps one company would undertake to build and maintain the roads, as well as the bridgework supporting all the different decks. In this scenario, the road deck owner might sublease each individual deck, much in the same way as the builder of a shopping center does not himself run any of the stores, preferring to sublet them

²⁶John Burchard, "Design and Urban Beauty in the Central City," in James Q. Wilson, ed., *The Metropolitan Enigma* (Garden City, N.Y.: Double-day, 1970), p. 245; emphasis added.

²⁷Noble, "Highway Design and Construction Related to Traffic Operations and Safety," pp. 546–47.

to others. Alternatively, the main owner-builder might decide to keep one road for himself, renting out the other levels to different road companies. This would follow the pattern of the shopping center which builds a large facility for itself, but leases out the remainder of the space.

Whatever the pattern of ownership, there would be several not just one—road companies in the same "place"; they could compete with each other. If Avenue D, as in our previous example, becomes multiple decked, then traveling from First Street and Avenue D to Ninth Street and Avenue D need not call for a trip along Avenue C or E, in order to take advantage of competition. One might also have the choice between levels w, x, y, z, all running over Avenue D!

Let us consider the objections of Z. Haritos:

There is joint road consumption by consumers with different demand functions. The road is not as good as steel which may be produced to different specifications of quality and dimensions. The economic characteristics necessitate the production of one kind of road for all users at any given place.²⁸

This statement is at odds with what we have just been saying. In our view, the double or triple decking of roads allows for the production of at least several kinds of road along any given roadway. We would then be forced to reject Haritos's contention. One point of dispute is the equivocation in his use of the word "place."

For in one sense, Haritos is correct. If we define "place" as the entity within which two different things cannot possibly exist, then logic forces us to conclude that two different roads cannot exist in the same place. But by the same token, this applies to steel as well. Contrary to Haritos, a road occupies the same logical position as steel. If roads cannot be produced to different

²⁸Z. Haritos, "Theory of Road Pricing," 13 *Transportation Journal* (Spring, 1974): 57.

specifications of quality and dimensions at any given place, then neither can steel.

But if we reverse matters, and use the word "place" in such a way that two different things (two different pieces of steel, with different specifications) can exist in one place (side by side, or close to each other) then steel may indeed be produced to different specifications at any given place, but so may roads! For many different roads, through the technique of multiple decking, can flow along the same pathway, or exist in the same "place."

Another objection charges that competition among roadway entrepreneurs would involve wasteful duplication. Says George M. Smerk: "[C]ompetition between public transport companies, particularly public transit firms with fixed facilities, would require an expensive and undesirable duplication of plant."²⁹

This is a popular objection to market competition in many areas; railroad "overbuilding," in particular, has received its share of criticism on this score. However, it is fallacious and misdirected.

We must first of all distinguish between investment *ex ante* and *ex post*. In the *ex ante* sense, all investment is undertaken with the purpose of earning a profit. Wasteful overbuilding or needless duplication cannot exist in the *ex ante* sense; no one intends, at the outset of his investment, that it should be wasteful or unprofitable.³⁰ *Ex ante* investment must of necessity, be non-wasteful.

Ex post perspective is another matter. The plain fact of our existence is that plans are often met by failure; investments often

²⁹Smerk, Urban Transportation, p. 228.

³⁰Even if someone intends, for some reason, to purposefully invest in a "losing" proposition, we would still deny, *ex ante*, that he intends to worsen his position. That people act in order to benefit themselves is an axiom of economics. If a person intends to lose money through his investment, it could only be because, by so doing, he thinks he will increase his psychic income by enough to more than compensate himself for his loss of money. In short, he is engaging in charity.

go awry. From the vantage point of history, an investment may very often be judged unwise, wasteful and needlessly duplicative. But this hardly constitutes a valid argument against private roads! For the point is that all investors are liable to error. Unless it is contended that government enterprise is somehow less likely to commit error than entrepreneurs who have been continuously tested by the market process of profit and loss, the argument makes little sense. (There are few, indeed, who would be so bold as to make the claim that the government bureaucrat is a better entrepreneur than the private businessman.)

Very often criticism of the market, such as the charge of wasteful duplication on the part of road owners, stems from a preoccupation with the perfectly competitive model. Looking at the world from this vantage point can be extremely disappointing. The model posits full and perfect information, and in a world of perfect knowledge there of course can be no such thing as wasteful duplication. *Ex post* decisions would be as successful as those *ex ante*. By comparison, in this respect, the real world comes off a distant second best. It is perhaps understandable that a person viewing the real world through perfectly competitive-tinged sunglasses should experience a profound unhappiness with actual investments that turn out to be unwise, or needlessly duplicative.

Such disappointment, however, is not a valid objection to the road market. What must be rejected is not the sometimes mistaken investment of a private road firm, but rather the perfectly competitive model which has no room in it for human error.

An intermediate position on the possibility of road competition is taken by Gabriel Roth. He states:

while it is possible to envisage competition in the provision of roads connecting points at great distances apart—as occurred on the railways in the early days—it is not possible to envisage competition in the provision of access roads in towns and villages, for most places are served by one road only. A highway authority is in practice in a monopoly position. If any of its roads were to make large profits, we could not expect other road suppliers to rush in to fill the gap. If losses are made on some roads, there are no road suppliers to close them down and transfer their resources to other sectors of the economy.³¹

Here we find several issues of contention. First, it is a rare small town or village that is served by only one road, path, or cattle track. Most places have several. But even allowing that in many rural communities there is only one serviceable road, let us note the discrepancy in Roth between roads and other services. Most local towns and villages are also served by only one grocer, butcher, baker, etc. Yet Roth would hardly contend that competition cannot thereby exist in these areas. He knows that, even though there is only one grocer in town, there is potential, if not actual, competition from the grocer down the road, or in the next town.

The situation is identical with roads. As we have seen, there is always the likelihood of building another road next to the first, if the established one proves highly popular and profitable. There is also the possibility of building another road above, or tunneling beneath the first road. In addition, competition is also brought in through other transportation industries. There may be a trolley line, railroad or subway linking this town with the outside world. If there is not, and the first established road is very profitable, such competition is always open in a free market.

Finally, we come to the statement, "If losses are made on some roads, there are no road suppliers to close them down and transfer their resources to other sectors of the economy." We agree, because a road is generally fixed geographically. An entrepreneur would no more "move" a no longer profitable road, than he would physically move an equivalently unprofitable farm, or forest. More importantly, even if it were somehow economically feasible to "move" an unprofitable road to a better locale, there are no such road suppliers simply because private road ownership is now prohibited.

³¹Roth, Paying for Roads, p. 61.

With Roth's statement, we also come to the spectre of monopoly and to claims that a private road market must function monopolistically. Why are such claims made? There are two reasons usually given. First, indivisibilities—the fact that many factors of production cannot be efficiently utilized at low levels of output. A steel mill or automobile factory cannot be chopped in half and then be asked to produce one-half of the output it had previously been producing.

Says Mohring, "But indivisibilities do exist in the provision of transportation facilities. Each railroad track must have two rails, and each highway or country road must be at least as wide as the vehicles that use it."³² In similar vein, says Haritos, "To get from A to B, you need a whole lane, not just half, for the full distance, not half of it."³³ And, in the words of Peter Winch, "indivisibility of highways makes it impractical to have competing systems of roads, and the responsible authority must therefore be a monopoly."³⁴

We do not believe that the existence of indivisibilities is enough to guarantee monopoly, defined by many as a situation in which there is a single seller of a commodity.³⁵ There are indivisibilities in every industry, and in all walks of life. Hammers and nails, bicycles and wheelbarrows, locomotives and elevators, tractors and steel mills, professors and podiatrists, ballet dancers and bricklayers, musicians and motorists, ships and slippers, buckets and broomsticks, none of them can be chopped in half (costlessly) and be expected to produce just half of what they had been producing before. A railroad needs two rails (with the

³²Herbert D. Mohring, "Urban Highway Investments," in Robert Dorfman, ed., *Measuring Benefits of Government Investments* (Washington, D.C.: Brookings Institution, 1965), p. 240.

³³Haritos, "Theory of Road Pricing," p. 56.

³⁴Winch, *The Economics of Highway Planning*, p. 3.

³⁵For an explanation of "monopoly as a government grant of exclusive privilege, see Rothbard (1971), pp. 586–619.

exception, of course, of the monorail), not one, or any fraction thereof. Also, in order to connect points A and B, it must stretch completely from one point to the other. It may not end halfway between them, and offer the likelihood of transportation between the two points.

Does this establish the need for government takeover of railroads? Of course not. Yet they exhibit the concept of indivisibilities just as do roads and highways. If indivisibilities justify government involvement in roadways, then they should justify it in all other cases wherein indivisibilities can be found. Since the advocates of the indivisibility argument are not willing to extend it to broomsticks, slippers, steel mills, and practically every other good and commodity under the sun, logic compels them to retract it in the case of highways.

CONCLUSION

So what do we conclude? Having debunked the notion that private ownership of the roads is not "impossible," and that, in fact, it may offer a variety of exciting alternatives to the present system, we return to the question of why it should even be considered. There we come face-to-face again with the problem of safety. A worse job than that which is presently being done by the government road managers is difficult to envision. We need only consider what transpires when safety is questioned in other forms of transportation to see a corollary. When an airline experiences an accident, it often experiences a notable dropping off of passengers. Airlines with excellent safety records, who have conducted surveys, have found that the public is aware of safety and will make choices based upon it.

Similarly, private road owners will be in a position to establish regulations and practices to assure safety on their roads. They can impact the driver, the vehicle, and the road—the key elements of highway safety. They can react more quickly than the government bureaucracy in banning such vehicles as "exploding Pintos." The overriding problem with the National Highway Traffic Safety Administration, and with all similar governmental systems of insuring against vehicle defects, for example, is that there is no competition allowed. Again, in a free-market system, opportunities would open up for innovative approaches to safety problems. Should stiffer penalties be shown unsuccessful in reducing unsafe vehicles and practices, an incentive system may be the answer. We cannot paint all the details of the future from our present vantage point. But we do know that "there has to be a better way."

2 Congestion and Road Pricing^{*}

Traffic congestion is one of the most stultifying, annoying and petty occurrences known to mankind. Vehicles which are capable of safely covering 150 mph under specialized conditions, and 55 mph under normal conditions, are limited to crawling along, bumper-to-bumper, at perhaps 5 mph.

Congestion is a danger to motorists. Apart from the direct psychological buffeting, frayed tempers undoubtedly create traffic accidents. The vehicle, too, deteriorates at a faster rate than otherwise, and overheated engines, cooling systems, interior hoses, etc., are the cause of yet additional highway injury and death.

The economic losses are monumental, merely in terms of wasted time. A system more wasteful of manpower can hardly be imagined: thousands upon thousands of productive workers are forced to sit idle in many cases for ninety minutes in the morning rush hour, and another ninety minutes in the evening. Furthermore, there is the spectacle of millions of vehicles, standing virtually still, with their motors idling and using up scarce

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gasoline supplies, while the society at large calls in vain for oil and gas conservation.

Nor is congestion a phenomenon limited to the process of getting to and from work. In many large cities, practically anything out of the ordinary is sufficient to trigger it: the letting out of the opera, a movie, or a ball game; the attempt to go to or return from the beach, the golf course or shopping.

Traffic congestion reaches into all aspects of living: working, shopping, recreation, etc. It insidiously cripples the ability of people to coordinate activities with one another, as it becomes virtually impossible to make exact appointments—a broad interval of time is usually the best that can be planned on.

One superficial indication of the gravity of the situation is the dramatic language used to describe it in otherwise sober and unemotional scholarly works. A.A. Walters, for example, in an authoritative mathematical and analytical tome, is moved to characterize "the congestion of towns and cities" as no less than "the plague of the century."¹

The judiciary has taken official note of "the generally obnoxious (traffic clogged) situation in midtown and lower Manhattan" by allowing chauffeur-driven limousines business-tax deductions. U.S. Tax Court Judge Theodore Tanenwald explained: "[These expenditures] were ordinary and necessary."²

To put a numerical perspective on the problem, there were 3,815,807 miles of highway in operation in the U.S. in 1974, the last year for which figures are available. Of these, 3,178,152, or 83 percent, were classified as rural,³ and only 637,655, or 17 percent, as urban. And yet of the 1,289.6 billion miles of motor vehicle

¹A.A. Walters, *The Economics of Road User Charges*, International Bank for Reconstruction and Development, Staff Occasional Paper #5 (Baltimore, Md.: Johns Hopkins University Press, 1968), p. 2.

²New York Post, 19 January 1978, p. 3.

³U.S. Bureau of the Census, *Statistical Abstract of the United States*, 1976 (Washington, D.C.: U.S. Government Printing Office, 1976), table 979.

travel which took place in 1974, only 583.5 billion, or 45 percent, utilized the rural roads, while fully 706.1 billion travel-miles, or 55 percent, were crammed onto urban highways.⁴ In other words, the rural 45 percent of the traffic enjoyed the use of a full 83 percent of the total road capacity while the urban 55 percent had to content itself with a mere 17 percent.

Yet the problem is even worse than these figures would indicate, for the following reasons:

- The classification of "urban roads" is itself divided into "Urban Arterial Streets," which comprise about 12 percent of the total, and "Other Urban Streets," which encompass 88 percent.⁵ Although 60 percent of vehicular miles of travel occur on the larger (88 percent) subdivision, a hefty 40 percent of the traffic takes place on the cramped (12 percent) Urban Arterial Streets.
- 2. Use of the roads is not uniform throughout the day, or the week. Rather, it is concentrated by work patterns, into weekday mornings and evenings, and by recreation, into weekend times that vary with the season. Termed the "peak load" problem, this is widely held to be responsible for road congestion. James M. Buchanan, for example, writes: "It should never be forgotten that the highway problem is essentially one of peak load. There is little traffic congestion, even in Manhattan, at three in the morning."⁶

⁴Ibid., table 986.

⁵George A. Smerk, *Urban Transportation: The Federal Role* (Bloomington: Indiana University Press, 1965), pp. 59–61.

⁶James M. Buchanan, "The Pricing of Highway Services," *National Tax Journal* 5, no. 2 (June 1952): 106. See also Wilfred Owen, *The Metropolitan Transportation Problem* (Washington, D.C.: Brookings Institution, 1956), pp. 80–85; G.J. Ponsonby, "The Problem of the Peak, with Special Reference to Road Passenger Transport," *The Economic Journal* (March 1958): 74; John W. Dyckman, "Transportation in Cities," in Arthur F. Schreiber, Paul K. Gatons, and Richard B. Clemmer, eds., *Economics of Urban Problems* (Boston:

Although almost everyone who has written on the subject has offered a solution to the highway peak load problem, there are a few commentators who are less sanguine. According to George Smerk, the problem will always be with us: "It is obvious and inevitable, with larger numbers of people on the move, that the paths leading to the focal point of their movement will be crowded."⁷ And Buchanan, despite his advocacy of the pricing solution, would appear to agree:

In attempting to decide how many resources should be devoted to highways and streets, society must choose between providing a structure which is too large in off-peak periods and one which is too small in peak periods. It seems certain that if enough resources were to be devoted to highway construction to reduce congestion to acceptable proportions in peak traffic periods, overinvestment in highways would be present. A highway system of compromise size would appear preferable. This would mean that some highway resources would be wasted in off-peak periods.⁸

There are even some writers, perhaps despairing of any solution whatsoever, who have tried to interpret highway congestion as *desirable*. Says Charles Meiburg, "I have not meant to give the impression that it would necessarily be desirable to try to eliminate congestion completely. Some congestion may be not only useful, but also desirable."⁹ Meiburg cites the failure of several proposed freeway systems in the San Francisco area as evidence that the voters prefer highway overcrowding to the alternatives

Houghton Mifflin, 1971), pp. 140–41; and Wilfred Owen, *The Accessible City* (Washington, D.C.: Brookings Institution, 1972), p. 37.

⁷Smerk, Urban Transportation, p. 59.

⁸Buchanan, "The Pricing of Highway Services," p. 106.

⁹Charles O. Meiburg, "An Economic Analysis of Highway Services," *Quarterly Journal of Economics* 77 (November 1963): 656. See also John Meyer, John F. Kain, and Martin Wohl, *The Urban Transportation Problem* (Cambridge, Mass.: Harvard University Press, 1965), p. 340.

of more construction or heavy, roadway-user taxes, a claim that seems possible to dispute.

There are others who claim that there is no "congestion problem." For example:

A great many so-called urban problems are really conditions that we either cannot change or do not want to incur the disadvantages of changing. Consider the "problem of congestion." The presence of a great many people in one place is a cause of inconvenience, to say the least. But the advantages of having so many people in one place far outweigh these inconveniences, and we cannot possibly have the advantages without the disadvantages. To "eliminate congestion" in the city must mean eliminating the city's reason for being. Congestion in the city is a "problem" only in the sense that congestion in Times Square on New Year's Eve is one; in fact, of course, people come to the city, just as they do to Times Square, precisely because it is congested. If it were not congested, it would not be worth coming to.¹⁰

Clearly, Edward Banfield is here confusing "congestion" with "density" ("having so many people in one place"). These are not at all the same. While "density" connotes only a large population per unit area, "congestion" implies something untoward, or inefficient. The choreography of a ballet may call for the dancers, at some point, to be tightly positioned; they would then be characterized as achieving a high *density*. But if all the dancers keep to their proper positions, and the ballet is reasonably arranged, there will be no question of congestion. Instead, the dancers could be characterized as moving about freely, albeit in a tight formation.

To eliminate high density would indeed remove the city's reason for existence: the economies in manufacture, service, and

¹⁰Edward C. Banfield, *The Unheavenly City* (Boston: Little, Brown, 1970), p. 5.

trade which are engendered by close proximity. But surely discoordinative congestion could be abolished without affecting density in the slightest.

With regard to Times Square on New Year's Eve: *some* people attend the festivities to enjoy the congestion; they enjoy bumping into people, being detained in their progress in any direction, and being elbowed, shoved, and even stomped on. But *others* find the congestion unsatisfactory, although they may desire to live in an area of high density.

Banfield poses an extreme rendition of the "no problem" view:

If these inner districts . . . usually adjacent to the central business district and spreading out from it [that are characterized by extremely poor and minority groups] . . . which probably comprise somewhere between ten and twenty percent of the total area classified as urban by the Census, *were suddenly to disappear, along with the people who live in them, there would be no serious urban problems worth talking about*. If what really matters is the essential welfare of individuals and the good health of the society as opposed to comfort, convenience, amenity, and business advantage, then what we have is not an "urban problem" but an "inner-central-city-and-larger-older-suburb" one.¹¹

One cannot but agree that many of our urban problems are intimately connected with the minority groups and the "poverty lifestyle" that are characteristic of our large urban inner cities, yet surely not all problems would be solved with the disappearance of this sector of the city. The destruction of human life on our highways, the serious congestion problems, and the mismanagement by the road authorities would survive the evaporation of the inner cities, because these problems are completely unrelated to the inner city.¹² No amount of sophistry, moreover, can convert

¹¹Ibid., p. 12; emphasis added.

¹²This is not to mention the deterioration of non-inner city housing due to rent controls, the unemployment of non-inner city youth due to minimum

our present highway mess into something merely affecting the "comfort, convenience, amenity, and business advantage" of our citizens. If our transportation crisis does not sabotage "the essential welfare of individuals and the good health of the society," then nothing does.

Next consider the "unrealistic expectations" charge. Robert Bish and Robert Kirk write:

Designation of "congestion" per se as a problem is not accepted by all economists. When one examines the travel time of journeys to work in urban areas he discovers that travel times are remaining constant at the same time the length of the journey to work is increasing. Thus, in spite of congestion the actual miles per hour speed of journeys to work is increasing rather than decreasing. It may be that considering congestion a problem relates more to a failure of expectations than a failure of transportation systems. The failure to meet expectations may result from the fact that as highway investments have been made to handle journey-to-work traffic, an individual's ability to move around an urban area at off-peak hours has increased tremendously, and he would really like to make his journey to work at a comparable speed. Thus, even though the actual miles per hour speed of the journey to work is increasing, the speed of the journey to work is increasing at a much slower rate than the speed of travel during the rest of the day, and the "problem" is a failure to meet expectations, not an absolute decline in speed of movement.13

wage legislation, the problems of pollution in noninner city areas caused by governmental failure to allow a full specification of property rights, and the intolerably high costs of medical attention for the middle class due to governmental restrictive licensing procedures for doctors. (See Milton Friedman, *Capitalism and Freedom* [Chicago: University of Chicago Press, 1962], chap. 9.) In none of these serious urban problems are the poorest classes involved causally—although they are oft-times the greatest sufferers.

¹³Robert Bish and Robert Kirk, *Economic Principles and Urban Problems* (Englewood Cliffs, N.J.: Prentice-Hall, 1974), pp. 138–39.

James Wilson agrees, "[The pseudo transportation problem is] simply the product of our natural but unrealistic desire to move instantly to any place at any time."¹⁴

John Meyer tells us:

If there has been a slow but steady improvement in the performance of urban transportation systems, why do we hear so much discussion of a so-called "urban transportation crisis?" The answer lies in a complex set of considerations of which probably the most important is what might be termed "a failure of anticipations."

This failure of anticipations is in great part a consequence of the uneven rates of improvement in off-peak and peak performances of urban transport systems. Traveling across densely populated urban areas at 50 or 60 miles an hour on a high-performance highway during an off-peak period seems to be an exhilarating experience, and urban commuters, quite humanly, would like to duplicate the experience during the rush hours. The difficulty, of course, is that too many of them wish to do so at one time and thus it becomes impossible without a vast increase in capacity.¹⁵

One problem with this tack is that there is simply no evidence to show that a set of "unrealistic expectations" has been adopted by the public because of the relatively better conditions at offpeak times. Rather, the argument seems to be that since traffic moves relatively freely at off-peak hours, therefore customer dissatisfaction with the rush hour state of affairs is due to unrealistic wishful desires for similar unencumbered travel at all times. (Wilson escalates even further, and claims that a desire for instantaneous travel is at the root of the disgruntlement; needless to

¹⁴James Q. Wilson, "Urban Problems in Perspective," in James Q. Wilson, ed., *The Metropolitan Enigma* (Garden City, N.Y.: Doubleday, 1970), p. 393.

¹⁵John Meyer, "Urban Transportation," in *The Metropolitan Enigma*, James Q. Wilson, ed. (Garden City, N.Y.: Doubleday, 1970), pp. 52–53.

say, he cites no evidence of this impossible consumer demand.) But this is a *non sequitur*, since it would be possible for people to demand better peak hour conditions even if the traffic situation at other times had not improved.

But more importantly, the argument fails to show that the demand for nonrush hour conditions during peak times is unreasonable. A whole host of business establishments, catering to a "rush hour" trade in other industries, have instituted arrangements for dealing with peak demands. The higher quality restaurants and hotels have initiated the practice of taking reservations, which insure against overcrowding and disappointed customers; theaters charge more for highly demanded evening performances than for (otherwise) sparsely attended afternoon matinees; vacation enterprises charge more during the "season" than in the "off season." To take some more peripheral, but still highly indicative examples, umbrellas cost more when it is raining (when there is a "rush" for them), shovels sell at a premium when it snows, and flashlight batteries fetch a higher price during "brownouts" or "blackouts." Our entire economy is permeated with arrangements which function in such a manner, so that the plight of the "rush" customers is relieved. Far from being "unrealistic," customer dissatisfaction with peak hour traffic jams is only to be expected-given all these other industries which function so as to relieve congestion.

Third, the "unrealistic expectations" view makes much of the slight improvements in the speed of journeys to work, without mentioning the abysmally low level on which the comparison is based, nor the sluggish pace we have achieved, presently, after the much vaunted change. This approach misses the important point; when there is a poor record of accomplishment, a marginal improvement is no justification.

We now turn to a consideration of the last reason for supposing that traffic congestion is really no problem at all: solving it would cost more than it is worth. Banfield writes:

That we have not yet been willing to pay the price of solving, or alleviating, such "problems" [as congestion] even when the

price is a very small one suggests that they are not really as serious as they have been made out to be. Indeed, one might say that, by definition, a serious problem is one that people are willing to pay a considerable price to have solved.¹⁶

There are some commentators who are even rash enough to apply this reasoning to the problems of safety. Robert Baker, for example, says: "A highway system of much safer proportions is obviously available, but the [costs in terms of] loss of mobility would be completely intolerable."¹⁷ And according to Martin Wohl:

Those who are stuck in traffic congestion . . . would rather make the same trips without congestion, everything else being equal, that is, providing they did not have to pay more for less congestion, or relinquish another amenity achieved by their choice of transportation mode.

Traffic congestion can be reduced, and even eliminated, in a number of ways—but *usually not for free*. It generally will cost society, or some group within it, something to achieve such a goal.¹⁸

Wilbur Thompson is one writer who contends that traffic congestion is actually a rational outcome because of the costs involved in alleviating it:

The urban traffic problem, like most problems, arises out of the frustration of trying to reconcile a number of partly incompatible goals. Urbanites would like to move about their area (1) quickly, (2) comfortably, (3) cheaply, (4) mostly at the same time, and (5) mostly to or from the same places...

¹⁶Banfield, *The Unheavenly City*, p. 10.

¹⁷Robert Baker, *The Highway Risk Problem* (New York: John Wiley and Sons, 1971), p. 2.

¹⁸Martin Wohl, "Must Something Be Done About Traffic Congestion?," *Traffic Quarterly* (July 1971): 403–04.

But congestion is too seldom seen as a direct, if harsh, form of economizing; we economize on urban transportation plant and equipment (social capital) by crowding many vehicles on a narrow street or by carrying standing passengers in packed buses. Through congestion, the commuter trades his time for lower fares, fees, or taxes; the lost time may be regained only at the cost of additional investment in transportation plant and equipment.¹⁹

A constant refrain in these passages is that solving the problem of congestion would be quite all right; however, to do this would involve the expenditure of monies, and this would be unjustified. But is it not true that the solution of any problem usually calls for the undertaking of some costs? And do we usually let this fact, and this fact alone, deter us? It may well be asked, "What is so special about congestion that, upon hearing that its solution may well call for the expenditure of resources, we must at once conclude that to do so would be unjustified?"

Also implicit in this treatment is the assumption that somehow, somewhere, at some time (perhaps in the long distant past), some people were actually asked to choose between something like the present levels of congestion, for free, and a vastly improved, uncongested rush hour situation, for some appreciable costs—and chose the present situation. But this is the merest fiction. Despite the allegiance this assumption has been able to garner, there is not the slightest bit of veracity to it.

Of course, on the market, people are continually choosing between (usually) lower priced but more crowded conditions, and more expensive, less congested alternatives. They do this in their daily choices to patronize, or not, a crowded fast food chain, a bargain sale at a local department store which they expect will attract large crowds, etc. The problem with our road network, in this regard, is that there is no functioning market in which the

¹⁹Wilbur R. Thompson, *A Preface to Urban Economics* (Baltimore, Md.: Johns Hopkins Press, 1968), p. 333.

consumer can make his preferences known: there are no congested but cheaper highways competing alongside more expensive but emptier ones.²⁰

Finally, there is the assumption that if an alternative were to arise whereby the consumer could purchase less traffic congestion (or a lower likelihood of falling victim to a fatal accident), the costs would be prohibitively expensive either in terms of money, or foregone mobility, or other resources. Now this might well be true, given that the state remains in control of the road industry. It is perhaps correct to suppose that, given our present institutional arrangements, we may be enjoying the best of all possible worlds in terms of our transit system, sorrowful though that world may be. But it by no means follows that the present method of highway operation is the only conceivable one, or the cheapest to maintain and operate. Indeed, it is the contention of this article that a free market in roads is not only feasible but desirable.

We shall now examine, in some detail, the most popular "nonpricing" solutions to the problem of congestion. But even more importantly, we shall examine the assumption behind them: that those responsible for the present congestion mess shall and should continue to administer the highway system and be responsible for any and all attempts to improve it. We shall try to show that this assumption is not valid and that, in fact, a privately

²⁰There are, to be sure, some choices open to the public. Bond issues to raise money to build turnpikes, the choice of whether to utilize a quicker toll road or to make use of the local roads—replete with traffic lights—for free, are examples. But the first type (political choice) has serious drawbacks as compared to market choices; and the toll road choice has usually been made in favor of avoiding congestion by paying for the privilege—in direct contradiction to the allegations made by the advocates of the status quo. For a discussion of how a free-market, privately owned road system might function, see Murray N. Rothbard, *For a New Liberty* (New York: Macmillan, 1973), chap. 11; and Walter Block, "Free Market Transportation: Denationalizing the Roads," *Journal of Libertarian Studies* 3, no. 2 (Summer, 1979), reprinted in the present volume as chapter 1.

owned and operated highway system is the answer to the congestion problem.

(*a*) Increased use of government rules. The first of the nonpricing solutions to be considered is the increased use of governmental rules. A general justification of this procedure is offered by Smerk, who opines that "some (governmental) rules are needed to preserve us all from the costly and painful chaos of transport anarchy." One problem with this argument is that, at least insofar as congestion is concerned, we are presently suffering from "transport anarchy" of the worst sort—and this, in the midst of a great number of government rules indeed. Second, while it may be readily conceded that traffic rules of some sort are a prerequisite of any order in transport, it by no means follows that government is uniquely suited for the task of prescribing them.

One governmental initiative that stands as a perennial favorite is a call for staggered work hours.²¹ Usually dependent on a "moral suasion," the solution of staggered hours is popular for several reasons. The government need do nothing: action is called for on the part of the employer, who, along with recalcitrant employees, can be made into a scapegoat for congestion during rush hours. Recommending that "employers stagger their starting and leaving times in order to reduce and spread out the rush hour peaks"²² seems, moreover, to be the height of common

²¹See Smerk, *Urban Transportation*, p. 200; Wilfred Owen, *The Metropolitan Transportation Problem* (Washington, D.C.: Brookings Institution, 1956), pp. 245–48; Robert A. Olmsted, "Response to [William Vickrey's] Improving New York's Transit Service—An Economist's View," *City Almanac* 8 (April, 1974): 11; Thompson, *A Preface to Urban Economics*, p. 354; James C. Plewes and Maurice H. Yeates, "The Urban Rush Hour: An Analysis of the Yonge Street, Toronto Subway System," *Traffic Quarterly* 26 (April 1972): 218; Wohl, "Must Something Be Done About Traffic Congestion?," 404; and David M. Winch, *The Economics of Highway Planning* (Toronto: University of Toronto Press, 1963), p. 80.

²²Plewes and Yeates, "The Urban Rush Hour: An Analysis of the Yonge Street, Toronto Subway System," p. 218.

sense. If the congestion is caused by great hordes of people entering the traffic flow at the same time, what better way of ending it than by staggering their work hours?

But there are problems with this simple, apparently rational view. Most restaurants, for example, are busiest during breakfast, lunch, and dinner time, and perhaps in some cases, after show closings, for late-night meals. In other words, restaurants suffer from congested traffic, a peak load problem, during these times. But were a restaurant management seriously to propose that its customers stagger their meal times "in order to reduce and spread out the rush hour peaks," it would be laughed right out of business in a trice. Its competitors would have a field day.

Many bowling alleys are open twenty-four hours a day, but "suffer" from peaks of demand in the late afternoon and early evening, until perhaps 10 p.m. Some have solved this peak load problem by advertising cut-rate prices during the morning and early afternoon hours, in order to smooth out the flow. When such changes in consumer behavior are an endogenous result of price reductions, customer satisfaction can be maintained. But a mere exhortation to "stagger" travel demands can be interpreted only as a callous disregard for the consumer of transport services.

The proponents of staggering have failed to realize that there are economies involved in tailoring the working hours of the labor force into a common pattern. Cooperation between complementary labor factors of production is enhanced by a common workday. Exhortations may induce staggering on the part of employers of labor whose productivity benefits the most from the common work hours. This result might ensue if these employers are amongst those who are politically weakest, or who are more dependent on the good will of the governmental authorities.

In contrast, if a price reduction is offered for off-peak travel, all employers will be tempted to accede to the wishes of their employees for cheaper travel. The ones who actually give in and reschedule their work forces will tend to be the ones whose employees' productivity is increased to the least degree by working the same hours as the general labor force.

(*b*) *Reversible one-way streets; limited turns.* A strategy adopted by many harried municipalities is the conversion of two-way into one-way streets, to align the direction of the traffic in accordance with the path followed by the majority of the motorists (outbound in the evening, inbound in the morning) and to prohibit turns on and off these main thoroughfares—in order to keep their traffic moving as quickly as possible.²³

Superficially, this sounds almost like a panacea. Turn limitation will speed the traffic along the artery, and the conversion of the direction of traffic (in all or some lanes) in accordance with rush-hour patterns can hardly fail to improve matters. But in actuality, none of the cities implementing this plan have succeeded in ending rush hour congestion. For while they have made better use of street surfaces than was possible with a set of two-way streets, there is still simply too much traffic for the streets to handle.

An analogy that comes to mind is the rush to the theater exits upon an announcement that there is a fire danger. All of the patrons are going in the same direction, but there are just too many of them for the exit capacity. A melee ensues. True, there is (somewhat) *less* chaos than would result if people were heading in different directions; but for all the effect of the marginal improvement, the problem remains unmanageable.

Not only does this policy similarly fail to stem the tide of street congestion, it also imposes distinct threats to the ease with which motorists may travel around the city. Every time a twoway is converted into a one-way street, the amount of territory that must be covered to reach a given destination is increased. For, if the one-way streets follow an every-other-street-in-a-different-direction pattern, the motorist will have to go around the

²³See Smerk, *Urban Transportation*, p. 194; and William Lathrop, Jr., "Reversible Roadway Controls," *Traffic Quarterly* (January 1972): 133.

block in half the cases. And the greater the number of prohibited turns, the greater the difficulty in maneuvering. In New York City, for example, it is illegal to make left-hand or right-hand turns on 42nd Street during rush hours. Thus, many (perhaps most) motorists have to go several blocks out of their way to reach their destinations. Clearly, turn limitation can actually add to the already great use of the streets during rush hours.

How would the one-way versus two-way street conflict be handled under private ownership? It is not possible to be specific, but we can say with absolute confidence that the competition inherent in the market will ensure that road entrepreneurs will be guided by customer preferences. Let us suppose, as an example, that the Jones Road Company insists upon maintaining Jones Road as a one-way street, despite its customers' overwhelming desire for the convenience inherent in a two-way street. The Jones Co., clearly, will not earn as much profit as it would otherwise have done. Marginal tenants and storekeepers will move to other streets, where their wishes are more nearly satisfied. The Jones Street addresses will become less popular for potential customers as well.

It might well happen that, while the local inhabitants prefer a two-way street, those who are just passing through would favor unidirectional traffic. But this case presents no difficulties not already encountered by entrepreneurs faced with customers of nonhomogeneous tastes. The installation of smoking and nonsmoking sections has already solved similar problems in industries as disparate as airlines, restaurants, theaters and movie houses.²⁴ In like manner, there is every reason to expect

²⁴As can be expected from our analysis of the differential incentives involved in government and private enterprise, it was the latter that first initiated this response to differential customer desires, and which continues in the forefront of consumer satisfaction. In contrast, the response of governmental agencies has been to prohibit smoking, thus satisfying one segment completely at the expense of the other.

similar responses from businessmen involved in the street business. One possible compromise might be one-way streets during rush hours, when the outside users would likely predominate over the locals, and two-way traffic at other times, when the street is likely to be patronized mainly by local inhabitants. In order for this plan to be viable, though, the owner must make the judgment that the extra costs, both in terms of installation and of possible increased danger due to confusion at changeover time, are less weighty, in the eyes of the paying customers, than the benefits.

If no such compromise is feasible, and only the profit-andloss system, through trial and error, would be able to make this determination, then the road owner could be counted upon to choose that mode which he thinks will maximize his profits: i.e., the one that will accede to the wishes of the customers who have shown themselves to be most concerned (by their willingness to pay the most in order to have things arranged in a manner preferable to them). There will be a "vote," as it were, including only those who are intimately connected to the road, and not, as under democracy, all those over the age of eighteen or twenty-one. The decision will be made in much the same way that it is decided to plant oats and not wheat on a given plot of land (because there is more money expected to be forthcoming for the former than for the latter).

(c) Surveillance, monitoring. The magic of modern electrical technology is off-times put forward as a nonprice-rationing panacea for highway congestion. Its proponents are not backward in their claims on behalf of this attempted solution. Says John F. Kain, for example:

A revolutionary improvement in the quality and quantity of urban transportation services could be obtained in virtually every U.S. metropolitan area in a relatively short period of time. Moreover, this improvement can be obtained with expenditures that are no larger than those presently programmed. These gains can be achieved by converting existing urban expressways to rapid transit facilities through the addition of electronic surveillance, monitoring, and control.²⁵

How would metered freeways work? Explain Bish and Kirk:

A major problem with freeways is that as soon as more than 1,500 cars per hour per lane enter them, traffic becomes congested, stopping and starting rather than maintaining a continuous flow. The congestion causes the flow of traffic on the freeway to fall well below 1,500 cars per hour per lane. Monitoring freeway access forces cars to wait their turn on large on-ramps. Once cars are permitted to enter the freeway, the traffic flow is maintained at thirty-five to forty miles per hour, the speed that provides the greatest flow of automobiles. Thus, part of the trip is spent sitting still and the other part is spent moving at a steady speed. Total trip time is reduced.²⁶

Although many economists propose electronic monitoring as part of an overall plan that includes such other components as express bus lanes, we shall consider the monitoring proposal on its own merits.²⁷

In principle, there is very little wrong with this arrangement. But we would be foolish indeed to think of putting its administration into the hands of government. It calls for working with sophisticated electronic equipment, which is subject, potentially, to frequent breakdowns. One can scarcely trust an organization that cannot collect the garbage, deliver the mail, or fill in the

²⁶Bish and Kirk, Economic Principles and Urban Problems, p. 147.

²⁵John F. Kain, "A Re-appraisal of Metropolitan Transportation Planning," in Arthur Schreiber, Paul Gatons, and Richard Clemmer, eds., *Economics of Urban Problems: An Introduction* (Boston: Houghton Mifflin, 1971), p. 163. See also Owen, *The Accessible City*, p. 31; Charles M. Noble, "Highway Design and Construction Related to Traffic Operations and Safety," *Traffic Quarterly* (November 1971); and S.S. Morris, "Freeways and the Urban Traffic Problem," *Traffic Quarterly* 27 (October 1973): 523.

²⁷The express bus lane idea is dealt with separately below.

potholes with such an onerous task. Nor is there any reason to believe that government is uniquely suited to the task of successfully subcontracting for such an operation. For subcontracting, too, calls for no mean level of skill. And surely we cannot blithely assume an ability to *recognize* the ability to maintain such a system—surely the prerequisite for successful subcontracting.

But even if run in an impeccable manner, the surveillance scheme would leave something to be desired. That is because it is an engineering solution, designed to maximize the transportation of vehicles through the highway network. As such, it is a viable scheme. But it does nothing to end congestion. It only transforms congestion from a situation where the waiting is disguised in the form of slow speeds, to one where the waiting becomes explicit in the form of long queues. It represents a shift from slowly moving traffic with minimal queues to quickly moving traffic with longer queues. Congestion disappears from the traffic lanes—but reappears at the side of the highway in the form of waiting cars.

In some ways, what electronic surveillance seeks to accomplish is reminiscent of the phenomena of reserving tables at restaurants. This too is an attempt to deal with overcrowding. Explicit queues disappear, but does the problem disappear? No. Only the place where the waiting occurs changes. And so it is on the highways. Electronic monitoring may well bring about convenience. But in the absence of programs designed to cut down on the demand for road services, it cannot solve the problem of congestion. It can only transform the congestion of slow moving traffic into quicker movement—*plus* overcrowded, or congested queues at the entrances to the highway.

(*d*) *Planning, zoning, building new towns.* There is an increasingly popular viewpoint within the transportation community according to which it makes little sense to try to solve the congestion problem by itself, or in a vacuum. Rather, the true solution lies, first, in recognizing the present lack of cooperation between the auto and mass transportation on the one hand, and between both of these modes of transport and the decision of

how to locate housing, shopping, recreation, and employment opportunities, on the other; and second, in ensuring, by increased governmental planning initiatives, that all these factors are coordinated with each other.

With regard to the lack of auto-mass transit synchronization, Owen argues:

Clearly, the fortunes of both the automobile and public transport are interdependent. The success of each depends on what is done about the other. Yet in nearly every city in the world these two major parts of the single problem of how to provide adequate mobility for the urban population are being separately planned and financed. The outcome is reflected in the severity of street congestion, the absence of acceptable standards of public transport, the lack of genuine travel options, and the neglected travel needs of large segments of the population. The continuing rise in car ownership and the growing obstacles to providing satisfactory public transport point to the need for a combined strategy.²⁸

Owen then justifies land-use controls on the following grounds:

Rapid transit solutions may also create congestion rather than alleviate it. For while some routes may never develop sufficient traffic to warrant a subway, the high density routes that do require such facilities may encourage areas of high-density growth that generate more transit traffic than can be conveniently handled without lowering service standards. *Without effective land-use controls*, the tendency toward greater concentration of economic activity will make congestion, inclusive of street congestion, worse than ever.²⁹

²⁸Owen, The Accessible City, pp. 43–44.

²⁹Ibid., pp. 48–49; emphasis added. See also Wohl, "Must Something Be Done About Traffic Congestion?" where he advocates the reduction of employment density.

On the coordination of land use and transportation through central planning, he writes:

The basic difficulty of urban growth all over the world is that decisions about the use of urban land are being made by a host of private parties without the guidance of *comprehensive plans* or community goals. The result is heavy social costs, which include the high costs of a bad environment and large outlays for transportation and other services needed to cope with the outcome. Transportation technology is supporting a wide variety of undesirable cities and shoddy suburbs. The only remedy is to recognize that anything is technically possible and to choose the kind of environment to be sought. The laissez-faire city is likely to end in disaster. . . . Transportation technology will be able to serve effectively only if it is furnished as part of a total development strategy.³⁰

Owen's case for "new towns," in order to combat congestion, is made as follows:

These [congestion] problems can be solved in two ways. One is redesigning the old cities, to make way for "the new city in city." The other lies in guiding urban growth through a combination of new highway and transit investments plus public land acquisition to help bring about an orderly urbanization process in place of the urbanism that is accidental, divisive, and designed for *profit instead of for people*. Planning a nation's economic growth should be accompanied by planning for its spatial growth.

The single-purpose, least-cost solution aimed at moving traffic will have to be abandoned in favor of creating an environment in which adequate shelter and decent neighborhoods are convenient to job opportunities, recreation, and all that urbanization, in theory, has to offer. Plans for transportation must shift

³⁰Owen, *The Accessible City*, pp. 50–51; emphasis added.

the emphasis from coping with congestion to encouraging communities without congestion. $^{\rm 31}$

Let us consider each of these points. We must begin by "conceding" to Owen that highway traffic and mass transit are *not* now coordinated with one another. In fact, it would be difficult to cite another situation where two such closely allied fields evidence such little complementarity. But the conclusion that this state of affairs points to the need for more government involvement cannot be sustained. For it is the government ownership and control over both highways and mass transit which is precisely responsible for the sad discoordination which presently prevails between them.

Urban mass transportation is presently almost entirely in the hands of local government. Indeed, the synonymous use of the terms "mass transit" and "public transit" is eloquent testimony to the fact that, in the eyes of most people, the only possible owner and manager of such transportation networks is the government. And, although it is commonly held that, since individual automobiles are privately owned, therefore the highway system upon which they move is under control of the market, this is, as we have seen, simply not true: the plain fact is that our road and highway systems are completely under the control of one level of government or another.

The defense of zoning, land-use controls, and other attempts on the part of the state to determine the location of individuals and businesses must be rejected on similar grounds. For one thing, the government already deploys people and resources geographically. All big cities,³² most small towns, counties, and

³¹Ibid., p. 54. See also Smerk, *Urban Transportation*, pp. 179 and 203, where he advocates a new towns policy.

³²With the honorable exception of Houston, Texas. See Bernard Siegan, *Land Use Without Zoning* (Toronto: D.C. Heath, 1972). See also Walter Block, ed., *Zoning: Its Costs and Relevance for the 1980s* (Vancouver: Fraser Institute, 1980).

states, and many regional, planning associations boast of well entrenched, thorough and detailed laws which narrowly restrict the pattern of land settlement. If these laws are already in operation during the congestion crisis, how can the solution to this problem lie in the direction of still more controls?

On the contrary, economic analysis points to the operation of the market as an antidote to such location-caused congestion. If, for example, housing is built on a massive scale in a place without adequate transportation or the prospects of such, it is simply not true, as implied by the Owen view, that hordes of people will first move in, either as renters or purchasers, and *then*, starting to worry about how they will travel to work, discover that they will be very cramped and congested.

In a fully free market, with all travel modes privately owned, things will in all likelihood work out very differently. Location decisions will ultimately be approved or disapproved by the final consumer, as are all entrepreneurial choices. But in this case, two different sets of entrepreneurs will together be responsible for launching projects: the builder and the transportation owner.

The builder, of course, determines the location of his edifices. But he cannot plan in a vacuum. If there are not ample sources of transport, either of the mass variety (trains, trolleys, buses, etc.) or of the "private" kind (the automobile on an individually owned road), he knows he will not be able to attract customers on a profitable basis. Before building, then, he will either determine that there are sufficient sources of travel access for his potential customers, or that there soon will be. In either case, he will have to involve the provider of the transit source in an appropriate (voluntary) contractual bind—otherwise the latter will be able to charge much higher transportation prices once the facility is built.

The transportation entrepreneur will have an incentive to entice the construction of additional buildings along the route of his holdings. Given the original investment, additional costs for additional riders are likely to be virtually zero. He can be expected to fall in happily with the builder's desires for assurances concerning future supply of service.

The only way congestion can occur in this kind of operation is if one or both sides commit a serious error. Abstracting from the possibility of below equilibrium transportation prices, congestion might take place either because of overbuilding compared to the amount of transportation services in operation, or from an undersupply of the latter relative to the quantity of residential units in existence. But this is no cause for alarm. For the market contains self-correcting devices to deal with mistakes which are unfortunately the lot of mankind, at least on this side of the Garden of Eden.

If congestion occurs on the free-market transportation network, the response is likely to resemble what accompanies "excess demand" for any other good or service: the businessman does not rest day or night until he provides the extra services the market is clamoring for. (We again abstract from the possibility of price increases.) The ice cream shop with long lines of people waiting for admission hires additional workers as soon as possible; the economist who "suffers" from the "congestion" of large numbers of people clamoring to engage him as a consultant hires more staff or expands output in whatever way seems appropriate to him. Throughout the private economy "congestion" is looked upon as a golden opportunity for expansion of output, sales, and profits. It is only in the public sector that the customer clamoring for additional service is looked at askance,³³ blamed, excoriated, and told to desist in his efforts.³⁴

Owen's contentions concerning the desirability of central planning for transportation are likewise without merit. It is true, as he contends and as we have seen, that transportation technology is uncoordinated with "total development strategy." But this is not because of lack of "comprehensive plans"; it is due to a surfeit of such government involvement in the economy. The fate of

³³See Rothbard, For a New Liberty, p. 197.

³⁴See the section below on banning automobiles.

the modern city might well be "to end in disaster." Certainly it is heading in that direction at present. But the modern city is, if anything, dedicated not to *laissez faire*, but to its very opposite.

Advocates of city planning, and of planning in general, ofttimes make the facile equation between their views and economic rationality. The implication is that a society which does not utilize a comprehensive central plan is acting irrationally, leaving important decisions to chance and inviting chaos. Nothing could be further from the truth, however.

Economics as a science can trace its beginnings to the discovery that men can coordinate their individual plans entirely without benefit of one overall planning body empowered to direct the whole society: it is precisely the function of the price system to impart the bits of information, known only in the most decentralized manner, to all participants in the economy.³⁵ One need not explicitly add up all bales of cotton, for example, in order to plan for cloth making, as the central planners would have it; by far the best way to use all the relevant information known to people in the cotton and cloth industry is to allow markets and prices to exist in these areas, and then to rely on the profit motive to insure that the two industries are coordinated with one another. An incipient shortage in either area will call forth market behavior which will tend to be self-correcting. There would be no need to mention basic postulates such as these but for Owen's complete and utter misunderstanding of the function of profits. One cannot, in a market setting, earn profits in any other way than by producing "for people": by producing, that is, what people are willing to purchase.

Owen's case for "new towns" as a means of avoiding traffic congestion is likewise unconvincing. New towns cannot possibly counteract traffic congestion if they are built and managed on the identical principles that have caused this problem in the old

³⁵See the three chapters on the "socialist calculation debate" in F.A. Hayek, "Socialist Calculation I, II, & III," *Individualism and Economic Order* (Chicago: University of Chicago Press, 1948), pp. 119–208.

towns. They would only repeat the problem. And since Owen is not urging the creation of new towns by private enterprise, where the price system would be allowed to operate on the roadways and thereby guarantee an end to congestion, there is little merit in his proposal.

But mere speculation as to the effect of new towns on congestion is no longer necessary. Many such towns have been built in the past several decades, in the U.S. and in other countries. None of them has been noticeably congestion-free. In this case, at least, the facts speak clearly for themselves.

(e) Expanding roads. One of the most popular antidotes to congestion is to build more roads. This solution, benefiting from the seeming presence of common sense, has attracted widespread attention and praise. As Buchanan reports, "the recommended solutions usually take the form of expansion and reconstruction of the highway system, all of which involve considerable additional investment of resources in highways and streets."³⁶ Mohring goes even further. In his view,

Currently, the only technique being employed to an appreciable extent to alleviate urban traffic congestion is investment in additional highway capacity. Some of these additions to capacity have involved widening or otherwise altering existing arterial streets, but most of them have involved the construction of entirely new, high-speed, limited-access expressways.³⁷

Even Brownlee and Heller, who might have been expected to know better, given their understanding of the role of highway prices, go along with the groundswell in favor of building our way out of traffic congestion. They state that

³⁶James M. Buchanan, "The Pricing of Highway Services," *National Tax Journal* 5, no. 2 (June 1952): 97. See also Smerk, *Urban Transportation*, p. 179; and Norman L. Cooper, *Urban Transportation: An Answer* (Bloomington: Bureau of Business Research, Indiana University, 1971), pp. 1, 15.

³⁷Herbert Mohring, "Urban Highway Investments," in Robert Dorfman, ed., *Measuring Benefits of Government Investments* (Washington, D.C.: Brookings Institution, 1965), p. 248.

without raising the amounts spent by highway users, excess demand also can be cured by drawing on the general taxpayer to increase the supply—as some auto manufacturers and the American Automobile Association will testify.³⁸

Oft-times, in addition to calling for increased roadway investments, specific designs are also advocated. Wohl, for example, favors building roads to bypass Central Business Districts of large cities since "through traffic as a proportion of downtown street traffic . . . usually ranges between 30 and 60 percent."³⁹ And Morris, in a thinly disguised call for an increased roadway supply, favors "using urban freeway design criteria which give preference to considerations of peak hour capacity rather than offpeak travel time."⁴⁰

Although widely praised by economists and virtually viewed as an axiom of business by much of the transportation community, this solution has not gone uncriticized. One major criticism is based on the concept of "traffic equilibrium." According to this view, all attempts to solve the congestion crisis by increasing the supply of roads is doomed to failure—for as soon as a new facility comes on stream, it attracts riders from other roads, from other modes (such as mass transportation), and from the pool of motorists who, in the absence of the new road, traveled at less convenient nonrush hours. And the process will tend to continue until the congestion levels on the new installation are indistinguishable from that on all other avenues. It is then that the system will have arrived at a new traffic equilibrium. In short, "supply creates its own demand."

This view was expressed by Dyckman as follows:

³⁸O.H. Brownlee and Walter W. Heller, "Highway Development and Financing," *American Economic Review* (May 1956): 235.

³⁹Wohl, "Must Something Be Done About Traffic Congestion?," pp. 407–08.

⁴⁰Morris, "Freeways and the Urban Traffic Problem," p. 523.

Additional accommodation creates additional traffic. The opening of a freeway designed to meet existing demand may eventually increase that demand until congestion on the freeway increases the travel time to what it was before the freeway existed.⁴¹

A definitive explanation is given by Bish and Kirk:

If people would really like to travel at uncongested speeds during the journey-to-work hours, just how much additional highway investment would be necessary? If one looks at engineering forecasts for freeway travel before the freeway opens and the actual freeway travel shortly after opening, one is continually amazed at the lowness of the peak-hour forecasts relative to actual travel. Far in advance of the time predicted, the new freeway has traffic beyond "capacity" and is congested again. Why does this happen over and over again? There are essentially two reasons. First, there is usually more than one highway route to work that takes approximately the same amount of time. This is because if any route were significantly quicker, travelers would shift to that route, increasing its congestion while reducing congestion on the formerly slower route until times were equalized. Thus, when a new route opens up, traffic using a variety of former routes will switch to the new route until travel time on the new route is equalized with time on adjacent routes. If former routes have been city streets and the new route is a freeway, equilibrium may not be established until freeway traffic is very slow and congested. However, travel time will be less on both the new and old routes because of the increase in highway capacity.

But these gains, even in reduced travel time, if not in reduced congestion, are likely to be dissipated. Bish and Kirk continue:

A second reason why new routes congest prior to forecast is simply that when transportation capacity increases and peakhour time decreases, fewer drivers will take the trouble to beat

⁴¹Dyckman, "Transportation in Cities," p. 143. See also Owen, *The Metropolitan Transportation Problem*, p. 109.

the rush. Instead, they will travel closer to the time of their actual preference. Thus as traffic capacity increases, there is a shortening of the rush hour, but very little reduction in congestion during the new shorter peak-hours of travel.⁴²

It would appear that the "build more roads" solution to traffic congestion cannot withstand the force of the "equilibrium" argument leveled against it. But before we move on, let us consider a possible criticism. We have already stated that the market, unlike the government, looks upon "congestion" as a simple case of excess demand and, in effect, "rolls up its sleeves in glee" in the anticipation of new and profitable sales. In other words, the market expands seemingly to meet excess demands. Why then, when the government tries to "expand" its offering, by building more roads, does it fail so dismally and apparently so inevitably?

The answer lies in the concept of price: when charges are prohibited, i.e., when there is a zero price for highway use, then and only then, attempts to build our way out of congestion are doomed to failure. As long as highway services are "free"—as long as people pay for them whether they use them during peak periods or not, and pay no more for this use than for nonuse then the "equilibrium" phenomenon will tend to consign to failure all attempts to cure congestion by adding to the highway

⁴²Bish and Kirk, *Economic Principles and Urban Problems*, p. 139. See also Anthony Downs, *Urban Problems and Prospects* (Chicago: Markham Publishing, 1970), p. 176; William Vickrey, "Maximum Output or Maximum Welfare? More on the Off-Peak Pricing Problem," *Kyklos* 24 (May 1971): 305, Thompson, *A Preface to Urban Economics*, p. 334; Meiburg, "An Economic Analysis of Highway Services," pp. 648, 653; Wohl, "Must Something Be Done About Traffic Congestion?," p. 406; and Sam Yagar, "Potential Demand Response to Improved Roadway Service," *Traffic Quarterly* (January 1973): 133. Gabriel Roth, *Paying for Roads: The Economics of Traffic Congestion* (Middlesex, England: Penguin) objects as follows: "It is doubtful whether cities as we know them today could ever be designed to accommodate all the vehicles that would appear if free uncongested roads were made available to them" (p. 15).

stock. Private enterprise, too, would "fail" if it were prohibited from charging a price for services rendered.⁴³

It is when positive use prices are allowed that businessmen see an opportunity for profit making by curing the excess demand, or "congestion" situations. It is here that private enterprise shows itself head and shoulders above the bureaucratic, statist system which operates without benefit of prices for services rendered.

(*f*) Automobile banning. A solution to the congestion problem widely beloved of some less sophisticated economists and of many popular writers is to ban cars from crowded highways. On the most simplistic level, the "reasoning" seems to be that since road congestion consists of too many automobiles, the best and surest way to end the problem is to ban the offending vehicles.⁴⁴ A slightly more cogent argument is that while automobiles usually carry between 1.2 and 1.5 passengers per vehicle, a bus, taking up no more than two and one-half times the highway space, is able to carry up to fifty passengers at a time.

The problem with both views, of course, is that they treat human beings as homogeneous units.⁴⁵ Underlying both is the

⁴³Such prohibition would, of course, be inconsistent with a pure freemarket system.

⁴⁴Smerk, *Urban Transportation*, p. 198, favors the exclusion of automobiles from highly congested areas. See also Wohl, "Must Something Be Done About Traffic Congestion?," p. 405. William J. Baumol, "Urban Services: Interactions of Public and Private Decisions," in Howard G. Schaller, ed., *Public Expenditure Decisions in the Urban Community* (Baltimore, Md.: Johns Hopkins Press, 1963) justifies such extremely radical measures as "the complete banning of privately owned passenger cars from downtown streets to cope with the traffic problem," on the ground that the traffic equilibrium effect has prevented the additional building of highways from solving the problem: "Freeways seem frequently to have turned out to be obsolete before they were completed" (p. 15).

⁴⁵See Kain, "A Re-appraisal of Metropolitan Transportation Planning," where he states:

democratic or "nose-counting" approach to economics which imparts a false equality into the analysis. For the trips of human beings are *not* all equal. That a bus can carry, for a given road space, a multiple of the people who can travel by car, does not mean that the bus is doing more "work" than the car. Even less justified is the assumption that the value of the bus's services is equal to the same multiple by which it carries more people than a car.

Perhaps a numerical example will clarify this point. Suppose that the average car carries 2.0 passengers per trip, that the bus carries forty people, and that the bus takes up twice the highway space of the auto. Dividing the forty people in half, we arrive at twenty as the number of people carried by a bus of equivalent size of a car. Can we say that the bus is doing ten times the amount of work being done by a car, since the former carries twenty people, while the latter only carries two? No we cannot, unless we make the further assumption that all people concerned are homogeneous in terms of the value they place, or which are placed on their trips. To take only the starkest example, all twenty people in the bus may be out on a pleasure tour, the value of which to them is barely above the costs of the fare they had to pay for the trip. And the two people in the automobile might be

If we limit our consideration to peak hour passenger travel, there is no doubt that buses use much less street space per passenger than private automobiles at each possible speed of roadway operation. Assuming that the benefits from making a particular trip at a particular time and from travel time savings are not too dissimilar between car and bus passengers, the total benefits resulting from a given reduction of bus travel time are much greater than those resulting from a comparable reduction in the travel time for a single automobile traveling during peak hour. (p. 160; emphasis added)

True enough, based on this assumption, but the assumption is completely unjustified! No evidence is given in its behalf and indeed, the presumption should be the exact opposite: automobile riders have higher incomes, and hence higher alternative costs of time, than bus passengers.

a man and his pregnant wife, rushing desperately to the hospital for a delivery. Not only is it not true that the bus is doing ten times the work of the auto; it is by no means clear that the bus is even doing more valuable work than the private vehicle. William Vickrey, one of the few economists to clearly apply this point to transport, criticizes "an aggregate made up of components which, through happening to have a common physical unit of measurement, are economically quite disparate."⁴⁶ It is, moreover, impossible to determine whether the bus or the automobile, in any given case, is doing more valuable work, in the absence of a road pricing system which allows them to bid against one another for scarce road space.

Issue has been taken with this point by Thompson, who holds that under certain circumstances "an outright ban on automobile traffic becomes an approximation of and a rational substitute for a cost-based price." And the special circumstances? "If it is generally agreed that the price that would be charged for automotive access to the Central Business District (C.B.D.)... is so great that no one would pay it." Thompson reasons: "Whether the demand for automobile movement was priced out of the core area by [high prices], the effect is the same."⁴⁷

⁴⁶Vickrey, "Maximum Output or Maximum Welfare? More on the Off-Peak Pricing Problem," p. 305. See also Meyer, "Urban Transportation," p. 66, who objects to "physical controls" on the ground that "they will not differentiate . . . between different classes of user and the intensity of different groups' desire to use urban highways." See also, with regard to the heterogeneity criticism, Harold Torgerson, "Comment [on Brownlee and Heller]," *American Economic Review* 46 (May): 262, wherein it is argued that highway monies ought to be allocated on the basis of necessarily homogeneous "traffic counts"; Schreiber, Gatons and Clemmer, eds., *Economics of Urban Problems*, p. 93, also err in making use of "homogeneous service units . . . in comparing modes of transportation." An author who takes account of the nonhomogeneity phenomena is Winch, *The Economics of Highway Planning*, p. 21.

⁴⁷Thompson, A Preface to Urban Economics, p. 350.

There are problems with Thompson's views, however. For one thing, they assume far too much. How can we ever know, in any particular case, of "general agreement" with the proposition that the price will be so high as to deter all potential motorists from the C.B.D.? Second, even if there is "general agreement," there still may be some consumers with nonaverage tastes who might willingly patronize the C.B.D. roads, even at what are considered to be outrageously high prices by most people.

But let us even suppose that at any one time Thompson is right, and that no one actually would willingly pay the very high prices needed for access to the city streets. Still, a ban is not a good approximation of a price system. For someone could *change his mind* about the benefits of such travel compared to their costs, and decide to patronize the road. Under a price system, what would happen would be akin to any slow-, or non-selling, highly-priced item suddenly rising in the estimation of the consumers: more of it can be sold. But under an outright ban, the whole system will have to be dismantled in order to allow this change in consumer rankings to be translated into action. It is only if we assume perfect initial knowledge, and no changes in consumer preferences thereafter, that the Thompson approximation makes sense. But these are truly heroic assumptions.

Roth⁴⁸ has set out four criteria for judging systems which seek to reduce highway congestion. First, selectivity: a system should be able to distinguish those road users whose needs for the service are immediate and pressing from those whose needs are of a lesser intensity. Second, flexibility: it should discourage use of crowded roads only, not of empty ones. Third, practicability: it should be "simple, fair, cheap and enforceable." Fourth, remediability: the system should be able to pinpoint the trouble spots, and act automatically to remove them. And how do automobile bans, or a system of partial bans, stack up? Says Roth:

⁴⁸Roth, Paying for Roads, pp. 70–71.

Restraint by permit does not commend itself by any of the criteria. The granting of permits would have to follow rigid rules and generally could be neither selective nor flexible. A permit system would give no reliable guidance on investment policy, as it *would* provide inadequate means of measuring *the intensity of* the demand for road space. It would involve the creation of a new bureaucracy to investigate the transport requirements of all car users in order to find out which are, and which are not, "in the public interest."

The idea of a permit system is bound up with the definition of the "essential" vehicle, but this is so difficult that it cannot be usefully pursued. A doctor is usually considered as an obvious "essential" user, but even his permit would raise problems. Would he be entitled to use his car to take his family *to the* theatre? Some might say that he should not, but what would be the position if he were "on call" at the theatre and liable to be rushed out for an emergency at any time?⁴⁹

On the second point, flexibility, it appears that a system of restraints could, with dint of effort, be operated so as to permit the widest use of empty roads and only inhibit the utilization of crowded roads. As to the

⁴⁹Roth, *Paying for Roads*, pp. 71–72. Although clearly on the right track, there are some difficulties even with this eloquent plea in behalf of prices and against permit restraint. First, there is no known or even possible way to measure intensity, by a price system or by any other system. Intensity is basically a subjective and unmeasurable phenomena. Given the inadmissibility of cardinal utility measurements to the bar of economic theorizingcf. Murray N. Rothbard, Reconstruction of Utility and Welfare Economics (New York: Center for Libertarian Studies, 1978)-the quest for a measurable "intensity" is a will-o'-the-wisp. But in economics, it is not necessary to be able to measure the intensity of road use in order to make welfare judgments. Given a price system, where some motorists choose to patronize the road at a given price and others do not, we may still conclude that utility is being maximized in that the two partners to the trade, the road owner and the customer who chooses to patronize his establishment, both gain in the ex ante sense, or else they would not have agreed to the trade. The price system will, and restraint by permit will not, sift out those who are unable or unwilling to pay the congestion premium for road use.

Sometimes the banning of automobiles is urged because of an alleged animosity between "people" and "automobiles." Wilfred Owen writes in this regard:

In an age of urbanization and motorization, the way people live and the way they move have become increasingly incompatible. . . In an automotive age, cities have become the negation of communities—a setting for machines instead of people. . . . Economic and social progress should not be impaired by an unnecessary discord between living and moving. . . . In all the world's major cities, from Bogota to Bangkok to Boston, the conflict between the city and the car is at a point of impending crisis.⁵⁰

And, in the opinion of *The Economist*, "the need to limit the intrusion (of automobiles) into the places where people move, live and work" is "irrefutable."⁵¹

This alleged conflict between "people" and "automobiles" is entirely manufactured, unbelievable, and impossible to parody sufficiently. Were a Martian to learn of the widely portrayed "life and death struggle" between them, he would have to be excused for supposing that these are two different kinds of creatures, vying for an inhabitation of the earth which could be granted to

third point, simplicity, fairness, cheapness and enforceability, there seems little to choose between the two systems. A price system will undoubtedly be cheaper, but, at least in the minds of most of the public, a permit system will be far simpler to understand. Enforceability will depend entirely upon the efforts made by the authority whose job it is to uphold the law-given equal public acceptance; and on fairness, we are convinced that any mutually agreeable contract between two consenting adults is "fair."

Nevertheless, we can go along with Roth to the extent of saying that we, too, might *predict* that under private enterprise the market might well lead the road owners, as if "by an invisible hand," to *choose* prices over permits. But we refuse to enter into the assumptions implicitly held by Roth: that the government *will* of necessity have to make the choice, and that the economists' job is to advise it on the "best" procedures.

⁵⁰Owen, *The Accessible City*, pp. 1, 4.

⁵¹*The Economist*, 30 November 1963, p. 912.

only one. Dare it be mentioned that one of the "protagonists" is a completely inanimate object, invented solely by, and for the use and satisfaction of the other? And that contrary to what might be implied by certain writers,⁵² the car has not taken on supernatural powers which enable it to "body snatch" human beings, or any other such invasive act?⁵³

It is completely fallacious, then, to speak of "cars vs. people." If even a modicum of common sense is to be introduced into this discussion, the problem will have to be treated, not as a conflict between humans and inanimate objects, but between *some* people who want to use automobiles for some purposes, and *other* human beings who are opposed to such (or any) use of these machines. Given this translation, the problem transforms itself into the more usual and hence more manageable conflict over scarce means and competing ends.

With any scarce resource there are always two (or more) individuals or groups who want to use it for different purposes. And the usual method of deciding between the contending groups is the price and private-property right system. The owner of a given property is the one who decides whether it shall be used as a bowling alley or auto showroom, for example. And it is through the price system that those who wish to use the property in question are able to register their preferences.

The reason insoluble difficulties appear in the conflict over "cars vs. people" is clearly due to the absence of the institutions of prices and property rights as applicable to roads. There are no road owners who can presently decide whether to allow their properties to be used (at different hours) by people with cars or by people without cars. There is now no price system which can

⁵²Owen actually speaks of a "spreading automotive *invasion*" (*The Accessible City*, p. 19; emphasis added).

⁵³As for the claim that "cars kill 50,000 people per year in the U.S.," there is not one case on record where a completely unmanned automobile injured a person, except in the fictional movie, "The Car."

determine whether the demand for the given road is greater on the part of those people who wish to use the road in conjunction with their autos, or by those people who wish to use the roads without benefit of these machines.

Another argument against automobile banning is that, at best, it will not solve the congestion problem but will only disguise it. We have seen that electronic surveillance would shift congestion from the roads to the highway entranceways; automobile bans will not transfer the congestion to such an easily seen place, and, therefore, it may be more difficult to realize that the congestion will still exist. After all, the roads will be relatively uncrowded, and there won't be any jam-ups on the entranceways. But the effects of the ban will not vanish. The results will be "seen" in the inconvenience of those who are forced from their first preference, the automobile, to mass transportation; in the lessened mobility of those who, having to give up their autos, and facing unappealing mass transit choices, opt to stay at home, or make fewer trips; in the increased spatial integration of residential, employment and recreational opportunities, which was uneconomic given reasonable transportation opportunities, but which comes into its own, given a transportation breakdown.

We must make no mistake about it: The individual motorist vastly prefers his private mode of automotive transportation to most conceivable, mass-transit alternatives. Even a fanatical adherent of public transportation such as Owen admits this:

The automobile, notwithstanding its shortcomings, is at the top of the list of what most people want, whoever they are and wherever they live. High taxes and restrictive policies designed to discourage car ownership have not had much effect, nor have the inconveniences of urban traffic. People still drive under the most adverse conditions, or they move out when conditions finally become unbearable.⁵⁴

⁵⁴Owen, *The Accessible City*, p. 21.

The usual reasons for this state of affairs, which is vexing transportation planners the world over, are the auto's advantages *vis à vis* mass transit in terms of: privacy; package-carrying ability (especially for shopping); seating availability; safety; and amenities. Furthermore, the automobile is supreme in flexibility—starting from and going to wherever the rider desires. It can be no accident that while mass or public transportation is almost wholly owned and operated by the government, only part of automobile traffic is state-controlled: the roadbed, but not the vehicle.

This does not mean that under private enterprise motor vehicles would never be prohibited or their use never restricted.⁵⁵ The difference is that under private enterprise, the market would have a "voice" in the decision-making process, albeit indirectly. Assume, for example, that a road-owner decided to close off his road to private automobiles. If his decision was wrong, his profits will decrease. Disappointed motorists will turn to other roadowners, willing and able to pay increased charges. The roadowner may, as a result, change his policy. If he does not, he may be driven toward bankruptcy, the better to encourage reorganization of the road-ownership, and the substitution of a more rational policy. Needless to say, citizens have nothing remotely resembling this degree of "power" over their governmentally placed transportation officials.

(g) Special bus lanes. What about special advantages for buses? Most often, highway lanes reserved for the sole use of buses is the specific suggestion.⁵⁶ Although this privilege is only

⁵⁵Roth objects to banning because "restrictions of the kind required are unacceptable on the grounds that they conflict with freedom of choice" (Paying for Roads, p. 15). This may make good sense in an era of government ownership of the roads, but under a system of private enterprise, the right to restrict entry to one's own property is the linchpin of the entire system.

⁵⁶See Owen, *The Accessible City*, p. 32; Noble, "Highway Design and Construction Related to Traffic Operations and Safety," p. 547; Peter L. Watson and Edward P. Holland, "Study of Traffic Restraints in Singapore," *World*

extended to the "freeway flyers"⁵⁷ during the rush hour, it is an important advantage indeed. Automobiles are prohibited from entry, except in some cases for short spans, or in order to make turns. This often allows the bus lane traffic to move at 40 to 50 mph, while hordes of private automobiles must sit by impotently, choked in congestion made even worse by the special treatment accorded the mass-transit mode.

As we have seen, this scheme is fatally flawed by the mistaken homogeneity postulate. It is only if the collective preferences of the bus passengers outweigh those of the motorists that any economic rationale can be used in defense of this plan. But since there is no market, by assumption, there is no way to register or compare competing desires for scarce, peak-hour-highway lane space. Shorn of any possible economic underpinning, the scheme is exposed as a return to a society of status, not contract. Certain groups are privileged. Others are downtrodden. Castelike, bus travelers, whatever their intrinsic "merits," are placed in a higher category than automobile users.

A sharp distinction must be drawn between two seemingly similar situations: (1) special bus lanes by fiat, and (2) special bus lanes that are the result of the operation of the price system. Paradoxically, the exact same result may follow—that is, the identical road use pattern may come about from road pricing as from executive orders. Nevertheless, the economic welfare implications will be very different. If, as a result of the free-market price system, buses are able to outbid automobiles for use of reserved, limited access peak-hour highway lanes, then we may legitimately conclude that all parties to the transaction are beneficiaries—otherwise they would not have entered into contractual arrangements. No such conclusion follows, however, from the establishment of bus lanes without benefit of the price system.

Bank Staff Occasional Papers (Washington, D.C.: International Bank for Reconstruction and Development, 1978), p. 21; Smerk, *Urban Transportation*, p. 194; and Owen, *The Metropolitan Transportation Problem*, p. 121.

⁵⁷See Bish and Kirk, Economic Principles and Urban Problems, p. 146.

Under a price system, there is reason to believe that special bus lanes would ensue.⁵⁸ Jumbo jet airlines serve so many people that they are able to bid scarce airline runway space away from those who use private and corporate jets, even though the latter are presumably much richer on an individual basis. The same phenomenon is likely to be repeated on our nation's roads. Although there will be some limousines, taxicabs, jitneys, and the odd Maserati or two which will be able to bid for privileged lane space on an equal (or favorable) basis with the much more crowded bus, there is little doubt that the mass transportation buses will be able to dominate special lanes. Nor is there much question that the private road owner will find it in his interest (as governmental road managers have not, for the most part) to institute special lanes, perhaps in conjunction with electronic monitoring devices, which will allow higher peak hour speeds, albeit at a higher road price. If he does not, and there is an untapped demand for this service, his competitors will take advantage of this gap. The recalcitrant road owner will, in any case, earn less money than otherwise; for this reason alone we can expect a tendency toward express lane provision.

The economic efficiency of a finely tuned, price-oriented express lane system will be formidable. True, a fiat system might be able to make allowances for emergency vehicles such as firefighting apparatus and ambulances. But it is not easy to distinguish finely between the emergency trips of such conveyances, when it is of the utmost importance that they be sped along, and other journeys, such as the return to base. Nor will the fiat system be able to distinguish between a full and an empty bus. Nor between a full bus where higher price tickets are sold and a faster trip is promised, and one in which slower, cheaper service is promised to an equally packed bus.

⁵⁸See Roth, Paying for Roads, p. 89; "The Changing Challenge," *General Motors Quarterly* (1974): 28; William Vickrey, "Pricing and Resource Allocation in Transportation and Public Utilities," *American Economic Review* (May 1963): 461.

Among some writers, a fiat express lane for buses is justified not for its own sake, but as a "second best" policy. Since it is "politically impossible" to institute such a system based on prices, and it is important to have express bus lanes, it is argued, a fiat system, while not ideal, may be the best possible alternative.⁵⁹ The difficulty with this line of thought is that there is no scientific way of proving that fiat bus lanes really is the policy next best to that which would result from the operation of a price system. It may well not be the second-best policy. Moreover, it is poor strategy for economists, the supposed "experts" in the matter, to relinquish the defense of the best policy, in this case, an operational price system.

Perhaps the most disheartening thing about the reserved bus lane proposal is not the idea itself, but the manner in which it is to be tested and introduced. Not surprisingly, it is the state that is called upon for this task.⁶⁰ But this is the very institution which has so far not seen fit to institute the program on any widespread basis.⁶¹ There is a contradiction lurking here. For if the reservelanes idea is a good one, *and* the highway authorities are competent, then they should have been the first to have thought of and implemented it. Given that they have not done so, and that instead the impetus for the program has come from outside sources, then *either* the idea is unsound, *or* those responsible for not implementing it so far are incompetent. Those who want reserve-lane systems instituted by the present authorities cannot logically maintain that those bureaucrats who have so far failed in this regard are the most qualified to control them now.

⁵⁹See John R. Meyer, "Knocking Down the Straw Men," in Benjamin Chinitz, ed., *City and Suburb* (Englewood Cliffs, N.J.: Prentice-Hall, 1964), pp. 91–92.

⁶⁰Kain, "A Re-appraisal of Metropolitan Transportation Planning," p. 166, calls for the Department of Transportation to conduct the study.

⁶¹See the discussion of the Diamond Lanes experiment—which was later abandoned—to reserve freeway lanes for buses and car pools in Los Angeles. "Diamond Lanes Experiment," *California Journal* (January 1978): 20.

(*h*) *Improved mass transit*. What about proposals for the much lauded car pool, which consists of individuals who formerly rode alone now sharing the same vehicle?⁶² If undertaken by a sufficient number of commuters, the effect of car pooling will be to drive up the "load factor" (the utilization of each vehicle), while reducing the number of (almost empty) automobiles clamoring for limited road space during peak hours.

One drawback is that, for successful operation, car pooling requires people who live and work in close proximity. Except in the case of towns dominated by one large company, for example, a steel mill, where most of the workers live in the same neighborhood, this condition is unlikely to prevail. In most cases, people who live together are not likely to work together and vice versa.

A distinction must once again be drawn between ride sharing which arises as the natural reaction to a road-price system, and that which is compelled by government fiat. In the former case, but not the latter, fine distinctions may be made between those who can benefit from pooling and those who cannot. An arbitrary edict that a pool consists of not less than four passengers (including driver) will exclude the marginal benefits available to the system via the price mechanism which will encourage shared rides between three or even two people. An individual, even if willing to pay the price commonly shared by four or more, would be forbidden road access. Once again, the nonpricing solution is seen to ignore the heterogeneity of human plans and purposes. Pooling is necessarily inflexible with regard to the size of the passenger load, as well as with regard to the desires of the road-service consumers.

What of attempts to speed up and increase the capacity of trains and buses through increasing the length of trains and

⁶²See Wohl, "Must Something Be Done About Traffic Congestion?," pp. 405, 408; and Schreiber et al., *Economics of Urban Problems*, p. 86.

using skip-stop service on both modes of transport?⁶³ Skip-stop operation has its problems, too. It works by first assigning bus or train stops as either *A*, *B*, or *AB*. Vehicles are then either assigned an *A* route, a *B* route, or an express *AB* route. The *A* train, for example, stops only at *A* or AB stops, skipping all intervening *B* stations. Speed is increased, as fewer stops are made, but the question is, does this advantage outweigh the inconvenience of a person's having to switch from the *A* line to the *B* line through the intermediation of an *AB* stop—or having to go backwards if the line is laid out as follows: A_1 , B_1 , AB_1 , A_2 , B_2 , AB_2 ..., and one wants to travel from A_1 , to B_1 ? (In this case, one would have to proceed from A_1 , to AB_1 , and then back to B_1 .)

The problems with increasing train length are: (1) it usually entails a large capital investment in order to build up the train station to a capacity sufficient to handle the larger sized train, and (2) there will be a greater need for police manpower to cover the extra cars, at least in the large urban centers where armed robbery is a force to be reckoned with, even during the crowded, rush-hour peaks.

Another solution to highway congestion proposes to aid mass transit, not by speeding it up, but by enticing motorists out of their cars. If enough people can be attracted into buses or trains by quality improvements (more convenience, decor, luxury, etc.) then, it is hoped, traffic tie-ups will be reduced.⁶⁴ But this proposal has run into difficulties. As we have seen, automobiles are very popular for a number of reasons, and it has always

⁶³See Vukan Vuchic, "Skip-Stop Operation as a Method for Transit Speed Increase," *Traffic Quarterly* 27 (April 1973): 307; William Vickrey, "The Revision of the Rapid Transit Fare Structure in the City of New York," *Technical Monograph* N3 (New York: Mayor's Committee on Management Survey, 1952), concerning New York City; idem, "Improving New York's Transit Service—An Economist's View," *City Almanac* 8 (April 1974): 1–10; and Olmsted, "Response to [William Vickrey's] Improving New York's Transit Service."

⁶⁴Owen, The Accessible City, p. 24; and The Metropolitan Transportation Problem, p. 122.

proven difficult, if not impossible, to "entice" the American motorist out of his car. One transportation critic, John Rae, has gone so far as to label this hope a "myth."⁶⁵ In the United States, at least, "a man's car is almost as much his castle" as his home.

It must be stressed that there is nothing intrinsically objectionable about any of these solutions: car pools, or skip stopping, speeding up trains, making them longer, or even making mass transit more attractive than alternative modes at the margin, for some people at least. There is nothing in any of these attempts to improve mass transit that, in principle, could not take place naturally in a free market. What is objectionable in these scenarios is that, without a market system, it is not possible to determine scientifically which is most worthwhile. "We need to know," asserts Wilbur Thompson, for example, "whether a luxury class, rapid, mass-transit system can be self-supporting."66 But the only way to know definitely is to allow businessmen to set up such services, and see if they succeed in earning a profit. All the handwringing, quibbling, debating, and second-guessing in the world cannot take the place of the profit-and-loss system in determining the economic viability of any of these solutions.

(i) The free fare. Free mass transportation is sometimes advocated as part of an aid package to encourage motorists to forsake their autos in favor of public modes of transport.⁶⁷ The argument

⁶⁵See John B. Rae, "The Mythology of Urban Transportation," *Traffic Quarterly* (January 1972): 88. See also Barry Bruce-Briggs, *The War Against the Automobile* (New York: Dutton, 1978).

⁶⁶Thompson, A Preface to Urban Economics, p. 359.

⁶⁷See L.L. Waters, "Free Transit: A Way Out of Traffic Jams," *Business Horizons* (Spring, 1959): 104–09. Hayek also advocates what are, in essence, "free fares" for highway use:

There are some kinds of services, such as . . . roads, which once they are provided, are normally sufficient for all who want to use them. The provision of such services has long been a recognized field of public effort, and the right to share in them is an important part of the protected sphere of the individual. We need only

is that, if sufficient numbers of people can be so tempted, highway congestion will be reduced. Free fares are also defended on the ground that they will save heavy collection costs, which are a high proportion of the total transportation bill. If no collections are made at all, then at one fell swoop the whole panoply of toll booths, tokens, change-making machines—and the labor necessary to service them—can be eliminated. And similarly, the more sophisticated electronic and computer-based pricing technology that is likely to be employed in the future, would be obviated.

In addition, several other cost considerations are cited in favor of free fares. Scheiner and Starling, for example, propose:

First, to the extent free-fare induces drivers onto public transit, the bus itself is able to move faster; and increased vehicle speed means lower operating costs. . . . Second, free-fare reduces running time by reducing boarding time, which can consume as much as 18 percent of total running time. Under free-fare, fare box queues would be eliminated and passengers could board through both front and rear doors. Third, fare collection equipment maintenance and cash, token, and transfer handling requires about one person for every ten buses—under free fare, this would be eliminated. For a 100-bus operation, approximately \$100,000 annually could be saved in personnel reduction alone. Fourth, transit liability insurance, costing \$.04-\$.06 per mile, would probably not be required; with the patron paying no consideration for the trip, it would be taken at his own risk.⁶⁸

⁶⁸James I. Scheiner and Grover Starling, "The Political Economy of Free-Fare Transit," *Urban Affairs Quarterly* (December, 1974): 179. The authors claim also, in behalf of free fares, aid for urban renewal, full employment, relief of poverty.

remember the role that the assured "access to the King's highway" has played in history to see how important such rights may be for individual liberty. (F.A. Hayek, *The Constitution of Liberty* [Chicago: University of Chicago Press, 1960], p. 141)

According to Meyer, Kain and Wohl, *The Urban Transportation Problem*, p. 340: "The American public seems to feel that highways should be 'free'— that is, have tolls extracted in the form of fuel and other excise taxes."

Another strand of the argument in favor of free public transit proceeds gradually from the attempt to speed up vehicle movements. Instead of going directly to free fares, the first step is the call for exact fare collection, as an intermediary. Owen's statement that "Requiring exact fare collection on the buses has also introduced inconveniences that suggest eliminating fares altogether as a logical next step,"⁶⁹ is a fair portrayal of this view.

These arguments, or ones like them, may have had some influence, for the free-fare idea has become a reality. Seattle's "Magic Carpet" and Dayton's "Downtown Area Short Hop" (DASH) are described as "no fare-zones" if not "full-fledged free-fare transit programs."⁷⁰ But, as in the case of Wilkes-Barre's experiment with free fares in the aftermath of the destruction of Hurricane Agnes in 1972, the evidence for or against the program is conceded, even by its proponents, to be inconclusive.

The free-fare arguments have not gone unchallenged. The difficulty is that:

The present patrons of mass transportation are really a more-orless captive group who cannot use an automobile for one reason or another, (thus) their demand for transit service is relatively inelastic. Cutting or eliminating the fare would not increase ridership significantly, except perhaps for some odd peak, short distance riding as a substitute for walking.⁷¹

⁶⁹Owen, *The Accessible City*, p. 47. Another reason for the exact fare is to reduce robbery of the bus driver's cash, since fares can go directly into a locked box which the driver cannot open.

⁷⁰Ibid., pp. 175–76. For a description of the Toledo experiment, see Owen, *The Metropolitan Transportation Problem*, p. 121.

⁷¹George M. Smerk, "Subsidies for Urban Mass Transportation," *Land Economics* 41 (February 1965): 65. Scheiner and Starling ("The Political Economy of Free-Fare Transit," pp. 175–76) cite elasticities of I-34 for Denver and I-90 for San Diego. Kraft and Domencich cited a study by the Charles River Associates to the effect that "free transit might divert 13.810 of the trips to work from auto to public transit, but few or no shopping trips

The difficulty with elasticity measurements, of course, is that they are not constants which exist in nature, equivalent, for example, to the fixed coefficient of gravity. On the contrary, they are highly dubious attempts to measure the response of one group of people, in one city, on one day, to an elimination of fares. If the experiment were carried on in a different city, or for different people, or on a different day, or at a different time of the day, while holding all other conditions constant, the results would be different. Elasticity, then, is a very weak foundation indeed upon which to erect any public policy. Nevertheless, this criticism seems to have effectively demoted free transportation as a highway congestion cleanser to a secondary role. Instead, upgrading the quality of mass transit has been urged in its place.⁷²

Furthermore, although collection costs would be virtually eliminated, these costs themselves only amount to 8 percent of total operating expenses.⁷³

Free-fares, moreover, are a denial of the price system. If there is no payment for riding, there can be said to be no price system in operation. Free fares, then, are undesirable in that they make it impossible to retain the usual benefits associated with prices. With free fares, there will be "no rational method of determining the proportion of national resources that should be spent,"⁷⁴ since it is through the price system that such allocations are made. Without fares, such allocation decisions will have to be arbitrary.

by auto." See Gerald Kraft and Thomas A. Domencich, "Free Transit," presented at the Transportation and Poverty Conference. Brookline, Mass.: American Academy of Arts and Sciences, 1968. Cited in Lewis M. Schneider, "The Fallacy of Free Transportation," *Harvard Business Review* 47 (January–February 1969): 84.

⁷²See Smerk, Urban Transportation, p. 231.

⁷³See Vickrey, "The Revision of the Rapid Transit Fare Structure in the City of New York."

⁷⁴See Roth, *Paying for Roads*, p. 18, for this and other criticisms of unpriced road use.

Moreover, since prices are the only reins through which consumers "control" producers, free fares will remove any vestige of this effect. Not compelled to earn profits, with their costs subsidized out of general tax revenues, the managers of the transit operations will find that their efficiency and responsibility will be eroded. Roth states: "Free fares fail to relate expenditures to the wishes of the consumers . . . and do nothing to insure that existing [stocks] are used in an efficient manner."⁷⁵

Scheiner and Starling, however, would be disposed to argue with this contention. They ask:

Would an open ended federal subsidy become an invitation to inefficiency and excessive wage demands? Clearly, a carefully designed program would have to deal with this question. One possibility would be to have the federal government pay local communities a flat subsidy per passenger trip. This approach would provide a built-in incentive for transit systems to improve service since the more passengers it carries the more assistance it receives.⁷⁶

This would indeed encourage the local community to provide service, but the quality of service encouraged would only be at that level necessary to tempt use at a zero price. And commuters who put up with rush-hour crunches in some of our larger cities could be expected to continue use of free transit unless it deteriorated very seriously indeed. So there would be some incentive for quality service; but it would only become operational at levels where the service was practically nonexistent.

Additionally, without prices there would be no way in which to gauge the importance that each rider places on his trip. With

⁷⁵Schneider writes: "There would be no quantitative measure other than 'public benefits' or 'last year's budget' by which to judge the performance of the system," ("The Fallacy of Free Transportation," p. 86).

⁷⁶Scheiner and Starling, "The Political Economy of Free-Fare Transit," p. 177.

prices, we know that the customer places a higher value on the trip than the money he must pay in order to buy it. But with free fares, a person will not hesitate to use the service even for the most superficial and frivolous of reasons. People may use transportation just in order to get out of, and stay out of, the rain; for the purpose of having a place to stay; or for loitering. A group of derelicts could tie up transit service by utilizing it at peak-hour times. And if the fare were free only at off-peak times, this would seriously cut into the savings made by obviating the need for collection costs.

We must conclude this discussion of the free fare with the caveat that our rejection of the case in favor of this policy is only applicable to public, mass transportation. As far as private, mass transportation is concerned, the question is a completely open one. Notwithstanding the powerful arguments leveled against free public fares,⁷⁷ a private entrepreneur may well decide, as part of his profit-oriented plans, to give transit away "free" as part of a package deal. This is commonly done in department stores and office buildings, at least as far as internal transportation (elevators, escalators) are concerned. And amusement parks sometimes offer free train rides within their own premises. Given private ownership of all means of transportation, it is impossible to rule out all such behavior.

⁷⁷Note also that in rejecting free fares, one need not embrace the seeming alternative, paid public fares. And that is because there is still a third alternative: the abolition of public transit.

3 Public Goods and Externalities: The Case of Roads^{*}

When government monopolization of the roadways is discussed by economists, the "externalities" argument is usually raised. The argument is said to be simple, clear, and irrefutable. In fact, none of these terms really applies. Let us consider the argument closely.

The externalities argument is based upon a distinction between private goods and services, the use of which benefits only the consumer in question, and public or collective goods, consumption of which necessarily affects the welfare of third or "external" parties. For example, externalities are said to exist when Mr. A. paints his house and neighboring householders benefit as a result.¹ House painting is contrasted with completely

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¹Externalities are usually separated into external economies (positive externalities) and external diseconomies (negative externalities). Although

private goods such as bread, which adds to the well-being of only those who purchase and consume it.

The distinction is often made in terms of excludability: in the case of private goods, the consumer is able to exclude all others from the benefits; in the case of public goods, he is not, and so some of the benefits "spill over" onto third parties. A typical textbook makes the point in the following way:

For a good, service, or factor to be "exclusive," everyone but the buyer of the good must be excluded from the satisfaction it provides. A pair of sox, for example, is a good which is consistent with the exclusion principle. When you buy the sox, it is you alone who gets the satisfaction from wearing them—no one else. On the other hand, a shot for diphtheria is a "commodity" which is not subject to the exclusion principle. While the person inoculated surely get(s) benefits from having the shot, the benefit is not exclusively his. Having become immune to the disease, he can't communicate it to other people. They cannot be excluded from the benefit of the shot even though they do not pay for it and even though the person receiving the shot cannot charge them for it.²

Even at this introductory level an objection must be made. There are any number of external economies, neighborhood effects, spillovers, benefits to third parties, which flow from the

considered by most economists as virtually the same (i.e., as merely opposite sides of the same coin), in our view positive and negative externalities are conceptually different and in need of separate treatment. See Murray N. Rothbard, "Law, Property Rights, and Air Pollution," *Cato Journal* 2, no. 1 (Spring, 1982): 55–99. Reprinted in *Economics and the Environment: A Reconciliation*, Walter Block, ed. (Vancouver, B.C.: Fraser Institute, 1990).

²Robert Haveman, *The Economics of the Public Sector* (New York: John Wiley and Sons, 1970), p. 25. Robert Bish and Robert Warren, "Scale and Monopoly Problems in Urban Government Services," *Urban Affairs Quarterly* 8, no. 1 (September 1972): 97–122, define public goods in terms of excludability: "Public or collective goods in economic terminology are 'non-packageable'; that is, in principle, no one can be excluded from consuming them."

purchase and use of supposedly private goods. Take, for example, the paradigm case of a private good, socks. First, there is a health question. People who do not wear socks are liable to colds, sore feet, blisters, and possibly pneumonia. And sickness means lost days of work and lost production; it means possible contagion (as in the diphtheria case); it may result in rising doctor bills and increased health insurance premiums for other policyholders. Increased demand for doctors' time and energy will result in reduced medical attention for others. There is, in addition, an aesthetic problem: many people take umbrage at socklessness. Restaurants often forbid bare feet, presumably in the interests of retaining their more sensitive customers. Not wearing socks is also interpreted by some as a disturbing political statement, like flag or draft-card burning. Many mothers—a third party, if ever there was one-rejoice when their "hip" sons finally don footwear. That benefits of sock-wearing "spill over" to these mothers cannot be denied.

The problem is by no means limited to the socks example, for *all* so-called private goods affect second or third parties in some way. The reader is challenged to think of any item the use and purchase of which is not affected with a public interest, i.e., which does not similarly have spill-over effects on other people.

Misguided though the definition may be, the externalities argument still has strong influence. Many economists continue to claim that to the extent that externalities are present, "market imperfections" are created and government action is justified to remedy the situation.

EXTERNAL ECONOMIES

Leaving aside these objections for the time being, let us consider the externalities argument as it applies to roadways. The argument assumes that roadways are an instance of positive externalities. Any entrepreneur who constructs a road will have to bear all the costs (of labor, materials, etc.), just as in any business, but since highways are an external economy, he will be unable to reap rewards proportional to the benefits provided. For example, benefits would spill over to those who own land near the highways, in the form of increased value (i.e., the road builder cannot charge the beneficiaries for these gains). Other benefits would be enjoyed, for free, by people who simply prefer more and more highways. Nor could the road owner exclude from increased benefits those who gain from the resulting cheaper transport in the form of lower prices for shipped merchandise.

The claim is that private road builders, responsible for all of the costs but only partially compensated (through fee charges) for providing the benefits, would underinvest. The marginal dollar, therefore, would have a higher return in highway investment (were all benefits to be considered) than it would in alternative outlets.

This argument is sometimes put forth in terms of social and private returns. Private returns—the difference between the outlay and revenue which accrue entirely to the individual entrepreneur—are said to be lower than social returns—the difference between the costs and the benefits for society as a whole. In both cases, the builder—whether an individual business or society as a whole—must pay the full costs of the highway; but it is possible only for society as a whole to derive the full benefits. The entrepreneur, being limited to the tolls he can collect, is unable to capture the gains in terms of increased land values, etc., which spill over onto the remainder of the population.

Given this alleged tendency of the market to underinvest in highways, the argument from externalities concludes that it is the government's obligation to correct matters by subsidizing road building, or, more likely, by building roads itself. Consider the following argument made by Bonavia:

The extreme *laissez-faire* doctrine of non-interference by the State depends upon the assumption that social and private net returns are identical—that self-interest is equated with the common weal.

We are only concerned here with one aspect of positive intervention by the State—namely, through investment in transport. It is clear . . . that the object of State investment is to secure output of a kind whose private net returns are lower than its social net returns, and which accordingly tends to be less than it would be under ideal conditions. A railway, for example, may yield high prospective social returns, and yet, in a community chronically short of capital, offer lower private returns than other industries. The State may then find it advisable to invest the communities' resources in railway construction.³

This argument is erroneous, for its conclusion does not follow from its premises. Even if we accept the view that private road ownership will indeed result in underinvestment, it does not logically follow that government must step into the breach and make up the deficit. The contention that government should involve itself with the private economy is a moral conclusion, one that can be reached only if there are ethical arguments in the premises. But the science of economics must of necessity be value-free.⁴ Therefore, no strictly economic argument can ever establish the legitimacy of government intervention into the economic sphere.

Can we interpret the argument as leading to the conclusion that, since the market will underinvest, given externalities, government action will correct the misallocation of resources by

³Michael R. Bonavia, *The Economics of Transport* (London: Cambridge University Press, 1954), pp. 48–49. Consider also this statement:

Transportation almost always involves rather strong . . . externalities of one sort or another, so that unsubsidized private operation involves necessarily higher prices, in order to break even, than would be conducive to the most efficient utilization of the facilities. (private correspondence, September 6, 1977, from William Vickrey to the present author)

⁴See Murray N. Rothbard, *Man, Economy and State: A Treatise on Economic Principles*, 2 vols. (Princeton, N.J.: D. Van Nostrand, 1962), p. 883. Also, Walter Block, "On Value Freedom in Economics," *The American Economist* 19 (Spring, 1975).

adding to the mileage of road construction? This will not work either. On the one hand, the addition of government investment in roads may decrease the amount of private investment,⁵ so that the total amount of road building, private plus public, may fall below the previously established market level and thus worsen the so-called original underinvestment in roads. On the other hand, government, unshackled by any market test of profitability, may so expand the scope of road building that a resultant overinvestment may ensue. If so, a new misallocation will emerge, with an overinvestment substituted for an underinvestment. Further, even if government action results in the correct amount of total road mileage, government management of its domain may be so inept as to erase any allocation gains. If any of these eventualities obtains, and there is little reason to think not, then the argument fails.

There is another flaw in Bonavia's view: his notion of a "chronic shortage of capital." Economies are *always* short of capital in the sense that people would prefer to have more; this is because capital is an economic good. If capital is not in short supply, it becomes a free good, or a general condition of human welfare, and thus is not amenable to economic analysis. If, however, "chronic shortage of capital" is meant to distinguish poor from wealthy economies, then it is irrelevant to the issue of externalities. The presence of neighborhood spill-overs has to do only with whether third parties are affected, and they will occur or fail to occur regardless of the wealth of a society.

The externalities argument for governmental roads, although widely acclaimed in the modern era, is by no means recent. On

⁵Whenever government competes in the market, it has a chilling effect on private investment in that area, for the government can underwrite its losses out of tax proceeds, and a market enterprise cannot. In this paper we assume the plausibility of a private market in road building. For further explication, see Walter Block, "Free-Market Transportation: Denationalizing the Roads," *Journal of Libertarian Studies* 3, no. 2 (Summer, 1979): 209–38, reprinted in the present volume as chapter 1.

the contrary, it is a hoary tradition. Jackman, writing of England in the mid-1830s, referred to the argument "that [only] those who used the roads should [financially] sustain them," saying:

But the fact is that it was not alone the carriers, but the public as a whole, that reaped the benefits from good roads, and therefore the upkeep of the roads should not be a charge upon those who used the road, but upon the public treasury, for all derived the advantages from them. It was, therefore, inevitable that in time the turnpike gates should be taken down and a more equitable method adopted to secure the end desired.⁶

The American Henry Clay wrote that it is

very possible that the capitalist who should invest his money in [turnpikes] might not be reimbursed three per cent annually upon it; and yet society, in its various forms, might actually reap fifteen or twenty percent. The benefit resulting from a turnpike road made by private associations is divided between the capitalist who receives his toll, the land through which it passes, and which is augmented in its value, and the commodities whose value is enhanced by the diminished expense of transportation.⁷

The major flaw in the externalities argument is, as we have seen, the fact that it is vulnerable to a *reductio ad absurdum*, for indeed there is precious little (if anything) that is *not* an example of an externality. And unless we are willing to follow the internal logic of the argument and hold that government is justified in taking control of practically every aspect of our economy, we must, perforce, pull back from the conclusions of the argument from neighborhood effects.

⁶W.T. Jackman, *The Development of Transportation in Modern England* (Cambridge: Cambridge University Press, 1916), p. 261.

⁷Cited in William C. Wooldridge, *Uncle Sam, The Monopoly Man* (New Rochelle, N.Y.: Arlington House, 1970), p. 129.

Gabriel Roth wrote the following concerning external economies:

It is sometimes suggested that roads should not be charged for because they provide "external economies," that is, benefits to the community which cannot *in principle* be recouped from road users. For example, it is said that the construction of the Severn Bridge will stimulate economic activity in South Wales, that the benefits from this increased activity cannot be reflected in the tolls collected on the bridge, and that therefore there is no point in charging a toll.

While this argument is good as far as it goes, it applies in the case of all intermediate goods and services. There is no reason to suppose that the benefit to the community from a new or improved means of transport is greater than the benefit from an improved supply of electricity or steel. Unless it can be shown that roads are a special case, the "external economies" argument . . . in the case of roads becomes a general argument for subsidizing *all intermediate goods and services.*^{8, 9}

⁸Gabriel Roth, *Paying for Roads: The Economics of Traffic Congestion* (Middlesex, England: Penguin, 1967), pp. 20–21.

⁹Roth unfortunately contradicts himself several pages later. Even though he is unwilling to accept the implication that government becomes involved in the production of all "intermediate goods and services," he states: "As roads benefit non-motorists by providing facilities for pedestrians and cyclists, and access to properties of different kinds . . . there is a logical case for charging non-motorists for the use of the roads" (ibid., p. 43). There would be no problem for Roth if the nonmotorist he advocated as liable for tolls were limited to cyclists and pedestrians. Although they are certainly nonmotorists, it is no less sure that these two groups do use the roads. This interpretation will not do, however, for Roth raises this point specifically in order to justify property taxes as a source of road funding. But property taxes are paid by landowners, who are not to be confused with motorists, pedestrians, or cyclists (although there is obviously an overlap). In basing road charges on property ownership, Roth is using the very externality argument which he had earlier seemed to reject.

Shorey Peterson is another economist who seems to understand this point, though he is reluctant to accept its full implications:

Actually it is easy to endow much of private industry with great collective significance, if one is so inclined. There is no greater social interest than in having the population well fed and housed. The steel industry is vital to national defense. Railroads perform the specific social functions credited to highways. The point is that, in a society such as ours in which an individualistic economic organization is generally approved, it is usually deemed sufficient that an industry should develop in response to the demands of specific beneficiaries, and that the social benefits should be accepted as a sort of by-product. If the steel industry, spurred by ordinary demand, expands sufficiently for defense purposes, further development because of the defense aspect would be wasteful...

Thus if highways, when developed simply in response to traffic needs, serve adequately the several general interests mentioned above, no additional outlay because of these interests is warranted.¹⁰

On one hand this is a very welcome statement, for it clearly sets forth the thesis that the externalities argument for government intervention into the highway industry must be opposed. If we were to allow state takeovers in all areas with "great collective significance," there would scarcely be any private enterprise left in our "individualistic economic" system.

¹⁰Shorey Peterson, "The Highway from the Point of View of the Economist," in Jean Labatut and Wheaton J. Lane, eds., *Highways in Our National Life: A Symposium* (Princeton, N.J.: Princeton University Press, 1950), p. 196. See also Herbert Mohring, "Urban Highway Investments," in Robert Dorfman, ed., *Measuring Benefits of Government Investments* (Washington, D.C.: Brookings Institution, 1965). Mohring states that "the aesthetic, humanitarian, and other 'non-market benefit' arguments that are often used to justify subsidies to such areas as education, research, and the arts seem to apply little to transportation" (pp. 231–32).

On the other hand, Peterson seems unable to carry through his own logic. In the sentence omitted from the above quote, he states: "But if, as in the case of the American merchant marine, the ordinary demand is not believed to bring forth what some collective purpose requires, additional investment on the latter account is indicated." He thus denies practically everything he stated before, for there will always be some "collective purpose" which "requires" additional investment on the part of the state because of externalities. If additional state investments in the American merchant marine are indeed indicated for "collective purposes," even though it is now as large as voluntary payments from satisfied customers would make it, then why is not a governmental takeover of the food and housing industries warranted? After all, there is no question, as Peterson himself has pointed out, that food and housing are imbued with the public, collective interest.

William Baumol is one who does not seem to be aware of this problem. In fact, he carries the externality argument to almost ludicrous lengths in contending that population growth, of and by itself, is a justification for increasing the scope of government operations because of the neighborhood effects it brings in its wake.

Thus, increasing population adds to the significance and degree of diffusion of the external effects of the actions of all inhabitants of the metropolis, and thereby requires increasing intervention by the public sector to assure that social wants are supplied and that externalities do not lead to extremely adverse effects on the community's welfare.

Indeed, the very growth of population itself involves external effects. New residents usually require the provision of additional services and facilities—water, sewage, disposal, road paving, etc., and this is likely to be paid for in part out of the general municipal budget.¹¹

¹¹William J. Baumol, "Urban Services: Interactions of Public and Private Decisions," in Howard G. Schaller, ed., *Public Expenditure Decisions in the Urban Community* (Baltimore, Md.: Johns Hopkins Press, 1963), p. 8.

The obvious question that cries out for an answer is: Why should we single out government services tinged with externalities, such as water, sewage, and road paving, as examples of areas requiring growth, given population increases? Why not also include services and goods that are usually forthcoming on private markets? As we have learned from Peterson, "There is no greater social interest than in having the population well fed and housed." It surely cannot be denied that a lack of food and shelter will create all sorts of negative externalities. Were a population to be deprived of these necessities, disease, famine, and death would soon appear, commerce would grind to a halt, and the economy, indeed the very society, out of which all external benefits flow, would soon end. How can it be, then, that an increase in population does not create the need for government takeovers of the farming and housing industries, to mention only two, even before the stepped up and continued nationalization of such paltry things as sewage and paving, as called for by Baumol? Can it be because we have all witnessed the doubling, redoubling, and doubling again of the U.S. population, since the level attained in the 1770s, with no apparent harm to the nation's farms or construction firms, externalities notwithstanding? Can it be that we are simply unused to the idea of a market in road paving, water, and sewage? Such shall be our contention.¹²

¹²For the same logical error, although presented with a slight variation of emphasis, see George M. Smerk, "Subsidies for Urban Mass Transportation," *Land Economics* 41 (February): 65, where he states:

External economies abound from the provision of transport. In other words, there are many gains and costs which are not realized in pecuniary terms by the enterprise in question, since by its very nature transport confers substantial benefits upon nonusers. . . . Assuming operation of public transport to reflect the general interests of the public, transport output therefore seems most justifiably geared to a point of equality between social costs and benefits rather than strict and sole adherence to the forces of the market as expressed in purely pecuniary terms. (p. 63)

The unique power of the *reductio ad absurdum* is that it casts doubts on the externalities argument, as used by Baumol, Roth, and Peterson. If a nationalized industry can be justified on the basis of externalities, but this phenomenon applies as well to areas where no one wants to see the spread of government enterprise, then one may question just how seriously its advocates take their own argument. They cannot have it both ways. Either externalities justify state enterprise on roads and in practically every other industry as well, or they justify it in no case. It is completely illogical to apply an argument in one case and to fail to apply it in all other cases in which it is just as relevant.¹³

EXTERNAL DISECONOMIES

One phenomenon that particularly infuriates those who see externalities as a justification for intervention is the fact that, under congested road conditions, each additional motorist imposes extra costs on all others, costs which he does not take fully into account, resulting in uneconomic use of resources. Roth states the problem as follows:

the level of traffic flow will depend on decisions taken by individuals taking account *of* the costs and benefits *to them* associated with road use. But from the point of view of the traffic as

Assuming, however, operation of merry-go-rounds to reflect the general interests of the public, and assuming also, as is the case, that these mechanisms, too, are replete with external benefits, does it follow that merry-goround output therefore seems most justifiably geared to public rather than private enterprise? If so, then it would seem that there is nothing that cannot be claimed for government operation.

¹³It would be consistent, although nonsensical, to accept the externality argument in favor of government road monopoly—and nationalization of all other industries wherein externalities obtain as well. For opposing positions, however, the reader might consult F.A. Hayek's *The Road to Serfdom* (Chicago: University Chicago Press, 1944) and *Collectivist Economic Planning* (Clifton, N.J.: Augustus M. Kelley, 1975), and three books by Ludwig von Mises, *Bureaucracy* (New Rochelle, N.Y.: Arlington House, 1969), *Planning for Freedom* (South Holland, Ill.: Libertarian Press, 1974), and *Human Action*, 3rd ed. (Chicago: Henry Regnery, 1966).

a whole this *is* an unsatisfactory state of affairs, for the individual road user when making his decision does not—indeed he cannot—take into account the costs imposed by him on others. He assesses his private costs but ignores the road use, congestions and community costs. It follows that so long as the volume of traffic in conditions of congestion is determined by each road user considering only his own costs and benefits, traffic volumes will be larger, and costs higher, than is socially desirable.¹⁴

And A.A. Walters expresses it this way:

Under congested conditions an additional vehicle journey will add to the congestion. The vehicle will get in the way of other vehicles using the road and will cause their costs to increase as they waste more time in traffic jams and incur higher maintenance costs per mile in the dense traffic. Thus the decision by a vehicle owner to use a congested highway involves all other users in increased operating costs.¹⁵

Unquestionably, under present conditions motorists do indeed ignore the costs they impose on other drivers with respect to overcrowding. Frequently a driver takes account of congestion costs imposed on him by others in that he tries to avoid being ensnared in tie-ups if possible. But to suggest that a commuter would refrain from traveling out of fear of slowing down others

¹⁴Roth, *Paying for Roads*, p. 34. Haveman, *The Economics of the Public Sector*, p. 34, writes the following:

when the next semi-truck pulls onto the freeway with the effect of delaying your arrival and that of all other freeway motorists, you and your fellow drivers are the objects of a spill over cost. It is characteristic that . . . the person harmed bears identifiable "costs" for which he is not compensated. Moreover, . . . this person would be willing to pay something to avoid bearing the spill over cost.

¹⁵A.A. Walters, "The Theory and Measurement of Private and Social Cost of Highway Congestion," *Econometrica* (October 1968): 11.

is ludicrous. The traffic jams endemic to urban rush hours are eloquent testimony to this fact.

Why does such antisocial behavior take place on our highways, and not in other areas where it might be expected? The reason is that our roadway network is in a state of chaotic nonownership run by the government, while other settings in which such behavior might be expected, but does not appear, are run by private enterprise.

We can ask, for example, why it is that economists of the Roth-Walters-Haveman stamp never spare a worry about movie goers who impose crowding costs on others? Why do not the "externality economists" wax eloquent in describing the individual movie goer (or opera patron, punk rock devotee, supermarket shopper, hotel patron, department store customer, airplane traveler, or indeed any person who utilizes a resource which is actively sought by many others at the same time) who shows callous disregard for the costs he imposes on others?

One reason is that the institution of private property¹⁶ is allowed to function in these other areas, so that the so-called externalities can be internalized. Externalities are said to be internalized when A, the source of the externality, and B, the recipient, interact on privately owned property, and can be appropriately penalized or compensated for the externalities through fees imposed by C, the owner. In the case of nonownership of the roads, which presently obtains, each additional driver, A, imposes congestion costs on all other drivers, B, and there is little or no reason for A to desist. But if the road were privately owned, then it would be possible (and indeed profitable) for the owner, C, to reduce negative externalities such as crowding, by raising charges for rush hour use. C's profit potentialities are in

¹⁶If the government charged a price for highway use, such a user fee might deter congestion and lead motorists, in effect, to take account of the congestion costs they impose on others. For an analysis of why a privately owned road system is preferable even to a government pricing mechanism, see Block, "Free-Market Transportation: Denationalizing the Roads," chapter 1 in this volume.

direct proportion to the smooth functioning of the roads; and the fewer the negative externalities, the more attractive will his place of business be, and the more he can charge for additional amenities.

This relation may be difficult to perceive in the case of roads, for we are not accustomed to thinking of roads in terms of private ownership. Let us consider, then, an example which will make the process clearer. A loudmouthed, swaggering drunkard is an external diseconomy on a public (unowned) street. He frightens passersby, but as long as he does not violate any law, no incentive to forbear is placed upon him. Let this same worthy put in an appearance in a nightclub, however, and he is no longer an external effect on his fellow customers. He no longer can adversely affect them and expect to be free of countersanctions. He has now been transformed into an "internal" financial liability to the nightclub owner. It is no longer true that A can act without "tak[ing] into account these costs imposed by him on others," for C, as the owner of the premises, has the lawful right to force A to take account of these impositions by throwing him off the premises if need be. In the private club, the victims (B) of A's unsavory actions cease to bear the complete burden. Though they are the initial sufferers of A's excesses, it is the work of a moment to depart for greener nightclub pastures. The real loser is C, who stands to lose not only revenue, but his entire investment, should his nightclub become known as one that tolerates the likes of A. The existence of bouncers and private guards shows that nightclub owners take seriously the threat of external diseconomies offered by the drunkards of the world.

The drive-in movie furnishes us with a case in which external economics were successfully internalized. When pornographic films were first shown at outdoor theaters adjacent to highways, they created quite a stir. Row after row of tractor-trailers were seen parked at the shoulders of roads, their operators perched atop their cabs to view without paying admission. These spectators, B, received the positive externality (namely, the view of the screen) from A, the theater-owners. Had this situation been permitted to continue, it might have created an under-investment in outdoor theaters, compared with the case in which all spectators were forced to pay admission. Needless to say, it did not long continue. In quite short order the owners in question erected higher fences, forcing all those who valued the view to pay for it. No longer was A conferring a benefit on B, unable to charge him for it. With the advent of the fence, the truck drivers' free view was cut off. The choice open to B was to see the movie and pay for it, or to not pay and not watch. If nonexcludability is the hallmark of the externality, then the ability to exclude nonpayers from the benefits, as here afforded by the fence, is the key to the internalization.

The objection has been raised that a private market in roads would result in underinvestment because the private developers would not be able to reap benefits of their efforts associated with increased land values and lowered costs of transporting goods. Rejecting free enterprise, most economists call instead for increased property taxes on the increased site value of land abutting a highway by the amount of gain attributable to the increased benefits conferred on the property by the road.¹⁷ As we have seen, however, this argument is without merit. External benefits do not lead to underinvestment. On the contrary, the prospective road builder can recoup the gains by internalizing the potential externality. The ease with which this can be done is evident when we reflect upon the fact that, before the actual building process begins, the entrepreneur is the only one who knows where the road is scheduled to be located (or even that a road is intended to be built at all). All the prospective builder need do is buy up territory likely to gain in value from his road at the old, low prices, which do not reflect the increased values likely to be imparted by the highway.¹⁸

¹⁷David M. Winch, *The Economics of Highway Planning* (Toronto: University of Toronto Press, 1963), p. 130, for example, calls for "taxes aimed to recoup from property owners the costs of the road attributable to the traffic which has conferred benefits on that property."

¹⁸He may not be able or even willing to purchase all of the land that may conceivably be benefited from his construction, but this will not affect the

The logic of this argument is not lost upon mainstream economists. For example, Cooper perceptively states:

In the immediate vicinity of a transportation corridor, urban land values tend to increase at a much higher rate from the beginning of facility construction until some time after the facility is in operation. Increases that are more than double or even triple the prevailing growth rate are common. A strong rationale exists for public rather than private realization of this increase in land value. It is argued that, because the taxpayers' money earned the increment, the taxpayers should receive the return. This rationale could justify the purchase of a right of way somewhat wider than needed for actual facility construction, thereby achieving greater flexibility with respect to mode choice and design.¹⁹

The only problem with this statement, from our point of view, is that Cooper ignores the possibility that the capitalist, too, could purchase "a right of way somewhat wider than needed for actual facility construction." If there is any question about which institution, private enterprise or government, would be better able to predict which land would benefit, and to keep plans in secret until the actual purchase was made, etc., there seems little doubt that the market would win hands down. The profit and loss test alone should ensure this.

However, the problem goes deeper. It is widely claimed that the market cannot function, given external economies. It is then argued that the government could act so as to dispel the positive externalities. *A fortiori*, we must conclude that the market can also internalize these externalities, and more effectively to boot.

viability of private roads anymore than will the advent of helicopters, able to see over even the highest of fences, ruin the possibility of a private market in outdoor movies.

¹⁹Norman L. Cooper, *Urban Transportation: An Answer* (Bloomington: Bureau of Business Research, Indiana University, 1971), p. 23.

THE "EVIL" FREE RIDER

The indictment against private ownership of roads is sometimes reversed. Instead of the highway owner being accused of not building enough, the nonhighway-user who benefits without cost is castigated as a "free rider" who "refuses" to pay for the benefits he receives. But certainly he has not asked for these benefits, and in no case can it be alleged that he has contracted for them.

Let us now consider the gains imparted to the consumers of final goods who benefit because goods can now be more easily shipped. If too large a proportion of the benefits created by the highway are provided free of charge, consumers will gain from lower-priced goods, but a private concern may be unable to cover its costs. But through the advent of externality internalization, the road owner will receive payment for the benefits he is providing. The process is simple. All that the road owner need do is charge a price for highway usage roughly conformable to the savings in transport fees created by the facility. The road will still benefit its users (the shippers) and their customers (the final consumers), but there will be no benefits seeping out, or spilling over, as it were, for "free." Such benefits will be paid for, given a price that makes it still profitable for a trucker to use the road. This point is made by Brownlee and Heller as follows:

That highways may cut transportation costs undoubtedly is true; but this truth does not warrant special taxes for highways purpose [sic] levied against persons who do not use the highways. Insofar as truckers pay for using the highways, those persons not directly using the highways can help pay highway costs indirectly through the price system. If appropriate charges for highway use were levied against the military, nonusers would also pay indirectly for the highways from general tax funds spent by them for highway services. The alleged benefits of highways to those who do not use them directly are primarily illusions arising from failure to charge highway users appropriately for the services provided by the highway system.²⁰

²⁰O.H. Brownlee and Walter W. Heller, "Highway Development and Financing," *American Economic Review* (May 1956): 236.

Without this insight, one might assume that highways necessarily involve the creation of an external benefit by the road building company to the advantage of the rest of the public. According to this reasoning, to the extent that highways are important for the national defense effort, the population at large gains a measure of security from them. But the Brownlee-Heller statement shows this argument to be false, for if the military, like anyone else, were required to pay for (potential) road use, then roads would be no more of a positive externality than shoes, lead, paper, or any other material used by the army.

The Brownlee-Heller statement has not gone unchallenged, however, in the economic literature. According to William D. Ross:

The highway users cannot theoretically or practically be assessed the full cost of providing low traffic volume connecting highways and access roads and streets. Some of the benefits of such roads are realized in forms other than the direct use of these roads, but the benefits are more than "illusions arising from failure to charge highway users appropriately for the services provided by the highway system." Some nonhighway-user revenues are necessary if adequate support for highway improvements is to be provided.²¹

But Ross's response is unsatisfactory. He fails to cite any theoretical reason why the overwhelming majority of benefits (or at least enough to make road building profitable) cannot be captured in revenue to the private road owner. We have seen how the entrepreneur would be able to capture the increased values of land by purchase at the old, lower prices. And the same principle can be applied to other important sources of externalities. Nor has Ross succeeded in countering the Brownlee-Heller contention that a price charged for highway use would end the free benefits provided to those who use roads indirectly. Indeed, he ignores this point.

²¹William D. Ross, "Comment," in ibid., p. 257.

Ross does point out a practical problem: "As a practical matter, utility of service or value of service cannot be used as a basis for pricing highway services to the highway user except in the very limited case of toll roads." But modern innovations in electronic counting mechanisms and computers have taken the force out of this argument, if it was ever valid. We must conclude that the external benefits in this case are, in the words of Brownlee and Heller, "illusions arising from failure to charge highway users appropriately for the services provided by the highway system."

Let us take a quite different case. An attractive woman sauntering down the street in a miniskirt provides an external benefit.²² She is a delight to other pedestrians, yet she is unable to charge them for these viewing pleasures.²³ The recipients, according to the theory, however, are the "free riders," who benefit without paying their "fair share" of the costs. Ought they to be forced to pay? Although examples cited by the advocates of the view that free riders ought to be made to pay for benefits received are usually far more sober, the miniskirt case is perfectly analogous. In all cases, the so-called free rider's benefits come to him unsolicited. If it is ludicrous to insist that he pay for an uninvited view of a woman's legs, it is equally so to insist that he be charged, via tax payments, for the losses accompanying "transport of all types."²⁴ And to call such forced payment "justified,"

²²To most males, that is. In the eyes of competitive women, homosexuals, perhaps, and strict, fundamentalist clergymen, presumably, she is anything but. (We deal below with the question of one man's meat being another's poison.)

²³Even such an externality can be internalized by the ever watchful and vigilant marketplace. For an account of how this is accomplished by the management of Maxwell's Plum restaurant, in New York City, see *New York Magazine*, March 1978, and for a similar account involving Sardi's restaurant, see *United Magazine*, November 1982.

²⁴George M. Smerk, *Urban Transportation: The Federal Role* (Bloomington: Indiana University Press, 1965), p. 230, writes: "As the general public benefits from an increased supply of transport of all types, tax receipts from the general public may with justice be used to make up losses."

as is often done, is to be guilty of a clear violation of *wertfrei* or value-free economics. No value judgments whatsoever logically follow from strictly economic postulates. Since we are here concerned only with what economics, not ethics, can teach us, we do not consider the question of what, if anything, would justify the extraction of coercive payments from free riders. We must content ourselves with the observation that the receipt of unsolicited services certainly cannot do so.

If the free-rider argument were really valid, it would open up a Pandora's box of truly monumental proportions. For example, a hoodlum could approach anyone walking along some street, smile at him,²⁵ and then ask the recipient of the smile for a payment of any arbitrary amount (for the value of the benefit that the free rider supposedly enjoys has not been established by any proponent of this view). If the honest burgher refuses to pay, the hoodlum has as much (or as little) right to force him to do so as does Smerk, or his agents, the government, to compel the average citizen to pay for the benefits he receives from "transport of all types."

The so-called free-rider problem would not be limited, however, to such fanciful examples, for our lives are riddled with such phenomena. As Murray Rothbard has written:

The difficulty with this argument is that it proves far too much. For which one of us would earn anything like our present real income were it not for external benefits that we derive from the actions of others? Specifically, the great modern accumulation of capital goods is an inheritance from all the net savings of our ancestors. Without them, we would, regardless of the quality of our own moral character, be living in a primitive jungle. The inheritance of money capital from our ancestors is, of course,

²⁵Or do anything else, whatsoever, that could theoretically be interpreted as being of benefit to the free rider. Remember, it has not been proven that the free rider must admit to being a beneficiary. Smerk and other writers have been willing merely to assume that the general public benefits from an increased supply of transport.

simply inheritance of shares in this capital structure. *We are all, therefore, free riders on the past. We are also free riders on the present,* because we benefit from the continuing investment of our fellow men and from their specialized skills on the market. Certainly the vast bulk of our wages, if they could be so imputed, would be due to this heritage on which we are free riders. The landowner has no more of an unearned increment than any one of us. Are all of us to suffer confiscation, therefore, and to be taxed for our happiness? And who then is to receive the loot? Our dead ancestors who were our benefactors in investing the capital?²⁶

PUBLIC GOODS

Another line of attack on the possibility of a free market in roads is that centered around the concept of "public" or "collective" goods. A pure public good is defined by Haritos as one, such as an outdoor circus, or national defense, "which all enjoy in common in the sense that each individual's consumption of such goods leads to no subtraction from any other individual's consumption of that good."²⁷ The polar opposite of this is the pure "private consumption good, like bread, whose total can be parceled out among two or more persons, with one man having a loaf less if another gets a loaf more."²⁸

Samuelson acknowledges the polar aspects of this partition of goods:

Obviously I am introducing a strong polar case The careful empiricist will recognize that many—though not all—of the

²⁶Murray N. Rothbard, *Man, Economy, and State: A Treatise on Economic Principles* (Princeton, N.J.: D. Van Nostrand, 1962), pp. 888–89; emphasis added.

²⁷Z. Haritos, "Theory of Road Pricing," *Transportation Journal* (Spring, 1974): 54.

²⁸Paul A. Samuelson, "Diagrammatic Exposition of a Theory of Public Expenditure," *Review of Economics and Statistics* (November 1955): 350.

realistic cases of government activity can be fruitfully analyzed as some kind of a blend of these two extreme polar cases.²⁹

As we saw in the case of the socks, there is no clear dividing line between the two categories and, furthermore, no criteria by which the disinterested observer can objectively distinguish between a private good, a public good, and a blend of the two. Let us consider three examples.

First, to the extent that bread is a source of external economies it is a public good, rather than a private one, since these external benefits are "enjoyed by all in common." In other words, while the bread itself may be a private good in that if one person has more, someone else necessarily has less, the bread plus its inseparable neighborhood effects is a collective good, since the externalities from the bread that benefit Mr. D do not in any way subtract from those enjoyed by Mr. E. Mr. D's gain from the externalities, again in Harito's words, "leads to no subtraction from any other individual's consumption of that good."

Second, contrary to what might be assumed, an outdoor circus need not be a collective good at all. If a fence is placed around the festivities and a charge is levied for admission, the external benefits will no longer seep out onto the general public. In addition, if no one in the neighborhood likes circuses, then it is not a good at all. However, if so many people like circuses that crowding results, then it will not be true that one person's enjoyment of the spectacle will not detract from another's. Rather, in the press for a good view, one person's good position will necessarily entail a poor one, or none at all, for another.³⁰

²⁹Ibid.

³⁰On this point, see Stephen Enke, "More on the Misuse of Mathematics in Economics: A Rejoinder," *Review of Economics and Statistics* (May 1955): 131–33; Julius Margolis, "A Comment on the Pure Theory of Public Expenditure," *Review of Economics and Statistics* (November 1955): 247–49; and Charles M. Tiebout, "A Pure Theory of Local Expenditures," *Journal of Political Economy* (October 1957): 417.

A third case, national defense, is one of the reddest of red herrings. This case is of such wide renown and so hoary with tradition that it has gone almost completely unchallenged. But in fact national defense does not fit well with the definition of a public good. One problem stems from differing tastes: not everyone views national defense in the same light. In the words of Rothbard, "an absolute pacifist, a believer in total nonviolence, living in the [sheltered] area, would not consider himself protected . . . or [as] receiving defense service."³¹ Far from being a collective good, so-called defense would be considered a liability. Furthermore, defense protection is supplied through the intermediation of physical tangible goods and services which are very certainly limited in supply-if one person or locale has more of them, another must have less. According to Rothbard: "A ring of defense bases around New York, for example, cuts down the amount possibly available around San Francisco."32

Furthermore, contrary to the definition of public goods, the positive external effects of national defense can be largely internalized. While it might not be possible to exclude all nonpayers from protection, there is no evidence indicating that internalization could not be made to work reasonably well.

How might this work? We might divide the country into sections according to the alacrity with which most people in an area are likely to welcome a private defense agency dedicated to their protection from foreign enemies. Thus, Orange County, California, parts of Arizona, the far west, and the old south might be considered highly interested in safeguarding their liberties in such manner. Mid-Pennsylvania, home of the pacifistic Mennonites, Amish, and other Pennsylvania Dutch peoples, along with the upper west side of Manhattan, and Ann Arbor, Michigan, strongholds of liberalism and antiwar sentiment, would very likely be lukewarm in their reception of such an enterprise. The

³¹Rothbard, Man, Economy, and State, p. 884.

³²Ibid., p. 885.

rest of the country would fall somewhere in between these two extremes.

One manner of internalization of the externalities, on what we might call the "macro level," would be the use of restrictive covenants. People could simply refuse to sell their homes (or rent their apartments) to those who would not agree, and also hold all future owners to agree, to a contract calling for payments to a defense company. Although there might be a few holdouts and recluses, most people in these areas would soon find it in their interest to subscribe. And in the same manner, the areas of the country with a less developed preference for such services would tend to have commensurately less defense provision.

On what might be called the "micro level," the defense company might at some point announce that those who had not paid for service would no longer be protected by its personnel. The company would, of course, continue to protect its own dues-paying members, and indiscriminate attacks on the neighborhood would be repelled. Any attacks which interfered with paying customers would be liable to retaliation from the defense company. But, of course, an attack pinpointed against nonpayers, which did not at all interfere with customers, would be ignored by the company. Given these conditions, the provision of defense service loses most of its qualities of being a public good.³³ People who paid for the service would receive it; others would not. As in so many other cases, the notion of a collective or public good is an illusion created by the absence of an actual market. Effective operation of the market depends on excludability. But the important point is that excludability is not an inherent characteristic of goods. Rather, the ability to exclude nonpayers from benefits is

³³This is not meant as an exhaustive brief for a free market in defense services. Such treatment would take us far beyond the scope of this paper, but the interested reader can consult Murray N. Rothbard, *For a New Liberty* (New York: Macmillan, 1973), chaps. 11, 13; and idem, *Power and Market* (Menlo Park, Calif.: Institute for Humane Studies, 1970), chap. 1; as well as Wooldridge, *Uncle Sam, The Monopoly Man*, chap. 6.

something that can be learned, that must be learned, if the market is to operate. We cannot first prohibit the operation of the market (by government preemption), and then conclude that a market could not function, because of its inability to exclude beneficiaries who do not pay. Of course it would be very difficult for a market which hitherto has been prohibited to suddenly begin effective operation (and it is much more difficult, as we have seen, to envision the operation of such a market). But this difficulty is not the result of anything intrinsic. It is because the erection of bigger and better fences, the creation of more sophisticated jamming devices, etc., can come only with practice; if there is no market in operation, there is no chance for the experimentation with the skills, institutions, and management requisite to its development.

Bish and Warren assert that all "public or collective goods . . . are 'non-packageable'; that is, in principle, no one can be excluded from consuming them."³⁴ But they are incorrect. As we have seen, even in the case of national defense, the paradigm case of the collective good, there exist potential methods and institutions for excluding nonpayers.³⁵ There is nothing in principle to prevent excludability—there is only a lack of a past history of market operation in this area and the limited powers of imagination on the part of economists.

An interesting sidelight on the definitional problem of using national defense as an example of a public good is considered by Charles M. Tiebout. Tiebout contrasts national defense with radio broadcasting, which he holds is not a collective good.

There seems to be a problem connected with the external economies aspect of public goods. Surely a radio broadcast, like national defense, has the attribute that A's enjoyment leaves B

³⁴Bish and Warren, "Scale and Monopoly Problems in Urban Government Services," p. 100.

³⁵For examples of excludability of road users, see Haritos, "Theory of Road Pricing," pp. 55–56.

no worse off; yet this does not imply that broadcasting should, in a normative sense, be a public good. . . . The difference between defense and broadcasting is subtle but important. In both cases there is a problem of determining the optimal level of outputs and the corresponding level of benefits taxes. In the broadcasting case, however, A may be quite willing to pay more taxes than B, even if both have the same "ability to pay" (assuming that the benefits are determinate). Defense is another question. Here A is not content that B should pay less. A makes the *social judgment* that B's preference *should* be the same. A's preference, expressed as an annual defense expenditure such as \$42.7 billion and representing the majority view, thus determines the level of defense. Here the A's may feel that the B's *should pay* the same amount of benefits tax.³⁶

Troubling and puzzling is the importation of value judgments into the analysis. It would appear that the concept of "public good" was offered in a scientific, not a normative sense. What, then, are we to make of the statement, "Broadcasting should, in a normative sense, be a public good"? In the spirit of the definitions offered, one would have thought that broadcasting (or any other service or good) either is or is not a public good, and that normative judgments were beside the point. This is not the case, however, for later in the quote we learn that A's "social judgment" is all that is necessary to justify that B "should pay" for national defense. But what is a "social judgment" as opposed to, for example, a "private judgment"? And by what authority can A, a mere individual, make a "social judgment," whatever that is? Suppose that it is A's considered "social judgment" that B should, through taxes, pay for can openers. Does that judgment automatically convert these implements into collective goods? Moreover, why need we assume that A is content that B pay less taxes for radio, but not for defense? May we not reverse this and assume that although A is willing that B pay less for defense, he is not so inclined when it comes to radio? Is there anything intrinsic

 $^{^{36}\}mbox{Tiebout},$ "A Pure Theory of Local Expenditures," p. 417; emphasis added.

to the goods "radio" and "defense" that precludes this reversal? And if A's preferences were indeed reversed, would this prove that radio, rather than defense, is a "true" collective good?

Perhaps we should reckon with the institution of "democracy," for Tiebout cites majority support for A's preference. It is majoritarianism, then, that puts the winning side in a position to label its view a "social judgment." But this is very far indeed from the initial definition of a collective good. If this is all his argument amounts to, Tiebout might just as well have spared us all the rigmarole about externalities, public goods, and the fact that A's enjoyment leaves B no worse off. All he need have said is that, if and when, for whatever reason, a majority of the eligible voters decides that any particular good ought to be provided by the government, why then, so be it.

SIGNPOSTS AND "FREE" GOODS

If classifying a good as "public" implies that one person's utilization of that good does not detract from another's, then defining roads as a "public good" presents another problem. If, on congested highways, any one motorist imposes costs on all others, the classification of roads as a public good fails. Conversely, if roads really are an example of a public good, then, by definition (but contrary to evidence), one motorist cannot impose costs on others in overcrowded conditions.

According to Samuelson, "no decentralized pricing system can serve to determine optimally [the] levels of collective consumption." And why is this so? "It is the selfish interest of each person to give false signals, to pretend to have less interest in a given collective consumption activity than he really has."³⁷ It is

³⁷Paul A. Samuelson, "The Pure Theory of Pubic Expenditure," *Review of Economics and Statistics* (November 1954): 388–89.

³⁸E.S. Savas, "Municipal Monopoly vs. Competition in Delivering Urban Services," in Willis D. Hawley and David Rogers, eds., *Improving the Quality of Urban Management*, vol. 8: *Urban Affairs Annual Review* (Beverly Hills, Calif.: Sage Publications, 1974): 483.

for this reason that Savas holds that "public goods are properly paid for by the public at large, for their benefits cannot be charged to individual consumers or small collective groups."³⁸

For a more elaborate rendition of this point of view, we turn to Haveman:

The posting of signs on a highway, for example, is a public good. The benefits cannot be denied to anyone who travels the road. Similarly, when a society provides national defense, the benefits accrue to all of its citizens. Because it is so costly to ration the system of city streets once it has been put into place, they, too, are public goods.

Because one can not economically be excluded from the benefits of a public good once it has been provided, private firms have no incentive to produce and market these commodities. Any potential buyer would refuse to pay anything like what the commodity is worth to him. Indeed, he would be likely to express an unwillingness to pay anything at all for it. He would reason: "If I simply sit tight and refuse to pay, I may get the benefit of the good anyway, if someone down the line provides it for himself—after all, it's a public good." However, if each buyer reasons this way (and presumably he will), the good will not be provided. Public goods will only be provided if collective action, usually through a government, is taken. Only through collective action can the availability of worthwhile public goods be assured.³⁹

Needless to say, there are many compelling problems with this argument. As we have seen, highway sign-posting is a public good only when private ownership is forbidden and no price is charged. It becomes a private good just as soon as the externalities are internalized by the market. It is easy to see this point. No one, after all, would call signs in a privately owned department store public goods. Yet the benefits of the signs, usually posted on each floor as well as on elevators and escalators, indicating the

³⁹Haveman, *The Economics of the Public Sector*, pp. 42–43.

departments located on the various floors, "cannot be denied to anyone who travels" in the store. Is there a case, by analogy, for making government responsible for informing people where dresses, sportswear, and household utensils can be found?

Let us turn now to the doctrine of revealed preference. It, too, has serious flaws. It is our contention that, government interferences into the market apart, all external benefits, spill-overs, etc., will tend to cease to exist, provided they are significant enough to make it profitable for private enterprise to internalize them. For example, if the costs of building a tall fence around the drivein theater are lower than the (discounted) value of the additional receipts the owner expects to receive as a result of its construction, then he will build it. If the costs exceed the benefits derivable, he will not build the fence. But if the benefits to be received are so low, then the externalities and spill-overs are not likely to discourage the businessman from providing the service in the first place.

It has been objected that the government can provide the internalization for free and may thus be more efficient than the market (profit-and-loss incentives notwithstanding). Let us construct an example. Suppose that in a society of one hundred people each would benefit from the provision of a "public good" to the extent of \$10. And let us also suppose that the cost of providing the good, in terms of alternatives foregone, is only \$50. Thus, with a total benefit of \$1,000, less a cost of \$50, there would be a \$950 profit in this enterprise. The only problem is that, while each of the one-hundred people would indubitably benefit to the tune of \$10, we must also consider the cost-let us assume, \$1,000,000—of erecting a fence sufficient to exclude these people from enjoying the benefits for free. Therefore, it cannot be a paying proposition for free enterprise. But what will government do? Rather than wastefully spend the \$1,000,000 on the fence, the state simply recoups the \$50 cost by taxing \$.50 from each of the one hundred people, and then provides the service to all comers "for free."

Can we, as strictly value-free economists, conclude that the government will maximize utility by so acting? I submit that we cannot. We cannot, unless, in addition to all the facts heretofore presented, we assume that none of the one-hundred people will resent being forced to contribute to the scheme via compulsory taxes. And this we have no reason to do. In other words, even while maintaining the assumption that each person values his benefits from the project at \$10, and that each realizes that the government's plan will cost him as well as everyone else) only \$.50, it is still conceivable that a person will so resent being forced to do something, even "for his own good," that the costs to him will vastly exceed the \$9.50 gain he stands to capture.

To deny this possibility is to make an implicit assumption of the validity of interpersonal comparisons of utility. In order to justify government action on utility grounds in this case, one has to assume either that all one-hundred people are identical, as far as utility is concerned, or, at the very least, that the benefits derived by the ninety-nine outweigh the psychic income losses of the one malcontent. In fact, the assumption of interpersonal utility comparison is not merely implicit in the thinking of mainstream economists. Samuelson, for example, speaks of a "social welfare function that renders interpersonal judgements,"⁴⁰ and then proceeds to draw an indifference-curve map encompassing the utilities of two or more different people.⁴¹

This procedure is scientifically invalid, however, as there are no units with which to measure or compare happiness or utility. We may, in ordinary discourse, say that one child likes pickles more than another and that therefore, should any temporary household shortage arise, the "pickle lover" should get first crack. But in so speaking we do not have in mind any units of happiness. We do not imagine that one child loves pickles to a degree of, let us say, 48.2 happiness units, the other child only

⁴⁰Samuelson, "Diagrammatic Exposition of a Theory of Public Expenditure," p. 351.

⁴¹Ibid., p. 352.

24.1 units, and that therefore the first child likes pickles exactly twice as much as the other.

Rothbard tells us that

there is never any possibility of measuring increases or decreases in happiness or satisfaction. Not only is it impossible to measure or compare changes in the satisfaction of different people; it is not possible to measure changes in the happiness of any given person. In order for any measurement to be possible, there must be an eternally fixed and objectively given unit with which other units may be compared. There is no such objective unit in the field of human evaluation. The individual must determine subjectively for himself whether he is better or worse off as a result of any change. His preference can only be expressed in terms of simple choice, or rank. Thus, he can say, "I am better off" or "I am happier" because he went to a concert instead of playing bridge, ... but it would be completely meaningless for him to try to assign units to his preference and say: "I am two and a half times happier because of this choice than I would have been playing bridge." Two and a half times *what*? There is no possible unit of happiness that can be used for purposes of comparison, and hence of addition or multiplication. Thus, values cannot be measured. . . . They can only be ranked as better or worse.42

If, then, it is impossible to make interpersonal utility comparisons, we cannot, as scientific economists, conclude that

⁴²Rothbard, *Man, Economy, and State*, pp. 15–16. See also John V. Krutilla, "Welfare Aspects of Benefit Cost Analysis," in Howard G. Schaller, ed. *Public Expenditure Decisions in the Urban Community* (Baltimore, Maryland: Johns Hopkins Press, 1963), p. 227 and Edward F. Renshaw, "The Economics of Highway Congestion," *Southern Economic Journal* (April 1962): 374. Winch, *The Economics of Highway Planning*, p. 38 writes that "unless we make some assumption about interpersonal comparisons [of utility], economics can offer no help in problems of policy such as that of highway planning."

government intervention in "public goods" production will unambiguously lead to an increase in welfare.

MEASURING THE UNMEASURABLE

In order to avoid these difficulties, the neighborhood effects economists have attempted to measure externalities. Large numbers of impressive statistics have not been forthcoming however. Rather, the work of these economists has been sort of a "metameasurement," a prolegomenon to any future measurement; benefit measures have been developed and discussed, but no one has, as yet, offered any definite findings which purport to gauge external benefits received with any degree of exactitude. Mohring, in a typical statement, writes: "the benefit measures developed in this paper ignore externalities—plus or minus, pecuniary or technological. My basic excuse for this shortcoming is the conventional one: the data required to place dollar values on externalities are lacking."⁴³

There is indeed a lack of data placing dollar values on externalities. The problem would appear to be, judging from the above quote, a mere accident: economists have, for some (implicitly) unimportant reason, not yet begun the actual measuring. But in this age of statistics, this is indeed puzzling. Surely a few economists should have taken time out to measure such important data.

Actually, of course, the problem is far more intractable. What is being proposed by those who would attempt to measure the value of externalities is simply the measure of utility. But as we have seen, such an undertaking is impossible and hence doomed to failure. Utility is a subjective phenomenon, rooted in individual preference. There are no units with which to measure utility, a fact that appears to be no more than a slight annoyance to those who would measure it.

⁴³Mohring, "Urban Highway Investments," p. 231.

In a second attempt, Mohring and Harwitz inform us that in questions of highway benefits "reliance is placed entirely on the body of theory that would likely be used by an economist in attempting to place a value on a dam, a steel mill, or any other productive investment."44 But this, too, fails. First, the economist, qua economist, simply has no special aptitude as an appraiser of real estate, factories, or any capital good. This is the job, rather, of the businessman, or entrepreneur, whose success depends on his acuity in making such determinations. No theoretical economist, empirical economist, historical economist, nor any other kind of economist, qua economist, has any practical training or experience as an appraiser. Second, there is no "body of theory" that can be used by an economist (or by anyone else) in determining the value of a capital asset. The value the market places on an asset depends upon what people plan to do with it, with its complements and substitutes, and upon the reactions consumers are expected to have toward the finished product; it depends upon the course of new discoveries and inventions, upon wars, famines, storms, and so forth. Some people are better able to anticipate the future course of the market than others; but such people are successful entrepreneurs, not economists or other social scientists. But Smerk nevertheless suggests in his book on urban transport:

External costs and benefits, many of them of a nonpecuniary nature, should be weighed along with the pecuniary costs and revenues internal to the project. Some of the external factors to be considered will be: (1) Overall freedom of movement; (2) Gains or losses to central city businesses in terms of customer traffic; (3) Gains or losses in travel time for subway riders, public transport riders in general, and motorists; (4) Gains or losses in real estate values; (5) Effects on air pollution and other amenities.⁴⁵

⁴⁴Herbert D. Mohring and Mitchell Harwitz, *Highway Benefits* (Evanston, Ill.: Northwestern University Press, 1962), p. 7.

⁴⁵Smerk, Urban Transportation, p. 236.

As a statement of the measurement task, Smerk's is par for the course. It is really no more than an exhortation that measurement be undertaken, and a specification of some of the facets to be measured. But it does not help us to overcome any of the problems involved. Indeed, it underscores them. How, for example, would we approach a calculation of the value of increasing "overall freedom of movement"? Even if we choose to ignore the lack of a unit of pleasure and the problem of interpersonal comparisons of utility, the task is insurmountable. Nor is his specific suggestion for measuring the benefits of a belt highway in terms of "the resulting increase in sales"46 of much use. Smerk seems to be saying that we can measure the external benefits of a belt highway by noting the sales of the relevant stores before and after its construction and simply attribute the difference to the road. But there is no constancy in human affairs, and other factors may well have intervened between the first measurement and the second. Tastes and fashions, consumer knowledge concerning alternatives, the prices of substitutes and complements, zoning laws, the alacrity with which laws are enforced-all of these might have changed in the interim. Thus, to ascribe all measured change to the belt highway would be illegitimate. Moreover, the use of econometric techniques, which are commonly employed for purposes of this sort, are unsuitable.⁴⁷ Perhaps their most important drawback is that they rely on the facile assumption that discrete, unique, nonrepeatable events (e.g., a presidential election, or the economic effects of opening a road at a particular time and place) can be abstracted from to produce a series of random events (i.e., all presidential elections, all road openings). This assumption is necessary for econometric equations; but if

⁴⁶Ibid., p. 241.

⁴⁷See Bruno Leoni and Eugenio Frola, "On Mathematical Thinking in Economics," *Journal of Libertarian Studies* 1, no. 2 (Spring, 1977): 101–10; Mises, Human Action, pp. 107–15, 350–52; and Rothbard, *Man, Economy, and State*, pp. 277–80.

applicable anywhere, they are applicable only to truly random events such as flipping a coin or tossing dice.

In terminology employed by Mises, what we have here is a confusion of class probability ("We know, or assume to know, with regard to the problem concerned, everything about the behavior of a whole class of events or phenomena; but about the actual singular events or phenomena we know nothing but that they are elements of this class") with case probability ("We know, with regard to a particular event, some of the factors which determine its outcome; but there are other determining factors about which we know nothing").⁴⁸ Road openings and their effects on sales are, at best, amenable to study in terms of case probability. Econometrics, however, can function only in a milieu of class probability. It is therefore inappropriate to use econometrics in measuring a new belt highway's effects on sales.

Revealed Preferences

We now return to our second criticism of the Samuelson-Savas-Haveman assertion that the market will fail, in the case of public goods, because economic actors will fail to register their true preferences. The basic drawback of this approach to the question of "revealed preference" is the vantage point from which the decision-maker is viewed. Let us, then, focus our attention on how these economists view market participants who refuse to voluntarily purchase the public good on the market. Under their theory a market actor would have as his constant refrain, "Let George do it." Unwilling to spend his own money on a good which he may enjoy through the payment of others, this person contributes to the unlikelihood of private provision of that good.

An embarrassing question arises: How does the economist propose to determine the preference scales of market participants? It might be suggested that each individual knows his own preference ranking by introspection, and that the rest of us come

⁴⁸Mises, *Human Action*, pp. 107, 110.

to know it by simply asking him. Both, however, are incorrect. The latter, the questionnaire method, may easily be dismissed. The empirical unreliability of questionnaires and public opinion polls alone should give us pause for thought. Furthermore, the fact that people lie clearly invalidates this method as a good foundation for scientific economics.

It might be argued nevertheless that the individual himself surely knows his own preferences by introspection. Our answer, once again, is no. The evidence of impulsive buying is overwhelming. How many of us have walked down the street with nothing further from our minds than the purchase of an ice cream cone, only to find ourselves, seemingly without any conscious volition, plunging hand into pocket, relinquishing the required sum, and avidly eating away? Is it that we "really" or "unconsciously" were thinking of ice cream? While that could be true, it need not be. Regardless, however, of the exact psychological mechanics involved, it is clear that, before the purchase, introspection might well have failed to reveal the hidden desire. We must therefore conclude that, in at least some cases, the individual economic actor may not know his own value scales. Motivational advertising, to the extent that it is efficacious, is further evidence of the fact that introspection will not necessarily dredge up the true preferences of the individual. The buyer may think he knows what he wants, but in reality, according to this argument, some of his tastes are at the beck and call of Madison Avenue. and not amenable to his own consciousness.

If true value-rankings can be scientifically discovered neither by introspection nor by questionnaire surveys, how can they be? The answer is through market purchases and sales, or more generally, through observation of human action. Ludwig von Mises expressed this idea as follows:

It is customary to say that acting man has a scale of wants or values in his mind when he arranges his actions. On the basis of such a scale he satisfies what is of higher value, i.e., his more urgent wants, and leaves unsatisfied what is of lower value, i.e., what is a less urgent want. There is no objection to such a presentation of the state of affairs. However, one must not forget that the scale of values or wants manifests itself only in the reality of action. These scales have no independent existence apart from the actual behavior of individuals. The only source from which our knowledge concerning these scales is derived is the observation of a man's actions. Every action is always in perfect agreement with the scale of values or wants because these scales are nothing but an instrument for the interpretation of a man's acting.⁴⁹

In our previous example, all the prior introspection and questionnaires in the world would not have ineluctably established that the buyer valued ice cream over the money it cost. It was his action alone, in making the purchase, which established that, at least at the time of purchase, the buyer actually valued the ice cream more than the money spent.⁵⁰

Let us consider a possible challenge to this view. Suppose the ice cream buyer is actually an economist intent upon proving Mises's argument false. Suppose, further, that he hates chocolate and that to refute Mises's theory he goes to the candy store and purchases chocolate. Would he then have demonstrated Mises's theory as wrong by virtue of its implication that he valued the hated chocolate more highly than the money paid for it?

There is more than one way to handle this challenge. First, we might deny that the purchaser really hates chocolate. Following a strict interpretation of Mises, we can reason that whatever his past relationship with this particular treat, his present purchase

⁴⁹Ibid., pp. 94–95.

⁵⁰Rothbard, *Man*, *Economy*, and *State*, p. 890, asks

by what mysterious process the critics know that the recipients [of external benefits] would have liked to purchase the "benefit." Our only way of knowing the content of preference scales is to see them revealed in concrete choices. Since the choice concretely was not to buy the benefit, there is no justification for outsiders to assert that B's preference scale was "really" different from what was revealed in his actions.

reveals either that he has changed his taste or that at least he prefers it to the money he exchanged for it. His action has spoken, in this interpretation, louder than all his protestations to the contrary.

Second, and perhaps in the present scenario more straightforwardly, we can reinterpret the good that was actually purchased. What was really bought was not only chocolate, but chocolate plus the pleasure of "proving Mises wrong." If it had been a question of the chocolate alone, a true chocolate hater would not have purchased it perhaps at any positive price. It was the compensatory pleasure of attempting to disprove the thesis (that only human action establishes value orderings) that more than made up for the disutility of the chocolate. And if the person went so far as to eat the hated chocolate in order to prove his point, our interpretation would still apply and would be fully consistent with the Misesian view.

The trouble with the revealed preference doctrine put forth by Samuelson, Savas, and Haveman is that it assumes a preference ordering on the part of the general public which is completely divorced from actual choices and actions. There is no room in scientific economics for "true preferences" which are not embodied in action. Samuelson may contend that "it is in the selfish interest of each person to give false signals"—i.e., signals which underestimate that person's true value for the collective good—but he cannot show that his interpretation has any scientific validity. This is not to say that his statement is meaningless. Indeed, in the ordinary discourse that has room for measured and interpersonal utility comparisons, it is perfectly sensible. But if we are to remain true to the strict discipline of economics, we shall have to relinquish such loose talk from our vocabulary. There is simply no action that anyone can take which would demonstrate the truth of Samuelson's contention. Samuelson might reply with an admission that he is citing inaction, not action; a refusal to purchase, not an actual purchase. The problem, though, is that (temporary) inaction is consistent with all too many other things. No one can logically reason from the fact that a person is not buying something (a "public good") to the conclusion that he really relishes the service in question and is seeking a "free ride." It may be that he simply does not want it. We can speculate at length about the different reasons people have for not buying something (distaste, ignorance, the desire to "free ride"), but we cannot as scientific economists conclude from the fact of nonpurchase that the person "really" values the good.

If we could legitimately reason in this manner, the sky would be the limit. Once we leave the solid foundations of preferences revealed in market action, the imagination is left free. Some contend that parks, roads, and national defense are public goods and would receive underinvestments in a free market. But using the same reasoning, one might hold that Edsels, pickle-flavored ice cream, and kerosene lamps are presently victims of vicious underinvestment because people are secretly waiting for everyone else to buy first, so that they can be free riders. All of these claims have the same logical status. Each is conceivable and expressible in ordinary discourse. But none is supported by demonstrated preference. We must regard all of them as scientifically invalid.

ISOLABILITY

Another argument for government provision of roads, closely allied to the externalities argument, might be called the isolability condition. According to this line of thought, a good or service comes properly under the province of the marketplace only if its benefits can be isolated and imputed to specific individuals. Otherwise its benefits are said to be "diffused," and the good in question must then be supplied by government. As stated by one advocate of this position: "If it were agreed that the benefits from highway improvements are so diffused among inhabitants of a state that it is impossible to isolate individual beneficiaries, . . . [then] highways should be supported from the general fund."⁵¹

⁵¹D. Netter, "Toll Roads and the Crisis in Highway Finance," *National Tax Journal* 5, no. 2 (June 1952): 109.

One problem with this reasoning is that if there is really no one person willing to step forward and declare himself a beneficiary, then there remains a serious question as to whether there really are any beneficiaries. As we have seen in the discussion on revealed preference, the only secure evidence of actual benefits is market action—the actual payment by consumers for goods delivered or services rendered. If payment is not forthcoming, then it is only idle speculation to suppose that there are hordes of beneficiaries who are unwilling to reveal their interests through market action.

Second, if one is free to justify government roads on this ground, then one is free to defend any state action on the same ground: "X really benefits the masses, although no one person will exemplify this through voluntary payments; the problem is that the gains are diffuse, so that no one beneficiary can be isolated. Therefore, government involvement in the provision of X is justified."

We would not for a moment accept this argument were it applied to any good or service that the government is not now engaged in supplying. As a defense of the status quo, however, its defects are more difficult to see.

This argument can also be attacked on a third ground. Most contemporary economists are comfortable with the phenomenon of continuity in economics. For example, revenue curves and cost curves are usually drawn as smoothly continuous, presumably depicting economic action as taking place in a series of infinitely small steps. The doctrine of "diffused benefits" is entirely in keeping with this tradition, for here, too, an infinitesimal benefit, so small as to not even be noticeable to the presumed beneficiary, is regarded as "real"; indeed, it is seen as justifying government involvement in the economy.

It is true that such a conception of the universe is exceedingly helpful in the employment of the mathematical tools of analysis, especially differential calculus. This no doubt explains, at least in part, the popularity of smooth curves, and the acceptability of diffuse, infinitely small gains. However, as Rothbard states, we must never let reality be falsified in order to fit the niceties of mathematics. In fact, production [and, similarly, benefits from the actions of others or of oneself] is a series of discrete alternatives, as all human action is discrete, and cannot be smoothly continuous, i.e., move in infinitely small steps from one . . . level to another.⁵²

Strictly speaking, either a gain is noticeable to the presumed beneficiary, or it is not part of his realm of human action at all. If a person makes no notice of something, then for him it is not an element that can affect his choices. And if it cannot enter into his economic decision making, it is irrelevant.

An implicit justification for government activity here is that, while the benefits to any one person in a group are indefinitely small, once their benefits are added up they become substantial. This may work, under some assumptions, in physics and other natural sciences. But in economics, where human action is the touchstone, it is nonsense to posit that a phenomenon which is of no benefit to any one individual can be of substantial importance to a group of such individuals. If no one person can be shown to gain from these "diffuse benefits," it cannot be claimed that the whole group somehow gains.

ONE MAN'S MEAT IS ANOTHER'S POISON

Let us consider now a shortcoming, previously alluded to, in the public-good view: that tastes differ and that what may be viewed as a benefit by one person may be seen as something to be avoided by another. Samuelson replies to this objection as follows:

Even though a public good is being compared with a private good, the indifference curves are drawn with the usual convexity to the origin. This assumption could be relaxed without hurting the theory. Indeed, we could recognize the possible case where one man's circus is another man's poison, by permitting

⁵²Rothbard, *Man, Economy, and State*, p. 643.

indifference curves to bend forward. This would not affect the analysis but would answer a critic's minor objection.⁵³

While it is true that, in a formalistic sense, indifference curves could be drawn as concave to the origin to represent disutility, garbage, or negative feelings toward the "good" in question,⁵⁴ this answer will not suffice. When we reflect on the fact that Samuelson's use of the concept of public goods to justify government takeovers is based on the assumption that such takeovers will maximize everyone's welfare, we can see the weakness of this answer. A person for whom a good or its presumed external benefits are in fact disadvantageous will actually lose by its subsidization. To the confirmed pacifist, for example, the expenditure of ever more billions of dollars for military purposes leads to increased disutility. And to add insult to injury, Samuelson's argument is used to justify taxing the pacifist, supposedly for his own benefit, to cover the costs of those increasing expenditures. What we have, then, is a situation which forces a person to pay for the provision of a good that he regards as a "poison."

⁵³Samuelson, "Diagrammatic Exposition of a Theory of Public Expenditure," pp. 350–55. Neither will Tiebout's attempted reformulation do: "A definitive alternative to Samuelson's might be simply that a public good is one which should be produced, but for which there is no feasible method of charging the consumers" (Tiebout, "A Pure Theory of Local Expenditures," p. 417). We can ask Tiebout (and Samuelson, too) how we can *know* that consumers really value a good for which they have no way of registering a demand. If there is no feasible method of charging a consumer, then he can never make his desires known.

⁵⁴This is not the time to expound on the general difficulties of indifference curve analysis. It is worth noting, however, that it is impossible to reveal indifference through the usual market procedures of buying or selling. Thus, an economics based on the view that preference orderings are seen only in human action must entirely reject indifference-curve analysis. For a full exposition of this point, and a general discrediting of indifference as an economic category, see: Rothbard, *Man, Economy, and State,* pp. 265–67; and Walter Block, "On Robert Nozick's 'On Austrian Methodology'," *Inquiry* 23 (Fall 1980): 422–37.

No minor rearrangement of an indifference curve can erase the harm done to a man so confronted. At best, Samuelson's suggestion of permitting the indifference curve to bend forward provides a means of representing the problem—a geometrical way of stating the dilemma—but hardly a solution to it. It is as if, in response to a complaint that the economy is constantly in a state of disequilibrium, Samuelson were to offer to draw supply and demand curves, showing price to be other than at their intersection. Such a drawing would be an illustration of the difficulty, not a solution to it. It cannot seriously be maintained that a man's lot will be bettered by forcibly extracting his money in taxes, if it is intended that these funds be spent on a good that for him is detrimental. The objection cannot be dissolved by pointing out that the situation where one man's circus is another man's poison can adequately be portrayed by forward-falling indifference curves.

IS GROUP ACTION IRRATIONAL?

We next consider a version of the public-good argument put forth by Mancur Olson. It is his contention that "unless the number of individuals in a group is quite small, or unless there is coercion or some other special device to make individuals act in their common interest, rational, self-interested individuals will not act to achieve their common or group interests." And, as a corollary, only "groups composed of either altruistic individuals or irrational individuals may sometimes act in common for group interests... even when there is unanimous agreement in a group about the common good and the methods of achieving it."⁵⁵

Olson limits his analysis to groups whose avowed purpose is the furtherance of the economic well-being of their membership: "The kinds of organizations that are the focus of this study are expected to further the interests of their members."⁵⁶ A group

⁵⁵Mancur Olson, Jr., *The Logic of Collective Action* (New York: Sehocken Books, 1965), p. 2.

⁵⁶Ibid., p. 6.

such as a "lobbying organization, or indeed a labor union or any other organization, working in the interest of a large group of firms or workers in some industry, would get no assistance from the rational, self-interested individuals in that industry."⁵⁷ Olson accounts for this situation by invoking neighborhood effects and public goods. He writes:

Some goods and services . . . are of such a nature that all of the members of the relevant groups must get them if anyone in the group is to get them. These sorts of services are inherently unsuited to the market mechanism, and will be produced only if everyone is forced to pay his assigned share. Clearly, many governmental services are of this kind.

It would obviously not be feasible, if indeed it were possible, to deny the protection provided by the military services, the police, and the courts to those who did not voluntarily pay their share of the costs of government, and taxation is accordingly necessary. . . . A common, collective, or public good is here defined as any good such that, if any person Xj in a group xl, . . . xi, xn consumes it, it cannot feasibly be withheld from the others in that group.⁵⁸

And further:

To be sure, for some collective goods it is physically possible to practice exclusion. But . . . it is not necessary that exclusion be technically impossible; it is only necessary that it be infeasible or uneconomic.⁵⁹

We have already touched upon the case of unfeasible excludability in our numerical example. There, we concluded that the value-free economists could not justifiably deduce that government action, albeit "cheaper," would unambiguously increase

⁵⁷Ibid., p. 11.

⁵⁸Ibid., p. 94.

⁵⁹Ibid., p. 14.

utility. Now we must consider Olson's assertion that economic rationality and market action are incompatible. We must ask whether market action in the case of collective goods can function only if the economic actors are altruistic or irrational. We must ask if a large group of individuals can collaborate in the provision of a good whose benefits, once created, cannot feasibly be limited to cooperating members.

In fact, there are literally hundreds of groups now in existence which meet Olson's definition. Labor unions, charities, businessmen's associations, and civic organizations are numerous. Contributions to artistic and musical societies are in abundance. As I write this, a local nonprofit radio station is featuring "160 uninterrupted hours of J.S. Bach" and asking for funds. If contributors respond generously, such programming can continue to exist. But each potential contributor may reason that, if many others give, he himself will not be excluded from the benefits. And the same applies for the Society for the Prevention of Cruelty to Animals, the N.A.A.C.P., disease research foundations, etc.

In a recent year, the United Way charity alone raised \$1,039,000,000 for such purposes as individual and family services, hospitals and health, social adjustment, and community organization. The American National Red Cross reported donations received totaling \$248,700,000, as well as the involvement of 4,262,000 participants in its blood donor programs. And, in this era of government assumption of increasing numbers of functions previously in the private domain, private philanthropy funds were in a recent year as follows: individuals, \$21.4 billion; foundations, \$2.0 billion; business corporations, \$1.2 billion; and charitable bequests, \$2.2 billion.⁶⁰ One might want to discount some of the corporate giving as motivated by tax incentives, which no doubt did play a role. But the generous financial outpourings

⁶⁰U.S. Bureau of the Census, *Statistical Abstract of the United States*, 1976. (Washington, D.C.: U.S. Government Printing Office, 1976).

from concerned individuals provide ample evidence of the charitable impulses of many of the American people.

Are we to assume, on Olson's theory, that no rational, selfinterested persons are involved in these enterprises? I think not. Rather, it seems clear that Olson is guilty of a stipulative redefinition of some rather slippery words such as "rationality," "selfinterest," "altruism," and so on. Specifically it would be inconsistent with his theory to suggest that a rational, self-interested person might be interested in the welfare of others to that extent that he derived pleasure from an increase in theirs. But why should this suggestion be considered unreasonable? Olson has definitionally precluded such motives from the realm of the rational.

It might appear that Olson is on firmer ground in using the term "self-interested." Dickens's Scrooge, after all, was not known for his charitable instincts. But on consideration, it does not seem correct to so restrict the word "self-interested" to those who take only their own happiness into account, and no one else's. Surely the word is sufficiently elastic to include as "selfinterested" a person who includes the welfare of others around him, such as the members of his immediate family, in his own utility calculations. Doesn't Papa Scrooge ever worry about how Li'l Scrooge is making out?

If we are wrong in this contention, and it is somehow shown that true self-interest is limited to consideration of one's own pleasure and no one else's, then Olson's view is of course correct. But even then, Olson's position is much less powerful than he seems to believe, for all we are left with is the argument that those individuals who are strictly self-interested will be unable to coalesce into groups which can work for common ends. But since there cannot be more than a minute proportion of people who really take into account no one's happiness but their own, this would seem to be but a slight impediment to the smooth functioning of cooperative groups.

Another problem with Olson's hypothesis is that it ignores the role of the entrepreneur.⁶¹ To be sure, it is difficult to rouse large numbers of individuals for collective action. And it is difficult to convince people to contribute to the production of any good whose benefits they will receive whether they contribute or not. The entrepreneur is not faced with this problem, however. If the entrepreneur sees an opportunity for profit, he seizes it, presenting a *fait accompli* to the consumers. In the case of a "public good," of course, the businessman will first have to take steps to ensure that there will be sufficient funds forthcoming to defray expenses and leave a profit. Olson argues that, in the case of public goods, if one person in a group consumes the service, then it cannot feasibly be withheld from others. The entrepreneur will strive to deal with this challenge by lowering the costs of exclusion of nonpayers to the point at which potential revenues warrant investment. The feasibility or unfeasibility of exclusion is not predetermined, but rather a function of market operation. If hitherto government-monopolized markets were suddenly opened to the domain of the entrepreneur, the number of goods and services to which Olson's definition applies would be sharply reduced.

Indeed, the key to excludability may be as cheap as it is obvious. We have seen how a simple announcement of discontinuance of protection for noncontributors might work in the case of defense. Fire protection would probably fall into the same mold. Let just one house burn down, with the private fire department and its apparatus on the scene but refusing to quench the flames—all because the owner not only did not keep the company on retainer, but also refused to meet a "special, emergency price"—and let this event be widely reported by the media, and fire protection would probably cease, from that moment on, to be an example of Olson's public goods.

⁶¹For an excellent exegesis of the importance of the entrepreneur, see Israel Kirzner, *Competition and Entrepreneurship* (Chicago: University of Chicago Press, 1973).

THE HISTORY OF PRIVATE ROADS

Perhaps the most telling argument against the externality and collective goods thesis as applied to the provision of roads is the sheer weight of historical experience to the contrary. Roads are nowadays generally considered a paradigm case of public goods, for the very possibility of privately operated roads is dismissed. Yet, prior to the latter part of the nineteenth century, private roads, highways, turnpikes, etc., played an important role in world commerce.

Privately owned and operated turnpikes were the backbone of the highway network in England in the eighteenth and nineteenth centuries. Exact statistics for this time period are unfortunately difficult to come by. However, since the formation of each new turnpike required a specific Act of Parliament, the number of such acts provides "a fairly reliable, though rough, estimate of the progress that was taking place."62 According to Jackman, the number of such parliamentary acts throughout England in the two decades from 1751 to 1770 was twice as great as the number passed during the previous fifty years. In the north midland counties, the number rose from 55 in the earlier time period, to 189 in the latter. And from the first half of the eighteenth century to the forty-year period after the mid-century mark, there was a 388 percent increase in the number of such acts passed.⁶³ And if the percentage increase figures are impressive, the base is no less so. Says Sir Alker Tripp, "it is computed that more than a thousand Turnpike Acts were passed between 1785 and 1810, and that in all there were more than four thousand acts of this character."64

⁶²Jackman, The Development of Transportation in Modern England, p. 233.
⁶³Ibid., pp. 233–34.

⁶⁴Sir Alker Tripp, "The History of the Modern Highway in England," in *Highways in Our National Life: A Symposium*, Jean Labatut and Wheaton J. Lane, eds. (Princeton, N.J.: Princeton University Press, 1950), p. 43. According to Sidney and Beatrice Webb, *English Local Government* (New York:

From the perspective of history, it is difficult to avoid the conclusion that private turnpikes were the norm. For example, in the view of Shorey Peterson:

But history shows, if two notable instances establish a rule, that when highways come to play a major part in transportation, the view of them in strict collective terms breaks down both in theory and in practice. This was true in the 18th and early 19th centuries when the growing commerce of the Industrial Revolution turned to the public roads for accelerated and cheapened movement. The local governments were unable to take care of the traffic; and turnpike trusts of a quasi-private nature were set up to exploit the discoveries of Telford and McAdam on a business basis. Toll gates might seem offensive by customary usage, but there was effective logic in the idea that highway service, unlike other basic government activities, might be developed by ordinary investment standards and financed by specific beneficiaries, rather than the general public.⁶⁵

If every dirt track, muddy path, narrow passageway, and winding route were counted, of course, the actual mileage of public highways was far in excess of the turnpikes. Jackman, citing two historical reports, calculates that in 1820,

out of a total length of about 125,000 miles of road, only a little over 20,000 miles, or roughly, one-sixth of the whole, was turnpike; and even by 1838 there was only 22,000 miles of turnpike, while the amount of ordinary highway was computed as not less than 104,770 miles.⁶⁶

Longmans, Green, 1922), pp. 155–59, toll roads, or turnpikes, were in operation as early as 1662 and 1670 but did not achieve a modest frequency until 1691. The earliest historical example on record, however, seems to be much earlier: "Authority seems to have been given in 1267 to levy a toll in Gloucestershire Manor" (ibid., p. 157).

⁶⁵Peterson, "The Highway from the Point of View of the Economist," pp. 192–23.

⁶⁶Jackman, *The Development of Transportation in Modern England*, p. 234. The two reports he cites are "Report from the Committee of the House of

These statistics are, however, misleading in terms of the actual importance played by the turnpike system, for highway mileage is not a homogeneous commodity. Miles cannot be equated one to another. On the contrary, some mileage is more strategically placed, is of better quality, and supports more important and valuable traffic. And in each of these respects the (quasi) private turnpikes surpassed the public highway system. In terms of strategic location, for example, Jackman tells us that "the greatest industrial and commercial centres at this time [1838] were linked up by practically continuous turnpike roads."67 In comparison, the less industrialized areas of the country were served by the parish highways. Although these served "large and important sections" of the country, the typical rate of industrialization and commercialization was lower there. Further, the parish, or public highways, in comparison with the turnpikes "were generally in a bad state."68 And, as for the quality of traffic, "turnpike roads were constantly treated by the legislature on the assumption that the traffic upon them was more important than the traffic upon an ordinary highway."69

The early American experience of private road building was entirely in keeping with that of England.⁷⁰ Replying to the view

Commons to Consider Acts Regarding Turnpikes, Roads, and Highways, 1821" and "Report of the Royal Commission on the State of the Roads, 1840." The Webbs give rough support to these estimates in stating that 23,000 miles of roads were administered by the Turnpike Trusts in 1835. They add the fact that, in the same year, 1,100 Turnpike Companies collectively levied an annual revenue of more than 1.5 million sterling and had a debt of £7 million. Webb and Webb, *English Local Government*, p. 152.

⁶⁷Jackman, The Development of Transportation in Modern England, p. 234.

⁶⁸Brit. Mus., T. 1157 (4), "Highways Improved," p. 2, quoted in ibid.

⁶⁹Joshua Scholefield and Archibald W. Cockburn, eds., *Pratt and MacKenzie's Law of Highways*, 18th ed. (London: Butterworth, 1932), p. 467, quoted in Tripp, "The History of the Modern Highway in England," p. 43.

⁷⁰See also Bonavia, *The Economics of Transport*, p. 53, concerning the Italian experience with private roads, or autostrade.

that individual investment in roads would have to make way for societal or public investment, Wooldridge had this to say:

Exactly the opposite situation prevailed for most of the important roads of the nineteenth century. From 1800 to 1830 private investment poured into thousands of miles of turnpikes in the United States, notwithstanding the miniscule return the capital earned, and hundreds of turnpike companies built roads that carried the rivers of emigration to the old Northwest and the products of the newly settled states back to the seaboard. For the first third of the century, constructing the roads that were the only means of transportation to and communication with most parts of the West remained a function of private capital. An occasional exception, like the famous National Road going west from Cumberland, Maryland, was a deviation from the norm.

The history of the grandfather of all the turnpike companies, the Philadelphia and Lancaster Turnpike Corporation, chartered in 1792, has much in common with all the rest. Pennsylvania had no desire on principle to commit its program of road building to private enterprise, and in fact had resorted unsuccessfully to several other expedients before chartering its first turnpike company. That was the pattern in most of the states where the companies later flourished; in the late 1700's, the states tried lotteries, forced road service from local landowners, grants-in-aid to localities, and even offers of large acreages to contractors if they would build roads to the interior. All these measures failed, as well as the routine expedient of levying taxes and spending them on the highways of the states. None of the states' financing schemes could begin to supply the volume of capital necessary for the improvements the people were more and more vociferously demanding as they in ever larger numbers pushed to the West. An economist might have told the states that if the people needed roads that badly, it ought to be a simple matter to levy sufficient taxes to pay for them, but then as now political reality was not always conducive to economic models, particularly when the people using the roads were often using them to leave the states. In view of the durable consensus on the necessity of publicly financed roads that developed well

before the end of the nineteenth century, it is a little ironic that the private road companies should have been chartered only because it proved impossible for the states themselves to raise enough capital to build the roads everyone seemed to want. ⁷¹

Although the early part of the nineteenth century was the heyday of private road construction, similar efforts are to be found much later on. The Lincoln Highway, for example, was built in the twentieth century.⁷² Although not privately owned, its impetus, and much of its financing, came from private sources. The idea for a road across the United States was first presented by Carl Fisher in 1912 to a body of automobile and allied businessmen, who, as we can imagine, had an immediate and pressing interest in the construction of highway mileage. And there were dozens of private contributions, including \$300,000 from Goodyear and \$150,000 from Packard, although these were given to various state governments for actual construction.

Furthermore, if the existence of externalities are held to be an impediment to the private construction of roads, then the existence of private railroads throughout American history must be counted as evidence to the contrary, for the external effects are virtually the same in the two cases. Yet the existence of externalities has never acted as a barrier to private railroad construction. Indeed, as of 1950, there were some 224,000 miles of railroad track in operation,⁷³ virtually all of it privately owned; this is truly ample testimony to the fact that the existence of claimed externalities has not interfered with the construction of substantial railroad mileage.

⁷¹Wooldridge, Uncle Sam, The Monopoly Man, pp. 129–30; emphasis added.

⁷²See *The Lincoln Highway* (Lincoln Highway Association; New York: Dodd, Mead, 1935).

⁷³U.S. Bureau of the Census, *Statistical Abstract of the United States*, 1976, p. 604.

CONCLUSION

Finally, even if the externality–public good argument for government intervention were correct, it would be problematic because it can so easily lead to abuses. All sorts of state activities could, on the same grounds, be demanded by those who advocate an ever larger role for government. Baumol warns of this when he says:

The presence of external effects and other grounds for increased governmental intervention need not constitute a license for petty bureaucrats and others to impose their view of virtue and good living on a recalcitrant public.⁷⁴

The problem is, of course, that many governmental operations, supposedly justified on public goods grounds, do not really involve externalities, even in the view of the proponents of this view. Says Peterson, for example:

But government does not limit itself to activities which are purely of this type [collective or public goods], or, necessarily, even approximately of this type. For a variety of reasons, it may, and often does, enter fields where the principles of the private economy can and do operate, wholly or in considerable degree. This happens when a government undertakes to supply water or gas or electricity or street railway or bus service, when it markets forest or mineral products from the public domain, or even when it provides postal service.⁷⁵

Peterson might well have included the provision of highways in this regard. Savas makes a different but related point:

⁷⁴Baumol, "Urban Services: Interactions of Public and Private Decisions," p. 14.

 $^{^{75}}$ Peterson, "The Highway from the Point of View of the Economist," p. 192.

public goods are properly paid for by the public at large, for their benefits cannot be charged to individual consumers or small collective groups. However, from this reasonable arrangement, it is easy to leap to the unwarranted implication that public goods paid for by the public through payments to the public tax collector must be provided to the public by a public agency through public employees. There is no logical reason for the mode of payment to bear any relation to the ultimate mode of delivery of collective goods.⁷⁶

Here, again, we find the government, seemingly basing its actions on the "scientific" arguments from externalities, somehow overstepping these bounds. And we know that this trend is widespread. Modern government has undertaken a myriad of tasks unrelated to the collective good argument (or any other arguments we have discussed here), as Peterson has indicated. As Savas suggests, even when the collective goods argument does apply, the ensuing state involvement monumentally oversteps the bounds set by it. In how many cases does the government limit its activities merely to ensuring that the good is produced? Quite to the contrary, in the transportation sector, as in many others, the government has undertaken the direct provision of the service by a public agency, through public employees.

Given this state of affairs, it behooves us to question the role played by the collective-goods argument. Is it, as is implicitly maintained by its adherents, an intellectually sound defense of government activities? Or is it no more than an apology for programs which would have been embarked upon regardless of the availability of the argument—and which were actually begun long before the argument was conceived?

⁷⁶Savas, "Municipal Monopoly vs. Competition in Delivering Urban Services," p. 483.

4 Theories of Highway Safety^{*}

he highway safety record in the United States is unfortunate, where some 50,000 people lose their lives every year and some 2,000,000 more are involved in serious accidents. This phenomenon has evoked a response from the social science community: try to find the causes and hence the cures. The difficulty, however, is that all such attempts have been marred by a major flaw: the belief that whatever else is the cause of the problem, one thing is not responsible—the current institutional arrangements whereby road and street safety is the responsibility of the public sector. This view is challenged, and an alternative scenario of private road ownership is presented. Based on this model, several attempted explanations of, and implicit cures for, highway fatalities and accidents are discussed. Specifically, an analysis is undertaken of the claim that a major portion of the responsibility can be leveled at the manufacturers of road vehicles. One fallacy committed by this argument includes ignoring the fact that the private, highway-inspection industry has been in effect nationalized. The criticisms by the Naderites of the NHTSA are considered, and the policy recommendations based on this analysis are rejected.

^{*}The article first appeared as "Theories of Highway Safety," *Transportation Research Record No.* 912 (1983): 7–10.

Current interest in deregulation and privatization is being manifested in the social sciences. So far, this interest has pertained to airline deregulation and to the replacement of municipal sanitation services with private alternatives.

A more ambitious undertaking in this direction involves the substitution of private or marketplace-oriented road and highway ownership and management for the current institutional arrangements under which such tasks, rights, and responsibilities are accorded to the public sector.

The substitution of private for public road ownership and management should be distinguished from another theoretical position—one that advocates that the current public-sector highway managers introduce peak-load or other pricing schemes usually associated with the marketplace. There is a vast difference between these two proposals. In the former case, the highways would be turned over to private entrepreneurs, and the new owners would themselves decide what kind of charging mechanism to institute.^{1,2} In the latter case, the various road authorities would continue their overall management but would merely introduce some type of marginal-cost pricing system for road use.³

In this chapter, only one argument in favor of such a change is implicitly considered: that such a substitution would improve the safety standards under which the system of roads and streets currently operates. This is accomplished by considering a theory of highway safety regarding vehicle malfunction from a point of

¹Walter Block, "Free Market Transportation: Denationalizing the Roads," *Journal of Libertarian Studies* 3, no. 2 (Summer, 1979): 209–38, reprinted in the present volume as chapter 1.

²Walter Block, "Congestion and Road Pricing," *Journal of Libertarian Studies* 4, no. 3 (Summer, 1980): 299–330.

³Gabriel Roth, *A Self-Financing Road System* (London, England: Institute of Economic Affairs, 1966).

view that holds private road ownership as a feasible alternative to the current system.

The thesis of this chapter is that the dismal highway safety record is due to the absence of a free marketplace in the provision for, and management of, highways. Under the status quo, there is no competition, i.e., no financial incentives to urge managers to control accidents. (Bureaucrats do not lose money when the death rate rises, nor is the road manager rewarded, as in private enterprise, if a decline in accidents occurs).

This lack of incentives has not gone completely unnoticed by the highway establishment. For example, Kreml, a member of the President's Task Force on Highway Safety, calls for the government to

Establish an incentive system that will relate federal aid to some overall measure of safety improvement. Under such a system, each state could be eligible to receive from federal funds incentive payments for reduction in deaths . . . accidents . . . etc.⁴

Although, in one sense, this would be an improvement compared with the current system, it is paradoxically a step in the wrong direction. For what we need is not a superficial improvement of the government system, but a basic revamping. It is true that Kreml's suggestion may have some beneficial effects, but it depends on, and would further entrench, the management system that brought us to the current crisis. Further, it is replete with problems.

First and most important, it would not be an incentive system commensurate with the one provided by the market. The financial rewards and penalties would not be automatic as a result of an ongoing market process. Rather, Congress would have to act and would presumably delegate this responsibility to yet another

⁴F.H. Kreml, "On Highway Safety," *Traffic Digest and Review* (March 1971): 2.

government bureau. A new core of bureaucrats would thus be born, whose job would be to hand out the actual incentive payments to the states that show the most improvement.

Second, the consumer is not involved in the process. There is not even a hint in this plan that the purchaser of road services could, through his or her consumption decisions, affect plans of the highway managers. In the Kreml plan, the incentive payment goes to the state government, not to individuals. But can the prospect of the state government receiving the extra millions of dollars raise the morale and support of those employees charged with highway safety to the degree necessary to make serious inroads on the death statistics?

Third, why should the plan reward a reduction in the accident rate? Kreml specifically calls for a relation of incentive payments to safety improvement. This is far from the pattern that usually takes place in the market.

The basic problem with the thinking of the road authorities is the approach that they have taken. They ignore the possibility of employing the usual profit-and-loss business incentives to minimize highway accidents, and instead have an overwhelming concern with objective considerations. Unwilling to look at entrepreneurial potential because they see only government institutions as viable for highway management, the professionals in the safety field concentrate on the physical means through which death rates can be lowered and not on the subjective elements necessary to mobilize objective factors for this purpose.

A brief survey of the literature shows that these objective conditions are usually listed under three headings: the vehicle, the driver, and the road. For example, Campbell⁵ cites the driver, the road, and the vehicle as causes of accidents and implores that we "move on all three fronts." Oi states the following:

⁵H.E. Campbell, "The Wet Pavement Accident Problem: Breaking Through," *Traffic Quarterly* (April 1973): 210.

In the accident research literature, accident "causes" are typically classified under three headings: the host, the accident agent, and the environment. Injuries on the ski slope are "caused" by (1) the reckless actions and physical condition of the skier, (2) the design and condition of the ski equipment, and (3) the characteristics of the slope and the snow.⁶

Here the host and skier are readily seen as the driver; the accident agent or ski equipment as the vehicle; and the environment or slope as the road.

It must be stressed that there is nothing wrong with this division—if it is used as an organizing tool—provided that the essential nature of the problem (entrepreneurial incentive) is not obliterated. The difficulty with the division of highway safety into driver, vehicle, and road is that it ignores and masks the true solution. Unless the physical elements, along with the financial incentives, motives, and purposes, are analyzed through a perspective that makes entrepreneurship its primary focus, a solution to the problem will not be found.⁷ The chief drawback to the safety literature is that there is simply no room in the analysis for the only institutional arrangement that makes entrepreneurship its centerpiece—the free market. Only government solutions fall within the realm of this analysis.

One manifestation of this mindset is the division of the profession into "vehicleists," "driverists," and "roadists," where each faction urges that its realm is the most important and the key to the solution of the safety problem.

Nader, perhaps the best known of the "vehicleists," states the following:

⁶W. Oi, "Safety at any Price?" American Enterprise Institute Journal on Government and Society (November–December 1977): 22.

⁷Israel Kirzner, *Competition and Entrepreneurship* (Chicago: University of Chicago Press, 1973).

For decades the conventional explanation preferred by the traffic safety establishment and insinuated into laws, with the backing of the auto industry and its allies, was that most accidents are caused by wayward drivers who *ipso facto* cause most injuries and deaths.... Not only was their approach unscientific regarding drivers, but it conveniently drew attention away from the already available or easily realizable innovations that could be incorporated into vehicle and highway design to minimize the likelihood of a crash and to reduce the severity of injuries if a crash should occur.⁸

One problem that particularly concerns Nader is the presence of dangerous hood ornaments on automobiles.⁹ Even more vexing to him is the lack of NHTSA action to alleviate this problem in the late 1960s and early 1970s.

Another vehicle-related problem is the lack of conformity of truck-cab dimensions to the variations in human body size. It is charged that by using assembly line techniques, arm and leg room can be built to only one set of specifications. But this means that the tallest and shortest drivers will be uncomfortable and unable to react to road conditions in an optimally safe manner. McFarland states:

Clearances were frequently inadequate; in one model the shortest 40 percent of drivers could get the knee under the steering wheel when raising the foot to the brake pedal. In another, this clearance was so small and the gear shift so close to the steering wheel that the tallest 15 percent of drivers could not raise the foot to the brake pedal, by angling the knee out to the side of the wheel, without first shifting the gear level away.¹⁰

⁸Ralph Nader, *Unsafe at Any Speed* (New York: Grossman Publishers, 1972), pp. xvi and xvii.

⁹Ibid., pp. xxviii, xxix.

¹⁰R.A. McFarland, "Health and Safety in Transportation," *Public Health Reports* 73, no. 8 (August 1958): 671.

Inferior truck tires have been allowed on the nation's roads and have contributed to the accident toll. Sherril claims:

Tire failure and brake failure are the top killers in truck accidents caused by mechanical failure, and two-thirds of the tire failures are blowouts on the front. Even with new tires, the heavier front load presents an extra risk of blowouts. With retreads the risk becomes much greater; but the Federal transportation bureaucracy, despite repeated pleas from drivers to come up with a ruling, has not outlawed retreads on the steering axle.¹¹

Another aspect of the vehicle that might contribute to safety, but all too often does not, is the license plate. Were it to be constructed out of reflectorized material,¹² it might reduce the likelihood of rear-end collisions at night.

Therefore, how is it that private companies, such as General Motors (hood ornaments), private trucking firms (retread tires), and truck builders (improper cab dimensions), have been responsible for contributing to the accident rate? The only item mentioned above that is not the fault of the market is nonreflecting license plates, which are clearly the responsibility of state authorities, not private companies.

Let us stipulate for the sake of argument that all of these charges are factually correct. The case for the market is not ruined if some, many, or even all participants have made mistakes. Any real example of a free market in action will have to consist exclusively of fallible human beings. As such, the surprise is not that mistakes are made, but how few there are compared to the limitless human potential for error. The market can still be justified in terms of minimizing error, not eradicating it, in the tire retread

¹¹R. Sherrill, "Raising Hell on the Highways," *New York Times Sunday Magazine Section* (November 27, 1977), p. 99.

¹²Dan Klein and J.A.Waller, "Modification of Driver Behavior vs. Modification of the Driving Environment," *Traffic Quarterly* (April 1971): 229.

and truck cab specification cases when compared with alternative methods of control.

But what of the public agencies responsible for the malfeasance? If it is assumed that the above-quoted charges are substantially correct, then public agencies (e.g., NHTSA) must also be held responsible. And here the explanation of human frailty will not suffice. For regulatory bureaus are without the safety net of market competition. If one falters, no others need arise to take its place.

Nader's hood-ornament charge, however, cannot be answered in this manner. Again, on the assumption that these decorations are actually harmful to pedestrians, it cannot be assumed that the market forces will engender a tendency toward their removal. This is because, by definition, the ornaments will not harm the purchaser of the automobile, the driver, or his family; they can, at most, prove detrimental to outsiders, i.e., pedestrians.

However, it cannot be concluded that the market is incapable of registering the desires of pedestrians, i.e., third parties to the purchase of a car.¹³ It appears incapable of doing so, but this is because public-highway ownership has foreclosed a vital part of the market—street ownership.

The owner of a shopping center (this is the closest current analogue to private streets) must ask:

Can I earn more money by permitting entrance to automobiles with possible dangerous hood ornaments, or can profits be maximized by forbidding them? If I forbid them, I shall be boycotted, to a degree, by owners of the offending cars, but patronized, perhaps to a greater degree, by those who fear these protuberances. If I allow them, the reactions will be identical, but in the opposite direction.

¹³For a fuller discussion of the externalities issue, see, Walter Block, "Public Goods and Externalities: The Case of Roads," *Journal of Libertarian Studies* 7, no. 1 (Spring, 1983): 1–34.

In the market, the (perhaps different) decisions of thousands of street and road owners will determine whether hood ornaments stay or go. If the overwhelming decision is that ornaments are a significant danger, then the owners of private roads will either charge more for their use or else forbid them entirely. In either case, it will be to the advantage of the automobile manufacturers to discard them. It can perhaps be concluded from the non-existence of any prohibition of hood ornaments by private sources—parking lots, shopping centers, and so on—that they are not as dangerous as Nader believes. But even if the hood ornament is not a good example of an actual danger, the same analysis can be used to show how, under full market conditions, safety implementation can still take place.

But many accidents are caused in relation to other vehicles. Hood ornaments are but one example of this phenomenon, other examples of one vehicle involving others in accidents are when the high beam from one automobile interferes with the vision of the driver of another; when the rear of one automobile is inadequately lighted so that the driver of another cannot see it in time; and when a blowout or a brake failure or a swerve of one automobile results in a crash with another.

Only the road manager, not the original manufacturer of the automobile, is in a position to alleviate problems of this sort. But the government, by seizing a monopoly on highway management, has not adequately assured the public that vehicles allowed on the road will meet minimal safety standards.

Austrian economists have long taught that capital, far from being a homogeneous entity, where any bit could fit in equally well with any other, is actually highly differentiated and heterogeneous. In order to work efficiently, capital must fit together in a delicate latticework, where each piece is in a position to support and make effective all other pieces.^{14, 15}

¹⁴F.A. Hayek, *Prices and Production* (London: Routledge and Sons, 1931).

But labor, too, fits the same principle. The automobile safety establishment has failed to realize that a whole profession, complementary to automobile manufacturing, has been prohibited.

The area that is complementary to automobile manufacturing in terms of certifying and upgrading vehicle safety is the private enterprise of vehicle inspecting. But there is no such private industry. It has been, in effect, nationalized—in part and parcel of public control of all aspects of road management.

The public enterprise of vehicle inspection has been sadly remiss in its self-claimed monopoly responsibilities. According to a report from the former Department of Health, Education, and Welfare:

In the realm of government jurisdiction over traffic safety, matters at first fell to revenue collection agencies on the one hand and to law enforcement agencies on the other; vehicles were initially licensed solely for the purpose of collecting revenue, and not for many years did the notion appear of vehicle inspection for safety purposes (fourteen states still do not have inspection laws).¹⁶

By government admission, then, there were many years during which there was no concern with vehicle inspection for safety purposes. This is only believable of a governmental institution, i.e., one that suffers no monetary or any other reversal for failure to carry out its self-appointed tasks. And as late as 1968, fourteen states did not even carry out this task to the extent of passing inspection laws.

The overriding problem with NHTSA, and with all similar government systems that are supposed to guard the public against vehicle defects, is that no competition is permitted. If

¹⁵Ludwig Lachmann, *Capital and Its Structure* (London: Bell and Sons, 1956).

¹⁶"Report of the Secretary's Advisory Committee on Traffic Safety." U.S. Department of Health, Education, and Welfare (February 29, 1968), p. 21.

market certification were allowed, there might be several or perhaps many competing private agencies; in real life, there are only a few commercial testing laboratories.¹⁷

Perhaps the above discussion explains some of the shortcomings Nader has charged against NHTSA:

Since February 1969, no new regulations have been added to the meager data informing the consumer of differences between vehicles, thus reinforcing the absence of quality competition in the auto market.¹⁸

Written in 1972, this translates into a three-year hiatus during which consumers learned nothing about the quality difference between competing brands of automobiles. One could scarcely imagine a similar occurrence in a private industry, or even on the part of one single firm, such as Consumers' Union, dedicated to providing information on automobiles. If such a thing were to occur, there is no doubt that other profit-seeking competitors would move in to exploit such an opening. They would take advantage of this lack of knowledge by providing the missing product.

Another difficulty with NHTSA, as with other regulatory agencies, is the tendency of bureaucrats to become "too friendly" with the regulated companies. Cecil Mackey, Assistant Secretary of Transportation states:

As the more obvious regulatory actions are taken; as the process becomes more institutionalized; as new leaders on both sides replace ones who were so personally involved as adversaries in the initial phases, those who regulate will gradually

¹⁷For a sympathetic analysis of what might be termed the private safety certification industry, see Milton Friedman, *Capitalism and Freedom* (Chicago: University of Chicago Press, 1962), chap. 9.

¹⁸Nader, *Unsafe at any Speed*, p. xxviii.

come to reflect, in large measure, points of view similar to those whom they regulate.¹⁹

Gabriel Kolko gives a more extreme viewpoint on this phenomenon and contends that such commonalities have existed throughout American history.²⁰

It cannot be contended that the free market is completely without such problems. It must be admitted that all institutions, whether public or private, are susceptible to this danger. Free enterprise, however, has certain safeguards that are absent in the public sector.

This phenomenon can be better understood by comparing what happens to people involved in public and private institutions when a problem is discovered. For the owner of a private commercial-testing laboratory, when an employee is discovered accepting bribes for rendering favorable opinions, the results are truly catastrophic.

But this would not be the case for employees of the government. Barring jail sentences, the worst that is likely to happen is that the single bureaucrat caught will be fired. And even that is by no means certain if he is protected by civil-service regulations.

In addition to competing on the basis of their main mission (laboratory testing, checking, and certifying), private certification agencies also compete in terms of preventing defections on the part of their employees. And this job is second in importance only to their main mission.

Therefore, it can be concluded that, at least as far as the vehicle malfunction and maldesign theory of highway accidents is concerned, no barriers to private road ownership have been found. If the Naderites were consistent, they would call for a

¹⁹Ibid., p. xxxi.

²⁰Gabriel Kolko, *The Triumph of Conservatism* (Chicago: Quadrangle Books, 1963).

radical alteration in the institutional arrangements provided for highway safety. As it is, they are reduced to advocating what can only be considered marginal improvements.

Part II

Applications

5 Private Roads, Competition, Automobile Insurance and Price Controls^{*}

Under present institutional arrangements, there is a modicum of competition, which takes place with regard to our nation's roads. Sad to say, however, such competitiveness is superficial, very limited and only indirectly related to these transportation corridors. For example, advertisers compete with one another in terms of highway billboards; insurance companies vie with each other over automobile coverage; roadside restaurants, gift shops, etc., each attempt to wrest market share from their counterparts. But in terms of knock-down, drag-out competition, of the sort which earmarks, for example, the industries which provide us with ships and sealing wax, computers, automobiles, books and movies, there is none. There could hardly be any, since for the most part roads, highways, streets and other vehicular thoroughfares are all owned and managed by different governmental jurisdictions.¹ None of them can earn

^{*}The article first appeared as "Private Roads, Competition, Automobile Insurance and Price Controls," *Competitiveness Review* 8, no. 1 (1998): 55–64.

¹In similar manner, while there is indeed competition with regards to envelope stuffing, postage metering, etc., there can be no real competition

profits from wise managerial decision-making, nor suffer losses and risk bankruptcy from the lack of same; as with all activities performed in the public sector, such competition cannot, by the very nature of the enterprise, take place.

Why is this an unfortunate state of affairs? It is because market competition tends to bring about more economic efficiency than governmental, bureaucratic control. Ceteris paribus, the weeding out of the inefficient, which occurs under free enterprise ,tends to ensure a higher quality product at a lower price than that which emanates from the public sector, which does not benefit from this process. States one anonymous referee in this context, "privatization of roads could make a society more competitive by allowing more efficient use of resources, including spending on insurance" and much more. For example, Block gives reasons to believe that competition between private highway owners would reduce the motor vehicle death rate,² surely evidence of an inefficient use of resources, and demonstrates that such private arrangements will tend to decrease road congestion³ (more incentive toward peak load pricing), which is certainly another economic misallocation.

It must be faced at the outset, however, that this scenario will strike many as unlikely in the extreme, not to say bizarre. Are not highways the sorts of things that must, by the very nature of things, be assigned to the public sector? How could private streets overcome the free-rider problem? Are not roads quintessential public goods? How could private firms surmount the

with regards to first class mail: it is prohibited by law. The postal monopoly prevents such competition, as does (virtually total monopoly) state ownership of roadways.

²Walter Block, "Free Market Transportation: Denationalizing the Roads," *Journal of Libertarian Studies* 3, no. 2 (Summer, 1979); "Theories of Highway Safety," *Transportation Research Record* 912 (1983); and "Road Socialism," *International Journal of Value-Based Management* 9 (1966).

³Walter Block, "Congestion and Road Pricing," Journal of Libertarian Studies 4, no. 3 (Summer, 1980).

difficulties associated with nonexcludability? What about monopoly? We must object to the claim that there is something intrinsic about roads that renders it necessary for them to be part of the "public" sector. The original highways, turnpike roads, were invariably private concerns; the theoretical arguments opposing vehicular thoroughfare privatization are all invalid.⁴ Even nowadays, there are miles of private "streets" which function exceedingly well, despite the fact that most commentators have not appreciated that they accommodate automobile traffic.⁵ Nor is there any theoretical reason why such a state of affairs could not prevail for the entire vehicular-transportation network

⁴See T.S. Ashton, An Economic History of England (London: Methuen, 1955), pp. 78-81; Block, "Free Market Transportation: Denationalizing the Roads," chap. 1 in this volume; "Theories of Highway Safety;" and "Road Socialism." Also Walter Block, "Public Goods and Externalities: The Case of Roads," Journal of Libertarian Studies 7, no. 1 (Spring, 1983); and Walter Block and Matthew Block, "Roads, Bridges, Sunlight and Private Property Rights," Journal Des Economistes et des Etudes Humaines 7, no. 2/3 (June-September 1996); Economist (November 30, 1963): 912 and "Watch This Airspace," Economist (June 22-28, 2002):14-21; W.T. Jackman, The Development of Transportation in Modern England (Cambridge: Cambridge University Press, 1916); Dan Klein, John Majewski, Christopher Baer, "Economy, Community and the Law: The Turnpike Movement in New York, 1797-1845," Journal of Economic History (March 1993); idem, "From Trunk to Branch: Toll Roads in New York, 1800–1860," Essays in Economic and Business History 11 (1993); Dan Klein and G.J. Fielding, "Private Toll Roads: Learning from the Nineteenth Century," Transportation Quarterly (July 1992); idem, "How to Franchise Highways," Journal of Transport Economics and Policy (May 1993); idem, "High Occupancy/Toll Lanes: Phasing in Congestion Pricing a Lane at a Time," Policy Study 170 (November); Gabriel Roth, A Self-Financing Road System (London: Institute of Economic Affairs, 1966); idem, Paying for Roads: The Economics of Traffic Congestion (Middlesex, England: Penguin, 1967); idem, The Private Provision of Public Services in Developing Countries (Oxford: Oxford University Press, 1987); Murray N. Rothbard, For a New Liberty (New York: Macmillan, 1973); William C. Wooldridge, Uncle Sam, The Monopoly Man (New Rochelle, N.Y.: Arlington House, 1970).

⁵I refer to the traffic lanes inside modern enclosed shopping centers.

of the U.S. We are accustomed to regarding long, thin entities such as highways as impossible to privatize. But railroads, which are equally "long and thin" have for many decades been built, owned and managed by profit-making firms.⁶ Access need not be limited by use of antiquated-coin tollbooths.⁷ The universal product codes, which keep track of groceries, could easily by applied to automobiles; even our "horse and buggy" highway authorities are now—at long last—in the process of introducing such automation.⁸ Nor need we fear that a private street owner would not allow automobile access, or would charge unreasonably high "monopoly" prices; our experience with the typical forprofit railway line is that it

tried its best to induce immigration and economic development in its area in order to increase its profits, land values and value of its capital; and each hastened to do so, lest people and markets leave their areas and move to the ports, cities, and lands served by competing railroads. The same principle would be at work if all streets and roads were private as well.⁹

⁶In the rest of the world outside the U.S., where railroads have traditionally been under the provision of the government, people have an equally difficult time imagining how such services could be provided privately. They are perhaps not aware of U.S. experience where not only inter-city lines have operated on a profit basis, but that this applies to intra-city rail as well. For example, in New York City, the Interborough Rapid Transit (IRT) and Borough of Manhattan Transit (BMT) lines (but not IND) were originally owner-operated.

⁷These are pictured, by opponents of road privatization, as being located in front of each house on every street, thus bringing traffic to even more of a standstill than operates at present.

⁸For more on this, see James C. Nelson, "The Pricing of Highway, Waterway and Airway Facilities," *American Economic Review, Papers and Proceedings* (May 1962); William Vickrey, "Review of Herbert Mohring," *Transportation Economics* (1982); A.A. Walters, "The Theory and Measurement of Private and Social Costs of Highway Congestion," *Econometrica* (October 1961).

⁹Murray N. Rothbard, *Reconstruction of Utility and Welfare Economics* (New York: Center for Libertarian Studies, 1978), p. 204.

Such irresponsible behavior would be impossible in any case since

everyone, in purchasing homes or street service in a libertarian society would make sure that the purchase or lease contract provides full access.... With this sort of 'easement' provided in advance by contract, no such sudden blockade would be allowed, since it would be an invasion of the property right of the landowner.¹⁰

Having introduced the concept of street, road and highway privatization, let us now utilize it to assess an analysis of a related issue: automobile insurance rates.

AUTOMOBILE INSURANCE RATES

Smith and Wright (hereafter SW) set themselves two main tasks.¹¹ The first is an explicit one. As the title of their paper indicates, it is to explain just why Philadelphians pay higher automobile insurance rates than do people of other cities in the U.S. The second task is an implicit one, or at least it is not so fully explicit. This is to add to the already voluminous literature that seeks to justify price controls on the basis of economic efficiency. The remainder of this paper will confine itself solely to their second point; it will show that, although hoary with tradition, this rather clever attempt to justify price controls—on presumably value-free grounds—succeeds no more than any other.

What are the arguments of SW? Simply stated, they maintain that there is a suboptimal equilibrium (to which Philadelphia and several other cities have sunk), where automobile-insurance rates are so high that an excessive number of drivers elect not to avail themselves of this protection. This, in turn, leads to excessively high rates for the law abiders, which deter the non-insurers in the

¹⁰Ibid.

¹¹Eric Smith and Randall Wright, "Why is Automobile Insurance in Philadelphia So Damn Expensive," *American Economic Review* 82, no. 4 (September 1992).

first place. And why is this? It is due to the lack of coverage for accidents of the non-insured, which spills over negatively to all and sundry. In the words of SW:

When an uninsured or underinsured driver causes an accident, the damaged party will be forced to collect from his own policy if the at-fault party does not have sufficient resources to compensate his victim. Hence, when there are significant numbers of uninsured or underinsured low-wealth drivers, insurance companies have to charge higher premiums in order to earn a given rate of return, and these higher premiums may be enough to discourage some drivers from purchasing insurance.¹²

The contention of SW is that society needs to break through this vicious cycle. How can this be done? Their public-policy recommendation is that government should control auto-insurance rates, bringing them down to the level where even the law breakers, under the present system of "market failure"¹³ will choose to insure. Then, all can both enjoy the lower rates, and the better driving conditions that a reduction of lawlessness will bring about.

To be fair to SW, they do not claim that such price controls will necessarily bring us to this nirvana of optimal equilibria; they continually stress only that numerous equilibria "could" or "might" exist; and that even if they do, it is only "possible" that controls (on price, entry, coverage, no-fault, assigned risk, etc.) can reach an optimal situation. They are fully cognizant of the California situation, where ceilings on rates seem to have led to the withdrawal of insurance firms, not to the attainment of any optimal equilibria. Nevertheless, despite their cautious mien, there are grave problems with this analysis, to which we now turn.

¹²Ibid., p. 759.

¹³Ibid., p. 771.

Private Roads, Competition, Automobile Insurance, and Price Controls

1. SW sees "market failure" as the underlying cause of the problem, and government control as the solution. They state, "Concerning efficiency in *laissez-faire*, our model demonstrates the possibility of market failure in the market for automobile insurance."¹⁴ "In this paper, we have demonstrated the possibility of market failure in the automobile insurance market."¹⁵

But how can they coherently talk of a failure of markets, or, even more extremely, of *laissez-faire* capitalism, in the context of state-owned and managed roads and streets? Their charge is almost akin to the claim that our welfare system, or social security, represents a market failure. This is clearly government failure, not market failure.

The plain fact of the matter is that the U.S. now suffers under a Sovietized highway system. Although here and there can be found a private street or bridge, the overwhelming majority of our country's vehicular transportation arteries are under state authority.¹⁶ So if there were any failure in this sector of the economy, it would be amazing if it were due to "markets." To characterize the present state of affairs as one of "*laissez-faire*" is very wide of the mark indeed.

2. SW seems to have taken the advice of Coase with regard to the importance of institutions.^{17,18} Their footnote 5, for example,

¹⁷The latter appears, coincidentally, in the very same volume as their own paper under discussion. See Ronald Coase: "The Nature of the Firm," *Economica* 4 (November 1937): 386–406; "The Problem of Social Cost," *Journal of Law and Economics* 3 (October 1960): 1–44; "The Institutional Structure of Production," *American Economic Review* 82, no. 4 (September 1992): 713–19.

¹⁴Ibid., p. 770.

¹⁵Ibid., p. 771.

¹⁶Under Soviet agriculture, 97 percent of the arable land was communalized; only 3 percent was in private holdings, mostly in the form of garden surrounding the hovels of the farm workers. Of all U.S. streets and highways, an amount greatly in excess of 97 percent is held by the state; far less that 3 percent are privately owned.

constitutes a very detailed examination of a rather minute institutional detail. But this concern is more apparent than real, as indicated by their failure to take into account the statist institutional arrangements which now earmark the nation's highway system.

They note that, "a few cities like Philadelphia and Miami have nearly forty percent of their drivers uninsured."¹⁹ Under present institutional arrangements, there is of course no automatic feedback mechanism to penalize those managers who allowed the situation to get so far out of hand. Under a competitive street industry, of course, there is little doubt that firms which stood by idly under such a state of affairs would long ago have gone bankrupt, and their places taken by those with more competence.²⁰

3. The SW analysis fails to take cognizance of the social functions of a freely functioning insurance industry. By discriminating amongst customers, and charging more for those more likely to file for claims (e.g., people who smoke, drive carelessly—or whose age, sex, race or other characteristics are correlated with dangerous actions), they tend to reduce the incidence of such anti-social behavior. In the present context, the uninsured drivers

¹⁸See also Douglass C. North, *Structure and Change in Economic History* (New York: Norton, 1981); Oliver Williamson, *The Economic Institutions of Capitalism* (New York: Free Press, 1985), Joseph A. Schumpeter, *Capitalism, Socialism, and Democracy* (New York: Harper, 1950), p. 198.

¹⁹Smith and Wright, "Why is Automobile Insurance in Philadelphia So Damn Expensive," p. 760.

²⁰One would have thought that even a reasonably competent bureaucracy would have been able to avoid such extremes of lawlessness. And, to a degree, this is true. That is, some governmental bodies have done far better at this than others. The problem, though, is that the failures are not automatically penalized, nor the (relative) successes automatically rewarded. But the same results obtain under all Sovietized economic systems. It is no accident, for example, that on the 97 percent of agricultural land under collectivization only 75 percent of the crops were grown, while the three percent of the land in private hands accounted for 25 percent of farm products.

are more likely to create accidents than the insured; if they were effectively denied access to roads, as they would be under high-way *laissez-faire* this would undoubtedly reduce traffic fatalities.

SW propose a plethora of policies designed to handicap the insurance industry, but it is difficult to see how they can improve social welfare given that they have not incorporated the positive contribution of insurance firms to this end.

4. SW discuss suboptimal equilibria in terms of high premiums deterring poor people from insuring, while lower ones might encourage them in this behavior, to the general benefit of all concerned. Let us, having criticized this proposal, offer an alternative. Stipulate it as a given that we must regulate automobile insurance rates; perhaps then, it would be better to require minimum rates, not the maximum ones offered by SW. That is, instead of price ceilings, lowering payments, let us suggest for argument's sake price floors, raising them. How could this be justified, using the methodology for which we must thank SW?

Simple. If insurance companies were required to raise their rates, even fewer people would insure. Non-insurance rates of 40 percent, which are now the exception would instead become the norm. Perhaps the minimum! In many cities we would "achieve" noncompliance rates of 80, 90, and even 95-plus percent. This then would render present driving conditions into utter shambles, given the SW analysis. But it would also have the very salutary effect of so predisposing the electorate against present socialized road management that privatization might actually occur. If so, perhaps, the interim "disturbed" era might well have been worth it.

Now I am not advocating any such scenario. But if this *reductio ad absurdum* for a price floor is no less theoretically viable²¹

²¹There is also the objection to the SW public policy prescriptions that they cannot be made in a value-free context. Price controls (of the ceiling or any other variety) will inevitably benefit some and harm others. To claim

than the SW claims in behalf of a price ceiling, it tends further to dispel any attractiveness of the latter.

AN OBJECTION

The public policy recommendations of this paper are very radical, particularly in the context of present day political economy. The solution offered here is one of total *laissez-faire* capitalism: the government would have absolutely no role to play as regards traffic thoroughfares, apart from protection of private property and defense of contract. Just as radical privatizers of education call for separation of school and state,²² radical privatizers of the post office call for the separation of mail and state,²³ and radical privatizers of welfare call for a completely voluntary system of charity with no state involvement at all,²⁴ the present paper recommends the total separation of highway, street, road and sidewalk from the government. In these other cases, however controversial, it is at least crystal clear precisely what is being advocated. Not so, perhaps, in the present case. Consider in this regard the following objection:

At the basis of this paper is a concept of privatization of roads being a market driven solution to the insurance dilemma facing cities such as Philadelphia. Most of the specific analysis, however, deals with the issue of privatization of security on these roads. Who builds and owns the roads doesn't have anything

that the gains are greater than the losses necessarily involves an interpersonal comparison of utility, something that cannot be reconciled with *wertfreiheit* in economics. On this see Murray N. Rothbard, "Toward a Reconstruction of Utility and Welfare Economics," *Occasional Paper* no. 3 (San Francisco: Center for Libertarian Studies, 1977).

²²Sheldon Richman, *Separating School and State: How to Liberate American's Families* (Fairfax, Va.: Future of Freedom Foundation, 1994).

²³Edward L. Hudgins, ed. *The Last Monopoly: Privatizing the Postal Service for the Information Age* (Washington, D.C.: Cato, 1996).

²⁴Rothbard, For a New Liberty, pp. 142–70.

to do with insurance. Who is responsible for allowing individual drivers on the roads is. The problem is that uninsured drivers are "allowed" on the roads by a security force (police) that cannot stop them. . . . The author seems to be saying that privatizing the enforcement duties will solve the problem. This is very different from the road privatization issue in general (though is obviously a related one) and has virtually nothing to do with the comparison to land collectivization.²⁵

There are several difficulties here.

1. The public policy prescription being offered here is by no means confined to "privatization of security on these roads." The solution does indeed involve this, but it involves much more as well; that is, privatization is not at all confined to highway policing. In order to solve the external diseconomy problem of underinsured drivers, the whole ball of wax must be privatized.

Security, yes, but also the entire operation, including purchasing rights of way (there could be no such thing as eminent domain under *laissez-faire* capitalism), pouring the concrete, setting up the rules of the road, charging for road usage, filling the potholes, etc. It is as if I were advocating the total privatization of the U.S. Post Office, or a Soviet farm or factory, and this were interpreted as promoting only the private policing of these facilities.

2. While it is undoubtedly true that "who builds and owns the roads doesn't have anything to do with insurance," this need not at all be the case under a regime of economic freedom. There is simply no reason to believe that a private insurance industry would have no role to play in an era of private road ownership. How might this work? One possibility is for an amalgamation of a road-owning corporation and an insurance firm. This is something which right now might be considered a conglomerate merger,²⁶ but might one day be deemed vertical. That is because

²⁵This objection was posed by an anonymous referee.

²⁶There are now a few private owners of highways.

(second possibility) the two can work together, as firms in different levels of production, toward the creation of the good: safe driving. It is often difficult to anticipate precisely how a newly privatized industry would function, but in one scenario, the road-owning firm would base its user charges on the safety category a driver were placed into by an insurance company. For example, if a motorist had never had an accident in twenty years, and were charged a low rate by his insurance company, the highway corporation might charge him a lower rate.

3. While there may be a problem where uninsured drivers are "allowed" on the roads by a security force (police) that cannot stop them in some proposals, the present case is not one of them. Here, presumably, the highway owner would hire its own police force,²⁷ and these officers would be fully empowered to refuse entry to any obstreperous or dangerous driver.

4. It is not true that road privatization "has virtually nothing to do with . . . land collectivization." On the contrary, they are intimately connected. For under present institutional arrangements of "road socialism,"²⁸ all of the land on which roads, streets, sidewalks, etc., are built is indeed collectivized. During the heyday of communism in Russia, conservative commentators criticized with great glee the long queues in that country waiting to purchase groceries. But is this really very different from motorists waiting on congested highways such as the Long Island "Expressway" to consume further highway transportation? Our system of providing vehicular-transit arteries is every bit as Sovietized as the Stalinist grocery "industry." Both are in dire need of de-collectivization.

CONCLUSION

There can be political competition in places likes North Vietnam and Cuba, but in the absence of free enterprise there can be

²⁷Akin to the "police force" now hired by Disney World to ensure safety for Patrons.

²⁸Block, "Road Socialism."

no economic competition. This is why privatization and competition are inseparably linked. Without the

former, the latter is logically impossible.²⁹ But this applies to roads and highways no less than to cabbages, chalk, and cheese. It is perhaps the contribution of this paper to show that economic competition on the roadways cannot take place in the absence of privatization, and that it is this lack, not any "market failure," which is responsible for the plight afflicting cities such as Philadelphia.

²⁹Of course, there can be economic competition in the mixed economy. But this is because of its market elements, not its bureaucratic ones.

6 Road Socialism^{*}

What are the best institutional arrangements for roads, streets, highways, sidewalks and other such thoroughfares for human and vehicular traffic? The economics profession can be divided into two camps with regard to this issue. On the one hand are the road socialists.¹ They dominate.² In their view, it is an unquestioned, and unquestionable fact that roads must inevitably and necessarily be managed by government. It is

¹At first glance it might seem harsh to characterize such a position as "road socialism." For none of the people criticized below as falling into this category would embrace such an appellation. Given that we are used to considering people as socialists only if they purposefully adopt such a viewpoint, and that the "road socialists" slide into their stance seemingly oblivious to the fact that this is precisely what their position amounts to, perhaps they should instead be called "inadvertent road socialists."

But this will not do, either. For these are professional scholars, for the most part sophisticated economists of the first order. To make excuses for them in this manner would therefore amount to a condescending paternalism. They have made their bed; let them lie in it. I shall therefore continue to characterize them as in the title of this chapter above.

^{*}This chapter first appeared as "Road Socialism," International Journal of Value-Based Management 9 (1996): 195–207. The author wishes to thank the North American Editor of Transport Policy and an anonymous referee from the International Journal of Value-Based Management, for helpful suggestions and commentary on an earlier draft of this chapter.

never explicit, but is rather implied by their mode of analysis. They believe that roads are a "public good." Privatizing them is quickly brushed aside as preposterous. A private enterprise highway and street industry is viewed in much the same manner as was free-market agriculture by the planners during the heyday of Soviet collectivized agriculture—as inconceivable.

What is the job of the economic analyst under such assumptions? It is to serve as a sort of managerial consultant, much in the same manner that the economist in the U.S.S.R. would advise the Minister of Agriculture about crop rotation, fertilizers, etc.³ Only now the analysis concerns itself with such matters as road safety, congestion, planning for new clover leafs, etc.

On the other hand there are the road capitalists,⁴ or privatizers.⁵ In their view, streets and roads are no more a necessary part

³The analogy is a reasonably good one. For just as the Soviet agricultural planners knew that farming had once been conducted on a private basis, negating all arguments concerning the necessity of public ownership, so are their modern counterparts acquainted with the fact that initially roads were owned by private turnpike companies. See Walter Block, "Free Market Transportation: Denationalizing the Roads," Journal of Libertarian Studies 3, no. 2 (Summer, 1979); Gerald Gunderson, "Privatization and the 19th Century Turnpike," Cato Journal 9, no. 1 (Spring/Summer, 1989); W.T. Jackman, The Development of Transportation in Modern England (Cambridge: Cambridge University Press, 1916); Daniel Klein, "The Voluntary Provision of Public Goods? The Turnpike Companies of Early America," Economic Inquiry (October 1990); Daniel Klein, John Majewski, and Christopher Baer, "Economy, Community and the Law: The Turnpike Movement in New York, 1797-1845," Journal of Economic History (March 1993); idem, Daniel Klein and G.J. Fielding, "Private Toll Roads: Learning from the Nineteenth Century," Transportation Quarterly (July 1992). In each case, however, these historical antecedents play (played) no role in their analysis.

⁴Actually, the situation is somewhat more complicated as there is at least one commentator who is a road capitalist with regard to limited access highways, and a road socialist with regard to all else. See Gabriel Roth, *A Self-Financing Road System* (London: Institute of Economic Affairs, 1966);

²See P.D. Loeb and B. Gilad, "The Efficacy and Cost Effectiveness of Vehicle Inspection—A State Specific Analysis Using Time Series Data," *Journal of Transport Economics and Policy* 18 (May 1984) for a survey of this literature.

of the state apparatus than are cars, railroads, subways, baseball bats, lima beans or rubber bands. The former set of products can and should be analyzed along the lines everyone agrees are appropriate for the latter.

The purpose of this present chapter is to do just that, and to focus on one aspect of the overall analysis: that having to do with highway fatalities.

TWO ANALOGIES TO TRAFFIC SAFETY

Suppose that a gunman shot a person with a rifle. Hauled into court, his "defense" was that the bullet killed the victim not he, the defendant. True, this man would concede, he aimed the gun and pulled the trigger, but he was two-hundred yards away from the victim when he died, so he couldn't have been responsible for his death.

Our reaction to this "defense" would properly be one of dismissal, on the ground that the murderer was confusing proximate with ultimate cause. We would mete out to this murderer whatever penalties were accorded such behavior. The bullet was the proximate cause of the death. But the gunman, in aiming at the victim and pulling the trigger, was ultimately responsible for his demise and therefore should pay for this crime to the full extent of the law.

idem, *Paying for Roads: The Economics of Traffic Congestion* (Middlesex, England: Penguin, 1967); idem, *The Private Provision of Public Services in Developing Countries* (Oxford: Oxford University Press, 1987).

⁵Walter Block, "Free Market Transportation: Denationalizing the Roads," *Journal of Libertarian Studies* 3, no. 2 (Summer, 1979); "Congestion and Road Pricing." *Journal of Libertarian Studies* 4, no. 3 (Summer 1980); "Theories of Highway Safety," *Transportation Research Record* no. 912 (1983); "Public Goods and Externalities: The Case of Roads," *Journal of Libertarian Studies* 7, no. 1 (Spring, 1983); and "Road Socialism," International Journal of Value-Based Management 9 (1966); Murray N. Rothbard, *For a New Liberty* (New York: Macmillan, 1973); William C. Wooldridge, *Uncle Sam, The Monopoly Man* (New Rochelle, N.Y.: Arlington House, 1970); Daniel Klein and G.J. Fielding, "How to Franchise Highways," *Journal of Transport Economics and Policy* (May 1993); idem, "High Occupancy/Toll Lanes: Phasing in Congestion Pricing a Lane at a Time," *Policy Study* 170 (November 1993).

Now consider the case where a restaurant goes out of business. The proximate causes are badly cooked and cold food, surly service, dirty conditions, lack of personal safety, poor decor, etc. But the ultimate responsibility, surely, lies with management. It and it alone failed to hire good cooks, to ensure that the waitresses, busboys, cleaners, bouncers, interior decorators, exterior architects, etc., did their assigned tasks in a satisfactory way. A competent manager would either get his employees to change their behavior, or he would fire them, and hire proficient ones in their places. This all stems from the fact that the good manager can recognize talent, and has the motivation to insist upon it.

ROAD SOCIALISM

What is the point of all this discussion of restaurant failures and excuse-making killers? What does it have to do with road safety under socialism?

Simply this: The way the most economists approach this issue is akin to the "defense" of the murderer, or the advice of the restaurant consultant who ignores the manager. Instead of focusing on the real cause of traffic fatalities—government ownership and management of the nation's highway network—many economists have instead concentrated on a plethora of proximate causes, preeminently vehicle speed, driver alcoholism, safety regulations and inspections.

The theoretical analysis of highway safety rests on some principles which are quite elementary, indeed distressingly so. They are so obvious that one would feel the greatest reluctance to repeat them on the pages of a professional journal were it not that a great public policy (road socialism) has been erected upon either ignorance or a repudiation of them.⁶

⁶W.S. Grampp, "Some Effects of Rent Control," *Southern Economic Journal* (April 1950): 425–26. Grampp speaks with regard to rent control; I have fashioned them so as to apply to the topic now under discussion.

It is in order to rectify this great oversight that we must examine how neo-classical economists have been dealing with road fatalities.

MAINSTREAM ANALYSIS

Consider first Crandall, Gruenspechl, Keeler, and Lave. These authors intensively analyze automobile regulations for over two-hundred pages. They state at the outset:

It is now possible to look back over nearly two decades of experience to evaluate this strategy of regulating the undesirable byproducts of the automobile and to determine whether some of the regulatory programs should be redesigned. This book is designed to provide a comprehensive examination.⁷

Although they do indeed subject a whole host of restrictions to great scrutiny, they never once mention the chief constraint on the market: public ownership and management.⁸ Thus, the concept of privatization completely eludes them.

With regard to the thousands of people slaughtered on the nation's highways each year, Crandall, et al. adopt a rather cavalier and Pollyanna-ish perspective:

This program . . . (of federal automobile regulations) . . . has been the best planned and administered and the most successful in achieving its goals. Our estimates indicate that highway

⁷Robert Crandall, H.K. Gruenspechl, T.E. Keeler, and L.B. Lave, *Regulating the Automobile* (Washington, D.C.: Brookings Institution, 1986), pp. 1–2.

⁸Public ownership is really the key, not management. For suppose that the politicians or bureaucrats hired "private" managers. The minute they did so these managers would cease to be private. On the contrary, they would be public employees, as far removed from the vicissitudes of profit and loss as every other civil servant. See on this Ludwig von Mises, *Human Action* (Chicago: Henry Regnery, 1969) and Hans-Hermann Hoppe, *A The*ory of Socialism and Capitalism: Economics, Politics and Ethics (Boston: Dordrecht, 1989); idem, *The Economics and Ethics of Private Property: Studies in Political Economy and Philosophy* (Boston: Kluwer, 1993).

fatalities would be about 40 percent greater were it not for the safety features adopted since the beginning of this program.⁹

It cannot be denied that road fatalities have decreased somewhat over the last decade or so. But their assessment is overly optimistic, for it compares vehicular deaths on public highways, not with those on private ones, but with fatalities on public roads in previous years when there were fewer safety regulations in effect. The public managers may be improving on their dismal record of a decade or two ago, but this is hardly relevant to a public-private comparison. To extend the socialism analogy, it is as if Stalin were bragging that crop yields from his present five-year plan are greatly in excess of the results of collectivized agriculture from several years back when there were fewer "incentive" features in effect.

Loeb and Gilad criticize previous studies of the contribution of governmental vehicle inspection to safety, and promise to overcome the difficulties besetting them:

[They] have mostly been plagued with statistical or methodological problems which have made their conclusions far from definite.

Only relatively recently has regression analysis been used, and then only on the basis of cross-sectional data. Thus there have so far been no state-specific studies which have used econometric techniques to test the efficacy of inspection.

The present study employs, for the first time, a time series analysis of the efficacy of inspection in reducing fatalities, injuries and accidents.¹⁰

And what is the conclusion of their analysis? According to Loeb and Gilad, it

⁹Ibid., p. 155.

¹⁰Loeb and Gilad, "The Efficacy and Cost Effectiveness of Vehicle Inspection," p. 145.

indicates that vehicle inspection in New Jersey reduces highway fatalities by 304 deaths per year. This result is obtained when other changes that also might affect fatalities are taken into account in the analysis.¹¹

And indeed they are thorough in taking into account numerous other such variables. These include the number of motor vehicle registrations, number of drivers licensed, vehicle mileage, personal income, number of drunk driving revocations, population and gasoline consumption. All in all, a very careful job of eliminating alternative hypotheses to their own, except for one small detail, the one analyzed in this chapter.

Loeb is even more specific about the possible exclusion of variables. He singles out Sommers in this regard, charging that "if the model used by Sommers omits an important variable, biased estimates may result for the coefficients of the remaining variables."¹² And what are the specifics? Loeb uses "personal income, education, fuel consumption, density of population, precipitation, highway mileage, consumption of distilled spirits, and the age composition of the population."¹³ But this is surely a case of the pot calling the kettle black, for Loeb himself omits an important variable, with a causal effect potentially greater than all of the variables he cites put together,¹⁴ if only because this one is responsible for affecting (virtually all of) the others.

¹¹Ibid., p. 162; emphasis added.

¹²P.D. Loeb, "The Determinants of Motor Vehicle Accidents with Special Consideration to Policy Variables," *Journal of Transport Economics and Policy* 21 (September 1985): 279.

¹³Paul Sommers, "Drinking Age and the 55 MPH Speed Limit," *Atlantic Economic Journal* 13 (March 1985): 43, mentions "public concern over the staggering number of deaths and injuries caused each year by drunken drivers and speed violators," a paradigm case of the confusion between proximate and underlying causes.

¹⁴Loeb, "The Determinants of Motor Vehicle Accidents with Special Consideration to Policy Variables," pp. 279–87.

Loeb again worries about the "omission of variables."¹⁵ This time he employs "specification error tests" in an attempt to root out this scourge. Again he criticizes Sommers, asserting that, in contrast to that author, his "models do not omit the potentially important socio-economic and driving-related variables as in Sommers' work."¹⁶ Needless to say, he is again guilty of the same error, since he omits the crucial "socio-economic" variable of public or private-sector ownership, management and control.¹⁷ As for his "specification error tests," they employ the usual litany of drinking age,¹⁸ alcohol consumption, speed,¹⁹

¹⁷Donald Snyder, "Speeding, Coordination and the 55-MPH Limit: Comment," *American Economic Review* 79, no. 4 (September 1989): 922, also discusses the issue of omitted variables in the same unsatisfactory manner.

¹⁸Loeb, "The Determinants of Motor Vehicle Accidents—A Specification Error Analysis," p. 40. Other studies which focus on this variable include P.J. Cook and G. Tauchen, "The Effect of Minimum Drinking Age Legislation on Youthful Auto Fatalities, 1970–1977," *Journal of Legal Studies* 13 (1984): 169–90; P. Asch and D.T. Levy, "Does the Minimum Drinking Age Affect Traffic Fatalities?," *Journal of Policy Analysis and Management* 6 (Winter, 1987); Williams, et al., "The Minimum Drinking Age and Fatal Motor Vehicle Crashes," *Journal of Legal Studies* 4 (1975): 219; idem, "The Effect of Raising the Minimum Drinking Age on Involvement in Fatal Crashes," *Journal of Legal Studies* 12 (1983): 169.

¹⁹Other studies which focus on speed include Dana Kamerud, "The 55 MPH.Speed Limit: Costs, Benefits and Implied Tradeoffs," *Transportation Research* 17A (January 1983): 51–64; Gilbert Castle, "The 55 MPH Speed Limit: A Cost-Benefit Analysis," *Traffic Engineering* 45 (January 1976); L. Egmose and T. Egmose, "Speed Limits Save Lives," *Journal of Traffic Medicine* 14 (1986): 4–5; Thomas Forester, Robert F. McNown, and Larry D. Singell, "A Cost Benefit Analysis of the 55 mph Speed Limit," *Southern Economic Journal* 50 (January 1984): 631–41; A. Hoskin, "Consequences of Raising the Speed Limit," *Journal of Safety Research* 17 (1986): 179–82; James Jondrow, Marianne Bowes, and Robert Levy, "The Optimal Speed Limit," *Economic Inquiry* 21 (July 1983): 325–36; D. Solomon, "Accidents on Main

¹⁵P.D. Loeb, "The Determinants of Motor Vehicle Accidents—A Specification Error Analysis," *Logistics and Transportation Review* 24 (March 1988): 33.

¹⁶Ibid., p. 34.

vehicle inspection,²⁰ per capita fuel consumption, age of the population, but nary a mention of road socialism is made.

Callahan employs no fewer than sixteen different highway safety program standards, and opines that,

auto officials and others assert that the nation is merely "holding its own" in the battle against highway accidents, and that this stagnation must be due to the failure to improve the drivers and roads since the cars have been substantially improved.²¹

That's it. It is either the cars or the drivers. Since automobiles are implicitly of optimally (high) quality, the cause of all the fatalities must be the man behind the wheel. It does not seem to have occurred to him that there might be a better explanation.

Lave and Weber offer what at first glance seems to be a radical analysis of traffic fatalities. They state:

Government intervention is certainly one way to decrease the number of automobile accidents, but this accident reduction is not an economic justification for government intervention. Any sort of interference with the market has a cost which must be

Rural Highways Related to Speed, Driver and Vehicle," Federal Highway Administration, U.S. Department of Transportation (July 1964).

²⁰Other studies which focus on vehicle inspection include R.G. Buxbaum and T. Colton, "Relationship of Motor Vehicle Inspection to Accident Mortality," *Journal of the American Medical Association* (1966); M.W. Crain, *Vehicle Safety Inspection Systems* (Washington, D.C.: American Enterprise Institute for Public Policy Research, 1980); J.L. Duda, *Program Evaluation Support for the Motor Vehicle Diagnostic Inspection Demonstration Projects*, vol. 11: Costs and Benefits (Falls Church, Va.: Computer Sciences Corporation, 1977); V.R. Fuchs and I. Leveson, "Motor Accident Mortality and Compulsory Inspection of Vehicle," *Journal of the American Medical Association* 201 (August 1967): 87–91; and Loeb, "The Efficacy and Cost Effectiveness of Motor Vehicle Inspection Using Cross-Sectional Date," pp. 500–09.

²¹J.M. Callahan, "States Move Slowly on Safety Projects," *Traffic Digest* and Review (March 1970).

weighed against the possible benefits. The economic justification for government intervention is a substantial market failure. There is not sufficient evidence to conclude that various safety features ought to be mandatory. The judgment that government ought to require particular features, therefore, is a non-economic one based on an individual's ideas about consumer sovereignty, the importance of particular market failures, and the social cost of injury and death.²²

Here, at last, it might be supposed that we have analysts who, even though they reject the market, at least mention it as a possibility. Since, on this interpretation, these authors are the only ones cited so far to do so, they appear to earn high marks in this regard.

Alas, however, such an interpretation cannot be sustained. For what they mean by the market, amazingly enough, is the present situation where government owns and manages the roads, but refrains from mandating any safety devices! If that is the market, there is no doubt that it contains many failures indeed. But this, of course, is not the case. A true market in highway transportation would consist of private ownership and control not only of the vehicles, but of the actual traffic arteries as well.

Road socialism, unfortunately, has seeped out from the professional writings of economists to the textbooks, a sure sign of its widespread acceptance. Paul Heyne's textbook *The Economic Way of Thinking* is a case in point.²³ This is a text supposedly devoted to the idea that private property rights are an important linchpin of economics. Yet it starts out with rush hour traffic as an example of "social cooperation." He claims, rather heroically,

²²L.B. Lave. and W.E. Weber, "A Benefit Cost Analysis of Auto Safety Features," *Applied Economics* 2 (1970): pp. 265.

²³Paul Heyne, *The Economic Way of Thinking*, 6th ed. (New York: Macmillan, 1991), pp. 1–3.

that "The dominant characteristic of rush hour traffic is not jam but movement."²⁴ Maybe in rural Idaho, but not on the streets ofthe typical metropolitan district.²⁵

THEORETICAL INNOVATION

It cannot be denied that there is some innovation in the mainstream literature on this subject. In large part, it is due to the work of Lave. In that paper he explored the possibility that it is not really speed, *per se*, which is statistically associated with roadway deaths but rather the variance in speed.²⁶ If true, the highway authorities should concentrate not necessarily on slowing things down as much as on reducing the tails of the speed distribution, whether at the high end or the low. In Lave's opinion, "Variance kills, not speed."²⁷

This point was sharply criticized.²⁸ But in none of this exchange was there ever any mention of omitted variable bias as it applied to private roads.²⁹

²⁷Lave, "Speeding, Coordination and the 55-MPH Limit," p. 1159.

²⁴ Ibid.

²⁵For an analysis of traffic congestion as due to a lack of peak load pricing, and this, in turn, as a result of road socialism, see Walter Block, "Congestion and Road Pricing," *Journal of Libertarian Studies* 4, no. 3 (Summer, 1980).

²⁶Charles Lave, "Speeding, Coordination and the 55-MPH Limit," *American Economic Review* 75, no. 5 (September 1985): 1159–64. Others who have written on this include T.C. Schelling, *Micromotives and Macrobehavior* (New York: Norton, 1978); Nicholas J. Garber and Ravi Gadirau, *Speed Variance and Its Influence on Accidents* (unpublished manuscript; AAA Foundation for Traffic Safety, Washington, D.C., July 1988). Ezra Hauer, "Accidents, Overtaking, and Speed Control," *Accident Analysis and Prevention* 3 (January 1971); and Walter Block, "Free Market Transportation: Denationalizing the Roads."

²⁸See David T. Levy and Peter Asch "Speeding, Coordination and 55-MPH Limit: Comment," *American Economic Review* 79, no. 4 (September 1989): 913–15; Richard Fowles and Peter D. Loeb, "Speeding, Coordination

Also included in the same volume with the others in this exchange is Graves, Lee, and Sexton who introduced the concept of accident externalities. Even more important, they bemoan "the absence of a controlled experiment,"³⁰ one thing that is practically guaranteed to emerge from a private road system. This is because if each owner is able to set his own rules, concerning not only speed averages but speed variances,³¹ controlled experiments would be much easier to come by.

Unfortunately, all of this intellectual innovation is beside the point. No matter how clever,³² it is akin to rearranging the deck chairs on the Titanic in new ways; it is a useless effort to ward off the disaster of the iceberg. In similar manner, if the disaster of government road ownership is ignored, then no matter how

³⁰See Philip E. Graves, Dwight R. Lee, and Robert L. Sexton, "Statutes Versus Enforcement: The Case of the Optimal Speed Limit," *American Economic Review* 79, no. 4 (September 1989): 932.

³¹See Block, "Free Market Transportation: Denationalizing the Roads," for a discussion of the limitations in how sharply the rules of different road entrepreneurs could diverge from each other.

³²The strongest candidate for the cleverness sweepstakes is Sam Peltzman, "The Effects of Automobile Safety Regulation," *Journal of Political Economy* 83, no. 4 (1975): 677–725, who probes the case for unintended negative consequences of safety regulation. Needless to say, privatization forms no part of his analysis, however.

and the 55-MPH Limit: Comment," *American Economic Review* 79, no. 4 (September 1989): 916–21; Snyder, "Speeding, Coordination and the 55-MPH Limit: Comment"; and replied to by Charles Lave "Speeding, Coordination and the 55-MPH Limit: Reply," *American Economic Review* 79, no. 4 (September 1989): 926–36.

²⁹There were some points made, however, that are worthy of note. Richard Fowles and Peter D. Loeb, "Speeding, Coordination and the 55-MPH Limit: Comment," *American Economic Review* 79, no. 4 (September 1989): 917, are amongst the few researchers to incorporate a hospital access variable (closeness to medical care, operationally defined as hospitals per square mile) into their analysis; they also took account of the type of driver behind the wheel, professional vs. amateur (p. 924).

imaginative and ingenious the discussion of how to solve the fatality problem, it is doomed to irrelevance.

OBJECTIONS

Let us now consider some possible objections³³ to our thesis.

1. This chapter, thus far, takes it as axiomatic that privately provided highways would be safer than our existing highways.

There are two ways to test such an assertion or hypothesis. The first is to utilize actual empirical evidence. Unfortunately, there are no extant cases of roadways fully under private control, with which to contrast those in the public sector. Historically, of course, many turnpikes were privately built, maintained, owned and managed.³⁴ But there are no studies of those epochs available, to the knowledge of the present author, which compared the safety records attained under the two very different institutional arrangements.

What about the possibility of comparing "toll roads with comparable public roads," or "East Coast toll roads with California freeways," or "French and Italian toll roads with public freeways in the same countries?" This, unfortunately, is not of relevance here, for *all* of these transportation arteries are under public sector control. In *none* of these cases are the roads managed by private profit (and loss) making business concerns. Just because government in some cases charges a fee (toll) for road use does not convert such an operation into a fully private one.

The second alternative is to cite theoretical reasons. Fortunately, here, we are on firmer ground. Why might we expect

³³The author wishes to thank the anonymous referee for inspiring him to write this section of the paper. The specific objections arose from this source, as did a goodly part of the analysis. All otherwise uncited, direct quotes are from this referee's report.

³⁴See footnote 4, above.

firms to be more assiduous in satisfying customers than we find civil servants and politicians in serving voters and taxpayers? To ask this question is practically to answer it, at least given the insights furnished us by the Public Choice School of thought.35 Simply, the market is more responsive to consumer wishes than is the government to the desire of the citizenry. The dollar vote occurs every day, the ballot box vote only every two or four years. The former may be applied narrowly, to a single product (e.g., the Edsel) while the latter is a "package deal," an all or none proposition for one candidate or the other. That is, there was no way to register approval of Bush's policies in areas 1, 3, 5 and 7, and for Clinton in 2, 4, 6, and 8. People were limited to choosing one or the other in the last presidential election. Further, there is rational ignorance in the political sphere, given the unlikeliness of one's vote being a tie breaker. In contrast, in the private sector, the uninformed consumer is at a disadvantage. The bottom line is that private suppliers of any good or service face the prospect of loss of profits, and eventual bankruptcy, if they fail to satisfy customers. It cannot be maintained that public providers face no negative repercussions for poor service; neither can it reasonably be denied that these sanctions are of far less import. Otherwise, how can we explain the continued existence of such entities as the post office, the motor vehicle licensing bureau, and the passport service, which are notorious for lack of service to their clientele?

³⁵See James M. Buchanan "What Should Economists Do?" Southern Economics Journal 30, no. 3 (1964); idem, The Limits of Liberty (Chicago: University of Chicago Press, 1975); idem, "Public Choice and Public Finance," What Should Economists Do? (Indianapolis: Liberty Press, 1979); idem, "The Contractarian Logic of Classical Liberalism," in Liberty, Property, and the Future of Constitutional Development, Ellen Frankel Paul and Howard Dickman, eds. (Albany: State University of New York Press, 1990); James M. Buchanan and Gordon Tullock, The Calculus of Consent: Logical Foundations of Constitutional Democracy (Ann Arbor: University of Michigan Press, 1971), pp. 269–74; James M. Buchanan, Robert Tollison, and Gordon Tullock, eds., Toward a Theory of the Rent-Seeking Society (College Station: Texas A&M University, 1980).

2. Perhaps the present public road providers have more incentive to offer an optimal level of safety. In fact, we know that there are many law suits against state and local highway providers alleging that a particular road was inherently unsafe, and we know that juries award big damages in such suits because of the deep pockets of the public highway providers. Isn't it possible that the public providers have responded by constructing roads that are too safe? For example, public providers have placed safety rails or railroad crossing bars in situations where the cost per life saved is (excessive).

True, actual and threatened lawsuits provide some incentive for good behavior on the part of bureaucrats. The problem is, however, even if they are forced to pay damages, these monies do not come out of their own pockets. Rather, they are taken from general tax revenues. The incentive effects are thus greatly attenuated.

In contrast, lawsuits could play an analogous role in a fully private highway industry.³⁶ Only here, the benefits would be far more salutary. For if a lawsuit was lost under such assumptions, the people ultimately responsible for poor highway management—the owners of the road—would pay out of their own pockets.

But lawsuits are only of marginal concern. The reason McDonalds and Heinz and Toyota and Apple and Stradivarius and Moodys give us good products and services is not out of fear of litigation but due to the salutary effects of competition. There is no reason to conclude that the weeding out of the inefficient firms which works so well in all these other industries would somehow be inoperable in the case of transportation networks alone.

³⁶They need not do so, however. For under the market doctrines of strict liability and *caveat emptor*, the customer would enter this facility at his own risk, see Murray N. Rothbard, *The Ethics of Liberty* (Atlantic Highlands, N.J.: Humanities Press, 1982), pp. 54, 85–96.

Compare fatalities with regard to airlines and traffic arteries. When U.S. Air suffers from a greater rate of loss of life per passenger mile than its rivals, its entire existence is placed in jeopardy due to the risk of its customers deserting it for alternatives. The same sanctions hardly apply to two different parallel roads, to take the easiest conceptual case for roads, where one has a better safety record than the other. *Both* are typically operated by the same authorities. Even if they are in different states, and motorists desert the one for the other, the financial implications for the abandoned one are so attenuated that they might as well not even exist.

On the other hand, there is one sound point in this objection. It is entirely possible, given the absence of profit-and-loss incentives, for public managers to render short stretches of road safe at excessive costs that would not be undertaken by their private counterparts. Thus, we may be faced with the paradox that the public thoroughfares—different ones of them—are both overoptimally safe and overoptimally unsafe.

3. Might there be underkill? Assume if only for the sake of argument that the foregoing is correct: private roads will be safer than governmentally managed ones. It is then possible that a private road builder might provide too high a level of safety? For example, imagine a private toll freeway that parallels a two-lane road with five stop signs and traffic lights per mile. Imagine that the toll road sets a speed limit of 35 mph, and strictly polices those who go less than 30 or more than 40 mph. It would be safer. People would use it, because even a 35 mph road beats the constant stop and go of the parallel, socialist road. But the high degree of safety on the toll road is suboptimal in the sense that most people would rather trade a little less safety for a lot more time savings.

Let us take even more of an exaggerated case. Suppose one private owner insisted upon a *3 mph* speed limit, with traffic lights every *fifteen feet*. Is there any doubt that a competing parallel road would compete away all the customers of such a foolish firm?

To return to an earlier example, the analogous situation would be if a restaurant supplied a waitress, cook, busboy, bouncer, to each separate patron, and all of these employees got in each other's way. The aphorism "too many cooks spoil the broth" applies in all contexts.

The bottom line is that the market tends to obviate both overand under-optimal allocations of resources, whether in terms of safety, or weight, or quality, or any other dimension.

But what of the charge that our present³⁷ number of highway fatalities (41,462), and nonfatal highway accidents (2,210,000), is really either underoptimal, or optimal. On the face of it, this is difficult to accept. The claim can be seriously offered, I maintain, only because, like death and taxes, highway fatalities seem inevitable. This, I claim, emanates from the mindset which sees road socialism as the only possible alternative. To place this in context, imagine that carnage of these proportions were to occur in any private industry: mining, air travel, sports, whatever. Under these conditions a hue and cry of vast proportions would arise. Senator Ted Kennedy would hold outraged hearings, determined to get to the bottom of how we can allow the selfish ,greedy pursuit of the unholy buck to kill and maim so many people. The *New York Times* would call for the nationalization of such an enterprise.

In point of fact, however, this mutilation of the innocents occurs on public property. It is time, it is past time, to think in terms of privatization.

CONCLUSION

The present chapter has criticized numerous analysts of highway safety as "road socialists." This is a charge that will amaze these authors. When they set out to do their work, ideology was, perhaps, the furthest thing from their minds. Yet, for all of that, it cannot be denied that the "shoe fits." Their analyses presumes governmental ownership and control of transportation arteries; while they call into question every other variable

³⁷Statistical Abstract of the U.S., 1993, table 1030, p. 622, for the year 1991.

which might conceivably affect traffic safety, and even some which do not, they take for granted these institutional arrangements. If that is not "socialism," it will do very well until something better comes along.

7 Compromising the Uncompromisable: Speed Limits, Parades, Cigarettes^{*}

Libertarian, political, and economic philosophy is based on the nonaggression axiom.¹ In this perspective the one act that ought to be legally proscribed is the initiation of violence against nonaggressors. There are many who disagree with this view. Some maintain that far more ought to be illegal; others that not all invasions should be. While the critics may disagree amongst themselves on many issues, most have in common the belief that *laissez-faire* capitalism is altogether too radical. This

^{*}This chapter originally appeared as "Theories of Highway Safety," *Transportation Research Record* #912 (1983): 7–10. The author wishes to thank David Kennedy, Anthony Sullivan, and the Trustees of the Earhart Foundation for the financial support necessary to write this article. The opinions expressed herein, of course, reflect the thinking of the author alone.

¹Murray N. Rothbard, *The Ethics of Liberty* (Atlantic Highlands, N.J.: Humanities Press, 1982), pp. 85-96.

philosophy has been widely castigated as extremist, fanatical, and as occupying a position on the political spectrum at the very edge.

To some degree these criticisms are undoubtedly true in at least some sense. Libertarianism is indeed a principled philosophy, and any such view must appear to some as rigid or unyielding. However, it is the thesis of the present article that, for at least some issues, free enterprise actually constitutes a moderate or compromise viewpoint. Here, we consider three cases in point: roads, parades, and cigarette smoking.

ROADS

There is a furious albeit scholarly debate regarding optimal speed limits on the nation's highways.² It has been waxing and waning over the last several decades. On one side of this issue are those who advocate retention of the 55 mph limits on freeways. Foremost among them are the Naderites, who argue, among other things, that "speed kills." Although President Clinton signed a bill allowing the states to post higher maximum speeds, at their discretion, it is rumored that he did so only reluctantly. Behind these opinions is a wealth of empirical data suggesting that faster traffic flows will lead to a greater number of fatalities.³

 $^{^{2}\}mathrm{In}$ 1995 the federal government delegated speed regulations to the states.

³See Gilbert Castle, "The 55 MPH Speed Limit: A Cost-Benefit Analysis," *Traffic Engineering* 45 (January 1976); L. Egmose and T. Egmose, "Speed Limits Save Lives," *Journal of Traffic Medicine* 14 (1986): 4-5; Thomas Forester, Robert F. McNown, and Larry D. Singell, "A Cost Benefit Analysis of the 55 mph Speed Limit," *Southern Economic Journal* 50 (January 1984): 631–41; Richard Fowles and Peter D. Loeb, "Speeding, Coordination and the 55-MPH Limit: Comment," *American Economic Review* 79, no. 4 (September 1989): 916–21; Philip E. Graves, Dwight R. Lee, and Robert L. Sexton, "Statutes Versus Enforcement: The Case of the Optimal Speed Limit," *American Economic Review* 79, no. 4 (September 1989): 932; Ezra Hauer, "Accidents, Overtaking, and Speed Control," *Accident Analysis and Prevention* 3

The other side is no less intent upon upholding its view point. One argument stems from freedom, not the pragmatic issue of safety: people should have the right to do whatever they wish, unless their actions constitute an explicit "border crossing" or physical invasion of another person or his property. Even if there is a statistical correlation between deaths and higher (or no) speed limits, this is not equivalent to the initiation of violence. For to go fast is not, *per se*, to kill someone.⁴

But the "speed freedom" advocates are not without a response to the claim that faster traffic is dangerous. They argue that it is not speed, but rather the variance of speed which puts motorists at risk.⁵ For example, if all motorists travel at between

⁴Similarly, ownership of a gun is not the same thing as murder, even if there is a positive correction between them.

⁵For more on this hypothesis, see Lave, "Speeding, Coordination and the 55-MPH Limit." For a reply, see David T. Levy and Peter Asch "Speeding, Coordination and 55-MPH Limit: Comment," *American Economic Review* 79, no. 4 (September 1989): 913–15; Fowles and Loeb, "Speeding, Coordination and the 55-MPH Limit: Comment," Donald Snyder, "Speeding, Coordination and the 55-MPH Limit: Comment," *American Economic Review* 79, no. 4 (September 1989): 922. For a rejoinder to his critics, see Charles Lave, "Speeding, Coordination and the 55-MPH Limit: Reply," *American Economic Review* 79, no. 4 (September 1989): 926–36. Also see Nicholas J. Garber and Ravi Gadirau, *Speed Variance and Its Influence on Accidents* (unpublished manuscript; AAA Foundation for Traffic Safety, Washington, D.C., July 1988).

⁽January 1971); A. Hoskin, "Consequences of Raising the Speed Limit," *Journal of Safety Research* 17 (1986): 179–82; James Jondrow, Marianne Bowes, and Robert Levy, "The Optimal Speed Limit," *Economic Inquiry* 21 (July 1983): 325–36; Dana Kamerud, "The 55 MPH.Speed Limit: Costs, Benefits and Implied Tradeoffs," *Transportation Research* 17A (January 1983): 51–64; Charles Lave, "Speeding, Coordination and the 55-MPH Limit," *American Economic Review* 75, no. 5 (September 1985): 1159–64; Sam Peltzman, "The Effects of Automobile Safety Regulation," *Journal of Political Economy* 83, no. 4 (1975): 677–725; Paul Sommers, "Drinking Age and the 55 MPH Speed Limit," *Atlantic Economic Journal* 13 (March 1985): 43. For a critique, see Walter Block, 1997. "Tobacco Advertising," *International Journal of Value-Based Management* 10, no. 3, (May 1997): 221–35; idem, "Theories of Highway Safety," *Transportation Research Record* #912 (1983): 7–10.

75–80 mph, this will actually be safer than if some proceed at 40 mph (the typical minimum highway requirement) and others, cheek by jowl, at 65 mph (policemen rarely ticket anyone for excessive speed of only 10 mph).

What is the libertarian compromise between these two incompatible positions? The solution is to privatize all highways.⁶ With all highways, by-ways, streets, roads, thorough fares and other traffic arteries in the hands of private entrepreneurs, there would be no need for government to decide upon any speed regime. Just as the state now plays no role whatsoever regarding the color of cars, or cloths, or crayons, and thus there is no need for any public "decision" regarding these choices, the public sector would entirely absent itself from the decision concerning the rate of motorists. Just as there is now no U.S. government cloth or crayon "policy," so, too, would there be no speed limit "policy." Privatization is the only true compromise. Any other "solution" would be arbitrary, merely taking the limits

⁶For answers to objections that this is impossible, would create chaos, would not work, would be an abomination, or would be akin to Solomon's decision to cut the baby in half and give each part to two contending mothers, see Walter Block, "Free Market Transportation: Denationalizing the Roads," Journal of Libertarian Studies 3, no. 2 (Summer 1979); Daniel Klein, "The Voluntary Provision of Public Goods? The Turnpike Companies of Early America," Economic Inquiry (October): 788-812; Dan Klein, John Majewski, and Christopher Baer, "Economy, Community and the Law: The Turnpike Movement in New York, 1797-1845," The Journal of Economic History (March 1993): 106–22; idem, "From Trunk to Branch: Toll Roads in New York, 1800–1860," Essays in Economic and Business History 11 (1993): 191–209; Dan Klein, and G.J. Fielding, "Private Toll Roads: Learning From the Nineteenth Century," Transportation Quarterly (July 1992): 321-41; "How to Franchise Highways," Journal of Transport Economics and Policy (May 1993): 113-30; idem, "High Occupancy/Toll Lanes: Phasing in Congestion Pricing a Lane at a Time," Policy Study 170 (November 1993); Gabriel Roth, The Private Provision of Public Services in Developing Countries (Oxford: Oxford University Press, 1987); Murray N. Rothbard, For a New Liberty (New York: Macmillan, 1973); William C. Wooldridge, Uncle Sam, The Monopoly Man (New Rochelle, N.Y.: Arlington House, 1970).

advocated by one side, adding them to the other, and perhaps, dividing by two.⁷

This privatization compromise is the only one compatible with the libertarian perspective on rights.⁸ In that view, government nationalization of private property is tantamount to a taking,⁹ or, more accurately, theft.¹⁰ For the only legitimate role of government¹¹ is to protect persons and their property from aggression, and while courts, armies and police are at least relevant to this task, highways are not.

⁹Richard Epstein, *Takings: Private Property and the Power of Eminent Domain* (Cambridge, Mass.: Harvard University Press, 1985).

¹⁰Lysander Spooner, *No Treason* (Larkspur, Colo.: Pine Tree Press, [1870] 1966).

¹¹If indeed it has one. For support of this contention, see Robert Nozick, *Anarchy, State, and Utopia* (New York: Basic Books, 1974). See Epstein, *Takings*; for a critique see Rothbard, *For a New Liberty*; Hans-Hermann Hoppe, *A Theory of Socialism and Capitalism: Economics, Politics and Ethics* (Boston: Dordrecht, 1989); idem, *The Economics and Ethics of Private Property: Studies in Political Economy and Philosophy* (Boston: Kluwer, 1993); David Friedman, *The Machinery of Freedom: Guide to a Radical Capitalism,* 2nd ed. (La Salle, Ill.: Open Court, 1989); Bruce Benson, "Enforcement of Private Property Rights in Primitive Societies: Law Without Government," Journal of Libertarian *Studies* 9, no. 1 (Winter, 1989).

⁷Any such procedure, moreover, would encourage "strategic" behavior: each side would have an incentive to exaggerate its real goal, so as to bring the judgment closer in conformity to its own wishes.

⁸See on this Bruce L. Benson, "Land Use Regulation: A Supply and Demand Analysis of Changing Property Rights," *Journal of Libertarian Studies* 5, no. 4 (Fall, 1981); Antony Flew, "Could There Be Universal Natural Rights?" *Journal of Libertarian Studies* 6, nos. 3/4 (Summer/Fall, 1982): 277–88; Tibor Machan, ed., "Against Nonlibertarian Natural Rights," *Journal of Libertarian Studies* 2, no. 3 (Fall, 1978): 233–38; Douglas B. Rasmussen, "A Groundwork for Rights: Man's Natural End," *Journal of Libertarian Studies* 6, no. 1 (Winter, 1980): 65–76.

PARADES

A similar problem on the roads arises with regard to their use for parades. Any organized march is necessarily an infringement on the scope of vehicular and pedestrian traffic; and there is no principled, nonarbitrary criterion which can unambiguously determine whether to give the nod to ordinary motorists, to a Fourth of July parade, a New York City marathon, a St. Patrick's Day parade, or to one for the Nazis marching in Skokie, Illinois.¹²

The latter two cases, of course, lead to additional challenges. Should the organizers be allowed to exclude gays? On the one hand, the parade belongs to the organizers, heterosexuals of Irish descent. If they don't want (even Irish) homosexuals to take part, that should be up to them. On the other hand, the event takes place on public property, and bisexuals and lesbians pay taxes for the creation, upkeep and maintenance of the streets just like everyone else. Should the Nazis even be allowed to carry their banners on public streets, much to the outrage of the Jewish population in Skokie, many bearing tattoos from German concentration camps, let alone have an organized march there? The American Civil Liberties Union thinks so, on the grounds of freedom of expression as the first amendment guarantees. There are those, in contrast, who think the only proper destination for such a parade would be right to jail—or right to hell—for holding and popularizing such evil views.

Fortunately, the libertarian compromise solution is able to cut though this Gordian knot of legal and moral complexities like a hot knife through butter. Again, simply privatize the streets! In one fell swoop this intractable problem is solved. It now presents no more of a difficulty than the total nonissue of whether Nazis, or Irishmen, or Martians for that matter should be allowed to rent

¹²Sometime issues of this sort can be matter of life or death. Much of the fighting in Belfast, for example, can be traced to the organization of rival parades on the part of the Catholic and Protestants in that city. As a matter of fact, Northern Ireland's "annual marching season" is the occasion for bitterness between the two rival factions.

a hotel room, or a convention center, or any other private meeting ground. Of course they should be, all of them, each and every last one. And they can exclude anyone they wish, for whatever reason, from their essentially private meeting. The foregoing was a challenging issue only because there were private people contending for public space. There is no way to solve this under conditions of public ownership, since all private parties have equal standing under any legal system based on the rule of law.¹³ The only solution is to reject one of the basic premises—public ownership. Then and only then is there a reasonable resolution of the issue.

This compromise, too, saves generations of judges from twisting in the wind, trying to solve the unsolvable. Right now, happily, the U.S. has no paper clip "policy." It leaves such matters strictly to private individuals. At present, unfortunately, the state does have a highway speed limit¹⁴ and a parade policy. It is time, it is past time, that we applied the principles of free enterprise which work so well for paper clips and bubble gum¹⁵ to such contentious issues as speed limits and marching bands.

CIGARETTES

The same insights may also be applied to smoking regulations. Before analyzing this mare's nest of contending legal philosophies, a sharp distinction must first be drawn between primary and secondary smoke. In the former case, the (alleged) harm of cigarettes is confined to the smoker himself; in the latter, it spills over onto others and thus constitutes an invasion.

One would think that in the relatively straight forward case of primary smoking, the conclusions would be clear: the (adult)

¹³See F.A. Hayek, *Law, Legislation and Liberty* (Chicago: University of Chicago Press, 1973).

¹⁴Even when the federates give over these decisions to the fifty states, the latter are still part of government.

¹⁵When is the last time either of these products were in the news as a problem?

user of tobacco products bears any and all risk of his actions. Certainly, particularly in this day and age of compulsory government-inspired warnings¹⁶ of the dangers of smoking, no blame can be placed at their doorstep.

Another argument is that, especially in an era of socialized medicine, harming one's own health is really an "attack" on others, since they will be forced to bear the costs of the smoker's subsequent ill health. In effect, this is an attempt to convert primary smoking into the secondary variety. Superficially, at least, it succeeds. For under this system, if I hurt myself physically, I hurt you financially.

But this is an entirely spurious conclusion, at least if it is interpreted as successfully converting a primary (personal) problem into secondary (social) one. For the entire transference relies on the institution of socialized medicine. Without it, if I harm myself, I'm no burden to you. Under medical socialism, since I can demand payment from you for harming myself, there is at least a case for you stop me from so doing; e.g., one might argue that it is justified for you to bar me from cigarettes. That this has even a semblance of logic behind it only furnishes further reason for repealing socialistic health plans.¹⁷

What of secondary smoke, true, direct secondary smoke, where the user impacts other parties, not by making them pay for

¹⁶For the libertarian, this is a clear and present violation of free speech rights. For the right to speak freely also implies the right to maintain silence. As to charges of fraud against tobacco companies, as long as they do not claim that cigarettes and cigars are "safe," they should not be made to bear any of the attendant risks. And this applies even in the absence of such warning, during the time when they *were not* compulsory. On this see Walter Block, "Coase and Demsetz on Private Property Rights," *Journal of Libertarian Studies* 1, no. 2 (Spring, 1977): 111–15.

¹⁷This "logic" also applies to eating fatty foods, failing to brush one's teeth, not getting enough exercise, etc. Taken to its logical conclusion, socialized medicine thus implies a world of Big Brother controlling you for your own good.

his future (possible) illnesses, but by blowing smoke in their faces and endangering them? Pro-government economists have handled this problem of undeniable invasion under the doctrine of "market failure."¹⁸ In this view, the market has failed, and so government must perforce step into the breach and right matters. The specific failure, here, is secondary smoke: others, nonsmokers, will be victimized by the fumes and made to undergo risk against their will.

The statist response has been to prohibit smoking in certain areas outright (hospitals, public buildings, air flights, schools, etc.), and in other contexts insist that particular areas be cordoned off and reserved for nonsmokers (e.g., compelling special, tobacco-free areas).

What of the other side of this debate? Opponents of this new regime argue that smoking is not at all akin to punching someone in the nose. For one thing, physical aggression has always been recognized as such. Assault and battery have never been legal in any country.¹⁹ And yet for most of recorded history, lighting up a butt was never totally proscribed. It is only in these hypersensitive "politically correct" times that this practice has become an issue.

A second argument is that of cause and effect. The present state of scientific medical knowledge establishes no unbroken link between cigarette usage and cancer or emphysema, etc., not for the smokers themselves, still less for second parties. The one

¹⁸For critics of this view, see Tyler Cowen, ed., *The Theory of Market Failure: A Critical Examination* (Fairfax, Va.: George Mason University, 1988); Jeffrey Rogers Hummel, "National Goods vs. Public Goods: Defense, Disarmament, and Free Riders," *Review of Austrian Economics* 4 (1990): 88–112; Ludwig von Mises, *Human Action* (Chicago: Regnery, 1966); Murray N. Rothbard, *Man, Economy, and State*, 2 vols. (Princeton, N.J.: D. Van Nostrand, 1962).

¹⁹De jure, that is. De facto, unfortunately, is entirely a different matter. But *de jure* is itself important. At least it shows an ideal direction for the law, even if it is not always upheld in actual police work or court decisions.

is neither a sufficient nor necessary condition for the other. There are those who indulge all their lives and never sicken, while others never so much as touch the "vile weed," nor live nor work near those who do, and yet succumb. (In contrast, everyone who has his nose punched sustains physical harm.) The most that can be claimed for this etiology is statistical correlation: there is a higher incidence of lung disease amongst users. But similar ,merely statistical disparities arise in a plethora of cases.

Then there is the *de minimis* argument. Even if there is one day found to be a direct invasive harm from this quarter which is not merely statistical, it may well be minimal. That is, it may be akin to the "harm" which emanates from radio waves, low level radioactivity (similar to that caused by bricks, clay, etc.), and the breathing out of carbon dioxide which each of us engages in and without which we would all die.²⁰ The point is that, even if there is a direct harm to other people, for the law to take cognizance of it, it must be "substantial."

There are some people who are seriously, even fatally harmed by carbon dioxide exhalations, overhead electrical wires, radio waves, etc.; they can safely live only in an oxygen tent. If they venture out, they sustain great damage. If they do, can it reasonably be said that others—smokers, carbon dioxide exhalers (all of us), electricity users, etc., have violated their rights? Must we, in effect, halt civilization in its tracks in order to accommodate these people? Or must they bear the risk of venturing out of their oxygen tents, of "coming to the risk" as it were? Coase, Demsetz, and Posner would advise the court charged with making this decision not to forestall civilization in order to enhance the mobility of these people.²¹ Why? Because the costs would be too great.

²⁰Murray N. Rothbard, "The Present State of Austrian Economics." Working Paper from the Ludwig von Mises Institute (November 1992). Reprinted in *The Logic of Action One: Method, Money, and the Austrian School* (Cheltenham, U.K.: Edward Elgar Publishing, 1997), pp. 111–72. Reprinted in *Journal des Economistes et des Etudes Humaines* 6, no. 1 (March 1995): 43–89.

²¹See Ronald Coase, "The Problem of Social Cost," Journal of Law and Economics 3 (October 1960): 1–44; Harold Demsetz, "Toward a Theory of

After all, there are many more of us than there are of them. True, any one of them might gain more than any one of us might lose, but when a cost benefit analysis is conducted, wealth can be maximized by not giving these people an outdoor oxygen tent, as it were.

The libertarian would concur in this conclusion, but for very different reasons: because normal people have homesteaded the right to engage in just these sorts of everyday activities, that if the invalids venture out of their safe havens, they must do so at their own peril.²²

So which is it? Is smoking an invasion or not?

Fortunately, it is not necessary to give an answer to this essentially empirical, scientific and medical question. Thanks to the compromising, ameliorative qualities of private property rights regimes, a compromise between these two bitterly contrasting views is possible.

²²See John Locke, "An Essay Concerning the True Origin, Extent and End of Civil Government," Vols. 27–28, in Peter Laslett, ed., *Two Treatises of Government* (Cambridge: Cambridge University Press, 1960); Rothbard, For a *New Liberty*; Hoppe, *The Economics and Ethics of Private Property*.

Property Rights," American Economic Review 57 (1976): 347-59; idem, "Ethics and Efficiency in Property Rights Systems, in Time," in Mario Rizzo, ed., Uncertainty and Disequilibrium: Explorations of Austrian Themes (Lexington, Mass.: D.C. Heath, 1979); Richard Posner, Economic Analysis of Law, 3rd ed. (Boston: Little Brown, 1986). For a critique of these three economists in particular, and of their "Law and Economic Philosophy" in general, see Block, "Coase and Demsetz on Private Property Rights"; idem, "Ethics, Efficiency, Coasean Property Rights and Psychic Income: A Reply to Demsetz," Review of Austrian Economics 8, no. 2 (1995): 61-125; Roy E. Cordato, Welfare Economics and Externalities in an Open Ended Universe: A Modern Austrian Perspective (Boston: Kluwer, 1992); Elisabeth Krecke, "Law and the Market Order: An Austrian Critique of the Economic Analysis of Law," paper presented at the Ludwig von Mises Institute's Austrian Scholar Conference, New York City, October 9–11, 1992; Gary North, Tools of Dominion: The Case Laws of Exodus (Tyler, Tx.: Institute for Christian Economics, 1990); idem, The Coase Theorem (Tyler, Texas, Institute for Christian Economics, 1992).

All that need be done is first to privatize virtually all indoor²³ spaces.²⁴ Given such institutional arrangements, the (principled) compromise could proceed.²⁵ Each owner would decide the smoking rules for himself, and then compete with all others on not one but two grounds. First, the old one, provision of a good or service. This would be as before. Second, the competition would take place in terms of how well the smoking rules maximize profits (e.g., satisfy customers.)

For example, health food stores would compete with one another in terms of the quality and price of their vegetables—and their smoking rules. Presumably, they would be led by the "invisible hand"²⁶ to ban smoking outright.

Bars and grills, bowling alleys and pool halls would continue to compete with each other by providing their unique services to the public. They also would do so regarding their smoking rules. In contrast, while a few might specialize in the total prohibition of tobacco, as in the health food industry, most, presumably,

²³No one, even anti-tobacco extremists, allege that smoking is rights violative outdoors. That is why we commonly see corporals' guards of tobacco adherents engaging in these practices just outside the doors of hospitals, universities office buildings, etc., even in the dead of winter.

²⁴Under libertarian anarchism, the problem is totally solved; there are no public spaces at all, indoor or outdoor; under limited government libertarianism, the problem is not entirely solved, since there would, presumably, be some indoor public space (e.g., devoted to courts, armies and police) but at least the problem would be strictly confined to these few areas.

²⁵In contrast, the "unprincipled" compromise would be to allow all or most or much public property to remain under government control—either outright ownership or regulation—and then, say, take half of it and allow smoking and on the other half not. Or to allow "democracy" to decide where smoking may occur and where not.

²⁶Usually associated with Adam Smith, *An Inquiry into the Nature and Causes of the Wealth of Nations* (New York: Modern Library, [1776] 1965). However, Murray N. Rothbard, *Classical Economics: An Austrian Perspective on the History of Economic Thought* (Cheltenham, U.K.: Edward Elgar, 1995), vol. 2, calls into question this linkage.

would not interfere with lighting up at all. Still other commercial establishments might find it most in their interests to have special smoking times (late evenings? weekends?) or areas. Many hotels feature smoking or nonsmoking rooms. Many restaurants cordon off particular areas where this habit is indulged. All of these different types of establishments have one thing in common: they would all be encouraged by the desire for profit to tailor their smoking rules—as they do everything else—to suit the tastes of their customers. The presumption is that health food consumers would lie at the opposite end of the spectrum from the denizens of pool halls in terms of appreciation for, and tolerance of, tobacco.

There are advantages to the market in this case, as there are in all others. Free enterprise is highly flexible, able to create smoking rules conforming to the desires of virtually all customers. In contrast, governmental "all-or-one" policies are likely to satisfy only the majority.²⁷

The beauty of this market compromise plan is that people can sort themselves out according to their smoking preferences. "Teetotalers" need not venture out into emporia where any vestige of smoking is allowed, *even* on a part-time basis and confined to a small area. Tobacco users, too, can patronize establishments which welcome and support such choices. As long as indoor cigarette use is not defined as *per se* invasive,²⁸ this compromise can satisfy far more people than any other alternative.

²⁷If that. When was the last time an election was decided upon this one issue alone?

²⁸Even actual explicit violence cannot be defined as per se invasive. This would allow no scope for adult consensual sado-masochism, nor for boxing, wrestling, judo, karate tournaments, which each participant agrees to enter the ring, knowing that the mutual goal is the infliction of (limited) violence. This applies, as well, to the present case. No one could venture into a privately owned establishment which clearly indicates that smoking is allowed, and then logically object to the practice, no more than could a boxer legally complain about being punched in the ring. For an alternative and in my opinion incorrect view on the "manly sport," see Gary North,

This libertarian compromise proposal has an additional virtue: it conforms to the "politically correct" appreciation of, and support for, minority cultures.²⁹ As it happens, Orientals in North America have not at all bought into the anti-tobacco tirade. On the contrary³⁰ they are still very much enamored of the practice. In many cities, politically correct leftists have been willing to ban smoking in all private establishments which are "open to the public." This shows that their hatred for tobacco is stronger than their advocacy of the rights of downtrodden minorities.

Tools of Dominion: The Case Laws of Exodus (Tyler, Texas: Institute for Christian Economics, 1990), p. 344.

²⁹Obviously, this holds true only for those who value political correctness.

³⁰See for example *British Columbia Report* 21 (August 1996): 16.

Roads and the Immigration Issue

There is a debate now raging within libertarian circles concerning the immigration issue.¹ Should government restrict immigration, or should people be allowed to cross international borders with impunity, without any leaves or permissions granted by the state? We consider this issue in the

¹Walter Block, "Ethics, Efficiency, Coasean Property Rights and Psychic Income: A Reply to Demsetz," Review of Austrian Economics 8, no. 2 (1995): 61–125; Hans-Hermann Hoppe, Democracy—The God That Failed: The Economics and Politics of Monarchy, Democracy, and Natural Order (New Brunswick, N.J.: Transaction Publishers, 2001), pp. 159-60, n. 10; Walter Block and Gene Callahan, "Is There a Right to Immigration? A Libertarian Perspective," Human Rights Review 5, no. 1 (October–December, 2003); Julian Simon, The Economic Consequences of Immigration (Oxford: Basil Blackwell, 1989); James L. Hudson, "The Philosophy of Immigration," Journal of Libertarian Studies 8, no. 1 (Winter, 1986): 51-62; David Gordon, "The Invisible Hoppe," Mises Review (Winter, 1997); Donald Boudreaux, "A Free Market Case Against Open Immigration?" The Freeman (October 1996); Peter Brimelow, Alien Nation: Common Sense about America's Immigration Disaster (New York: Random House, 1995); Patrick J. Buchanan, The Death of the West: How Dying Populations and Immigrant Invasions Imperil Our Country and Civilization (New York: St. Martin's Press, 2002); William L. Anderson, "Immigration Quandary" (June 24, 2004), http://www.mises.org/fullarticle.asp?control=567&id=68. See also Journal of Libertarian Studies 13, no. 2 (1997) for several other contributions to this topic.

present chapter since private highways would potentially play an integral role in its determination.

Since this immigration debate is entirely an intra-libertarian one,² all sides would agree to stipulate that, at least ideally, government would play no role in the ownership and management of roads. We, then, assume this to be the case, *arguendo*.

What is this immigration debate? The anti-immigration side maintains that free immigration amounts to trespass, or forced integration.³ Since all property, not just roads, would be owned in the free society by private individuals, any immigration must of necessity cross these private property rights boundaries. As such, without the willing consent of the owner, free immigration amounts to trespass, or forced integration, nothing any advocate of free enterprise could be expected to support. This is to be sharply distinguished from the free movement of goods, money, and capital across national boundaries. In these latter cases, there is mutual agreement between the buyer and the seller, the consumer and producer, the lender and the borrower, the saver and the investor.⁴ Goods, money and capital cross borders only under such circumstances of mutual agreement. In contrast, immigration is not an instance of such two-part voluntariness. Rather, the immigrant, as it were, plunks himself down in the foreign country, with no permission required of any other second-party private property owner.

What is the position of the free immigration side of this debate? First, it starts off by conceding the absolute truth of what has just been said. If all property is privately owned, there is no scope, whatsoever, for immigration of this sort. However, and

²This, of course, is not to deny that non-libertarians, too, discuss and debate the matter; it is only to assert that in these pages, we shall confine ourselves to the one taking place only amongst libertarians.

³See on anti-immigration, Hoppe, *Democracy—The God That Failed*, and Gordon, "The Invisible Hoppe."

⁴But, see, William Barnett II and Walter Block, "Saving and Investing," *New Perspectives on Political Economy* 3, no. 2 (2007).

this "however" is the crux of the argument, not all property is owned privately at present.

Surprise!, the evil government owns larges swatches of it, mainly in Alaska and west of the Mississippi, but throughout every state in the nation, without exception.⁵

This being the case, no permission of any extant landlord is needed. Homesteading is a one-way arrangement, not a two-way one, such as foreign trade or investment. If Americans act like sheep and decline to homestead these unowned areas, in defiance of their government, they can have no proper objection if foreigners show a bit more initiative and spunk. Nor is the objection tenable from the anti-immigration perspective that Americans "really" own these unsettled tracts of land or, worse, that the government does. For surely it is an uncontroversial premise (at least within the libertarian community) that the only just source of private property rights is homesteading, and, thus, anyone interfering with a homesteader peacefully going about his business is guilty of the initiation of violence. Since there is no reason to distinguish between foreign and domestic would-be homesteaders, the case for precluding the former (or the latter, certainly) on grounds of trespass vanishes.

How does this argument fit in with the institution of private roads? Simple. Assume that the foreign homesteaders helicopter over to unowned (that is, government claimed) land in, say, central Wyoming, and begin to settle there. Can they enter onto the private roads, and have surface access to the entire country, indeed, to all of North America? Or, will they be confined to

⁵For example, state and federal government own 95.8 percent of Alaska, 87.8 percent of Nevada, 75.2 percent of Utah and 60.4 percent of Oregon; on the other hand, east of the Mississippi the holdings are more modest. For example, 1.5 percent of Rhode Island, 6.2 percent of Connecticut, 6.3 percent of Massachusetts, 7.4 percent of Delaware and 7.6 percent of Maryland. For the U.S. as a whole, the figure is 39.8 percent. See on this: http://www.nwi.org/Maps/LandChart.html

helicopter (or plane) travel, when they venture out of their newly homesteaded territory?

There is, also, a second way in which the issue of private roads impinges upon that of immigration. Go back to the Hoppean scenario of complete private ownership. Suppose there were a U.S. citizen who purchased, or otherwise legitimately came to own, a vast tract of land in the middle of Alaska, or Nevada—thousands of square miles. He then invited, suppose, one billion Chinese, or Africans, or South Americans, or other foreigners to come and live and work on his land. Since this is a mutually agreed upon situation, there can be no question of trespassing. But the question still remains: would these hordes of people be confined to these hinterlands, or, apart from air travel (with willing hosts at the other end of these trips), would they have access to all⁶ surrounding territory through the roadway network, as in the case of other people?

Thus, we arrive at the same question from both sources. One, if the foreigners homestead out of the way places on their own, and two, if an American property owner invites numerous foreigners onto his territory. Will these people be able to percolate throughout the entire country, as is the practice for everyone else, or will they be confined, by the institution of private road ownership, to their beachheads?

But perhaps we go too fast in blithely assuming that "everyone else," all those other people already living in the domestic country, will have full freedom of movement. If they do not, the way ahead is easier to see where the newcomers will not enjoy these privileges either.

After all, while racial (sexual, ethnic, orientation, etc., etc.) discrimination is pretty much against the law of the land, it by no

⁶Perhaps we should say "most" here, to incorporate the fact that there might be gated communities, and other institutions that narrowly restricted access to their property. But still, the question remains, would these new one billion immigrants be treated on much the same basis as extant inhabitants of the country?

means contravenes libertarianism, the philosophy now under discussion.⁷ So, will all racial, sexual and ethnic etc., groups be allowed onto the private network of roads, streets and highways, or not? We ask, under the assumption, at least on the first go round on this, that new foreigners will be treated roughly in the same manner as domestic minority groups.

The problem with this question is that it is exceedingly difficult to anticipate the operation of the free enterprise system regarding the road industry or, indeed, any other for that matter. This task is essentially an entrepreneurial, not an economic, one. If so pedestrian an item as pencils were suddenly moved from the public to the private sector, the analogous questions would come fast and furious, with no obvious objective answers in sight: How long, wide, thick and heavy would these writing implements be? Would erasers be attached, and if so, how so, and if not, who would supply the latter? Would there be specialty stores that sold pencils, or would they be marketed alongside other office materials? How much would they cost? What profits would be earned on them? Who would attach the wood, graphite, rubber to one another, and how on earth would they be gathered together in one place, given that they come from different ends of

⁷Richard A. Epstein, *Forbidden Grounds: The Case against Employment Discrimination Laws* (Cambridge, Mass.: Harvard University Press, 1992); Walter Williams, "On Discrimination, Prejudice, Racial Income Differentials, and Affirmative Action," in *Discrimination, Affirmative Action and Equal Opportunity*, Walter Block and Michael Walker, eds. (Vancouver, B.C.: Fraser Institute, 1982); Thomas Sowell, "Weber and Bakke, and the Presuppositions of 'Affirmative Action'," in *Discrimination, Affirmative Action and Equal Opportunity*, Walter Block and Michael Walker, eds. (Vancouver, B.C.: Fraser Institute, 1982); Roy Whitehead and Walter Block, "Should the Government be Allowed to Engage in Racial, Sexual or Other Acts of Discrimination?," *Northern Illinois University Law Review* 22, no. 1 (Fall, 2001): 53–84; Roy Whitehead, Walter Block, and Lu Hardin, "Gender Equity in Athletics: Should We Adopt a Non-Discriminatory Model?," University of Toledo Law Review 30, no. 2 (Winter, 1999): 223–49.

the earth?⁸ We would have no definitive answers to any of these questions, except that we should "wait and see" what the working of the marketplace churns up. However, had pens always been in the private sector, we might well attempt to extrapolate the future story of the pencil from that example, and this is precisely the tack we shall take in our attempt to foretell the likely reaction of a completely privatized road industry to the questions about street and highway discrimination we are addressing. That is, we shall focus on a related experience, and see if it can shed any light, however clouded, about possible future road operation.

One answer that might be discerned is that discrimination, if it does occur, would likely take place on the basis of uncivilized or obstreperous behavior, not mere skin color (unless the two were highly correlated, and the latter could be used as a cheap proxy variable or indicator of the former). Even statist police, who are sometimes accused of "racial profiling," rarely if ever interdict a black grandmother. Rather, they tend to focus on that subset of this population proportionately over represented in the crime statistics: males from about ages fifteen to twenty-five, of whatever race (with the exception of those in this age/gender cohort who are easily identifiable as being far removed from the police blotters of the nation, e.g., male teens who are Chasidic, or Amish, or are wearing clerical collars). As it happens, however, for reasons that do not concern us at present,⁹ different racial and ethnic groups are differentially represented in terms of such unwelcome behavior: blacks for ordinary crime, Arabs and Muslims for terrorism.

⁸For a very different but not entirely unrelated treatment of the pencil, see Leonard Read, *I, Pencil* (Irvington-on-Hudson, N.Y.: Foundation for Economic Education, 1958).

⁹For an explanation of this phenomenon see Richard J. Herrnstein and Charles Murray, *The Bell Curve: Intelligence and Class Structure in American Life* (New York: Free Press, 1994); Michael Levin, *Why Race Matters* (Westport, Conn.: Praeger, 1997).

It is safe to say then, as much as it is safe to say anything about how a hypothetical highway industry would operate in future, that these groups would be more likely to be singled out for heavier scrutiny before being allowed out onto private highways, and perhaps in some cases even forbidden entry. Yes, certain benefits would not accrue to owners who turn away customers; discrimination costs money to firms who engage in such practices.¹⁰ However, the presumption here is that these losses would be more than offset by a majority of paying customers who appreciate the added safety thereby vouchsafed for them.

Let us now return to the question with which we began. We asked if massive numbers of foreign immigrants would likely have the run of the place under a regime of private road ownership. Peering through the murky clouds necessarily surrounding such essentially entrepreneurial issues, my own personal best guess is that this would depend almost totally upon their behavior. If they are hard working and industrious, good safe drivers, not given to criminal behavior, then the likely answer is yes; if not, then, not.

Another dimension comes into play with regard to road access. There are already gated communities which place all would-be entrants under a veritable microscope before allowing admission. To gain entry onto these private, low traffic capacity streets, one must typically convince an armed guard of his *bona fides*. This is often buttressed by an on-the-spot telephone call to the person being visited. There is very little acceptance, in such venues, of outsiders who wish to engage in joy riding, house viewing, window shopping, touring around, etc.

In contrast, nowadays, the level of examination for major traffic arteries is much less. This might imply that the foreign immigrant homesteader or invitee might find more of a welcome on the highways rather than on the byways of the nation. But any

¹⁰See Gary Becker, *The Economics of Discrimination* (Chicago: University of Chicago Press, 1957).

such conclusion is fraught with danger, as *ceteris paribus* conditions do not at all hold at present. Specifically, the heightened scrutiny for gated communities is all private, while the more relaxed, not to say cavalier, treatment (virtual anonymity for motorists who do not negatively distinguish themselves) is almost entirely a practice of public police. Another, possible, implication, then, of an all-private roadway system might well be increased care with regard to what the customers are up to for *all* roads, no matter what their traffic bearing capacity. This would have greater negative implications for the freedom of movement of newcomers, and subcategories of the native population who are criminally oriented. Most likely, perhaps, is that private road owners would invest in more information gathering for vehicle owners who seek access to residential neighborhoods for those who whiz along a highway at seventy miles per hour.

What must never be lost sight of in any such analysis is the high probability that there will be different practices with regard to such safety concerns on different roads. This typically occurs concerning virtually all goods and services produced. Burger, car, amusement park entrepreneurs, etc., are now free to implement whatever policies and procedures that seem to them likely to maximize profits.

At present, we are all too much accustomed to the rules of the road emanating from Washington, D.C. In our one-size-fits-all current practice, there is simply no scope for trying one thing on one street or avenue, and something else on others. Thus, we must take with a large grain of salt any one policy adumbrated above. Of course, if there is a reason that some policies are more profitable than others (e.g., cheaper, more in line with consumer tastes, etc.), the market place will tend in that direction, penalizing those firms that do not go along. It is only this latter phenomenon that allows us to speculatively peer through the fog to the degree we have.

9

The Motor Vehicle Bureau

ewly arrived in New Orleans from Arkansas, one of the first things I did after settling in was to attempt to register my automobile and get a Louisiana license plate (I can't pass for a native with an out of town vehicle).

I say "attempt" advisedly, because this quest, as it turned out, was quite a struggle.

On my first try, I went out to the Louisiana Motor Vehicle Bureau in Kenner, a twenty-five minute trip from my university. I saw a line of about thirty-five people, and took my place at the end of it. After twenty minutes, only two people had been served. This implied a wait of 330 minutes, or five and a half hours. Not having brought any work to do with me, I scurried back to my office, tail between my legs.

The next day I arrived with sandwiches and a book to read. There were only twenty people ahead of me. Hot diggity, I thought, this would take "only" 200 minutes at yesterday's pace, or a little over three hours.

Happily, we were queued up in "snake" formation, instead of the more usual system—popular for public sector "services"—of a group of people waiting, separately, for each clerk. At least I didn't have to worry about being at the slowest moving wicket. But, did you ever stand around, trying to read a book, cheek by jowl with almost two dozen people, confined, sardine-like, to a space of about ten feet by ten feet? It was no picnic for me, and I'm a relatively young pup of only six decades; there were also some really old people on that line. This was cruel and unusual punishment for them.

Why couldn't they give us numbers in order of arrival, and let us sit while we waited? For that matter, why does serving each "customer" take so long? And, if it really does, why not hire a few more clerks, or more efficient ones? Better yet, why not simplify the process? Are the opportunity costs of time of New Orleanians really that close to zero? Are we cattle? If they treated prisoners as badly as that, they would riot.

But the real problem is not with any of these considerations. It is, rather, that there is simply no competition for the provision of licensing and registry services. If there were an alternative (or two) available, I and at least several of my queue-mates would have patronized a competitor with alacrity.

The difficulty is, we have embraced the old Soviet system of economics in our so-called "public" sector. In the bad old U.S.S.R., there were long waiting lines for just about everything. In the land of the free and the home of the brave, we have sovietized such things as the Motor Vehicle Bureau, the Post Office, and a myriad of other government bureaucracies.

It is time, it is long past time, to privatize these last vestiges of socialism, and allow the winds of free enterprise to blow away these cob-webs of inefficiency. The reason we have reasonably good pizza, toilet paper and shoes, etc.—and don't have to wait hours for them—is because there is competition in these industries. Those entrepreneurs who cannot cut it are forced to change the error of their ways through our marvelous profit-and-loss system. If they cannot, they are forced into bankruptcy, and others, more able, are eager to take their places. Adam Smith's "invisible hand" assures quality service wherever competition reigns. In the event, my second wait took only an hour and forty-five minutes. The queue moved faster than I had thought it would. I was "lucky." (Furious, I wrote this op-ed while waiting in line). I am now the proud owner of a spanking new Louisiana license plate.

Part III

Process

10 Privatize Public Highways^{*}

cross the United States, more than four million roads, streets, and highways tie cities and states together and enable citizens to work, travel, and shop. Americans enjoy unprecedented freedom and convenience, as our whole economy is directly dependent upon this mobility. This makes the entire nation, in effect, one gigantic assembly line for the production and transport of goods.

Because of the importance of the U.S. transportation system, many believe that only the government can own and manage it. This is not the case. Privatization of the public highway system would provide economic efficiencies and other benefits.

Private ownership, which would include competitive roads owned by people and corporations that can charge tolls, would allow the incentive for profit to benefit consumers, as it does in other areas of our lives. We would see the results in increased safety, reduced traffic congestion, and, of course, tax savings.

The public highway system is a prime example of a public firm that is large in size, lax in management, and a costly burden to taxpayers. Public highways are suffering from problems of

¹Michelle Cadin and Walter Block, "Privatize the Public Highway System," *The Freeman* 47, no. 2 (February 1997): 96–97.

urban traffic congestion, poor maintenance, and high fatalities. The demands on road systems are continually changing in a society where in months a new shopping center, office complex, or residential area can appear.

According to the American Public Works Association, Americans spend more than two billion hours tied up in traffic on urban highways each year. The Federal Highway Administration (FHA) estimates that over the next twenty years travel on public highways will rise by two-thirds, adding even more strains to an already overburdened system. The FHA also estimates that over 234,500 miles of U.S. roads are in either poor or mediocre condition.

Every year, thousands of people lose their lives in highway accidents. Fatal crashes are variously attributed to vehicle speed, intoxication of the driver, lack of safety regulations, or mechanical failures. These are proximate causes, but government management and control are major factors as well. While there will always be some accidents, as long as customers want safety, private owners will compete to provide it. If a good safety record on a road attracted customers, it would be in the interest of owners to provide it.

Owners of airlines know the importance of safety and regular maintenance of their aircraft, for they face the consequences when safety fails. If the cause is believed to be the airline's, customers choose another carrier. As a result, air transportation is extremely safe.

But today's highway monopoly means that there is no monetary incentive for government to improve its safety record. People have to drive regardless of the safety of the road.

TRAFFIC CONGESTION

Another major concern about the public highway system is the massive congestion in and around many of the urban areas during rush-hour periods. This not only leads to aggravation and waste of gas while idling in traffic but also constitutes an immense loss of time and productivity. According to Representative Thomas Petri, chairman in the 104th Congress of the House Surface Transportation Subcommittee, if each Federal Express and United Parcel Service driver encounters traffic delays for five minutes in a day, the cost mounts to \$40 million over the course of a year. Multiplying this by all U.S. drivers gives some rough indicator of the cost to society.

The government has come up with ways to address the traffic problem, but none has worked. For example, the federal government has called for employers to stagger work hours for their employees so that the traffic coming into urban areas would be spread out more. In some states, special lanes for high-occupancy vehicles have been constructed at great expense. For many drivers, the inconvenience or impracticality of carpooling overrides the benefit of such a contrivance.

Owners of private highways would undoubtedly offer cheaper rates at off-peak times, thus providing a monetary incentive for staggered work hours. With today's highways, governments, too, could employ such a procedure. But instead of charging more for peak-load travelers, the state usually charges less. It is common to reduce the price for regular commuters who purchase tokens for forty or more trips a month. These are precisely the peak-load users who add to the congestion.

Other solutions the government has come up with are oneway streets and limited turns in busy areas. While these are intended to cut down on traffic, the secondary effects are often the opposite. The restrictions may necessitate circuitous routes and drivers may end up driving more. This increases the amount of miles driven in certain areas within a constrained time period.

Under private ownership, the builder of a road would want to secure the highest profits with the least cost. The builder would consider the businesses and residents located near the highway. A system where the transportation owners worked cooperatively with industry and residents would encourage efficiency as well as profits for the road owner.

The owner of a private highway would need to satisfy the customer in order to make profits. The governmental (public)

owner of the highway, the politician, is usually able to give the customer poor service and does not need to satisfy the voter in order to receive money. If the public enterprise is sued for negligence, the person in charge does not directly pay; all monies come out of general tax revenues. In the case of private ownership, the owner must pay. Thus there are much higher incentives for the private owner to provide good service.

Today it is difficult to imagine a private highway system because the government has owned almost all roads for most of the twentieth century. But in Anaheim, California, over 30,000 drivers are using the new 91 Express Lanes, a ten-mile automated toll road.

The 91 Express Lanes was developed, financed, and operated by the California Private Transportation Company (CPTC) in response to motorists' frustration with the amount of traffic on the Riverside Freeway (route 91). The toll road was built without a dollar of state or federal funds. It is the world's first fully automated toll road, it is the first example of congestion pricing in America, and is the first toll road to be privately financed in the United States in more than fifty years. "We're seeing a steady, upward trend both in the use of the Express Lanes and in growth of our customer base," says CPTC General Manager Greg Husizer.

Yes, private owners should be able to manage the highway system and provide the same level of efficiency as they are able to do in other aspects of our lives. With Express Lanes 91, we may see in microcosm the improvement that could be achieved with private ownership of highways.

11 Homesteading City Streets: An Exercise in Managerial Theory^{*}

Privatizing all goods and services will satisfy consumers far more effectively than allowing their management to remain in the hands of the state, under socialist provision. If we have learned one thing from the fall of the economic system of the U.S.S.R., it is that. More controversially, city streets are no exception to this general rule. They, too, can be mismanaged by the municipal government, or run more efficiently though the institutions of private property and competition. What society needs is a system wherein entrepreneurs are rewarded for promoting consumer sovereignty, and penalized for failing to satisfy customers. The ballot box vote is perhaps aimed in this general direction, but it is cumbersome: elections occur only every four years, and the electorate is usually given a choice between only

^{*}The author benefited from discussions with Jeff Tucker while writing this article; he wishes, also, to acknowledge the benefit of some very help-ful suggestions made to him by two referees of "Planning and Markets." The chapter first appeared as Walter Block, "Homesteading City Streets: An Exercise in Managerial Theory," *Planning and Markets* 5, no. 1 (September 2002): 18–23.

two or three options. In very sharp contrast, the "dollar vote" occurs every day, and can be focused in great detail upon choices at the micro level; it can distinguish between flavors of ice cream and colors of shirts. It can also reward and penalize individual street owners, tending to guarantee better performance on their part.

INTRODUCTION

This chapter is dedicated to an exploration of how city streets can best be privatized. Among the alternatives: giving them away or selling them to specific people (e.g., those who live on them, work on them, or travel through them) or auctioning them off to the highest bidder(s). Further, they could be disposed of piecemeal, e.g., in sections of one hundred feet or so, or in their entirety, e.g., Broadway in Manhattan goes to one firm, or, alternatively, they might be packaged in neighborhood sections, for example, all the streets in Greenwich Village end up under the control of a single commercial entity, all those in the Upper East Side to another. (I use examples from New York City since this is perhaps the most well-known locale in the world.)

To most scholars, this exploration will appear as ludicrous, idiosyncratic or even maniacal. Privatize the streets? "Which controlled substance is a person laboring under the influence of, who would even raise such an issue, let alone attempt to soberly address it?," will be the likely reaction of most urban economists.

Nevertheless, we persist in our folly. (This is meant sarcastically. I make no apology whatsoever for attempting to apply what we have learned about the best way to supply cars and chalk and cheese and computers namely, free enterprise—to an analogous good, roadways.) We will not here make the case for private rather than public enterprise in general. There is already a rather large extant literature on privatization.¹ It makes the

¹Terry L. Anderson and Peter J. Hill, eds. *The Privatization Process: A Worldwide Perspective* (Lanham, Md.: Rowman & Littlefield Publishers, 1996); Barnett (1980); Bruce L Benson, *To Serve and Protect: Privatization and*

Smithian² case that we can more effectively organize an economic system through decentralization based on private property, freely

Community in Criminal Justice (New York: University Press, 1998); Walter Block, "Comment on William Stanbury's 'Privatization in Canada: Ideology, Symbolism or Substance?" in Privatization and State-Owned Enterprises: Lessons for the U.K., Canada and the U.S., Paul MacAvoy, William Stanbury, George Yarrow and Richard Zeckhauser, eds. (Boston: Kluwer, 1989), pp. 331-36; "Comment on Alan Walters' 'Deregulation and Privatization: Lessons from the U.K.," in The Law and Economics of Competition Policy, Frank Mathewson, Michael Trebilcock and Michael Walker, eds. (Vancouver: Fraser Institute, 1990), pp. 175–78; "The Process of Privatization," in International Privatization: Global Trends, Policies, Processes, Experiences, O. Yul Kwon, ed. (Saskatchewan: Institute for Saskatchewan Enterprise), pp. 431–36; 2001; Stuart M. Butler, Privatizing Federal Spending (New York: Universe Books, 1985; Randall Fitzgerald, When Government Goes Private: Successful Alternatives to Public Services (New York: Universe Books, 1989); David Friedman, "Private Creation and Enforcement of Law: A Historical Case," Journal of Legal Studies 8 (1979): 399-415; idem, The Machinery of Freedom: Guide to a Radical Capitalism, 2nd ed. (La Salle, Ill.: Open Court, 1989); Gillian K. Hadfield, "Privatizing Commercial Law," Regulation 24, no. 1 (Spring 2001): 40-45; Steve H. Hanke, "Privatization," in James Eatwell, Murray Milgate and Peter Newman, eds., The New Palgrave: A Dictionary of Economics (London: Macmillan Press, 1987), pp. 976-77; William M. Landes and Richard A. Posner, "Adjudication as a Private Good," Journal of Legal Studies 8 (1979): 235-84; Paul R. Milgrom, Douglass C. North and Barry R. Weingast, "The Role of Institutions in the Revival of Trade: The Law Merchant, Private Judges, and the Champagne Fairs," Economics and Politics 2, no. 1 (1990): 1-23; T.M. Ohashi, T.P. Roth, Z.A. Spindler, M.L. McMillan, and K.H. Norrie, Privatization Theory & Practice (Vancouver, B.C.: Fraser Institute, 1980); Madson Pirie, Privatization in Theory and Practice (London: Adam Smith Institute, 1986); Edward Stringham, "Justice without Government," Journal of Libertarian Studies 14, no 1 (Winter, 1998-1999): 53-77; Gabriel Roth, The Private Provision of Public Services in Developing Countries (Oxford: Oxford University Press, 1987); Murray N. Rothbard, Reconstruction of Utility and Welfare Economics (New York: Center for Libertarian Studies, 1978); idem, The Ethics of Liberty (New York: New York University Press, 1998); Patrick Tinsley, "With Liberty and Justice for All: A Case for Private Police," Journal of Libertarian Studies 14, no. 1 (Winter, 1998–1999): 95–100; Morris and Linda Tannehill, The Market for Liberty (Lansing, Mich.: Self Published, 1984); Michael A. Walker, ed., Privatization: Tactics and Techniques

fluctuating prices and unencumbered markets than centralization, bureaucracy and commands.³

Nor will we again rehearse the arguments in favor of private rather than public roads in particular. There is already a relatively large body of work (given the admitted unpopularity of the argument) that attempts to justify this enterprise.⁴ That is, it

²Adam Smith, *An Inquiry into the Nature and Causes of the Wealth of Nations* (New York: Modern Library, [1776] 1965).

³Ludwig von Mises, "Economic Calculation in the Socialist Commonwealth," in *Collectivist Economic Planning*, F.A. Hayek, ed. (Clifton, N.J.: Kelley, [1933] 1975).

⁴David Beito, "From Privies to Boulevards: The Private Supply of Infrastructure in the United States during the Nineteenth Century," in Jerry Jenkins and David E. Sisk, eds., Development by Consent: The Voluntary Supply of Public Goods and Services (San Francisco, 1993), pp. 23-48; idem, "Voluntary Association and the Life of the City," Humane Studies Review (Fall, 1988); idem, "Owning the Commanding Heights," Essays in Public Works History (1989), vol. 16; David Beito and Linda Royster Beito, "Rival Road Builders: Private Toll Roads in Nevada, 1852-1880," Nevada Historical Society Quarterly 41 (Summer, 1998): 71-91; Walter Block, "Free Market Transportation: Denationalizing the Roads," Journal of Libertarian Studies 3, no. 2 (Summer, 1979): 209–38; idem, Zoning: Its Costs and Relevance for the 1980s (Vancouver, B.C.: Fraser Institute, 1980), pp. 299–330; idem, "Public Goods and Externalities: The Case of Roads," Journal of Libertarian Studies 7, No. 1 (Spring, 1983): 1-34; idem, "Theories of Highway Safety," Transportation Research Record 912 (1983): 7-10; idem, "Road Socialism," International Journal of Value-Based Management 9 (1996): 195-207; idem, "Roads, Bridges, Sunlight and Private Property: Reply to Gordon Tullock," Journal des Economistes et des Etudes Humaines 8, nos. 2/3 (June-September 1998): 315-26; Walter Block and Matthew Block, "Roads, Bridges, Sunlight and Private Property Rights," Journal des Economistes et des Etudes Humaines 7, nos. 2/3 (June-September 1996): 351-62; Michelle Cadin and Walter Block, "Privatize the Public Highway System," The Freeman 47, no. 2 (February 1997): 96–97; Bryan Caplan, "A Practical Proposal for Privatizing the Highways and Other 'Natural' Monopolies," Economic Notes 72 (London: Libertarian Alliance); John M. Cobin, "Market Provisions of Highways: Lessons from Costanera Norte," Planning and Markets 2, no. 1 (1999); Andre De Palma and

⁽Vancouver, BC: Fraser Institute, 1988); William C. Wooldridge, *Uncle Sam, The Monopoly Man* (New Rochelle, N.Y.: Arlington House, (1970).

shows that private streets, roads, highways, bridges, tunnels and other vehicular thoroughfares are feasible, workable, violate no scientific or ethical codes, and, actually, were the historical practice, not the exception. It demonstrates benefits in terms of reduced traffic fatalities, declining automobile congestion (peakload pricing which has still eluded public sector road managers is more likely to be implemented), and more efficiency. If socialism cannot work in Cuba, North Korea, East Germany or the

Robin Lindsey, "Private Toll Roads: Competition Under Various Ownership Regimes," The Annals of Regional Science 34 (2000): 13-35; idem, "A Model of Curb Rights In Private Urban Transit Markets," Canadian Transportation Research Forum (2001): 581-96; Dan Klein, "The Voluntary Provision of Public Goods? The Turnpike Companies of Early America," Economic Inquiry (October 1990): 788-812; Dan Klein, John Majewski, and Christopher Baer, "Economy, Community and the Law: The Turnpike Movement in New York, 1797-1845," Journal of Economic History (March 1993): 106-22; idem, "From Trunk to Branch: Toll Roads in New York, 1800-1860," Essays in Economic and Business History 11 (1993): 191-209; Dan Klein and G.J. Fielding, "Private Toll Roads: Learning From the Nineteenth Century," Transportation Quarterly (July 1992): 321-41; Fred Foldvary, Public Goods and Private Communities: The Market Provision of Social Services (Cheltenham, U.K.: Edward Elgar, 1994); Dan Klein and G.J. Fielding, "Private Toll Roads: Learning From the Nineteenth Century," Transportation Quarterly (July 1992): 321-41; idem, "How to Franchise Highways," Journal of Transport Economics and Policy (May 1993): 113-30; idem, "High Occupancy/Toll Lanes: Phasing in Congestion Pricing a Lane at a Time," Policy Study 170 (November 1993); Bertrand Lemennicier, "La Privatisation des rues," Journal des Economistes et des Etudes Humaines 7, no. 2/3 (June-September): 363-76; Gabriel Roth, A Self-Financing Road System (London: Institute of Economic Affairs, 1966); idem, Paying for Roads: The Economics of Traffic Congestion (Middlesex, U.K.: Penguin, 1967; idem, The Private Provision of Public Services in Developing Countries (Oxford: Oxford University Press, 1987); John Semmens, "Road to Ruin," The Freedom (December 1981); idem, "The Privatization of Highway Facilities," Transportation Research Forum (March 1983); idem, "Highways: Public Problems and Private Solutions," The Freeman (March 1985); idem, "Intraurban Road Privatization," Transportation Research Record (1987): 1107; idem, "Using Competition to Break the U.S. Road Monopoly," Heritage Foundation (December 14, 1987); idem, "Privatization: Saving While Serving the Public," Goldwater Institute (April 25, 1988); idem, "Taking Over the Roads," Liberty (November 1988).

U.S.S.R., why should it be supposed it would function adequately on any nation's roads or its city's streets? This literature, further, deals with issues of eminent domain, bankruptcy, encroaching (a private road owner surrounds a domicile with concrete, and will not permit access or egress), monopoly, street sweeping, profiteering, policing, traffic lights, dealing with bad weather conditions, drunken motorists, etc.

It is important to realize, too, that there are numerous real world examples of private streets which function highly effectively. These include the private streets of St. Louis; the streets internal to shopping malls and shopping centers (even the aisles of groceries and department stores may be considered for our purposes in this regard); gated communities worldwide, and the rural roads owned by associations of property owners in Finland and Sweden.⁵ Contrast the private streets in Disney World with those in New York City's famous Central Park; it is no accident that the former are safe for passersby, while the latter have been the location of numerous murders and rapes.

Yes, yet another article along these lines would still have a high marginal product, given that there are still no fully private road initiatives being undertaken at the present time. (The quasiprivate highways now in operation in Virginia and California are not exceptions. The goal of road privatization is to turn vehicular thoroughfares fully into the hands of private enterprise; in these cases, the state is still the ultimate owner.) On the other hand, hardly any work at all has been done on the practical issue of converting the present collectivism which earmarks road management to free enterprise. This, too, is worthy of considering, both because it can also move forward the analysis of private streets, and can offer, as shall be seen, interesting economic insights of its own. It is to that task that we now turn.

⁵I owe this point to an anonymous referee of "Planning and Marketing."

PRIVATIZATION

What, then, is the best process for converting vehicular thoroughfares from the public to the private sector, stipulating if only for the sake of argument that this is not a quixotic quest, that it can work, if it is but implemented?

There are several choices. First, let us address the issue of whether these resources should be given to the citizenry, or sold to it. The case for the former seems clear: it is the people whose resources went into the creation of the roads in the first place, not that of the government. True, the state was the proximate cause of the spending, but, ultimately, the money came from the long-suffering taxpayer. Indeed, the state has no money of its own, over and above that mulcted from the citizenry. Further, it is the government, if we are correct in our underlying analysis, which is responsible for the problems of road socialism in the first place. It would come with particular ill grace for the guilty institution to reap the fruits of correcting problems it itself created. The point is, if the roads are sold, the proceeds will be given to the city administration, the last group of people deserving of them.

Given, then, that we reject sales, and favor giveaways, who are the worthy recipients? Several immediately come to mind: those who travel on the streets (or otherwise use them), those who live or work in the surrounding buildings, and those who own these edifices. How can the claims of these various candidates be reconciled? How can they be ranked, so that those with a greater ones are given proportionately more ownership rights than those with lesser?

Fortunately, there is a theory that can elucidate these problems. It may not give definitive answers to the nearest four decimal points, but at least it can point in a proper direction. The theory is that of libertarianism, based on private property rights and homesteading; this may be readily used as a means of determining how un-owned resources can pass from that state into human control. Again, we will not justify this perspective, but rather apply it to the case at hand.⁶

How would it work? First, if there were any case of a privately owned street seized from its legitimate owners and brought into the public sector (e.g., nationalization, or, in this case, municipalization), those with first claim on it would be its former owners.⁷ For example, in the New York City case, while there never were any private streets condemned by City Council, there were two other transportation modes which were: the Independent Rapid Transit Corporation (IRT), and the Brooklyn-Manhattan Transit Company (BMT). When these are privatized, they will be given back to their former owners, not to those that traveled on them, or lived next to them, or above or below them, nor, even, to those who owned such surrounding properties. Borrowing a leaf from this experience, then, the first claimants on public streets are the taxpayers who were forced to finance them. These are the real and rightful owners of the streets: those who paid for them.

⁶Homesteading is the process of mixing human labor with land by farming it, or using it, or, in our present case, building a road on it. The classical justification for this form of establishing ownership over virgin territory is John Locke, "An Essay Concerning the True Origin, Extent and End of Civil Government," in *Social Contract*, E. Barker, ed. (New York: Oxford University Press, 1948). For improvements and refinements, see Rothbard, *Reconstruction of Utility and Welfare Economics* and *The Ethics of Liberty* and Hans-Hermann Hoppe, *The Economics and Ethics of Private Property: Studies in Political Economy and Philosophy* (Boston: Kluwer, 1993).

⁷Seized means commandeered, or taken over by eminent domain, whether or not this taking was in any way compensated. (If there were full compensation, presumably there would have been no need for the state to condemn the property. City governments purchase paper, pencils, etc., on free markets every day.) See Richard Epstein, *Takings: Private Property and the Power of Eminent Domain* (Cambridge, Mass. and London: Harvard University Press, 1985).

Assume, however, that the identity of such persons is lost in antiquity.⁸ Which other "stakeholder" would then have the next best interest in these properties?

One way to discern this is to ask, not as we are now doing, "Given the *status quo*, how shall we divide up the streets?," but, rather, "What would the world now look like had the city government never taken over the municipal streets, but had instead allowed this industry to develop purely under free enterprise strictures?" Had there been no government intervention, the likelihood is that the sites would have been claimed, and streets would have been built, by private road companies. This, at least, was the experience during medieval European times as well as in eighteenth century America. Who, in turn, might have invested in such companies? Although it can only be speculation—call it an educated guess—one reasonable candidate would be owners of the property alongside the street. This would be one way for the market to "internalize the externality" which might otherwise arise from different ownership of street and neighboring

⁸Suppose, to complicate matters, that one or a few taxpayers from the eighteenth or nineteenth centuries can be identified (or, rather, their heirs), but that in total the payments owed to them were a very small proportion of the present total value of the streets. Would these few claimants be given the streets in their entirety? Not in my view. The money they paid which went to paving of the streets, the setting up of traffic lights, etc., is a very small percentage of the site value of these thoroughfares. A similar analysis applies to the case where only one heir of a slave can be found, and there is a plantation to be divided up amongst the children of the slaves and the children of the slaveholders. Does the heir of the single slave obtain the entire inheritance? Not unless it can be shown that the labor services stolen from his grandfather, plus interest, amount to all or more of the value of the plantation. If not, then the heir of the slave owns only the value that can be attributed to his ancestor. On this see Walter Block and Guillermo Yeatts, "The Economics and Ethics of Land Reform: A Critique of the Pontifical Council for Justice and Peace's 'Toward a Better Distribution of Land: The Challenge of Agrarian Reform'," Journal of Natural Resources and Environmental Law 15, no. 1. (1999–2000): 27–69; Rothbard, The Ethics of Liberty, p. 75.

property. Insofar as this is true, we have another set of candidates for street ownership: those whose property abuts the street.

Would this apply, as well, to the tenants of these buildings? Not a bit of it. Tenants are not residual income claimants; they have no right to the real estate in question, *per se*. Their rights are limited to the use of these amenities for a certain, specified time. They could not possibly be entitled to the property in question, let alone ownership to it from centuries, decades, or even years ago.

What of the fact that these properties may have changed hands dozens of times throughout the years since the streets were first laid out and built? The rights survive. For the new owner(s) purchase the entire rights to the property, those recognized in law at the time, and, also, those that were not, e.g., that ownership of contiguous property would confer a claim over the abutting street.

Another way to discern who is entitled to street ownership is based on homesteading. Again, as it would take us too far afield to explain or justify such a procedure, we shall content ourselves with merely applying it. A modicum of entitlement is automatically captured by those who "mix their labor" with an unowned (or in this case, illegitimately or improperly owned—by the state) piece of property. Thus, all of those who have traveled on the street by that token alone thereby obtain a claim of ownership over it. It is here that tenants of contiguous buildings can make their claim: not as tenants *per se*, but, rather, as commuters between their homes and places of work.

At first glance, this creates more problems than it solves. For there are many, many people who have walked, ridden cars, taxis, horse drawn vehicles, bicycles, motorcycles, etc., on the streets of Manhattan, for example. It would be a real "dog's breakfast" to determine who has a legitimate claim and who does not on this basis. People don't save their bus transfers, or taxi-cab bills, which, even on the best of assumptions, would only be the veritable tip of the iceberg of evidence of road use. Bills for gasoline in Manhattan, or in the surrounding boroughs, would also serve as only the most indirect of evidence for use of any specific street.

Under these conditions, the most accurate assessment might well be derived through proxy. That is, we can assume that all residents of Manhattan use its streets to a certain, specific degree, call it X, and those in the surrounding areas to a lesser degree, say, X/3. Or, as a rough approximation, that all of the inhabitants of the entire city (or each of the residents of all five boroughs) are the legitimate owners of all of their respective streets.

Based on these considerations, we are faced with two, very different implications, and thus two, very different ways of distributing the thoroughfares to the people. On the one hand, the owners of the property alongside the road own it; on the other, all members of the society own one quotal share each.

But we have only begun to encounter complications. Another one concerns how the properties shall be divided up on the basis of either of these criteria. To wit, consider one long street in Manhattan, e.g., Broadway, which runs the entire length of the island. Suppose there are 10,000 separate properties that abut this avenue. Do each of these 10,000 property owners assume control over 1/10,000 of the entire facility? Or do they each own that little bit of it that touches upon their property? (In this case, every real estate holder would own exactly half of Broadway affronting his property, and the other half would be given to the owner across the street.)

The latter option is clearly infeasible. With 10,000 separate owners of Broadway, this avenue would quickly become impassible to traffic. Each individual, particularly if he could get the cooperation of the man across the street, would be able to bring motorists to a standstill. Streets would come to resemble a Parcheesi board, and blockades could become the order of the day. This option must be rejected, but not only because of its undoubted impracticality. Fortunately, for our underlying homesteading theory, roads could never have been built in the first place in any such manner, for the same reason: initial susceptibility to blockades. Indeed, this model serves principally as an entirely refutable objection to the whole idea of private roads.⁹

It follows, then, that no abutting real estate holder may establish such a chokehold over any street. If so, how is ownership to be divided? Clearly, the best way would be to accord with the practice of ancient road enterprises: to set up a joint stock company composed of these 1,000 people, who together would control the entire venture. This in turn leads to another question: would each of the 1,000 own an equal 1/1,000 of a share of the corporation, or would the division be unequal?

The latter is far more in keeping with homesteading theory than the former. That is, a building that stretches along Broadway from 55th to 56th Street is far more valuable than the same physical structure occupying the area between 155th to 156th. Naturally, the former would have more of a stake in Broadway than the latter. Were a road company to be set up *de novo*, it is inconceivable that the shares would be apportioned according to mere physical length. Based on these considerations, the ownership rights over Broadway would be distributed in a manner proportional to the assessed valuation of the property in question.

This leaves open the question of whether the stock company should own lengthwise, or in terms of geographical areas. That is, should a company own all of Broadway or 3rd Avenue, or 23rd Street or 42nd Street (the one dimensional format), or should one be assigned to Greenwich Village, another to Hell's Kitchen, a

⁹According to this proposal, any two owners located opposite of each other could together convert their little patch of road into a park. This would very much diminish the ability of the street to convey traffic. This is not to say that streets ought never be converted to parks. Economic efficiency would require that this occur only when the value of the land as a park exceeds that used as a street. When one entity owns the entire length of a street it will be in a position to internalize the externalities that might otherwise come into play.

third to Harlem, etc. (the two-dimensional format.) In terms of road management, each has advantages and disadvantages.

The main drawback of the one-dimensional model is the dispute over green light time on traffic signals. If one firm owns 3rd Avenue, and another 23rd Street, and they cross at right angles, each will naturally wish to have the green light for as much time as possible, and the red for as little. In that way, traffic can flow more easily on its own property, and its revenues be enhanced.¹⁰ How, then, to settle this potential dispute? Simple. Each will bid against the other for the proportion of red and green light time. It is akin to the situation in which two ex-partners find themselves upon dissolution of the company: who keeps the firm? And the answer is, whichever of them is willing to pay more for the other's half. Presumably, the north-south artery, which in Manhattan usually serves more customers, will be able to outbid the east-west thoroughfare for the lion's share of the green light time, based upon the derived demand for these services emanating from the final consumer.

Another difficulty in this scenario will be the arrangement of staggered traffic lights: those timed in such a manner so that motorists can move at a steady pace (e.g., 25 mph) without being forced to stop and wait for a red light. This will call for no mean talent of negotiation if each and every street and avenue comes under the management of a different firm.

These problems will be as nothing under two-dimensional ownership. Staggered lights and allocation of green light time are all arranged under the aegis of one firm, so that by definition no negotiation or transaction costs need be undertaken. Instead, the practical difficulties arise when the streets of one neighborhood connect with those of another. What to do, for example, when Turtle Bay gives over to the East Village? Here, similar negotiating

¹⁰We also eschew discussion of the monopoly problem: where the road owner jacks up the price so far as to in effect capture the property values of all adjacent property. For a discussion of this issue, see Block, "Free Market Transportation: Denationalizing the Roads."

efforts must be undertaken in terms of coordinating staggered lights and green light time.

Historical precedents can be found on each side of this debate as well. Ancient stock companies typically owned long, thin thoroughfares; this, too, was the practice of private inter-city railroads. But equally free-enterprise ventures such as Disneyland, Knott's Berry Farm, Universal Studios, etc., and hundreds of smaller shopping malls have organized themselves into the neighborhood, or two-dimensional format.

Given that there is in effect a "draw"¹¹ between these two models, I opt for the neighborhood format, if only because it is more modern. This indicates that the technology of private development has migrated from one to two dimensions. Since we are privatizing in the modern era, the latter is more appropriate. If this exercise were being carried out a century or two ago, the alternative option might well have been picked.

But why choose between having your cake and eating it? Why not have both? That is, were all the roadways in Manhattan owned by a single firm, all transactions costs vanish in one fell swoop. Well, not exactly. This is somewhat of an exaggeration, as negotiations would still be necessary *vis* à *vis* all the tunnels and bridges connecting this borough with its three neighbors, as well as New Jersey.

TRANSACTIONS COSTS

It is impossible to reduce such negotiation problems to zero, for wherever automobiles may travel, there will always be connections between one road owner and another under any system, free enterprise or socialistic.¹² This certainly applies under

¹¹Not of the sort that characterized the heavyweight title fight between Evander Holyfield and Lennox Lewis.

¹²The classical statement of the relationship between transactions costs and the nature of the firm is Ronald Coase, "The Nature of the Firm," *Economica* 4 (November 1937): 386–406; see also Ronald Coase, "The

government control, where the authorities in charge of city streets, bridges, tunnels, thruways, roads of contiguous states, etc., must all deal with one another. It might appear that transactions costs could be avoided if there were only one state authority, or one private road owner wherever highways or streets connect. But this is a mirage. The costs of coordination under such a system might be labeled management instead of transactions costs, but they would remain costs nonetheless.

It cannot be denied that such costs would still exist, even under a full, free enterprise road system. But if we have learned anything from the fall of the Berlin Wall and the economic debacle that was the economic system of the U.S.S.R., it is that one of these systems is highly efficient, and not the other. The government system, after all, is the one that brings us the horse and buggy U.S. Post Office. Need any more be said?

But let us posit that management within one firm is cheaper, within the relevant range, than negotiation between different street companies. Taking this idea to its ultimate logical conclusion would imply a single firm, for example, in all of North and South America, since all roads on these two continents are connected to each other. (We pass over the "problem" of the discontinuity in Panama, given that there are bridges that enable cars to travel north and south over it. If there were none, then, instead of only one owner, there would be two firms, one for each of the American continents.) Does this present any particular problem

Institutional Structure of Production," *American Economic Review* 82, no. 4 (September 1992): 713–19. Why is it that firms arise in markets, but no one firm takes over the entire economy? For Coase this has to do with the minimization of costs within and between firms. For example, it is very expensive for the waitress to bargain with the cook, offering him a price for the meal he gives her; in order to economize on these sorts of transactions, firms are created within which markets do not occur, but rather commands; e.g., the owner of the restaurant "commands" the cook to give the waitress the meal without charging her for it. However, unless there is vertical integration between the restaurant and the supplier of vegetables, for example, the former purchases these factors of production from the latter.

or embarrassment for the theory? Not to those¹³ who maintain that the success of One Big Firm is no threat as long as it arises from, and depends solely upon, market forces.

In one sense, privatizing roads is like attempting to unscramble an egg; it is very, very complicated, because what we are trying to do in effect is bring about a situation today which would have ensued had streets always been private. Our goal is to determine how this market would have functioned in the past, and then to set up a situation, now, as close to what would have been, in this imaginary, contrary-to-fact conditional.

The problem is that this is essentially an entrepreneurial, or managerial, not an economic or praxeological, task. For economists, it is impossible to anticipate the market. Suppose, for example, that the shoe industry had always been run under

¹³William Anderson, Walter Block, Thomas J. DiLorenzo, Ilana Mercer, Leon Snyman, and Christopher Westley, "The Microsoft Corporation in Collision with Antitrust Law," Journal of Social, Political and Economic Studies 26, no. 1 (Winter, 2001): 287-302; Dominick Armentano, The Myths of Antitrust (New Rochelle, N.Y.: Arlington House, 1972); idem, Antitrust and Monopoly: Anatomy of a Policy Failure (New York: Wiley, 1982); idem, Antitrust Policy: The Case for Repeal (Washington, D.C.: Cato Institute, 1991); Don Armstrong, Competition vs. Monopoly (Vancouver, B.C.: Fraser Institute, 1982); Walter Block, "Coase and Demsetz on Private Property Rights," Journal of Libertarian Studies 1, no. 2 (Spring, 1977): 111-15; idem, Amending the Combines Investigation Act (Vancouver, B.C.: Fraser Institute, 1982); idem, "Total Repeal of Anti-trust Legislation: A Critique of Bork, Brozen and Posner," Review of Austrian Economics 8 (1994), no. 1: 35-70; Donald J. Boudreaux and Thomas J. DiLorenzo, "The Protectionist Roots of Antitrust," Review of Austrian Economics 6, no. 2 (1992): 81-96; Thomas J. DiLorenzo, "The Myth of Natural Monopoly," Review of Austrian Economics 9, no. 2 (1996): 43-58; Jack High, "Bork's Paradox: Static vs. Dynamic Efficiency in Antitrust Analysis," Contemporary Policy Issues 3 (1984-1985): 21-34; Fred McChesney, "Antitrust and Regulation: Chicago's Contradictory Views," Cato Journal 10 (1991); Murray N. Rothbard, Power and Market: Government and the Economy (Menlo Park, Calif.: Institute for Humane Studies, 1970); William F. Shugart II, "Don't Revise the Clayton Act, Scrap It!," Cato Journal 6 (1987): 925; Fred L. Smith, Jr., "Why Not Abolish Antitrust?," Regulation (January-February 1983): 23.

government supervision, and that we were now contemplating moving it from the socialism to capitalism. A whole host of questions would quickly arise, the answers to which would lie outside the realm of economics. For example, how many shoe firms would there be? What color would be the footwear? What proportion would there be between black, brown, white, tan and other color shoes? Between shoes, runners, sneakers, slippers? How many lace holes would there be in a shoe? Who would stitch together the shoe and its sole? How many shoe stores would be located on each block? Would there be one in every mall? How would the poor afford shoes? Would someone like Michael Jordan become a pitchman for the product?

In like manner, it is difficult in the extreme to know, at this late date, the precise configurations of a private street and road industry, had one been allowed to be fully developed from day one. How much would the street vendors charge? Or would they provide road service for free, in a sort of super, loss leader ploy, and earn their income through billboard advertising, or enhancement of real estate values (some companies are now giving away computers, gratis, which come replete with advertisements)? How would we obviate the possibility of surrounding a property owner with private roads, so that he had no means of access or egress? I speculated that no one in his right mind would ever purchase a property without clearly delineated access rights, spelled out for the present and the future, but what, precisely, would be specified in contracts intended to obviate this difficulty? If road providers did charge for their services, I articulated a scenario whereby this would be done by placing universal product codes on the underbody of automobiles, so that their owners could be sent a monthly bill. This, of course, would set up privacy protection issues, which, in turn, have also been previously addressed.14

The point is though, that even if a contrary-to-fact conditional society such as ours but with continuous private road ownership,

¹⁴Block, "Free Market Transportation: Denationalizing the Roads."

did indeed address and solve problems of this sort in this manner, it would still be a Herculean job to convert our present society into that one. Even worse, we have only our managerialentrepreneurial speculation to buttress these suppositions, nothing more.

On the other hand, we need not be too pessimistic about this either. An imperfect privatization will be far preferable to none at all. Government streets are an administrative and safety nightmare.¹⁵ It is inconceivable that private initiatives could do worse. In any case, the same challenge faces the privatizer of all industries now in government hands. Even the post office and public education, the privatization of which are far easier on theoretical grounds (there are no linkages between them and virtually all other private property), present complicated problems of equity, transition, etc., as do streets.

Ordinarily, under laissez-faire capitalism, the owner of a private enterprise could charge whatever price he wished for the goods or services he supplies. If you didn't like the pricing or any other policy of McDonalds, you are free to patronize Burger King or Wendy's, or any such other emporium, or buy your burgers from the supermarket and eat them at home. It would be a bit harsh, however, to allow the new private owners of the street to engage in such an exercise of "economic freedom." This is because in the world where all streets were privatized from day one, no one would have ever built a home or a business without first contractually preventing the road owner from such unilateral behavior. Rather, there would have been an agreement preventing this, either through contract, or by making the home or business owner a partner in the street enterprise. Were we now to allow the new road owners to impose their unilateral decisions on travelers, this would in effect make a gift of the entire economic value to them, not only of the roads, but of virtually all

¹⁵Road fatality statistics are as follows: In the year 2000, there were 41,804 motor vehicle deaths. See on this http://www.cdc.gov/nchs/fas-tats/acc-inj.htm; accessed on 7/18/02.

property within a city. Some way must be found, then, to mimic the market in streets which would have existed under free enterprise from day one, but which did not.

One final caveat, whether for street privatization or any other: it is important to be thorough. In many of the Eastern European countries, even including Russia and other parts of the U.S.S.R., something along the lines advocated here has been followed. Shares of stock have been created for a number of properties, collectivized farms, factories, etc., and have been divided up widely among taxpayers, citizens, former employees, and other reasonable ownership candidates. Moreover, also much to the good, the law has allowed these shares to be traded on organized exchanges (foreigners have been precluded from taking part, which is a shortcoming of the system), so that they naturally tend to flow toward those who value them the most. The problem is, in all too many cases, the direction in which they flow is right back toward the very people responsible for the communist debacle in the first place: ex apparatchiks, goons, thugs, banking authorities, former military officers, etc. As a result, Eastern European and former Soviet "capitalism" has come to resemble nothing so much as "free enterprise" mafia style.

It would be a shame and a pity were road privatization efforts in the U.S. to come to a similar, sorry end. In order to obviate any such occurrence, steps must be taken to be thorough in the privatization effort, one, to ensure that vestiges of state control are eliminated, and, two, that those responsible for the present disarray do not succeed in taking any positions, let alone leadership ones, in the new regime. To wit, shares of road stock should not be given to those road managers responsible for our present astronomical level of traffic fatalities, nor should they be allowed to purchase any (in much the same manner that those convicted of certain crimes are not allowed to own gambling establishments). Indeed, the question should not be so much whether such persons should be allowed to regain control over street management as much as a debate over which criminal penalties should be imposed upon them.

As well, the state should keep its bloody hands off of the future private road, street and highway industry. Government police should be as scarce on traffic thoroughfares as they are now on the inside of Disneyland. In the latter case, if you act obstreperously, you are sooner, rather than later, surrounded by a group of mice and ducks, all packing heat, who will lead you away quietly from the scene of a confrontation. These private police are far better able to satisfy the requirements of consumer sovereignty than those in the public sector. After all, only the former, not the latter, can go bankrupt, because they are part of a market system. And the same holds true for bouncers in private drinking establishments. As for the "rent-a-cops" who serve on the Jerry Springer show, is there any doubt that they are far superior to any public alternatives when it comes to breaking up a fight at the exact point when the combatants are appropriately half undressed?

Similarly, if the death rate is to be reduced to optimal levels and traffic to be increased past horse-and-buggy levels, then road entrepreneurs must be able to control all aspects of highway travel, certainly including policing, pot-hole repair, street construction, penalties, etc.¹⁶ Under the present proposal could a street owner impose the death penalty on those who drove green automobiles? Not any more than he could charge whatever price he wished.

CONCLUSIONS

It is now time to draw this discussion to a close. I have no hard and fast conclusions as to the best way to privatize streets and highways. It is perhaps more important that they be privatized than how this task is accomplished. Once in the private

¹⁶Optimal levels, of course, need not be zero. The latter might be approached if the private owners imposed a five miles per hour speed limit, and required all autos to be of Hummer quality or above (e.g., tanks), but it is my entrepreneurial understanding that this set of rules would not maximize profits.

sector, these important elements of our economy will be managed in the same rational manner as all other goods and services subject to the consumer check of profits and loss.

This is not to say that there is no pattern we can use, even in broad brush strokes, to guide the privatization process: it is to imagine the contrary to fact conditional wherein city streets were always provided-by-private enterprise, and then to tailor the present situation to resemble that as much as possible. This, by its very nature, is difficult. Imaginary constructions cannot be relied upon without misgivings. And yet, as we have seen, there are rough shapes that may be discerned through the fog. One is that the people responsible for our present plight should be excluded from the process of privatization; another, is to as closely as possible approximate real world private road conditions. When a thoroughfare is very long, thin, and isolated, as in the case of a private railroad, adopt that as a model: one owner for the entire avenue; e.g., the one dimension model. When the public sector amenity resembles, instead, a relatively large landholding, e.g., Disneyland, then one owner might be more appropriate for an entire neighborhood of streets.

12 Overcoming Difficulties in Privatizing Roads

his chapter considers, and rejects, four arguments against the privatization of roads, and in favor of our present system of road socialism. They are: (1) Eminent domain is cheap, efficient, and necessary, but only government can avail itself of the "benefits." (2) Roads are not perfectly competitive, but rather, necessarily, are characterized by monopolistic elements, which only the state can address. (3) Roads are different than everything else; people impose waiting costs on others without taking them into account; this externalities problem is a market failure that, again, only government can solve. (4) Road privatization is unfair to abutting property owners. This chapter also deals with four objections to, or difficulties with, street and highway privatization: (1) The government has violated "Non-Compete" clauses to protect private investors in roadways. (2) Private industry would find it impossible to discern rational prices for its services. (3) Should public roads be commercialized before being privatized? That is, should the state first charge a price for these services and then privatize, or do the opposite? (4) Road privatization would be a public relations nightmare. How should this be dealt with?

INTRODUCTION

For the purposes of this chapter, we will take it as a matter of stipulation that it is desirable to privatize all traffic arteries. That is, all extant streets, roads, avenues, highways, etc., should forthwith be taken out of the control of governments, whether federal, state or local, and placed into private hands. There is a wealth of literature attesting to the benefits of market provision of goods and services *vis-à-vis* governmental, in general, which is well known especially since the demise of the Soviet economy, and also with specific reference to roadways,¹ which is far less well known.

¹David Beito, "From Privies to Boulevards: The Private Supply of Infrastructure in the United States during the Nineteenth Century," in Development by Consent: The Voluntary Supply of Public Goods and Services, Jerry Jenkins and David E. Sisk, eds. (San Francisco, 1993), pp. 23-48; David Beito and Linda Royster Beito, "Rival Road Builders: Private Toll Roads in Nevada, 1852-1880," Nevada Historical Society Quarterly 41 (Summer 1998): 71-91; David Beito, "Voluntary Association and the Life of the City," Humane Studies Review (Fall, 1988); idem, "Owning the Commanding Heights," Essays in Public Works History (1989), vol. 16; Walter Block, "Free Market Transportation: Denationalizing the Roads," Journal of Libertarian Studies 3, no. 2 (Summer, 1979): 209-38; idem, Zoning: Its Costs and Relevance for the 1980s (Vancouver, B.C.: Fraser Institute, 1980), pp. 299-330; idem, "Public Goods and Externalities: The Case of Roads," The Journal of Libertarian Studies 7, No. 1 (Spring, 1983): 1-34; idem, "Theories of Highway Safety," Transportation Research Record 912 (1983): 7-10; idem, "Road Socialism," International Journal of Value-Based Management 9 (1996): 195-207; "Roads, Bridges, Sunlight and Private Property: Reply to Gordon Tullock," Journal des Economistes et des Etudes Humaines 8, nos. 2/3 (June-September 1998): 315-26; idem, "Private Roads, Competition, Automobile Insurance and Price Controls," Competitiveness Review 8, no. 1 (1998): 55-64; idem, "Road Privatization: A Rejoinder to Mohring," Privatize Roads and Highways (Lewiston, N.Y.: Edwin Mellon Press, 2005), also reprinted as chap. 19 in the present volume; Fred Foldvary, Public Goods and Private Communities: The Market Provision of Social Services (Cheltenham, U.K.: Edward Elgar, 1994); Walter Block and Matthew Block, "Roads, Bridges, Sunlight and Private Property Rights," Journal des Economistes et des Etudes Humaines 7, nos. 2/3 (June-September 1996): 351–62; Michelle and Walter Block, "Privatize the Public Highway System," The Freeman 47, no. 2 (February 1997): 96-97; Bryan Caplan, "A

Rather than reiterating the case for free enterprise in this domain *vis-à-vis* socialism,² we will instead focus on several objections to implementation, and consider some difficulties with the transition period.

Practical Proposal for Privatizing the Highways and Other 'Natural' Monopolies," Economic Notes 72 (London: Libertarian Alliance); John M. Cobin, "Market Provisions of Highways: Lessons from Costanera Norte," Planning and Markets 2, no. 1 (1999); Andre De Palma and Robin Lindsey, "Private Toll Roads: Competition under Various Ownership Regimes," The Annals of Regional Science 34 (2000): 13-35; idem, "A Model of Curb Rights In Private Urban Transit Markets," Canadian Transportation Research Forum (2001): 581–96; Dan Klein, "The Voluntary Provision of Public Goods? The Turnpike Companies of Early America," Economic Inquiry (October 1990): 788-812; Dan Klein, John Majewski, and Christopher Baer, "Economy, Community and the Law: The Turnpike Movement in New York, 1797–1845," Journal of Economic History (March 1993): 106–22; idem, "From Trunk to Branch: Toll Roads in New York, 1800-1860," Essays in Economic and Business History 11 (1993): 191-209; Dan Klein and G.J. Fielding, "Private Toll Roads: Learning From the Nineteenth Century," Transportation Quarterly (July 1992): 321-41; idem, "How to Franchise Highways," Journal of Transport Economics and Policy (May 1993): 113-30; idem, "High Occupancy/Toll Lanes: Phasing in Congestion Pricing a Lane at a Time," Policy Study 170 (November 1993); Bertrand Lemennicier, "La Privatisation des rues," Journal des Economistes et des Etudes Humaines 7, no. 2/3 (June-September): 363-76; Gabriel Roth, A Self-Financing Road System (London: Institute of Economic Affairs, 1966); idem, Paying for Roads: The Economics of Traffic Congestion (Middlesex, U.K.: Penguin, 1967; idem, The Private Provision of Public Services in Developing Countries (Oxford: Oxford University Press, 1987); John Semmens, "Road to Ruin," The Freedom (December 1981); idem, "The Privatization of Highway Facilities," Transportation Research Forum (March 1983); idem, "Highways: Public Problems and Private Solutions," The Freeman (March 1985); idem, "Intraurban Road Privatization," Transportation Research Record (1987): 1107; idem, "Using Competition to Break the U.S. Road Monopoly," Heritage Foundation (December 14, 1987); idem, "Privatization: Saving While Serving the Public," Goldwater Institute (April 25, 1987); idem, "Taking Over the Roads," Liberty (November 1988); idem, "Why We Need Highway Privatization," Laissez Faire Institute (March 1991); idem, "Private Highways? They're Cheaper, Better, Fairer," Phoenix Gazette, 3 April, 1991; idem, "The Rationale for Toll Roads: You Get What You Pay For," *Phoenix Gazette*, 16 December 16, 1992; idem, "Highway Privatization: What Are the Benefits for Arizona?," Goldwater Institute

OBJECTIONS

Eminent domain is cheap, efficient and necessary

One argument against private roads is that the costs of amassing rights of way on which to build them would be enormous. Suppose a private highway company is trying to build a facility stretching from Boston to Los Angeles, or even from New Orleans to St. Louis. They have purchased sufficient acreage in order to do so, when they approach Mr. Harry Holdout, who refuses to sell at any but an astronomical price. This alone would put paid to the entire enterprise. Not only would coast-to-coast highways be impossible under private enterprise, but this applies to intrastate roads as well. Nor would even city streets be free of such impediments; after all, Harry Holdouts can be found anywhere there is money to be made by obstructing progress.

No, what is needed, if roads are to be built in the first place, is the government, for this is the only institution in society that can rely upon powers of eminent domain.³ Here, the state simply commandeers the property in question, paying what it determines is a fair market price. This can save millions of dollars, rendering public provision of highway building far more efficient than private.

There are difficulties with this objection. For one thing, it commits a very basic economic fallacy, a confusion of real costs

⁽December 1992); idem, "From Highways to Buy-Ways," *Spectrum* (Fall 1993); idem, "Highway Investment Analysis," Arizona Department of Transportation (December 1994); idem, "Privatize Driver's License, Registration System," *Tribune*, 25 December, 1994; idem, "Privatizing Vehicle Registrations, Driver's Licenses and Auto Insurance," *Transportation Quarterly* (Fall, 1995); "Selling the Roads: Privatizing Transportation Systems," Liberty; idem, "Goodbye, DMV," *Liberty* (January 1996); idem, "Selling the Roads: Privatizing Transportation Systems," Liberty (1996).

²Block, "Road Socialism," pp. 195–207.

³This process is called "expropriation" in Canada.

with out-of-pocket expenses. Of course, if government sets its own price, based upon what it feels is "fair market value," this is likely to be far below the level the property owner might insist upon. But the true costs are the alternatives foregone, and no one can know them apart from the owner in question.

Even to characterize him as "Harry Holdout" is to do violence to economic reality. For anyone, in any transaction, can use such a derogation against anyone who will not sell his wares for what the buyer deems an appropriate price. The point is, there is simply no objective way to distinguish the so-called holdout from any other property owner who will not sell at a price favored by the would-be purchaser.

Then there is the fact that there are often several, if not numerous, routes that a road from one city to another could take. All one need do is purchase options to buy contiguous land, at previously agreed upon prices, and if there is any supposed "holdout" activity, e.g., high prices on the part of one or a few sellers on any of them, merely utilize another. In this way, the property owners along each of these routes are made in effect to compete with each other. And this is to say nothing of the possibility of bridging over, or tunneling under, the holdings of a recalcitrant seller. It will of course be more expensive to do so, but this expense places an upper boundary upon what the road assembler need pay to any one property owner along his selected route.

This analysis can also be used to refute the claim that freemarket operation of roads will be paralyzed, given that one road owner can always refuse to allow another to cross his own property with another such facility. Suppose that there is a road running from east to west; it does not matter whether this is a highway between two cities or a street within any one city. Another entrepreneur wishes to install a north-south road, which would have to cross the first one. He has assembled all the land he needs for this purpose, except for one parcel: the land now occupied by the east-west thoroughfare. When he approaches the owner of the extant road, he is met with a stony rebuff; he refuses to sell at any price!

It is clear that without north-south roads, our transportation system would collapse, perhaps before it even gets started. However, there are several difficulties with this scenario. First of all, it is exceedingly unlikely that the would be builder of the northsouth artery would have invested any money in his enterprise without first ensuring that he had complete right of way. Perhaps this "up and down" route could avoid the "sideways" one entirely, if the owner of the latter were adamant. Second, it is unlikely in the extreme that the east-west corridor owner would take any such stand. After all, if no roads cross his own, then the capital value of his own possessions will be greatly attenuated. Motorists will be able to use it only to traverse in an east or west direction, as opposed to using virtually all 360 degrees. If he did, it is exceedingly probable that his board of directors would toss him out on his ear. Third, if all else somehow fails, the northsouth, would-be builder still has the same option available to him as did the land assembler we were considering above who was faced with Harry Holdout (which is precisely the role now played by the east-west owner): he can build a bridge over the latter's land, or tunnel under it.4

Roads are not perfectly competitive

A private roadway industry would not be perfectly competitive. Therefore, there would be dead-weight inefficiency losses in its operation. Thus, it should not be privatized.

⁴For a debate concerning these phenomena, see Block and Block, "Roads, Bridges, Sunlight and Private Property Rights," pp. 351–62; Gordon Tullock, "Comment on Roads, Bridges, Sunlight and Private Property, by Walter Block and Matthew Block," *Journal des Economistes et des Etudes Humaines* 7, no. 4 (December 1998): p. zx; Walter Block, "Roads, Bridges, Sunlight and Private Property: Reply to Gordon Tullock," *Journal des Economistes et des Etudes Humaines* 8, no. 2/3 (June–September 1998): 315–26. The first and third of these articles make the point that in bridging over or tunneling under someone's property, the latter's land ownership rights need not be abridged.

There are several flaws in this objection and they are serious ones. First, a perfectly competitive industry is an utter impossibility in the real world. The requirements for this status are numerous and ridiculously otherworldly: completely homogeneous products; an indefinitely large, not to say infinite, number of both buyers (to stave off monopsony)⁵ and sellers (to preclude monopoly); full and complete information about everything relevant on the part of all market participants; zero profits and equilibrium. The *reductio ad absurdum* of this objection is that, not only could roads not be privatized under such impossible criteria, but neither could anything else be. That is, this is a recipe for a complete takeover by the government of the entire economy; whether by nationalization (communism) or regulation (fascism), it matters little.

Second, even if, *arguendo*, it were somehow possible for such a state of affairs to come into being, it would not be advantageous to mankind for it to do so. This is because perfect competition speaks only in terms of structure of industry; it is totally silent on the issue of behavior. Specifically, there is simply no room in this concept for rivalrous action, the fountainhead of true competition and progress.

Roads are different than everything else; people impose waiting costs on others without taking them into account.

Consider the thinking processes of the man ready to commute to his downtown job during the morning rush hour. He can

⁵For the argument that monopsony is not a market failure, see Walter Block and William Barnett, "An Austrian Critique of Neo-Classical Monopoly and Monopsony Theory," unpublished manuscript. For the argument that monopoly does not constitute a market failure, see Dominick Armentano, *The Myths of Antitrust* (New Rochelle, N.Y.: Arlington House, 1972); idem, *Antitrust and Monopoly: Anatomy of a Policy Failure* (New York: Wiley, 1982); Don Armstrong, *Competition vs. Monopoly* (Vancouver, B.C.: Fraser Institute, 1982); Murray N. Rothbard, *Man, Economy, and State*, 2 vols. (Princeton, N.J.: D. Van Nostrand, 1962).

be counted upon to take into account the degree to which the congestion he expects to find will slow him down. He would not embark upon this trip did he not regard its benefits greater than its costs, and the slowness of traffic is one of the costs he will most certainly incorporate into his decision making process.

However, in traveling on the highway at this time, he also, albeit to a very small degree, adds to the traffic congestion that would exist without his participation in it. To wit, by making this decision, he imposes waiting costs on other drivers. Does he take this second, very different cost into account? He does not! But in refraining from doing so, he acts as an external diseconomy on every other driver. Of course, he is not the only motorist to be guilty of this oversight. Our analysis is perfectly general at this point: what we have said about this one road user is true of every other one as well. Thus, all drivers in this situation impose such waiting costs on every other one of them, with not a one of them taking them into account.

Such is the objection we are now considering to road privatization.

It is a very poor one, insofar as it operates, if it does so at all, not only with regard to roads, but far more widely. This objection applies, at least in principle, to every good or service for which there are queues, or waiting lists, or uneven demand. For example, seats at popular movies or plays, demand for pretty much most goods right before Christmas, Super Bowl or World Series tickets, etc. In each of these cases, the same could be said of people on the demand side as of motorists during rush hour: they take into account their own waiting time, but not that they impose on others by their own participation in the queue. If this objection were with merit, therefore, and it barred road privatization, then all of these other goods and services would have to fall to government provision as well. But in this direction lies communism.

However, while it is indubitably true that this is indeed a problem of epic proportions on our nation's roadways, it is far less so in any of these other situations. Why? Because in the market place, when there is a peak-load demand, prices tend to rise. And when they do, this tends to mitigate the original problem. For example, tickets for the NBA or NHL playoffs are far higher than for ordinary games; prices are greater right before Christmas than right after, during January and Boxing Day sales. Movies and plays typically charge more for weekend evening shows than for matinees, or Tuesday nights. Thus, the uneven or peak-load demand gets flattened out. In other words, deep within the bowels of the free enterprise system is the cure for this so called "market failure." In other words, it is not a "market failure" at all, but one of government mismanagement.

The contrast with the public sector is a stark one indeed. Compare and contrast the reactions of public and private sellers during the Christmas rush. For-profit firms roll up their sleeves, hire extra workers, stock their shelves almost to the bursting point, and proudly announce they are open for business, ready and willing to help the consumers satisfy their demands. And what of statist counterparts? Take the post office as an example. They urge that people mail early, to avoid the Christmas rush! The customer is not "always right," it would appear, in government "service."

It is the same with roadway use. Do the street and highway managers charge more for use of these facilities during peak-load times, which would have the result of ironing out the peaks and reducing congestion? To ask this question is to answer it: they do not. Rather, the same prices exist all throughout the week, namely, zero. Things are worse, far worse, with regard to bridges and tunnels also under the control of our road socialists.⁶ Here, anti-peak-load pricing is engaged in. In other words, lower prices are charged during the hours of heaviest demand, thus exacerbating the problem. How does this come about?

Bridge and tunnel authorities commonly sell monthly passes at lower prices per trip than otherwise obtainable. But precisely what kind of driver is likely to travel to the central business

⁶Block, "Road Socialism," pp. 195–207.

district twenty to twenty-four times per month? A suburban shopper? An out-of-towner? A rare visitor to the city? None of the above. Rather, obviously, the lion's share of these tickets will be taken up by regular commuters, precisely the ones most likely to use them during morning rush hours into the city and afternoon ones out of it.

Road privatization is unfair to abutting property owners

It is impossible to predict precisely how a competitive market would function with regard to roads. If shoes were always and everywhere the province of government, and some rash individual were to advocate the end of footwear socialism and the implementation of private, profit making firms in this industry, it might strain credulity. The objections would come thick and fast: how many shoe stores would be located on each block? Who would determine the color of the shoes? How would resources be allocated between boots, sneakers, runners, bedroom slippers, shower-thongs? What would be done to ensure a sufficient supply of shoelaces? Or would there be loafers? Or would they be fastened with Velcro? Would the market provide high-heeled shoes for women? What about changing styles? Without government control, would profit seekers be able to accommodate alterations in taste, or, more ominously, would they impose their own aesthetic sensibilities on consumers? How, oh how, would the poor get shoes?

These difficulties present no particular problem. There is no movement afoot to nationalize the shoe industry. Were we to find ourselves in any such predicament, we would readily denationalize, secure in the knowledge brought to us by years of reasonably satisfactory service from this quarter.

Roads are different. Although at one time in our history turnpike companies provided these services to travelers, no one now alive has had any experience with them.⁷ That alone goes some

⁷Recently, there have been several quasi-private road firms in operation. But these are all under the control of the public authorities, and thus do not constitute a pure form of private enterprise street and highway firms.

way toward explaining why, despite a large literature supporting roads (see footnote 2 above), regardless of the failure of the Soviet system that should awaken society to the benefits of privatization, we still suffer under government control of streets and highways. Moreover, difficult as are the problems of envisioning a fully free-enterprise road system in operation, even more challenging are those of the transition period.

Take the problem of access as an example. One of the criticisms of free market roadways is that the homeowner or business firm will be "trapped" on its premises, if it is completely surrounded by four, privately owned roads, as in the nature of things it inevitably would be. In making the case for markets in this industry, it is easy to show that this "problem" is a straw man. For one thing, just as we now have title search when property changes hands, so under a system of free enterprise for streets, there would be "access search," to ensure access and egress. For another, it would be in the financial interest of the road owner building a new facility to attract customers. Surely, he would fail dismally in this regard did he not ensure them of such basic amenities.⁸

But matters are far different when we contemplate, not a private enterprise street and highway system *de novo*, but rather the transition period from our present road socialist institution to one of pure *laissez-faire* capitalism. For, in this process, those in charge of the conversion will have to attempt to mimic the market, and, as we have established above with the shoe example, this cannot be done on the basis of economic theory alone. Rather, it is essentially an entrepreneurial task to establish how the shoe, the road, or, indeed, any other industry would function under a regime of economic freedom. But mimic the market they must, otherwise how else can the access and egress problem be addressed? If the roads are given to private firms, and no provision whatsoever is made for this phenomenon, this would be

⁸For more on this see Block, "Free Market Transportation: Denationalizing the Roads," pp. 209–38.

equivalent to giving these companies, not only the streets themselves, but also everything abutting them. For, if they were given the roads with no strings attached and could charge whatever they wish, they might set the tolls at such a rate that the internal home and factory owners would be indifferent between keeping their property and relinquishing it. That is, the road owners, with the means at their disposal of blocking the internal property holders from access and egress,⁹ would be able to capture, at least theoretically, the entire capital value of all these holdings. In order to obviate this possibility, those responsible for privatizing roads will have to mimic the street use charges that would have been imposed by a non-existent private industry, in this contraryto-fact conditional scenario.

Suppose, now, that somehow this was accomplished. Still, our difficulties are not over. For a property owner abutting one of these avenues might say something along the following lines: "I don't care a fig for the price you are allowing the road owner to charge me. I reject it, utterly. These tolls might seem fair to you, but not to me. Had I been confronted with them when I purchased my land, I never would have bought it."¹⁰

It cannot be denied that this is a powerful objection to the process of road privatization. We have not, after all, been able to offer a purely market process of transfer from the public to the private realm. Rather, we have been forced to use a bureaucratic process, wherein we non-entrepreneurs have attempted to mimic the (non-existent) market. And yet, and yet. . . . This objection seems too harsh by half. After all, it is not our fault that we cannot fully anticipate the market prices that would have eventuated, had the state never entered into this realm with its cloven

⁹In making this statement, we implicitly assume away the possibility of using helicopters and long pole-vaulting sticks, building bridges over or tunnels under these streets, in order to overcome the roadblocks. See also footnote 4.

¹⁰I am indebted to my Loyola University New Orleans colleague Professor William Barnett II for posing this objection to me.

feet. And even if we could, *arguendo*, any particular economic actor, such as the objector, could have legitimately rejected it. From one perspective, what we are trying to do is to unscramble the egg, and it cannot be done.

Rather than answering this particular objection, we will take refuge in the claim that all or at least virtually all privatization efforts are subject to it. Thus, there is nothing here in particular aimed at road privatization; it rather constitutes an objection to all such efforts.

In order to see this point, consider the privatization of a Russian nobleman's castle. It might have been nationalized in 1917, and is given back sometime during the period of 1989–2003. Is it the identical castle as existed in 1917? Of course, it is not. Is it even, to continue our analogy, the same castle as an imaginary one that would have existed, on the assumption that it was never nationalized in the first place?¹¹ It is difficult to answer this, to say the least. And, any answer we could give to the Russian nobleman (or his heirs) could be rejected by him (them) on similar grounds as those offered by our objector to road privatization. Namely, "well, this is the way you might have treated this castle in the intervening years, but it certainly isn't the way I (we) would have managed it."

But we need not resort to an example as esoteric as a castle. Any bit of farmland (or indeed, any other kind of land) will do. For it, too, will have or at least might have been treated differently than the manner that might have ensued had there been no initial land seizure. The person to whom we are now returning it will always be in a position to quibble with us, to assert that what he is being given back is not precisely what was taken away from him. He can say, no matter what additional amount is given him to compensate for this phenomenon, it is unfair, that he would never have agreed to it. Merely the passage of time will always

¹¹We are now entering, with a vengeance, the arena of contrary-to-fact, alternative, science-fiction history.

render this true. Therefore, we road privatizers need not worry about this objection any more than any privatizer of anything else other than roads.

Here is a second reply to the objection: (virtually)¹² any conversion to the market is better than allowing the status quo of road socialism. If we were to accept this objection as definitive, not only would there not be any road privatization, there would not be a return of any property from the public to the private sector. Ostensibly, the person making the objection is on the side of the angels. He can be, and we have done so far, interpreted him as making this objection on behalf of the property owner abutting the road. However, there is also a more ominous interpretation that can be placed upon this objection. Objectively, at least, if it is taken seriously, it will spell the death knell of privatization efforts. *Quo bono*, from such an objection? Obviously, socialists.¹³

A third rejoinder is as follows. Privatization, at least for our present purposes, may be likened to the just response to a crime. Someone (the government in our case) in effect stole something from the right owners (private roads, here, by nationalizing private property and/or refusing to allow this industry to come into being in the first place). Naturally, in the case of crime, the emphasis should be on compensating the victim.¹⁴ However, it is

¹²Murray N. Rothbard, *The Ethics of Liberty* (New York: New York University Press, 1998), p. 54, mentions one such: a king, right before dissolving his unjust government "arbitrarily parcels out the entire land areas of his kingdom to the 'ownership' of himself and his relatives." I owe this citation to Laurent Carnis and Andre Andrade.

¹³Strictly speaking, there are two kinds of socialists; those who advocate this position on a voluntary basis (the nunnery, the monastery, the kibbutz that receives no levies based on coercion; even the typical family is organized on the basis of "from each to his ability, to each according to his need") or coercively, e.g., state socialism. Needless to say, we are now alluding to the latter of these meanings.

¹⁴This, at least, is the libertarian take on the issue. For more on this see Rothbard, *The Ethics of Liberty; Williamson Evers, Victim's Rights, Restitution and Retribution* (Oakland, Calif.: Independent Institute, 1996), p. 25; Stephan

impossible to peer into the victim's mind, to discern the contraryto-fact conditional regarding how much he would have voluntarily accepted for what was in reality stolen from him had this nefarious deed not taken place. Given no interpersonal comparisons of utility, stipulate that there are no objective criteria for such losses, and it is necessarily impossible that this problem be solved to the extent that the victim can never complain about the level of compensation given him.

TRANSITIONAL PROBLEMS

"Non-Compete" clauses to protect private investors

Under contract with the government, private express toll lanes were built in the median of California's State Route 91. The firm in question was guaranteed that this state would not later add to its capacity in competition with its own new facility. In other words, there was a "non-compete" clause in the agreement, similar to that which exists in many private labor contracts.

However, traffic increased in this area. As a result, Orange County exercised an option in this contract and bought out the SR-91 investors. This, in effect, renationalized the initially private Express Lanes, and allowed the State to build as much more road capacity as it wished.

At the other end of the country, a similar initiative was dealt with in a very different way. Consider the private firm that built the "Dulles Greenway" toll road near Washington, D.C. With no such stipulation in their contract, the State of Virginia was not estopped¹⁵ from building as much new capacity, in competition with this private roadway, as it wished. As a result, they added to their parallel Route 7, and economically undermined the private builder.

Kinsella, "Punishment and Proportionality: The Estoppel Approach," Journal of Libertarian Studies 12, no. 1 (Spring, 1996): 51.

¹⁵See Kinsella, "Punishment and Proportionality."

One obvious comment is that private and public road capacity, serving side by side, is like trying to mix oil and water; it is unstable at best. It is rather difficult for an entrepreneur to continue to exist, let alone to prosper, when the government is giving away a very similar service for free.¹⁶

So, should the government sign contracts with private builders, offering "non-compete" clauses? To ask this is to answer it, at least from a libertarian¹⁷ perspective. The government should absent itself from this industry, root and branch, immediately if not sooner. All roads should be commercialized at once; then, this problem would cease to exist.

Nor is this problem by any means confined to roads and streets. It exists, too, with regard to private bookstores being forced to compete against public libraries; for private gymnasiums faced with the competition from governmental playgrounds, parks, municipal swimming pools, etc. The state, here,

¹⁶Obviously, the government does not provide highways and streets for free. They are, rather, financed through various and sundry tax levies. But the point is that at the time of decision as to which roadway to patronize, the motorist faces an additional fee for the private alternative that does not exist for the public one.

¹⁷Walter Block, Defending the Undefendable (New York: Fox and Wilkes, 1985); idem, "Libertarianism vs. Libertinism," Journal of Libertarian Studies 11, no. 1 (Fall, 1994): 117-28; Alfred Cuzán, "Do We Ever Really Get Out of Anarchy?," Journal of Libertarian Studies 3, no. 2 (Summer, 1979): 151-58; Anthony De Jasay, The State (Oxford: Basil Blackwell, 1985); Hans-Hermann Hoppe, A Theory of Socialism and Capitalism: Economics, Politics and Ethics (Boston: Dordrecht, 1989); idem, The Economics and Ethics of Private Property: Studies in Political Economy and Philosophy (Boston: Kluwer, 1993); idem, "The Private Production of Defense," Journal of Libertarian Studies 14, no. 1 (Winter, 1998–1999): 27–52; Stephan Kinsella, "New Rationalist Directions in Libertarian Rights Theory," Journal of Libertarian Studies 12, no. 2 (Fall, 1996): 313–26; Franz Oppenheimer, The State (New York: Free Life Editions, 1914); Murray N. Rothbard, The Ethics of Liberty; Edward Stringham, "Justice Without Government," Journal of Libertarian Studies 14, no. 1 (Winter, 1998–1999): 53–77; Patrick Tinsley, "With Liberty and Justice for All: A Case for Private Police," Journal of Libertarian Studies 14, no. 1 (Winter, 1998-1999): 95-100.

plays the role of the ghoul, or the "undead," in horror movies; short of killing it with a silver bullet, or with garlic, or whatever, the latter members of each pair above have an unfair advantage over humans, or entrepreneurs. They can be bankrupted, but their governmental sector counterparts cannot be.¹⁸

Suppose, now, that this happy scenario is not in the cards. That is, like it or not, governmental road systems will not disappear, at least not right away. Suppose we are confronted, not with the question of whether the state should play any role whatsoever in highway management, but rather with the issue of—given that it will for the foreseeable future continue to play a gigantic role in this regard—should or should it not offer non-compete clauses to the private establishments who add to roadway capacity?

This is by far a more difficult question to answer. We propose to do so under two very different headings: utilitarian and deontological.

The latter is easy. As a pure matter of justice, anything that supports private initiatives in this field is good. Non-compete clauses do so.

The former is far more difficult. On the one hand, the worse shape statist roads are in, the higher the probability there is that they will be replaced by capitalist institutions. If so, then the last thing we want are non-compete clauses, because this will strengthen the very few private road companies now allowed by the powers that be; this, in turn, will render the present situation more stable. Thus, paradoxically, supporting limited private enterprise in this manner will undermine placing roads totally under capitalism in the future. Worse is better, in this view of the world.

On the other hand, people now living need every bit of help they can get to rescue them from public road management. Non-

¹⁸In the short run, in any case. In the long run, there is of course for public enterprise in otherwise capitalist nations the fate that overtook the Soviet economy.

compete clauses will encourage private companies to take on some small percentage of the nation's roadways, and this, at least, will help some few people who patronize them.

The difficulty is that we literally have no way of weighing these two considerations so that an overall determination can be made. Suppose, for example, that non-compete clauses increased private road management so that it now made up one percent of the total (this is a vast overestimate, in terms of present mileage totals). Posit, further, that this would save "x" number of lives per year, and "y" amount of motorist's time, but that it would put off, from 100 to 101 years, the date on which all roads would be privatized. Where is the interest rate, on the basis of which we could discount future time and lives saved, compared to present ones in this regard? There simply is no such thing. Therefore, it is impossible to definitively answer this question in any rational or objective manner.

Pricing

How much should road users pay for roads, and how should they be charged? As we have seen with our shoe example, it is difficult to anticipate the market. Nevertheless, it is possible to discern some patterns in the midst of the fog, and to make predictions on the basis of them.

There is little doubt that, at least in the long run, a private highway and street industry would utilize electronic road pricing (ERP). After all, universal product codes are now relied upon for a myriad of private goods; there is no reason to think that automobiles and trucks could not be similarly outfitted as is now done for bread and cough drops. However, the free-enterprise philosophy would maintain that roadways should be privatized at whatever level of technology is presently available to a society; certainly, this quest should not have to wait until the development of ERP.

Nor did it, historically. The earliest roads, we must never forget, were private turnpikes. Tollgates collected on the basis of the weight of the wagon, the number of axles, the number of horses and the width of the wheels. Thin-wheeled vehicles could go faster, but would create ruts in the road, and were therefore charged more. Thick-wheeled ones would serve something of the function of a steamroller, flattening out the road and making it more passable for others, and were thus charged less. In more recent history, places like Singapore used another low technology collection method. A bull's eye would be superimposed on the city map, and a different color assigned to each of the areas thus created. The highest fees would be charged for use of those areas of the city in the center of the bull's eye, with lower prices as the motorist was restricted, successively, to the more outlying areas. Strict penalties, needless to say, would be imposed on travelers found in areas not permitted by their color-coded permits.¹⁹

Should public roads be commercialized before being privatized?

That is, should the government be encouraged to institute electronic road pricing before the privatization process, or should we merely sit back and wait for private firms to do so once these facilities are under their control?

Once argument for immediate ERP is that the sooner it is done, the sooner we shall have economic rationality on the nation's highways and an end (or at least a vast diminution) to traffic congestion. Another is offered by Gabriel Roth:

One could keep the system of dedicated road funds and pay private owners out of such funds, in the same way that state roads are now financed. But there would have to be a mechanism for adjusting the road-use charges in accordance with the wishes of road users. All this would be easier if road were commercialized before being privatized.²⁰

But the arguments on the other side seem more powerful. For one thing, government roadway pricing (on bridges and tunnels)

¹⁹See on this Block, "Free Market Transportation: Denationalizing the Roads," pp. 209–38.

²⁰Unpublished letter to the present author, dated December 20, 2002.

has already been tried, and it has been a dismal failure. Instead of engaging in peak-load pricing, they have used anti-peak-load pricing, and have actually worsened the situation that would have otherwise obtained, not improved it. True, only some of this pricing has been electronic—more and more as the years go on but this does not seem to be definitive. An institution that would misprice before the advent of ERP could be expected to do the same afterwards.

For another point, let us suppose that, *mirabile dictu*, the state actually priced correctly; i.e., charged more for rush hour than other traffic. We make the heroic assumption, here, that not only would they engage in some peak-load pricing, but would actually be able to anticipate the market in this regard, all of this without benefit of any of capitalism's weeding out process of profit and loss for business failures. Then, the problem would arise that, in so doing, we will have functioned as efficiency experts for the state; we would have, counterproductively, managed to improve state operation.

Why is this "counterproductive"? Deontologically, because roadway management is simply not a legitimate role for the state, which should be, at least according to the philosophy of libertarianism, confined to protection of persons and property through the provision of armies to keep foreign invaders from our shores, policies to quell local criminals, and courts to determine innocence or guilt.²¹

But even on utilitarian grounds there are powerful arguments for not marginally improving state operation of roads. For, if this is done, then the glorious day is put off even the more when government control ceases, and market forces once again take over this industry. For, make no mistake about it: public sector operation is responsible for an inordinate number of the tens of thousands of road fatalities which occur every year, and the sooner

²¹The anarcho-capitalist version of libertarianism, of course, would restrict the government to a far greater, indeed, total, extent.

this can be stopped, the sooner this carnage will cease (or, at least be radically reduced).²²

So, which is better, purely on utilitarian grounds: a quick marginal improvement in roadway operation²³ coupled with putting off the glorious day of fully private control for an indefinitely long period of time, or, not attempting to be efficiency experts for the state, allowing them to wallow in their misbegotten management, and achieving full privatization earlier? Unfortunately, there is no discount rate, social or otherwise, on the basis of which a definitive judgment of this question can be made. Thus, the implications of a purely utilitarian analysis are unclear. Hence, we resort to deontology.

Then, too, there is the argument that if government charges tolls on the road, even if it engages in peak-load pricing, inevitably more money will flow into its coffers. However, contrary to Galbraith,²⁴ at least from a libertarian perspective, the state already has far too much money at its disposal, and the people far too little. Therefore, this would constitute an argument against peak load pricing on the part of the public sector.²⁵ True, the government could disburse these new funds back to the long-suffering, tax-paying public, whether directly or in the form of tax reductions. But this is as unlikely as Dave Barry becoming the next president of the United States by acclamation.

²²See on this Block, pp. 7–10.

²³Remember, we are still implicitly making the heroic assumption that government will get things right, road pricing-wise, something neither they, nor their Soviet planning counterparts, ever succeeded in doing.

²⁴John Kenneth Galbraith, *The Affluent Society* (Boston: Houghton-Mifflin, 1958).

²⁵It is sometimes argued that one of the benefits of legalizing addictive drugs is that they could then be taxed, and the government revenues enhanced. From this perspective, this would be the only valid case against legalization.

Public relations

Right now, people are accustomed to street and highway use for "free." How, oh how, will they ever be weaned away from this "entitlement" to which they have become accustomed? It will be appreciated that in a democracy, unless they are convinced to give up this privilege, there is little hope for ultimate privatization.

One approach is to reject this question as improper, even impertinent. After all, we are after the truth here, with a capital "T," and if the masses are too moronic to see the benefits of privatization, well, they deserve to be killed like flies on the public highways, and to suffer the "slings and arrows of outrageous" traffic congestion.

But let us take a more sober tack. There is, after all, specialization and a division of labor in all things, and our present concerns are no exception to this rule. The average motorist can be forgiven for not reflecting carefully on something which, in the very nature of things, is out of his purview.

One tack in our public relations efforts might be to support such private road initiatives as California's State Route 91 and the "Dulles Greenway," at either ends of our country. The advantage, here, is that there was no history of free access in either case; so it is not likely, or at least it is less so, that resentment will build up at having to pay for that which was hitherto enjoyed "for free." If enough of these roadways are built, then, perhaps, eventually, the motoring public will come to see the benefits of this institution.

A better approach might be to convey to the public that even if it could enjoy public provision of highways and streets "for free" and had to pay for private counterparts, it might still be worth it to do so, given that the latter option would be vastly preferable in terms of safety and congestion concerns.

Better yet might be to point out to the typical motorist that he by no means enjoys public roadway services "for free." Rather, he pays for them in the form of a myriad of taxes, both direct and indirect. Somehow, the term "freeways" indicates to him that he pays nothing for them. Although originally conceived as a characterization of the fact that highways were of limited access, without traffic lights, and thus that travelers could move "freely," this phrase now functions to indicate to people that they pay nothing for them. Nothing could be further from the truth. And, given the general rule of thumb that private services come at a fraction of the cost of their public counterparts, it would be a shock to learn that this would not apply to the present situation. Thus, it is almost a given that the explicit costs of highway provision likely to be passed on to the consumer by a private industry would be a small part of those now imposed upon him, implicitly, in the form of hidden and not so hidden taxes.

13 Transition to Private Roads^{*}

et us posit that the full privatization of all roads, streets, avenues, thoroughfares, highways, and byways is the proper goal of public policy. Here, we are assuming, *arguendo*, that this end is desirable,¹ and are at present confining

^{*}This chapter is dedicated to my skeptical friend, Bill Barnett, my colleague at Loyola University New Orleans.

¹For support of this contention see David Beito, "From Privies to Boulevards: The Private Supply of Infrastructure in the United States during the Nineteenth Century," in Development by Consent: The Voluntary Supply of Public Goods and Services, Jerry Jenkins and David E. Sisk, eds. (San Francisco, 1993), pp. 23–48; David Beito and Linda Royster Beito, "Rival Road Builders: Private Toll Roads in Nevada, 1852–1880," Nevada Historical Society Quarterly 41 (Summer 1998): 71–91; David Beito, "Voluntary Association and the Life of the City," Humane Studies Review (Fall, 1988); idem, "Owning the Commanding Heights," Essays in Public Works History (1989), vol. 16; Walter Block, "Free Market Transportation: Denationalizing the Roads," Journal of Libertarian Studies 3, no. 2 (Summer, 1979): 209–38; idem, Zoning: Its Costs and Relevance for the 1980s (Vancouver, B.C.: Fraser Institute, 1980), pp. 299–330; idem, "Public Goods and Externalities: The Case of Roads," The Journal of Libertarian Studies: An Interdisciplinary Review 7, no. 1 (Spring, 1983): 1-34; idem, "Theories of Highway Safety," Transportation Research Record 912 (1983): 7-10; idem, "Road Socialism," International Journal of Value-Based Management 9 (1996): 195–207; Walter Block and Matthew Block,

ourselves to the transition stage from present institutional arrangements to it. That is, we ask, how do we move from the

[&]quot;Roads, Bridges, Sunlight and Private Property Rights," Journal des Economistes et des Etudes Humaines 7, nos. 2/3 (June-September 1996): 351-62; Walter Block, "Roads, Bridges, Sunlight and Private Property: Reply to Gordon Tullock," Journal des Economistes et des Etudes Humaines 8, nos. 2/3 (June-September 1998): 315-26; idem, "Private Roads, Competition, Automobile Insurance and Price Controls," Competitiveness Review 8, no. 1 (1998): 55-64; idem, "Road Privatization: A Rejoinder to Mohring," Privatize Roads and Highways (Lewiston, N.Y.: Edwin Mellon Press, 2005), also reprinted as chap. 19 in this present volume; Fred Foldvary, Public Goods and Private Communities: The Market Provision of Social Services (Cheltenham, U.K.: Edward Elgar, 1994); Michelle Cadin and Walter Block, "Privatize the Public Highway System," The Freeman 47, no. 2 (February 1997): 96–97; Bryan Caplan, "A Practical Proposal for Privatizing the Highways and Other 'Natural' Monopolies," Economic Notes 72 (London: Libertarian Alliance); John M. Cobin, "Market Provisions of Highways: Lessons from Costanera Norte," Planning and Markets 2, no. 1 (1999); Andre De Palma and Robin Lindsey, "Private Toll Roads: Competition under Various Ownership Regimes," The Annals of Regional Science 34 (2000): 13-35; idem, "A Model of Curb Rights In Private Urban Transit Markets," Canadian Transportation Research Forum (2001): 581–96; Dan Klein, "The Voluntary Provision of Public Goods? The Turnpike Companies of Early America," Economic Inquiry (October 1990): 788-812; Dan Klein, John Majewski, and Christopher Baer, "Economy, Community and the Law: The Turnpike Movement in New York, 1797-1845," Journal of Economic History (March 1993): 106-22; idem, "From Trunk to Branch: Toll Roads in New York, 1800-1860," Essays in Economic and Business History 11 (1993): 191-209; Dan Klein and G.J. Fielding, "Private Toll Roads: Learning From the Nineteenth Century," Transportation Quarterly (July 1992): 321-41; idem, "How to Franchise Highways," Journal of Transport Economics and Policy (May 1993): 113-30; idem, "High Occupancy/Toll Lanes: Phasing in Congestion Pricing a Lane at a Time," Policy Study 170 (November 1993); Bertrand Lemennicier, "La Privatisation des rues," Journal des Economistes et des Etudes Humaines 7, no. 2/3 (June-September): 363-76; Gabriel Roth, A Self-Financing Road System (London: Institute of Economic Affairs, 1966); idem, Paying for Roads: The Economics of Traffic Congestion (Middlesex, U.K.: Penguin, 1967); idem, The Private Provision of Public Services in Developing Countries (Oxford: Oxford University Press, 1987); John Semmens, "Road to Ruin," The Freedom (December 1981); idem, "The Privatization of Highway Facilities," Transportation Research Forum (March 1983); idem, "Highways: Public Problems and Private Solutions,"

present state of government ownership of such transportation arteries to one of complete privatization? We shall answer this question in two stages: the first, very briefly, since there is a large extant literature on this subject and the second, much more intensively, since there is not. The first stage of our analysis, then, is addressed to the issue of what is the appropriate transition process for privatizing any resource? The second seeks to answer the question of how can this be applied to the special challenges which arise with regard to road privatization?

PRIVATIZATION IN GENERAL

There are several methods that can be utilized regarding any governmental holding, such as a factory or forest. The worst one, always, from the libertarian point of view, is to sell the resource to any willing buyer. This is because a sale implies that the state will receive money in return for "its" property. But the government has no wealth at all but that which was seized from individual owners in the first place. It may "own" the resources in

The Freeman (March 1985); idem, "Intraurban Road Privatization," Transportation Research Record (1987): 1107; idem, "Using Competition to Break the U.S. Road Monopoly," Heritage Foundation (December 14, 1987); idem, "Privatization: Saving While Serving the Public," Goldwater Institute (April 25, 1988); idem, "Taking Over the Roads," Liberty (November 1988); idem, "Why We Need Highway Privatization," Laissez Faire Institute (March 1991); idem, "Private Highways? They're Cheaper, Better, Fairer," Phoenix Gazette, 3 April, 1991; idem, "The Rationale for Toll Roads: You Get What You Pay For," Phoenix Gazette, 16 December 1992; idem, "Highway Privatization: What Are the Benefits for Arizona?," Goldwater Institute (December 1992); idem, "From Highways to Buy-Ways," Spectrum (Fall 1993); idem, "Highway Investment Analysis," Arizona Department of Transportation (December 1994); idem, "Privatize Driver's License, Registration System," Tribune, 25 December, 1994; idem, "Privatizing Vehicle Registrations, Driver's Licenses and Auto Insurance," Transportation Quarterly (Fall, 1995); idem, "Selling the Roads: Privatizing Transportation Systems," Liberty; idem, "Goodbye, DMV," Liberty (January 1996); idem, "Selling the Roads: Privatizing Transportation Systems," Liberty (1996).

question as a matter of law, its own law, but certainly not as a matter of justice. The most just and hence best means of dispersal of governmental holdings to the private sector is to give the property in question, with no strings attached whatsoever, back to the rightful owners, i.e., the persons from whom it was stolen in the first place. For example, if the government nationalized a house or factory, privatization should consist of the return of this stolen property to its original and assumed rightful owner. If the property was built with tax revenue or purchased on that basis, as is true in the case of roads and highways, then it should be given back to the people in proportion to their tax payments (or tax burden, if this cannot be ascertained). That is, the rich should get the lion's share since they were forced to pay the most, and the poor the short end of the stick since relatively little was plundered from them in order to first erect the edifice in question. It is only if, for some reason, the rightful owners cannot be identified, and the property can reasonably deemed to have fallen into a state of nonownership, that the principles of homesteading or syndicalism should be brought to bear.² Another problematic distribution scheme is to impose conditions on the new private owners, however they are determined, such that they cannot, in turn, sell their shares of it or buy as many others for which they can find willing vendors; e.g., an attempt to keep ownership concentration ratios below any given level. This was a mistake made in the privatization of the British Columbia Resources Investment Corporation.³

ROAD PRIVATIZATION

With these remarks, we are now in a position to analyze the special circumstances of road privatization. Must we modify any of these general privatization considerations in this case?

²Hans-Hermann Hoppe, *Democracy—The God That Failed: The Economics and Politics of Monarchy, Democracy, and Natural Order* (New Brunswick, N.J.: Transaction Publishers, 2001), p. x.

³T.M. Ohashi, T.P. Roth, Z.A. Spindler, M.L. McMillan, and K.H. Norrie, *Privatization Theory and Practice* (Vancouver, B.C.: Fraser Institute, 1980).

Blockades. One argument for the thesis that roads are different, and thus either cannot or should not be privatized, or, if so, that special provisions applicable nowhere else must apply here, is based upon the "blockade problem": if the four streets surrounding the block in which my home is located are privatized, then I can be blockaded in, or entrapped. Alternatively, I can be made to pay such a high price for egress and access to my own property that virtually the entire capital value of it would end up being captured by these private road owners, e.g., the "entrapping" firm or firms will charge a fee just below the present discounted value of the house. We know that this scenario could not occur in the natural operation of a free market in road provision (see chapter 1). No one would purchase such a home, initially, unless access and egress rights were first stipulated, and at a mutually agreeable price, at present and in the future as well. Just as "title search" is now the order of the day in real estate transactions, so, too, would "access search" come to be a commonplace in the free society earmarked by private roadways. This being the case, no proper disbursement of public streets into private hands could ignore this issue. For, to do so would in effect be to give to the private road owners not only the streets themselves which is part of the explicit privatization plan, but also (the value of) virtually all the property "entrapped" by these traffic arteries. What, then, could be done to obviate such a monumental injustice? One possibility would be to add a codicil to the transfer of the roads (however else effectuated); to wit, that due weight would have to be given to the contrary-to-fact, hypothetical bargaining over these access rights that would have, but did not, take place, since no private road market existed. Here, the new private firms would own the street, but they would be subject to the side order constraint that they grandfather in all extant property owners abutting their newly owned roads. As for complete newcomers to the area, e.g., those traveling through it for the first time or those who purchase real estate lying within the bounds of these recently privatized avenues, they could be charged as much as the market will bear. But, for those already established, and also their visitors, repairmen, deliverymen, etc., due consideration would have to be given to this hypothetical contrary-to-fact bargaining over egress and access. How, in turn, might this be done? One possibility is to look at the market value of rights of way in arenas where this is subject to open and free bargaining, and then to incorporate this knowledge into newly privatized roads. For example, Christopher Muller notes that, with regard to his railroads, "James J. Hill encouraged settlement by letting immigrants travel halfway across the country on his railroad for ten dollars if they would settle along the route. He rented entire families freight cars for little more money."4 The point is, if this railroad magnate was attempting to attract people to live on territory abutting his holdings, he must have offered them inducements to do so. Borrowing a leaf from his and other such offers would be of help in solving our present challenge. Continues Muller: "Unlike other railroad builders such as Cornelius Vanderbilt who built their railroads around a population, Hill built a population around his railroad." Precisely. But if you are going to do this sort of thing, you must make attractive offers to would-be future neighbors.

Scale. Another possible problem in road privatization stems from dangers involving the scale of holdings. In order to put this difficulty into context, we must reflect upon yet another objection to road privatization: that the motorist would have to stop in front of each house and pay a few pennies in tolls, which would grind traffic to a virtual standstill.

The implicit assumption behind this objection is that roads would be given out piecemeal; each property owner abutting a street would receive a section of it stretching from one end of his property to another, and extending halfway into the thoroughfare; the other half would be given to his across the street neighbor. But nothing could be further from the truth. No reasonable privatization scheme would divide up the streets in so monstrously unjust, to say nothing of inefficient, manner. First of all,

⁴http://www.railserve.com/JJHill.html; I owe this citation to Sam Bostaph.

to do so would violate, with a vengeance, all strictures of viable scale. It would be as if a factory to be privatized were first divided into 100,000 parts, a brick here, a faucet there, and given to its similarly numbered owners in that format.⁵ The road, as a unit, consists of far more than any one of these pieces, or even thousands of them put together. The viable street ownership unit stretches, at least, for several miles in length, and not one but both sides of it would be included in the package. Certainly, this is the format that characterized roads built by private interests historically.

Second, if we are to transfer the road to private individuals in proportion to the taxes they have paid for their creation and maintenance, it is by no means clear that this is proportional to street frontage. Surely, a smaller piece of real estate in a luxury neighborhood pays more taxes than does a larger one in a poorer area. Even assuming away this objection, there is simply no warrant for dividing the road into 100,000, 10,000, or even 1,000 ownership units. Instead, if there are indeed to be 10,000 different owners of a given street, since there are that many homes with frontage, a more rational plan is to create a new road owning firm with 10,000 shares, these to be given to each of the owners, not according to frontage, but rather based on taxes paid in the past.

Any one person, or holdout, could charge exorbitant prices. If two of these property owners lived at opposite sides of the same street, they could effectively shut off all traffic, as in the case of the blockade in the game of Parcheesi. Since privatization is an attempt to anticipate the market, or to be congruent to it, and this sort of ownership pattern has never emerged under free enterprise, there is no reason to suppose that this would be a viable plan for transferring streets into the private sector.

⁵Gabriel Roth (personal correspondence, dated December 20, 2002) points out that no one even contemplates privatizing elevators in high rises by distributing them piecemeal, one floor at a time divided by all the occupants of each floor. Not only are elevators not privatized in this manner, no one would think, either, of returning the entire elevator to the private sector apart from the building in which it is located.

Externalities. At present, the city government manages all roads within its jurisdiction. As such, it can be presumed, at least at the outset, that the quality of the job it does would be homogeneous throughout. If so, then no geographical areas would be privileged by spillover effects on property values *vis-à-vis* any other. That is, it would not be the case that property values in one neighborhood would rise more than those in others, due to the efforts of the street czar.

All would be different, it might be contended, under private ownership of streets, particularly if there were dozens, not to say hundreds, of separate road firms in a given city, with the resultant heterogeneity of management skills thereby implied. Now, property values would depend upon the varying, possibly very much so, skills of abutting road owners.

It cannot be denied that this is a transition problem in that once the firms were set up and operating, the values of real estate holding adjacent to the specific roads would tend to be capitalized by the quality of the given management. If road A were managed well, for example, then the property surrounding it would rise in value. Thus, a new buyer would no longer be impacted, as to land values, by the management skills of other firms.

The objection then, to the transition period, but not to the underlying idea of privatized roads, is that during this interim land values would be haphazardly impacted, raising some here, reducing others there, and leaving them untouched in yet other places, with no rhyme or reason. This would play havoc with rational economic planning, as there would be no way for entrepreneurs to act in a coherent manner in the face of this hyperuncertainty.

⁶I refuse to employ the more commonly used expression "rent seeking." Why use a perfectly good concept, rent, to describe something that is at bottom evil and vicious? Why not call a spade a spade? See on this http://www.mises.org/fullarticle.asp?control=385&month=17&title=Watc h+ Your+Language&id=19.

But this objection, too, is without merit. First of all, it is by no means true that road bureaucrats act homogeneously. There is, after all, such a thing as booty or plunder seeking.⁶ That is, typically, the rich and/or the well organized, which are typically the same thing, are able to direct more than a proportionate share of public resources to areas in which they reside, or have business interests. Thus, what the critics fear in the case of the transition of roads to private ownership is already a concomitant of the present, statist system.

Second, there is a difficulty in how the objection is necessarily posed. It relies on the coherence of "management acting homogeneously." Does this imply equal expenditure on the part of all road owners? Hardly, since money can be well or poorly spent. Even on the assumption of equal quality of spending money, whatever that means, in turn, there is still the question of whether the "equality" is to be normalized for value of the road, or its length, or length multiplied by number of lanes and their width, etc. Also, how do we incorporate the differences between winding roads and straight ones? Those that are well banked, and those that are not? The concept of "quality" has in most cases a difficult, subjective element to it, which makes comparison difficult, and the present case is certainly no exception to this rule. Does it consist of filling in potholes, reducing the roughness of the road, the dangers for motorists who use it, the speed with which one can travel, the congestion levels? If this objection must be couched in such ambiguous phraseology, it loses much of its power. The point is, in markets, all of these hard to pin down considerations are amalgamated in one fell swoop into one statistic: profit. But this is impossible in the absence of market institutions.

Third, one can only properly own physical property, not the value thereof.⁷ The latter is determined by potentially thousands of buyers and sellers, any of whom could become the marginal purchaser or vendor, who actually determines price and hence

⁷Hans-Hermann Hoppe and Walter Block, "Property and Exploitation," *International Journal of Value-Based Management* 15, no. 3 (2002): 225–36.

property value. If a man truly owned the value of his property, as opposed to a bundle of rights pertaining to its physical inviolability, then one could forbid all of these other economic actors (including that man himself) from independent decision making, lest any of them, horrors, act in such a way, by purchasing or failing to purchase, for example, a complement or substitute. To take another instance: under the doctrine of sanctity of property values, not physical property, society would have the right to forbid blacks from making real estate purchases in previously white neighborhoods, on the assumption they drive down property values, a manifest injustice and rights violation against them.

Fourth, there is a market remedy, readily available, to any individual who is unduly worried about the impact of the management style of the new private road firm on the value of his real estate holdings: take a position in this very company; buy shares in it; kick out the inept manager, and install your own team. This is thus hardly a serious objection to the transition to a private road industry.

Fifth, there is nothing unique about roads in this regard. The "problem" of a firm affecting the property values of its neighbors is hardly limited to the case of streets. Rather, it is ubiquitous. If the bakery next door to my butcher shop does a land-office business, some of his customers are bound to find their way onto my own premises. If, in contrast, he can't cook his way out of a paper bag, there will be fewer customers of his I can snare to my own benefit. And vice versa. Does this means that once the government nationalizes bakeries and butcher shops, this negative externality argument would prevent the denationalization of these industries? Not a bit of it.

Coercion. Next, we consider the objection that the homeowner is required to accept a contract with the new road owner. The difficulty here, and the force of the objection, is not that the contract may not be a fair, just or appropriate one. And, as we have seen above, this legal agreement would attempt to incorporate into it protections for the property holder against blockades. The problem is, rather, that the owner of the land abutting the road is compelled to accept this contract, whereas, in an ideal situation, people can pick and choose which contracts to sign, and which to avoid. Yes, this is indeed a problem. In the truly free society, no one is forced to deal with anyone else. And here, admittedly, the property owner of interior land will have to deal with the road owner(s) who surround his holdings.

There are two ways to deal with the objection: one valid, the other not entirely so. Let us consider the invalid argument first. It is possible to argue that this difficulty is by no means limited to roads. For example, when the previously nationalized bakery or butcher shop becomes returned to its proper home, private enterprise, the people who used to patronize the government-run provider of these services will have no choice but to become customers of the new, privately operated firms selling these products. This claim is strengthened if these are the only such operations in town, and the next closest purveyor is located hundreds of miles away. This argument goes some of the way in the direction of dealing with the objection but does not completely attain this goal. The kernel of truth in it is that the land owner in question might conceivably not be as much inconvenienced by the transition to private roads as would hold true for the buyers of these foodstuffs. The latter might actually die, if alternative sources of food were not attainable; the landlocked homeowner need suffer no such fate, given that due consideration is given to the blockade issue.

Where this argument fails, however, is that, still, the blockaded owner is compelled by law to deal with the new road owner abutting his property, and this is simply not true for the grocery shopper. And this, despite the fact that the latter might die as a result of the privatization, and cannot occur, *arguendo*, in the case of the former. That is, we must distinguish between dying as a result of privatization, a scenario we are contemplating merely for the sake of logical argument, and being forced by law to deal with a firm, regardless of the outcome in terms of life expectancy. The objection we are now considering concerns only the latter issue; thus, no resort to the former can fully answer it. A better reply to this objection is to note that the difficulty stems not from the privatization process itself, but rather from the initial takeover by the government of the road building industry. The reason the landlocked property owner must deal with the new, private road owner, if there is to be a new, private road owner, emanates from the very logic of the situation.

Like it or not, the landlocked property owner, at present, is logically compelled to deal with the abutting road owner, which happens to be the state apparatus. The reason internal landowners are forced to deal with road owners, whoever they are, private or public, is part and parcel of geographical praxeology. Absent tunneling under the road, or building a bridge over it that is, if we confine ourselves to two-dimensional space— Euclidian geometry, not man made law, mandates that homeowners somehow "deal with" road owners. All that privatization will do is change the identity of the institution, from public to private, that Euclid "forces" the landowner to be related to, contractually. Part IV

Critiques

14 Roads, Bridges, Sunlight, and Private Property Rights^{*}

Suppose there to be a system of private roads and highways.¹ Suppose, further, that a single firm were to own a highway stretching from Boston to Los Angeles. One objection to such a state of affairs is that it would effectively cut off the northern and southern parts of the United States from one

^{*}This chapter first appeared as Walter Block and Matthew Block, "Roads, Bridges, Sunlight and Private Property Rights," *Journal des Economistes et des Etudes Humaines* 7, no. 2/3 (June–September 1996): 351–62.

¹For a defense, elucidation, explication of this contention, both on logical and historical grounds, see Walter Block, "Free Market Transportation: Denationalizing the Roads," *Journal of Libertarian Studies* 3, no. 2 (Summer, 1979): 209–38; idem, *Zoning: Its Costs and Relevance for the 1980s* (Vancouver, B.C.: Fraser Institute, 1980): 299–330; idem, "Theories of Highway Safety," *Transportation Research Record* 912 (1983): 7–10; idem, "Public Goods and Externalities: The Case of Roads," *The Journal of Libertarian Studies* 7, no. 1 (Spring, 1983): 1–34; Murray N. Rothbard, *For a New Liberty* (New York: Macmillan, 1973); and William C. Woolridge, *Uncle Sam, The Monopoly Man* (New Rochelle, N.Y.: Arlington House, 1970). This literature contends with dozens of objections to the system, but not the one discussed in the present paper.

another, something that even the Civil War was unable to accomplish.²

Upon first glance, this is a silly objection. Certainly any firm rich and powerful enough to have obtained ownership rights to a facility of such gigantic proportions,³ could never act in so arbitrary and capricious a manner. How could it make any profits whatsoever, much less maximize them, if it refused to allow people to use their road to travel in any direction they wished? If it didn't allow, nay, encourage, other road companies to provide north south transit corridors bisecting its own holdings,⁴ it would vastly reduce the value of its own property. A road with no entries and no exits except for terminal points in Boston and L.A. would have a far lower capital value than an ordinary limited access highway. This objection takes a good thing-limitedaccess, high-speed corridors-and escalates it beyond comprehension. Presumably, this firm didn't come to occupy so exalted an economic position by acting in this way, and will soon return to the economic obscurity from which it once sprang if it did so now. Surely, any president who organized the business in this way would be quickly shown the door by the board of directors. And any board of directors that fails to uphold such fiduciary responsibility would soon feel the wrath of the stockholders.⁵

²Even had the South prevailed in battle, there is no reason to believe that commercial relationships, akin to those that now take place between Canada or Mexico and the U.S., would not presently occur between the two halves of the country.

³For the monopoly objection to private roads, see, in addition to the literature mentioned above, Dominick Armentano, *The Myths of Antitrust* (New Rochelle, N.Y.: Arlington House, 1972); idem, *Antitrust and Monopoly: Anatomy of a Policy Failure* (New York: Wiley, 1982); Murray N. Rothbard, *For a New Liberty*; Walter Block, "Coase and Demsetz on Private Property Rights," *Journal of Libertarian Studies* 1, no. 2 (Spring 1977): 111–15; Don Armstrong, *Competition vs. Monopoly* (Vancouver, B.C.: Fraser Institute, 1982).

⁴Or undertake this task on its own account.

⁵That is, on the assumption that people like Michael Milken were allowed to orchestrate "unfriendly" takeovers of recalcitrant management.

But on further reflection, it can be charitably interpreted as something far more profound. Critics can readily admit to the unlikelihood of such a scenario eventuating.⁶ Instead, he can posit a situation where it could occur, given a specific concatenation of events. For example, accept for a moment road privatization,⁷ and assume that an heir has come into possession of such a radically limited access highway. Suppose that the firm is owned in the form of a single proprietorship and that this beneficiary cares not one whit for preserving capital values, let alone expanding them. Is this, then, a *reductio ad absurdum* of road privatization?

Again, there are problems. How was it possible, in the first, to amass the wherewithal necessary to put together a highway with no entrance or exits for 3,000 plus miles?⁸ It is not within the realm of reality, even one so heavily contrived. After all, an objection, even a theoretical one, must have some connection to a real state of affairs if it is to be relevant to it. Alternatively, if the road were a normal one when owned by the benefactor, it would be extremely difficult for the beneficiary to unilaterally cut off transverse roads. (Presumably, these are overpasses; otherwise the limited-access nature of the highway would be obviated.) There would likely be long term contracts, even permanent ones, which stipulate that the owner of the overpass has a right to continue to maintain his amenity.

⁶And this, for two reasons. First, it is exceedingly politically naive to think that an advanced industrial country such as the U.S. would ever move so close to a radically free society for privatization to occur to this extent. The public choice and "iron triangle" literature gives us good and sufficient reason for this supposition. Second, and less importantly, it is unlikely that a firm that found itself in this position would act in this manner, for reasons given in the text.

⁷If only, ultimately, to show the flaws in such a system, at least in the view of the advocates of road socialism.

⁸Strictly speaking, Tullock's objection had to do with traffic arteries crossing over this Boston–L.A. highway, not with access. But as long as there are entry and exit points every few miles, the worst this "highway monopolist" can do is make people go out of their way for a few minutes. He certainly cannot render one side of the country asunder from the other.

Nevertheless, we pass over these criticisms to Tullock's objection,⁹ if only for the sake of argument. That is, we take it as a given that there is a road owner of a zero-access highway stretching across the entire country who absolutely refuses to contractually arrange for exit and entry points, or for overpasses bisecting his property. Moreover, we assume that either there are no taxes, which would force him into bankruptcy,¹⁰ or if there are, he has sufficient funds to enable him to stay in business for the foreseeable future. Even under these more challenging conditions we still deny the claim that private enterprise highways can drive a wedge through an entire country.

Ad coelum

How, then, can we maintain the viability of private property rights in this context? Simple. All that need be done is apply the Lockean¹¹ and Rothbardian¹² theory of property rights. On this basis, another road entrepreneur can build an overpass above this limited-access highway, or a tunnel, burrowing underneath it. This will nip in the bud any incipient fear that private property rights in roads is so impractical, so untenable, that it can rip the nation into two parts.

Upon this "modest proposal," a criticism will immediately leap to mind. What about the private property rights of the road owner? According to the critics of homesteading theory, any

⁹In the terms of George P. Fletcher, "Paradoxes in Legal Thought," *Columbia Law Review* 85 (1985): 1263–92. Tullock is attempting to show that the concept of private road ownership amounts to an "antinomy."

¹⁰He is not going to be earning much money on his holdings. Even low real estate taxes would quickly bankrupt him, thus depriving us of an opportunity to wrestle fully with the objection.

¹¹John Locke, "An Essay Concerning the True Origin, Extent and End of Civil Government," in *Two Treatises of Government*, Peter Laslett, ed. (Cambridge, Cambridge University Press, 1960), vols. 27 and 28.

¹²Rothbard, For a New Liberty and The Ethics of Liberty (Atlantic Highlands, N.J.: Humanities Press, 1982).

attempt to breach his "airspace" or "underground space" is a violation of property rights. Therefore, we can have only one of two things: either full respect for private property rights or the existence of privately owned highways and national inviolability. That is, if the road owner's private property rights are fully protected, no one will be able to build an under- or overpass, since this would interfere with his use of his holdings.

This criticism is predicated on interpreting Locke, Rothbard, and the libertarians as favoring the *ad coelum* doctrine. In this view, if a person owns an acre of land on the surface of the earth, he possess a narrowing cone extending down to the very center of the planet, and a widening cone extending upward into the heavens.

But this is a travesty of property rights and no advocate of this system defends it. On the contrary, the enemies of private property rights offer it as an example of how such law would operate were we ever so foolish as to put it in place. The Friedmans, father and son, have long dismissed homesteading based, private property rights on this basis as a libertarian fetish or mantra.

Says David Friedman:

A court in settling disputes involving property, or a legislature in writing a law code to be applied to such disputes, must decide just which of the rights associated with land are included in the bundle we call "ownership." Does the owner have the right to prohibit airplanes from crossing his land a mile up? How about a hundred feet? How about people extracting oil from a mile under the land? What rights does he have against neighbors whose use of their land interfere with his use of his? . . . It seems simple to say that we should have private property in land, but ownership of land is not a simple thing. . . . There is no general legal rule that will always assign it to the right (person).¹³

¹³David Friedman, "How to Think About Pollution; or Why Ronald Coase Deserved the Nobel Prize," *Liberty* 5, no. 3 (January 1992): 58.

Says Milton Friedman:

How many times have you heard someone say that the answer to a problem is that you simply have to make it private property? But is private such an obvious notion? Does it come out of the soul?

I have a house. It belongs to me. You fly an airplane over my house, 20,000 feet up. Are you violating my private property? You fly over at 50 feet. You might give a different answer. . . . Are you violating my private property? Those are questions to which you can't get answers by introspection. They are practical questions that require answers based on experience. Before there were airplanes, nobody thought of the problem of trespass through air. So simply saying "private property" is a mantra, not an answer. Simply saying "use the market" is not an answer.¹⁴

But this is the classical straw-man ploy: assign an argument to your opponent, refute it, and then declare victory. Yes, if the *ad coelum* doctrine were the position of those who advocate property rights and road privatization, then their view would be untenable. For how could anyone justify building a bridge over someone else's highway, against his will, on these grounds? Not only would the firm own the airspace over the highway, it would own it all the way up to the heavens. The enterprise would have the right to forbid airplanes from flying overhead. Surely, it could legally prevent an over- (or under-) pass from being built.

As it happens, however, this is not at all the perspective of the libertarian advocate of private property rights. Instead, he takes a position based on the homesteading principle. In this view, one starts off with ownership of one's own person. Then, when one is the first to "mix one's labor" with hitherto unowned virgin territory, one can legitimately claim ownership rights over the latter. A person can own land, but not an extended cone from the heavens

¹⁴Milton Friedman, "Say 'No' to Intolerance," *Liberty* 4, no. 6 (July 1991): 18–20.

to the core of the earth—because by stipulation, he has only mixed his labor with property on the surface of the earth.

How far up, then, do the surface owner's rights extend? Where is the boundary between his domain and that of an airplane or overpass builder? This cannot be pinpointed precisely. It is impossible to defend any arbitrary answer, such as "100 feet up into the air." The obvious retort to that, as the Friedmans never tire of reminding us, is, "Why not 99 or 101 feet?" Instead, the Lockean homesteader offers a principle, and asks in cases of dispute that the courts determine the precise height in any given case. But there is a principle under which such determinations may be made: property boundaries are to be placed where homesteading, local custom and common enjoyment, and the context, indicate. For example, how low can the plane fly? If it is over wheat fields, very, very low indeed (five feet? ten feet?), so long as the crops cannot be damaged by such activity, and the only admixture of labor to the land was in the form of such plantings.

On the other hand, if the landowner put in a three-story house, he also owns a "penumbra" of air above it, enough so as to enjoy the ordinary amenities of home ownership. This might be defined both in terms of height and number of flights of airplanes per day. The answer to the puzzle in this case would be in the thousands of feet.¹⁵

A crucial element for the homesteading philosophy is chronological order.¹⁶ If the airport was already in operation when the

¹⁵In the many, many thousands of feet far away from airports, because it is likely that he took possession of his abode before there were any or many low flights in his neighborhood. However, if he lives near an airport, which homesteaded these rights before he or the original homeowner did, then the airplane owners have the right to continue to take off and land, even if it means interfering with his quiet enjoyment of his home.

¹⁶This is in sharp contrast to the Coasean Law and Economics tradition of the University of Chicago school of thought. There, property rights disputes are not settled by resort to prior use and homesteading. On the contrary, determination is made in a manner contrived so as to supposedly

farmer homesteaded the ground, then the latter cannot do anything that would interfere with the use that was prior in time. Here, we assume that the airport claimed not only the physical rights to the land on which the runways are located, but also the surrounding egress routes. That is, such a farmer would be forever precluded from erecting a large building in the flight path of the airplanes, without the permission of the airport owner.

On the other hand, if the settler were there first, and constructed a skyscraper, the airline would not only have to tailor its flight paths to accord with the existing buildings, but would also not be allowed to create a level of noise incompatible with the ordinary, quiet enjoyment of such real estate.

Well, how high must the overpass be so as to not interfere with the road owner's amenities? According to homesteading theory, it can be as low as the builder desires, provided only that it does not interfere with rights homesteaded by the highway company. This, in turn, would be determined by the firm's ability to provide its clients, the motorists, with a traffic lane. Since the tallest of the trucks that use the highway are no more than thirty feet high, as at least a first approximation we may say that the bottom of the overpass can be as low as say, thirty-five feet off the ground.¹⁷

maximize wealth. In the real world of positive and extensive transaction costs, the court in effect is asked to weigh the value of the right (noise, egress, whatever) to the farmer and the airport owner. For a critique of this system as a socialistic usurpation of property rights, see Block, "Coase and Demsetz on Private Property Rights," pp. 111–15; Roy E. Cordato, *Welfare Economics and Externalities in an Open Ended Universe: A Modern Austrian Perspective* (Boston: Kluwer); David Gordon, "Toward a Deconstruction of Utility and Welfare Economics," *The Review of Austrian Economics* 6, no. 2 (1993): 99–112; Hans-Hermann Hoppe, *The Economics and Ethics of Private Property: Studies in Political Economy and Philosophy* (Boston: Kluwer, 1993); Gary North, *The Coase Theorem* (Tyler, Tx.: The Institute for Christian Economics, 1992).

¹⁷To discuss the problem of who would be responsible for the automobile pollution generated in the tunnel would take us far a field. The interested

The Umbrella

We have thus far answered the objection of Tullock. The main highway bisecting the country cannot be used to cut off one section from the other. Any tendency to do that would be met by other road firms who would erect overpasses, or tunnels, allowing north-south traffic.

But we cannot conclude at this point, since there are many other criticisms to our position. Here is a simple one. Not only do trucks use the highway, but sometimes—rarely it is true but sometimes—the highways are used to transport far larger objects, such as oil drilling rigs, houses, barns, Ferris wheels, etc. Often they are, of course, broken down into smaller pieces. This facilitates conveyance, but only at price. However, at other times ,these are carried from one point to another as they are, in their entirety. Then, the capacity of the highway to service them requires a height of, say, 100 feet or more.

The response to this is relatively easy. Either the bottom of the overpass must be 100 feet or so from the ground, or it must be in the form of a drawbridge, which can accommodate such traffic, however rare. The highway owner may be said to have home-steaded such a right. An overpass which did not allow for this would thus limit his control over his property.¹⁸

A more complex objection is the following: If it is all right for a bridge to be built over a highway, against the objections of the road owner, why is it not legitimate for a person to create a very large umbrella over an entire city, blocking rain, snow, sunlight, and a view of the sky? For this is exactly what is being done to the highway owner, only on a vastly smaller scale.

reader is referred to Murray N. Rothbard, "Law, Property Rights, and Air Pollution," in Walter Block, ed., *Economics and the Environment: A Reconciliation* (Vancouver, B.C.: Fraser Institute, 1990).

¹⁸The same analysis applies to a real edifice of 100 feet in height, or an imaginary case where the road owner transports something much larger. Consider the transportation of the Eiffel Tower from Boston to Los Angeles along his road, in order to forestall the creation of any overhead bridges.

With this objection, the position of the private road advocate is seemingly rendered precarious. For he must now either renounce highway privatization, or embrace a situation where living in cities¹⁹—any city—would become well nigh untenable. Are there any replies open to him? Fortunately for his position, there are.

First, he could put forth the *de minimis* argument: that blocking out the sun and rain for a small patch of highway is significantly, and thus relevantly, different from doing this for an entire city. He could maintain that the pain and suffering undergone by a motorist traveling from Boston to L.A., forced to travel under several scores of overpasses during the 3,000-mile trip, would be nothing compared to rendering an entire city all but uninhabitable. He could insist, furthermore, that there is more than a scale difference involved. Or, alternatively, that the sheer divergence in scope renders an otherwise similar situation dissimilar.

But for all this, however, there is still the nagging doubt that the analogy is a good one. If someone may erect a bridge over a patch of highway, he would, on this principle, be justified in building an umbrella over an entire city.

VIEW OWNERSHIP

This charge is further buttressed by the claim that, under free enterprise, views can be owned. If so, the would-be builder of the bridge cannot be allowed to engage in this activity for an entirely separate reason: not only because he is infringing on the property right of the "monopoly" road owner, but because he is cutting off his view.

This, too, would fail, because the drawbridge overpass would allow for the infrequent, theoretical and threatened movement of such a structure.

¹⁹Were the technology sufficient, this objection could be expanded to include the whole world. Why be content with placing a big umbrella above a single city, if one had the option of placing the entire globe in a gigantic cloth envelope, which would in like manner keep snow, rain and sun off the surface, and, for good measure, interfere with the evaporation process?

Based upon a superficial analysis, there is some coherence in this position. After all, if views cannot be owned, much of the property value of "view properties" will be lost. For example, if the owner of the ocean²⁰ can erect a large fence preventing shoreline property owners from looking out upon it, their property will be worth far less than it is now under present institutional arrangements. As against that, it is not so much that this system will imply a loss of value as much as a transfer. For if the ocean owner can threaten to build a fence, he can also charge for not erecting it as well.²¹ In this case the homeowner's loss ought to be offset by the ocean owner's gain.

But a stronger defense for the impossibility of view ownership is that it would over-determine property rights. A well functioning system would not allow for any intrinsic conflicts. That is to say, property rights must be specified in such a way as to prevent two different people from each owning the same right. But this is precisely the flaw in the concept of view ownership. If A owns a view, he should be able to alter it in any way that suits him, and prevent anyone from changing it without his permission; this, after all, is the essence of ownership. But if this view includes B's house, A may dictate the color, shape, size, etc., of this dwelling. That however, would play havoc with the idea of

²⁰If we are contemplating full private ownership of roads and highways, there is no reason to be behind when it comes to bodies of water such as oceans, lakes and rivers. See Walter Block, "Institutions, Property Rights and Externalities: The Case of Water Quality," in *Agriculture and water Quality: Proceedings of an Interdisciplinary Symposium*, Murray H. Miller, J.E. FitzGibbon, Glenn C. Fox, R.W. Gillham and H.R. Whiteley, eds. (Guelph, Ont.: Guelph Centre for Soil and Water Conservation, 1992) for a defense of this proposition.

²¹For the case in behalf of legalizing such blackmail, see Walter Block, "Trading Money for Silence," *University of Hawaii Law Review* 8, no. 1 (Spring 1986): 57–73; Walter Block and David Gordon, "Blackmail, Extortion and Free Speech: A Reply to Posner, Epstein, Nozick and Lindgren," *Loyola of Los Angeles Law Review* 19, no. 1 (1985): 37–54.

B owning his own abode. Not only could A prevent B from creating this building, he could also preclude him from tearing it down, as that too, would change his view.

Even if views cannot be owned by the very nature of things, this still rescues private ownership only partially. This doctrine can now deflect the charge about the bridge obstructing the view, but it is still vulnerable to the one about it interfering with the sunlight, rain, etc., and other accoutrements of property ownership.

One possible defense against the Tullock position is the claim that sunlight, rain, wind, etc., cannot be owned. If so, there is one less objection to the erection of the overpass. Is it possible to maintain that even these things cannot be owned? No. One practical implication of this admission would be that no farming could take the place; at least not if a malevolent person wished to erect a gigantic umbrella above the fields, cutting off the necessary wind, rain, and sunlight. But we need not resort to mere pragmatism—which is unworthy of us—to make our case. Homesteading of these weather amenities is very much in "keeping with the land," when a man homesteads a piece of land, he also does so with regard to the sunlight, rain, etc. *All* are necessary to bring in the crops.

Aha!, says the critic. This may be all and well for farms, but cities are an entirely different matter. Without doubt there are some metropolitan areas, which began as farming communities. And in these cases, the homesteading by the farmers of wind, rain, sunlight, etc., could pass over to the downtown landlords when they purchased the agricultural land, so endowed. Here there is no problem: the umbrella cannot be installed because the owners of city land own the rights to weather. They did not homestead these amenities on their own, but they purchased them from the farmers who did "mix their labor" with them.

However, there are some cities, which did *not* begin their life in such a manner. Rather than being converted from cleared and planted acreage, they started as trading depots, manufacturing and trade centers, etc. *Here*, there can be no claim of Lockean homesteading for rain, sunlight, etc. City life is able to function quite well in the dark.²² Can the "umbrella monster" objection hold sway at least in this case?

ANTICIPATION

One way to obviate it would be to conjure up a case where this threat was anticipated. Suppose you owned some (not exagricultural) city property, and wanted to benefit²³ from the sunlight and rain. How could you preclude the construction of the "umbrella" which would block out the sun and rain for yourself, and cooperatively, with and for your surrounding neighbors? One possibility would be to erect a very large tower, or even a stick, so high that it would render practically impossible the placing of a tarpaulin over the city.²⁴ What steps might be taken

²⁴The analysis, but in the other direction, applies to the tunnel. In the one case, the stick would be erected in an upward direction. In the other case, it would aim downward. I owe this point to Matthew Block.

²²And of course there are those critics who claim it can function better in this manner.

²³Outside of the "public good" literature see Jeffrey Rogers Hummel, "National Goods vs. Public Goods: Defense, Disarmament and Free Riders," Review of Austrian Economics 4 [1990]: 88–122; Murray N. Rothbard, "Toward a Reconstruction of Utility and Welfare Economics," The Logic of Action One: Method, Money, and the Austrian School (Cheltenham, U.K.: Edward Elgar, 1997). Where economists seem very certain that some phenomena are unmitigated "goods" (e.g., national defense) and other unmitigated "bads" (e.g., species extinction), common sense and elementary subjectivism (Ludwig von Mises, Human Action [Chicago: Regnery, 1966]; James M. Buchanan, Cost and Choice: An Inquiry into Economic Theory [Chicago: Markham, 1969]; James M. Buchanan and G.F. Thirlby, L.S.E. Essays on Cost [New York: New York University Press, 1981]) tells us that what is pleasurable to one person is disutility to another. "One man's meat is another man's poison." Or to give a more modern example, perfume undoubtedly creates external economies for some, but others are allergic to it and thus for them it is a diseconomy. There can be no doubt that what some fear and loathe as the "umbrella monster" would be positively welcome by others as a great boon. After all, one of the benefits of modern shopping mall is the ability to shut out the weather, whatever it is on any given day.

by your opponent in these very hypothetical circumstances? Well, he could²⁵ build his umbrella with a hole in it to accommodate your stick. It would be a strange looking umbrella, but it might still function so as to achieve its task: blocking out the sunlight and rain, and thus supporting Tullock's objection to building bridges over private highways without their owner's permission.

Suppose that there were not one but several (dozens?) of large poles erected in the city, with the sole purpose of obviating the tarp monster. This would not entirely succeed, since even with an umbrella, which resembled a Swiss cheese, enough harm might still be done to the inhabitants of the city to render Tullock's objection a powerful one.

But the defense is not without at least one more reply. Instead of stationary sticks, it could construct them so as to rotate at the top. If so, and again on the assumption that equal technology mandates equal heights for the stick(s) and the tarp, this would not entirely reduce the offense to a rubble. It would all depend on how big the holes were in the "Swiss" cheese relative to its total area, and whether such a "Swiss" cheese could still be supported, and how much damage to the inhabitants below it would be capable of rendering.

There is at least enough uncertainty in such a scenario to render the road privatization argument immune from the objection that building a bridge over someone else's highway would not create the antinomy of unlivable cities. That is to say, the bottom line on the stick-umbrella mental experiment is not an overwhelming win for the Tullock side of the debate. It might just be

²⁵We ignore the case where either you or he could build a better, higher stick. We assume that technology is equal between the two combatants in this strange contest. If anything, the (slight) natural advantage is against the tarp monster. He has to build, not one, but four sticks, so as to hang his gigantic cloth between them; or, if he creates an umbrella, which by definition has only one pole, he has to build it more strongly than the mere defensive stick. For he would have to ensure it was strong enough to carry acres of cloth, a task not required by the defender.

that, given the natural advantages of twirling sticks over the tarp, one could build the bridge over the highway without setting up a principle of private property rights that would unduly disaccommodate the city dweller.

Nevertheless, just for argument's sake, and to make the case for road privatization as difficult as possible,²⁶ we are going to concede to the offense the "win" in this competition. That is, we posit the notion that, if someone may with impunity build a bridge over the private road owner's property, there is no reason he cannot erect a monster umbrella over a city, blocking out its sunlight and rain. We further suppose that this would not only be of great harm, but would be intolerable. On the basis of our discussion of poles, tarps, "Swiss" cheese, etc., we conclude that it is a violation of private property rights to build the tarp over the city. If so, we must perforce also concede Gordon Tullock's point that as far as a building is concerned, a private roadway stretching from Boston to L.A. would indeed cut the country into two parts, and each part off from the other. All this follows from our stipulation.

But only if we are discussing an ordinary bridge. Happily, for the case for road privatization—insofar as it depends upon connecting the country by leaping over the private road—it is possible to specify a bridge in such a manner so as to overcome this objection.

Suppose the bridge were not opaque, but built of glass. This would allow the sun to come shining through. There would of course still be a problem with the rain. Suppose, further, then, that the bridge were not built of solid material, but rather a mesh, or grid; as long as the holes were not too big, a roadway constructed in this manner could both support vehicular traffic and also allow the rain to fall on the highway below pretty much as it otherwise would have. Further, the whole structure could be

²⁶Winning debates over the bodies of straw men is an unedifying exercise.

made in the form of a drawbridge, in case the initial road owner wanted to transport an oversize (overheight) parcel.

CONCLUSION

What, then, can we conclude from this discussion? The resolution is that Tullock's support of road socialism must fail. It is without merit, first and foremost due to the possibility of bridging over, or tunneling under, the "hostile" road owner. Second, it can fail if we conclude, on the basis of private property rights consideration, that no one could build the umbrella over the city, due to the practical power of defensive poles. Alternatively, Tullock's view may be disregarded even if the tarp does block out the sun and the rain, provided that this is deemed as desirable, i.e., is an external economy, not a diseconomy. Fourth, and finally, we need not acquiesce in road socialism even if the offense is given the nod over the defense on the tarp question, and the tarp is interpreted as a negative diseconomy, provided that the overpass is drawbridge, built of glass mesh.

But the Tullock side of the debate is not without one further possible objection: the hostile road owner, like the city folk, can build a series of sticks both upward and downward, in an attempt to forestall the erection of an over- (under-) pass. But here, unlike in the city case, the clear winner is the "offense;" that is, the road owner (defender) will have to place sticks throughout the 3,000 mile extent of his holdings, every ten feet or so, otherwise a traversing tunnel or bridge can be built. Even if we grant him a two-year start—something he is by no means necessarily entitled to—his is a tremendously expensive and daunting task. In contrast, all the "offense" needs to do is succeed once every dozen miles or so, the average distance between access points on modern, limited-access highways.

Further, increasing technology necessarily works against the "defender." Assume that every year innovations make it possible to extend the length of sticks, or bridges and tunnels, by, say ten feet. This would mean that the "monopolist" road owner would have to go through the process every year, that is, beat out its

opposition over a 3,000 mile length, when all the opposition has to do is to succeed in a few hundred discrete points. By contrast, the Nazi defenders had an easy task trying to anticipate where the Allies would land.

Notice how far the advocates of road socialism have to go in order to even mount an interesting attack on highway privatization. At a time when tens of thousands of people are being killed²⁷ on the highways and byways of the nation, instead of calling for privatization, Tullock is instead placing philosophical roadblocks in its path. He does so by inventing, not only a contrary-to-fact, conditional scenario, but by being granted, only for the sake of argument, the reasonableness of supposing that a road owner would not positively welcome access roads, and overpasses. This, of course, is unlikely in the extreme. We have contemplated such a strange occurrence only because it allowed us to wrestle with some highly theoretical objections to road privatization. We should, however, not lose sight of just how improbable a situation we have been dealing with.

²⁷For a view that this is not due to alcoholism, or vehicle speed, or any of the other dozens of phenomena apologetics for road socialism put forth as explanatory variables, but rather to lack of privatization, see Block, "Free Market Transportation: Denationalizing the Roads;" *Zoning: Its Costs and Relevance for the 1980s*; "Theories of Highway Safety;" "Public Goods and Externalities: The Case of Roads;" Rothbard, *For a New Liberty*; Woolridge, *Uncle Sam, The Monopoly Man*.

15 Comment on "Roads, Bridges, Sunlight, and Private Property"*

The paper by the two Blocks¹ refers several times to my position. I believe its origin was a brief conversation I had with the two of them several years ago. I have to admit that I do not remember exactly what was said, but I do know what my position on private roads is, and think I can defend myself without much difficulty.

There are several items here, one of which is the adoption by way of Rothbard of the "homestead" view of land title held by Locke. In this view, you obtain title to land by occupying land that no one else now owns and mixing your labor with it. The problem with this in the present day world is there is practically no such land available, hence you have to buy.

^{*}This chapter first appeared as Gordon Tullock, "Comment on 'Roads, Bridges, Sunlight and Private Property,' by Walter Block and Matthew Block," *Journal des Economistes et des Etudes Humaines* 7, no. 4 (December 1996): 589–92.

¹Walter Block and Matthew Block, "Roads, Bridges, Sunlight and Private Property Rights," *Journal des Economistes et des Etudes Humaines* 7, no. 2/3 (June–September 1996): 351–62.

If you look back at the chain of title of almost any existing piece of land, you will find that some time in the past there was a forcible disposition of a previous owner, and you are buying the title which descends from that forcible disposition. This is particularly obvious in the case of the United States. It should be pointed out that, in general, the Indian tribes that we displaced had a few generations earlier displaced other Indian tribes.

Locke, the actual originator of the argument that you get title by mixing your labor with unowned land wrote the constitution for the colony of South Carolina, which displaced a number of Indians. It was also a slave colony, although apparently Locke didn't approve of that.

But to return to the road problem, perhaps it is easiest to understand if we consider the situation when the railroads were introduced. They would all be built on a long thin piece of land, hence, the railroad charters usually had restrictions on the full title to it. The state governments took over the previous rules for canal and railroads. Basically, there was a general permission for anybody to build another railroad across an existing railroad, normally by condemning a right of way sometimes as a sort of price on the permission to build the railroad. Of course, roads and canals have the same privileges.

The extension of this rule to other forms of transportation including pedestrian traffic is obvious. When pipelines and then later electric, high-tension lines came in, they were also given the same privileges. Ultimately, a new and improved technology for moving coal, slurry pipelines, was invented which wasn't mentioned in existing legislation. The proponents went to Congress to see if they could get the current laws amended. There then followed a vast battle of lobbyists which, unfortunately, the railroads won so that we have no slurry pipelines. No one seems to have tried building a very high bridge or drilling a tunnel under existing railroads, although most pipelines are built underground.

The Blocks' position is one which I run into occasionally from what I call the real, private ownership enthusiasts. They just don't let the government have any power. The Blocks are like the rest of them in that, for some obscure reason, they think that the courts are not part of the government. They have the courts making the decisions of how far up or how far down ownership extends. Why the court is more qualified than the legislature is not obvious. Both frequently make bad errors.

So much for this important but easy problem, the fact that if you had private and total ownership of roads, it would be possible to purchase all the houses around a given plot of land, let us say the roughly one square mile upon which my house and several hundred other houses stand. Then by charging for crossing your property you could collect the full rental value of the enclosed land.

Incidentally, the Blocks seem to think that I believe that owners of the roads would prohibit people from crossing rather than charge them a toll. Since I have admitted that I do not remember the conversation in detail, it is possible that I said something which could be so interpreted. If so I regret it.

Let me now turn to another problem with respect to private roads which I think is equally important but harder to solve. I do not know a solution, but I have no proof that none exists. I normally challenge proponents of private roads to draw a road map in which competitive roads are shown. This is quite feasible with superhighways. Indeed, at the moment some people are building such private roads in the United States. With these roads it may well be that economies of scale will make competition impossible, but there is no way of telling until we have some more experimentation. For superhighways we can't say that private ownership is not feasible until we have at least ten years of experience.

On the minor roads the matter is different. To repeat, I have not proved that you cannot have competing road nets, but none of the people who are in favor of it have ever met my challenge to produce a set of competing road nets on a map. I would not like the only road from my house to be owned by a monopolistic income maximizer. Note the road could be, as in fact the road to my house is, owned by a private association which works exactly like a village. I discussed this at some length in my *The New Federalist*.²

Although the Sunshine Mountain Ridge Homeowners Association, in which I live, was set up by a private real estate firm, it behaves just like a government. There are many similar cases in the United States. This is actually collective ownership rather than an individual ownership, and functions by holding elections among the individual owners.

In general, with respect to privately owned roads, first we cannot give them full title, and the Blocks don't as they introduce their own idea of titles. This is an important problem but one that is easy to deal with. We just compel owners of roads to permit people to cross them.

The other problem which I think is harder but which I am not sure is impossible is generating a competitive system of roads. I take it not even the Blocks would favor a monopoly owning all of the roads in the near vicinity of their homes. In essence, they would be converted into renters or their landlord would be.

I am very much interested in experimentation in this area, and in particular the devices available now under which people can be charged for the use of the roads in terms of how much and when they use them. But the roads should be collective entities unless my problem given above of designing a competing road network is solved.

²Gordon Tullock, *The New Federalist* (Vancouver, B.C.: Fraser Institute, 1994), esp. pp. 9–16.

16 Roads, Bridges, Sunlight, and Private Property: Reply to Tullock^{*}

n September 1, 1992 at the Mont Pèlerin Society meeting in Vancouver, B.C., Canada, Gordon Tullock approached my young son (then, aged fourteen) and I in the hallway. He had a bone to pick with me. He stated he had heard that I favored the privatization of roads streets and highways, and that, if this were true, he was going to show me the error of my ways. I confessed that this was indeed the case.¹ He proceeded to outline his objection.

^{*}This chapter first appeared as Walter Block, "Roads, Bridges, Sunlight and Private Property: Reply to Gordon Tullock," *Journal des Economistes et des Etudes Humaines* 8, no. 2/3 (June–September, 1998): 315–26.

¹At that time I had already published on this topic: Walter Block, "Free Market Transportation: Denationalizing the Roads," *Journal of Libertarian Studies* 3, no. 2 (Summer, 1979): 209–38; *Zoning: Its Costs and Relevance for the 1980s* (Vancouver, B.C.: Fraser Institute, 1980): 299–330; "Theories of Highway Safety," *Transportation Research Record* 912 (1983): 7–10; "Public Goods and Externalities: The Case of Roads," *Journal of Libertarian Studies* 7, no. 1 (Spring, 1983): 1–34. Subsequently I have published, Walter Block, "Road Socialism," International Journal of Value-Based Management 9 (1996):

Under full privatization, he charged, it would be possible for a firm to own a highway stretching from, say, Boston to Los Angeles. I agreed. Professor Tullock continued with the claim that it would then be possible for the owner to "split the country in half," something that even the south couldn't attain in the Civil War. How could this be accomplished? Simply by the owner refusing to build exits or entrances, or to allow any other road to bisect his own, either by building a bridge over it or a tunnel under it. Naturally, Tullock conceded to my initial reply, this would not make much economic sense, as such a highway would hardly maximize profits. Nevertheless, he insisted, his scenario constituted a *reductio ad absurdum* for road privatization.

During the next few years, my son and I discussed practically nothing else apart from this challenge. I wrote up the result of our many discussions, and we published this as Block and Block.² The gist of our response to Tullock was that it would indeed be possible, even plausible, for other entrepreneurs to build tunnels under this "monopoly" road, or bridges over it, and that this would be fully consistent with the libertarian notion of homesteaded, private property rights.

Now, in Tullock,³ our debating partner once again defended his position of road socialism,⁴ and presumably used it to attack

^{195–207;} Walter Block and Matthew Block, "Roads, Bridges, Sunlight and Private Property Rights," *Journal des Economistes et des Etudes Humaines* 7, no. 2/3 (June–September 1996): 351–62; and Michelle Cadin and Walter Block, "Privatize the Public Highway System," *The Freeman* 47, no. 2 (February 1997): 96–97.

²Block and Block, "Roads, Bridges, Sunlight and Private Property Rights."

³Gordon Tullock, "Comment on 'Roads, Bridges, Sunlight and Private Property,' by Walter Block and Matthew Block," *Journal des Economistes et des Etudes Humaines* (1998): zx. Reprinted in the present volume as chapter 15.

the notion of private, capitalistic highways we offered in Block and Block.⁵ I say "presumably," since this is the usual pattern. When someone criticizes your view, and you reply, you usually

⁵Block and Block, "Roads, Bridges, Sunlight and Private Property Rights."

⁴It seems harsh, even to me, to characterize Gordon Tullock, who has done more work than most economists to defend the institution of private and free enterprise, as a "socialist." However, the shoe seems to fit, at least in this one case. After all, he does advocate that only government, and not the marketplace, should be allowed to own and manage highways. Were he to have done so for practically any other good or service (e.g., steel, the Post Office, autos, etc.) there would be no question but that this was socialism. Why then in this case does it appear so harsh to characterize these views in this manner? Perhaps it has to do with the widespread and deeply ingrained feeling of inevitability of state roadways, and the utter impossibility of any private alternatives. Good antidotes to this view include Block, "Free Market Transportation: Denationalizing the Roads;" Murray N. Rothbard, For a New Liberty (New York: Macmillan, 1973); William C. Woolridge, Uncle Sam, The Monopoly Man (New Rochelle, N.Y.: Arlington House, 1970); Gerald Gunderson, "Privatization and the 19th-Century Turnpike," Cato Journal 9, no. 1 (Spring/Summer, 1989): 191–200; Dan Klein, "The Voluntary Provision of Public Goods? The Turnpike Companies of Early America," Economic Inquiry (October 1990): 788-812; Dan Klein, John Majewski, and Christopher Baer, "Economy, Community and the Law: The Turnpike Movement in New York, 1797-1845," Journal of Economic History (March 1993): 106-22; idem, "From Trunk to Branch: Toll Roads in New York, 1800-1860," Essays in Economic and Business History 11 (1993): 191-209; Dan Klein and G.J. Fielding, "Private Toll Roads: Learning From the Nineteenth Century," Transportation Quarterly (July 1992): 321-41; idem, "How to Franchise Highways," Journal of Transport Economics and Policy (May 1993): 113–30; idem, "High Occupancy/Toll Lanes: Phasing in Congestion Pricing a Lane at a Time," Policy Study 170 (November 1993); Gabriel Roth, A Self-Financing Road System (London: Institute of Economic Affairs, 1966); Gabriel Roth, Paying for Roads: The Economics of Traffic Congestion (Middlesex, U.K.: Penguin, 1967); idem, The Private Provision of Public Services in Developing Countries (Oxford: Oxford University Press, 1987); Madson Pirie, Privatization in Theory and Practice (London: Adam Smith Institute, 1986); Robert W. Poole, Jr., Private Tollways: Resolving Gridlock in Southern California (Los Angeles: Reason Foundation, 1988); idem, Privatizing Wisconsin's Interstate Highways (Los Angeles: Reason Foundation, 1996), Policy Study 203 (April).

defend your view, and use him to criticize those of your intellectual opponent.

But in this case, try as I may, I find it difficult to discern in Tullock⁶ any reference to his original point (private roads could cut the country in half), or, indeed, any answer at all to our response to this charge.

Nevertheless, I am enough of a traditionalist to want to respond to what purports to be a critique of an article of mine, even though, in this case, this is only a very rough approximation of the truth. As it happens, there is some correspondence between Tullock⁷ and my own work on highway privatization; however, this refers not to Block and Block,⁸ Tullock's presumed target, but rather to Block.⁹

With this introduction, I press on to a consideration of Tullock.¹⁰

Homesteading

Tullock correctly identifies the source of my own inspiration for private property with the Lockean-oriented homesteading writings of Rothbard.¹¹ Here, in order to bring unowned land

⁶Gordon Tullock, "Comment on 'Roads, Bridges, Sunlight and Private Property,' by Walter Block and Matthew Block," *Journal des Economistes et des Etudes Humaines* 7, no. 4 (December 1996): 589–92.

⁷Ibid.

⁸Block and Block, "Roads, Bridges, Sunlight and Private Property Rights."

⁹"Free Market Transportation: Denationalizing the Roads."

¹⁰Tullock, "Comment on 'Roads, Bridges, Sunlight and Private Property'," by Walter Block and Matthew Block." All otherwise unidentified page citations refer to article.

¹¹See Rothbard, For a New Liberty; Murray N. Rothbard, The Ethics of Liberty (Atlantic Highlands, N.J.: Humanities Press, 1982): 54, 85–96; also see Hans-Hermann Hoppe, The Economics and Ethics of Private Property: Studies in Political Economy and Philosophy (Boston: Kluwer, 1993); Robert W.

into ownership, one must "mix one's labor with the land," e.g., homestead it. But the University of Arizona¹² professor is very much in error in stating that the homesteading principle no longer applies "in the present day world . . . [since] . . . there is practically no such [unowned] land available, hence you have to buy."¹³

First of all, there are vast tracts of land, which have never been homesteaded in northern Canada, Siberia, and Alaska, to say nothing of Antarctica. And this applies as well to the gigantic Sahara and other deserts of Africa, Russia, China and elsewhere. Second, there are large reaches of land west of the Mississippi, which are claimed by the U.S. government, and administered by the Bureau of Land Management. These, too, have never been homesteaded. When and if we arrive at the free society of capitalism, there are still airplane and bridge paths, which could be owned, as well as subsurface rights, for mining and tunneling. Fourth, even were it true that there were absolutely no more land on the surface of the earth¹⁴ that is unowned, hence, if you wanted to own some of it "you have to buy," homesteading theory would still be relevant to public policy considerations. For example, it is

¹³Tullock, quoted in chap. 15, p. 311.

McGee, "The Fatal Flaw in NAFTA, GATT and All Other Trade Agreements," *Northwestern Journal of International Law & Business* 14, no. 3 (1994): 549–65; Tibor Machan, "A Defense of Property Rights and Capitalism," in *Introducing Applied Ethics*, Brenda Almon, ed. (Oxford, England: Blackwell, 1995), 260–71; and Bruce L. Benson, "The Impetus for Recognizing Private Property and Adopting Ethical Behavior in a Market Economy: Natural Law, Government Law, or Evolving Self-Interest," *Review of Austrian Economics* 6, no. 2 (Spring, 1993): 4380.

¹²At the time of the writing of this article, Tullock was a professor at the University of Arizona. However, at present time, 2007, he is located at George Mason University.

¹⁴We pass over the fact that according to homesteading theory, the oceans, seas, rivers and lakes of the planet are also fair game. As well, this applies to the moon, to Mars, to the asteroids, and indeed any other real estate, which may one day become available for human utilization.

on the basis of homesteading that libertarians decide issues of reparations.¹⁵

Tullock seems to attack homesteading theory as based on theft: "if you look back at the chain of title of almost any existing piece of land you will find that some times in the past there was a forcible disposition of a previous owner."¹⁶ This, unhappily, cannot be denied. It is a sad commentary, however, not on homesteading, but on man's inhumanity to man.

As well, he objects to this doctrine on the grounds that some of its proponents, e.g., Locke, "wrote the constitution for the colony of South Carolina, which displaced [by force] a number of Indians."¹⁷ This, too, fails as a critique, as it amounts to no more than an argument *ad hominem*. Stalin, presumably, believed that 2+2=4. That he did so no more casts doubt on this mathematical truism than does anything negative that can be said about Locke¹⁸ undermine homesteading.

As we have seen, this doctrine is still of importance in these cases, perhaps even more so as it can point in the direction of justified reparations for such past misdeeds.¹⁹

 $^{18}\mbox{It}$ is hard to see why we should blame Locke for the actions of the South Carolinians.

¹⁹The libertarian starting point in all such cases is that possession is nine points of the law; e.g., the burden of proof is on those who would transform extant property titles. This is unfortunate for the Indians, who kept no written records, and for theft that occurred in antiquity, for which no written records have survived, since it will be all the more difficult to meet this burden. However, libertarian homesteading theory may well have important implications for more recent theft, such as that which occurred to the Japanese Americans during World War II, and even for the children of black slaves in America, who might reasonably claim what is now the property of the children of southern plantation owners who benefited from this outrage

¹⁵See Walter Block, "On Reparations to Blacks for Slavery," *Human Rights Review* 3, no. 4 (July-September, 2002): 53-73.

¹⁶Gordon Tullock, quoted in chap. 15, p. 312.

¹⁷Ibid.; bracketed material added.

RAILROADS AND CANALS

Professor Tullock offers us a brief economic history of U.S. railroads and canals. "Basically, there was a general permission for anybody to build another railroad across an existing railroad, normally by condemning a right of way."²⁰ And ditto for roads and canals. So far, so good. But then, he concluded from this situation that , "No one seems to have tried building a very high bridge or drilling a tunnel under existing railroads."²¹ Of course, no one in his right mind would consider doing any such thing when the government stood ready to violate private rights through condemnation. Anyone who did would tend to bankrupt himself, while his competitors avail themselves of the coercive power of the state.

But this does not at all counteract the point made in Block and Block,²² as Tullock implies. Our point was merely that if a highway owner refused to allow "breaches" in his road (e.g., entrance and exit ramps—cloverleaves—so that traffic could flow north and south even in the face of an east-west, ocean to ocean highway), then it might well pay for other road firms to engage in large extra bridge or tunnel expenses necessary to overcome this difficulty. Tullock's was a totally hypothetical critique of our model of private road ownership. Thus, it is to hit somewhat below the belt to claim that since in reality "[n]o one seems to have tried building a very high bridge or drilling a

⁽on this see Walter Block, "On Reparations to Blacks for Slavery," *Human Rights Review* 3, no. 4 (July–September 2002): 53–73; Walter Block, Geoffrey Brennan and Kenneth Elzinga, eds., *Morality of the Market: Religious and Economic Perspectives* (Vancouver: Fraser Institute, 1985); and Murray N. Rothbard, *The Ethics of Liberty* (Atlantic Highlands, N.J.: Humanities Press): 54, 85–96.

²⁰Tullock, chap. 15, p. 312.

²¹Ibid.

²²Block and Block, "Roads, Bridges, Sunlight and Private Property Rights."

tunnel under [an] existing railroad"²³ and this negatively impacts our point.

REAL PRIVATE OWNERSHIP ENTHUSIASTS

Tullock characterizes "The Blocks' position as being that of real private ownership enthusiasts. They just don't let the government have any power."²⁴ This, presumably, he does not mean as a compliment. Strange, this, coming from the pen, well, the word processor, of an economist celebrated as a free-market advocate. As it happens, this is a very accurate depiction of the views of one of the authors he is criticizing, but only a rough approximation of the other. In any case, it is rather beside the point of Block and Block,²⁵ which was to show, not that it would be unwise to give the government any power, but only control over roads, streets and highways. Surely, objecting to highway nationalization,²⁶ monopolization by government, should not count as an "enthusiasm," i.e., the archaic synonym for "hysterical."

And what of the charge that my co-author and I "think that the courts are not part of the government"? According to Tullock, this is because we "have the courts making the decisions of how far up or how far down ownership extends," instead of relying upon the legislature which has an equally poor record for making "bad errors."²⁷ We nowhere accept the view, forsooth,

²³Tullock, chap. 15, p. 312.

²⁴Tullock, "Comment on 'Roads, Bridges, Sunlight and Private Property'," p. 590.

²⁵Ibid.

²⁶Responsible for the death of some 30,000 or more Americans on an annual basis for many decades, see Walter Block, "Free Market Transportation: Denationalizing the Roads," *Journal of Libertarian Studies* 3, no. 2 (Summer, 1979).

²⁷Tullock, "Comment on 'Roads, Bridges, Sunlight and Private Property'," p. 590.

that the courts are not part of government. Nor do we wish them to decide the extensions of ownership. Rather, we favor the view that this be determined on the basis of homesteading: you can only own so far down or up as you can mix your labor with. Of course some institution has to interpret this; and who else but the courts? The legislature, in contrast, is not in the business of applying natural (homesteading) law, but rather of enacting new legislation. As far as I am concerned, we have had more than enough of the latter; we could do with a bit of the former.

The blockade

Professor Tullock charges, "if you had private and total ownership of roads, it would be possible to purchase all of them around a given plot of land." If so, the owner could "collect the full rental value of the enclosed land."²⁸ This very point was anticipated in my article of 1979. This was how I addressed it:

Thirdly, in the rare case of a holdout that possesses an absolutely essential plot, it is always possible to build a bridge over this land or to tunnel underneath. Ownership of land does not consist of property rights up to the sky or down to the core of the earth; the owner cannot forbid planes from passing overhead, nor can he prohibit a bridge over his land, as long as it does not interfere with the use of his land. Although vastly more

²⁸Ibid. Our author states, "Incidentally, the Blocks seem to think that I believe that owners of the roads would prohibit people from crossing rather than charge them a toll." He now regrets saying anything that would be so interpreted. But he need not. He stated this in our conversation, not as like-lihood as to what private owner would do, but what he could do, the better to refute our notion of private road ownership. Obviously, any rational profit-seeking road owner would do no such thing. But he certainly would have the power to do so if he wished, under the legal provisions of a private property rights oriented free society, which allowed private ownership. It was the burden of Block and Block, "Roads, Bridges, Sunlight and Private Property Rights," to show that even in this unlikely scenario the case for privatization need not be embarrassed.

expensive than a surface road, these options again put an upper bound on the price the holdout can insist upon.²⁹

At this point I would only add that Tullock's treatment suffers from being static as opposed to a dynamic one. That is, he treats the problem as occurring after the trapped homeowner has built his house. Now, in effect, he must cede its entire value to the encroaching road owner. Had our author stopped to ask about the motivations of the homeowner for building in the first place, he would have realized that the highway corporation would have to entice him into doing this. And the only way it could accomplish this task would be by contractually ensuring him that it would never do any such thing.

The road map

Tullock "normally challenge[s] proponents of private roads to draw a road map in which competitive roads are shown." This is possible, he concedes, in the case of limited-access highways, but we won't be able to say for sure "until we have at least ten years of experience." However, we have had limited access toll highways for centuries! Indeed, the first highways were private turnpike toll roads.³⁰ Surely, according to this timetable, we should long ago have attained the information necessary to answer this question.³¹

³¹Tullock, "Comment on 'Roads, Bridges, Sunlight and Private Property'," p. 590. It cannot be denied that private turnpikes only started centuries ago, but did not remain in business all during that time. They failed,

²⁹See Block, "Free Market Transportation: Denationalizing the Roads," p. 218.

³⁰See Block, "Free Market Transportation: Denationalizing the Roads," Klein, "The Voluntary Provision of Public Goods? The Turnpike Companies of Early America," Klein, Majewski, and Baer, "Economy, Community and the Law: The Turnpike Movement in New York, 1797–1845"; idem, "From Trunk to Branch: Toll Roads in New York, 1800-1860," Klein and Fielding, "Private Toll Roads: Learning From the Nineteenth Century"; idem, "How to Franchise Highways."

It is entirely another matter, for Tullock, when it comes to "minor roads," by which I assume he meant city streets, byways, alleys, avenues, lanes, etc. Here, he repeats his "challenge," which "no one has ever met" to illustrate this schema on a map. And he underscores the importance of doing just that: "I would not like the only road from my house to be owned by a monopolistic income maximizer."³²

There are two alternative competing definitions of competition and monopoly, which have currency in the economics literature. According to the mainstream or neoclassical one,³³ competition requires that a homogenous good be sold by thousands of small "competitors," each of whom earns zero profits since there is full information about all aspects of the business and entry and exit are costless. Monopolistic elements enter whenever any of these conditions are missing altogether or even attenuated. There is no possible way that private roads could be competitive in this sense. Indeed, there is serious question whether any industry can fit this bill. The main reason for this definition is to support antitrust legislation.

Fortunately, there is an entirely different definition of competition and monopoly, a far more reasonable one. In the Austrian view,³⁴ a competitive industry is one in which there is free (not

for the most part, when government refused to uphold law against theft of services, by not punishing those who avoided payment for road usage. However, these private roads did last for far more than a mere ten years. Also, if we count railroads as "roads," then we have another large source of empirical information of the sort Tullock is seeking.

³²Ibid.

³³Which need not be cited since it is so prevalent in the profession.

³⁴For an Austrian critique of neoclassical monopoly theory, see Dominick Armentano, *Antitrust and Monopoly: Anatomy of a Policy Failure* (New York: Wiley, 1982); Dominick Armentano, *Antitrust Policy: The Case for Repeal* (Washington, D.C.: Cato Institute, 1991); Don Armstrong, *Competition vs. Monopoly* (Vancouver, B.C.: Fraser Institute, 1982); Walter Block, "Coase and Demsetz on Private Property Rights," *Journal of Libertarian* Studies 1, no. 2

costless!) entry; that is, no law exists which prohibits newcomers from taking part. How many firms actually choose to conduct business, and what proportion of total industry sales or employment or profit or anything else they account for, is strictly irrelevant. An industry can be competitive in this sense with one, two, a dozen, a hundred or a thousand firms in it, as long as there is no restricted entry. In contrast, a monopoly is a company that enjoys legal barriers, which keep out actual and potential competitors.

It will be clear from this Austrian definition that monopolistic roads are necessarily governmental, while competitive ones are necessarily private. Thus, Tullock, in his fear of a monopoly road owner surrounding his house, is rather misguided. He already has one such!

But what about this author's fear that the "monopolistic income maximizer" would take advantage of him by charging him such high prices for access to his home that the entire value of it would be dissipated? As we have seen, this is a non-issue. If a private road owner completely surrounds Tullock's house, of course, no one else can compete, but this would be due to the fact that the relevant private property rights would already be owned, and, thus, not available to another competitor. Since there would be no legally prohibited entry, apart from this, Tullock's

⁽Spring, 1977); Walter Block, Amending the Combines Investigation Act (Vancouver, B.C.: The Fraser Institute, 1982); idem "Libertarianism vs. Libertinism," Journal of Libertarian Studies 11, no. 1 (Fall, 1994); Donald Boudreaux and Thomas J. DiLorenzo, "The Protectionist Roots of Antitrust," Review of Austrian Economics 6, no. 2 (1982): 81–96; Jack High, "Bork's Paradox: Static vs Dynamic Efficiency in Antitrust Analysis," Contemporary Policy Issues 3 (1984–1985): 21–34; Fred McChesney, "Antitrust and Regulation: Chicago's Contradictory Views," Cato Journal 10 (1991); Murray N. Rothbard, Power and Market: Government and the Economy (Menlo Park, Calif.: Institute for Humane Studies): chap. 1 and pp. 87–90; William F. Shugart II, "Don't Revise the Clayton Act, Scrap It!," Cato Journal 6 (1987): 925; Fred L. Smith, "Why Not Abolish Antitrust?," Regulation (January–February 1983): 23.

scenario would count, for the Austrian, as a competitive one. However, it is extremely unlikely that any homeowner would put himself in such a position without contractually obligating this competitive road owner to specify an attractive, e.g., competitive price for access before he purchased the house in question. Thus, full competition takes in the dynamic Austrian—not the static, neoclassical—sense.³⁵

PRIVATE "GOVERNMENTS"

Tullock himself mentions yet another competitive scenario: his own "Sunshine Mountain Ridge Homeowners (sic) Association."³⁶ This is competitive in precisely the sense specified. The Sunshine Association had to compete with all other condominiums in the neighborhood in order to attract would-be homeowner Tullock. Although a private road-owning concern, they must have guaranteed to our author that he would be permitted access to the home they were trying to sell him; he wouldn't have made the purchase unless the package deal (home plus access) was worth more to him than the sale price.

Does Tullock admit defeat, since here is the quintessential case of what Block and Block³⁷ specified: a viable, private, competitive road-owning firm which does not exploit its customers? He does not. Instead, he claims that Sunshine "behaves just like a government." It features "collective ownership . . . and functions by holding elections among the individual owners."³⁸

³⁵This is of course not the "perfect" competition of the neoclassical. It is the rivalrous competition of the Austrians.

³⁶Tullock, "Comment on 'Roads, Bridges, Sunlight and Private Property'," p. 591.

³⁷Block and Block, "Roads, Bridges, Sunlight and Private Property Rights."

³⁸Tullock, "Comment on 'Roads, Bridges, Sunlight and Private Property'," p. 591.

In other words, when his challenger is met (I can draw a "map" of the private Sunshine roads which are not limited access highways, but rather "minor" traffic arteries), he attempts to escape unscathed. This really will not do. The Sunshine Association is no more like a government than a fish is like a bicycle. Yes, both organize elections. But so does the local chess, bridge or flower club. Would Tullock also characterize these as governmental? I wouldn't put it past him.

Anyone who can so mischaracterize political economic reality as to label a private club, a totally voluntary association, as a government, is capable of practically anything.

States Schumpeter in this regard:

the state has been living on a revenue which was being produced in the private sphere for private purposes and had to be deflected from these from these purposes by political force. The theory that construes taxes on the analogy of club dues or of the purchase of the services of, say, a doctor only proves how far removed this part of the social sciences is from scientific habits of mind.³⁹

There is all the world of difference between the club dues and entry fees "imposed" by the Sunshines of the world and the taxes levied by the government. In the former case, they sell Tullock a house, and the right to use their road; but this is their own private property, and they have every right to ask whatever price they wish. In the latter case, government forces the Tullocks of the world to pay taxes for "services" they may or may not favor. If they refuse to enter this "deal," they are threatened with incarceration.

But isn't the government just like a gigantic club, in that we all have initially agreed to the constitution, under which government asks us to uphold our end of the bargain and pay whatever

³⁹Joseph A. Schumpeter, *Capitalism, Socialism and Democracy* (New York: Harper, 1942): 198; emphasis added.

taxes (club dues) a majority decides? Not a bit of it. This response is simply not available to Tullock. The simple fact of the matter is that none of us now living, nor even anyone at the beginning of the United States, signed any such document.⁴⁰ Do we not give voluntary assent to the government merely by continuing to live where we are and to pay taxes? No more than we would give assent to a highway man⁴¹ by paying him under the threat of a gun; no more than do we give consent to robbery in the inner cities by continuing to live in these dangerous areas.

COMPULSION

Tullock has an easy answer to the question he has posed for himself. Is there a problem with a "monopolistic" private owner (for the Austrians, a veritable contradiction in terms)? Well, then, "we just compel owners of roads to permit people to cross them."⁴² How convenient, at least for the compeller, if not the compellee. But how to reconcile this with a much vaunted reputation as a free market advocate?

According to Tullock, "not even the Blocks would favor a monopoly owning all roads in the near vicinity of their homes. In essence, they would be converted into renters or their landlord would be."⁴³ We have already seen how innocuous is the Sunshine Association's ownership of such streets.

In any case, what is wrong with renting houses, if that is the preference of the private "monopoly" street owner? Alternatively,

⁴⁰A handful of men signed the Declaration of Independence, a very different document. Even had these few signed the Constitution itself, how could that commit the millions of others alive at the time to "club" membership.

⁴¹Lysander Spooner, *No Treason* (Larkspur, Colo.: Pine Tree Press, [1870] 1966).

⁴²Tullock, "Comment on 'Roads, Bridges, Sunlight and Private Property'," p. 591.

⁴³Ibid.

if the occupiers of the homes want to own, not rent, all they need do is patronize a different private "monopoly" road firm. In such a way, competition is brought to bear in this industry.

17 Who is Responsible for Traffic Deaths?

et us posit, if only for argument's sake,¹ that the cause of road fatalities is governmental mismanagement, and not the usual litany of explanations (e.g., speeding, drunk driving, vehicle malfunction, driver error, bad weather, etc.) Some 40,000 people lose their lives each year on U.S. highways.² Is the government, under these assumptions, responsible for them all? One criticism of this thesis is that bureaucratic management is not at all so responsible, for if the state were not in charge of managing vehicular transportation arteries, then private enterprise would do so. In this case, we would have to subtract the number of fatalities under these alternative institutional arrangements from present statistics. Then, central planning would be liable for either fewer deaths, if under market conditions fewer people would die, or, perhaps, none at all if more fatalities occurred under these conditions. For example, if under

¹Many of the other chapters in this book make precisely this case. Here, then, we merely assume it to be true.

²For the official statistics, see http://www.publicpurpose.com/hwy-fatal57+.htm.

laissez-faire capitalism for roads, say, 50,000 would perish; then, far from the government being liable for any deaths at all, it would be credited for saving 10,000 per year. Alternatively, suppose that with private property highway firms managing this resource, only 15,000 would lose their lives. Then, by subtracting this amount from the extant figure (40,000 - 15,000 = 25,000) we deduce that government was responsible for killing only 25,000, not 40,000 people.

Let us now attempt to analyze this situation and lay blame for highway fatalities where it belongs. We do the blaming, not for the sake of blaming, but, rather, in an attempt to ameliorate conditions. We can scarcely achieve improvement if we are not clear as to the cause of this calamity of roadside deaths.

So, is it likely that private enterprise would be run more efficiently in this regard than the public sector and thus kill fewer people? It is difficult to definitively arrive at any such conclusion, since what we are involved in is a contrary-to-fact conditional: at present, government owns and manages the roads. But if this were not so, and *if*, instead of the status quo, somehow entrepreneurs were to take over these reins, then what would be the highway death toll? To appreciate the difficulty of any such extrapolation, imagine the scenario wherein wristwatches were always manufactured by government, and now the private sector was about to take over. The questions would come thick and fast, with no obvious answer: how many companies would go into this business? What would their profits be? Where would they locate? Would wrist bands be made of leather or metal, and would these two industries be vertically integrated or not (e.g., would one firm manufacture the former, and another the latter, or would both come under the auspices of only one company)? What proportion of watches would feature Mickey Mouse, be waterproof, or feature stopwatches? Would these timepieces be sold outright, or be given as gifts to people who opened bank accounts? The reason these questions cannot be answered beforehand is because they are essentially entrepreneurial issues, not economic ones. The answers can only emerge in a market, and cannot be predicted by non-market participants, such as economists.

Despite the foregoing considerations, however, even if no exact answers can be gainsaid, it might be possible to pierce the fog to some small degree and attain some measure of information, some ballpark estimates.

For one thing, it is exceedingly probable that roads markets will outperform bureaucrats; they do so, after all, in every area of endeavor for which there are comparable statistics.³ In fact, there is even a "two to one" rule that emanates from this literature:⁴ for every dollar spent by private enterprise to shift a ton of garbage, pave a given distance of road, or offer a given amount of fire protection, doing such a job through the public sector will cost two

³Says William L. Megginson and Jeffrey M. Netter, "From State to Market: A Survey of Empirical Studies on Privatization," *Journal of Economic Literature* 39 (June 2001): 380: "Research now supports the proposition that privately owned firms are more efficient and more profitable than otherwise comparable state-owned firms."

⁴According to E.S. Savas, *How to Shrink Government: Privatizing the Public* Sector (Chatham, N.J.: Chatham House Publishers, 1982), p. 93: "the cost of municipal (solid waste collection) service (is from) 61 to 71 percent greater than the cost . . . of contract collection." Stated Steve H. Hanke, "Money and the Rule of Law in Ecuador," Speech given in Quito, Ecuador (October 2003): "The public cost incurred in providing a given quantity and quality of output is about twice as great as private provision. This result occurs with such frequency that it has given rise to a rule-of-thumb: 'the bureaucratic rule of two'." For more on this, see Steve H. Hanke, "Privatization," in James Eatwell, Murray Milgate and Peter Newman, eds., The New Palgrave: A Dictionary of Economics (London: Macmillan Press, 1987), pp. 976-77. For further cost comparisons, all to the denigration of the public sector, see James T. Bennett, Better Government at Half the Price (Boston: Gree Hill Publishing, 1980); Thomas erding, ed., Budgets vs. Bureaucrats: The Sources of Government Growth (Durham, N.C.: Duke University Press, 1977); James T. Bennett and Thomas DiLorenzo, "On Weather Forecasting," Journal of Labor Research (1983); idem, Unfair Competition: The Profits of Non-Profits (New York: Hamilton Press, 1989); Robert Poole, Cutting Back City Hall (New York: Reason Press, 1976); E.S. Savas, "Refuse Collection," Journal of Urban Analysis (1979).

dollars. If we can extrapolate from this phenomena to highway fatalities, and translate directly from cost savings into lives saved, then, employing the "two to one" rule we arrive at the result that under private control, deaths will be cut in half, from 40,000 to 20,000.

What is the evidence for this "two to one" claim? Khursheed and erding⁵ state:

Scottsdale (Arizona) saves forty-seven percent in costs by contracting out for fire protection services. In other words, if Scottsdale had chosen to have the public sector provide its fire protection, production costs would have close to doubled.⁶

Is there any reason to believe that private/public advantages would be even more pronounced in street and highway management than in the more pedestrian goods and services such as running a bus line or delivering the mail? There is, there is. The former is tremendously more complicated than the latter. It is sometimes said "X is too complicated to be left to the marketplace." In point of fact, the very opposite is the case. If there is a simple function, such as, perhaps, running a lemonade stand, something that any halfway competent seven year old child could accomplish, then, maybe, the state apparatus could acquit itself not too badly in the provision of this beverage.⁷ In other words, if nationalize or municipalize we must for a given number of items, then it would undoubtedly be best to give over to the bureaucrats such simple and unimportant items such as lemonade, rubber bands, paper clips and their ilk, reserving

⁵Aayisha F. Khursheed and Thomas E. erding, "Organizing Government Supply: The Role of Bureaucracy," in Fred Thompson and Mark T. Green, eds., *Handbook of Public Finance* (New York: Marcel Dekker, 1998): 46–47.

⁶See on this also R. Ahlbrandt, "Fire Protection," *Public Choice* (1973).

⁷Although the question would surely arise, "Would you buy lemonade from the government?"

more important and complex provision such as highways to the always more efficient private sector. To return to our attempts to calculate the relative efficiency of public and private enterprise, if there is a two to one rule that operates regarding easy to supply products and services, then, perhaps, this rule might be amended to a three to one rule for difficult goods, such as surface transportation. If so, then, according to our calculations, highway fatalities would be cut to a third of their present level, and we would move from 40,000 to 13,334.⁸

We can, however, go even further than that in this direction, far further. Bennett and DiLorenzo (1983) report that, insofar as weather forecasting is concerned, the private sector costs are only some 28 percent of what federal government forecasters do. If we can extrapolate from this (roughly) four to one bit of empirical evidence in a very different field of endeavor to road fatalities, deaths can be cut from a horrendous 40,000 to a "mere" 10,000.

But this is not at all the way that White sees matters. He states:

Block ... attempts ... to pin ... the blame for all highway fatalities on the government. The argument . . . consists of two related parts: 1) all highway deaths can be causally *attributed* to government management; (2) the government is *morally responsible* for these deaths. . . .

Would the highway fatality rate be *zero* under a system of private ownership of the roads? There is good economic reason to suspect not. . . . It is not presently zero in private amusement parks, or in private road racing, or in private air travel. If we cannot then attribute *all* highway deaths to governmental administration of the highways, how many can we so attribute? I find it impossible to say, for it is impossible to know *a priori* what the death rate would be under private ownership and

⁸It will be readily appreciated that these numbers are used for illustration purposes only, and have no basis in any actual statistics.

management. It does not seem so implausible to me to suppose that it might be even higher than the present rate.⁹

Let us first focus on attribution. Let us posit the claim that governments have murdered some 173 million of their own citizens in the last century, and that, specifically, the partial breakdown was as follows: Mao, 60 million; Stalin 20 million; Hitler, 11 million; Pol Pot, 2 million. Assume, *arguendo*, all of these figures¹⁰ to be true. Following White's logic, we would not be able to make any such attribution. Why? Because all such figures ignore contrary-to-fact conditionals. To wit, had these governments not gone on their various murderous rampages, some of these people, assuredly, would have died in any case. Some would have perished, merely, of old age. Others would have died from diseases completely unrelated to statist mismanagement, and therefore could not be fairly attributed to their socialized medicine nostrums, for example.

White's, in other words, is an improper use of the concept of "attribution." In my view, there is no need at all to refer to such contrary-to-fact conditionals. If Hitler, for example, murdered 11 million people, then, by gum and by golly, he killed 11 million people. The fact that, say, one million of them would have died in the half decade it took the Nazi regime to accomplish this slaughter is completely beside the point. They obliterated 11 million, *dagnabit*, not 10 million.

⁹Lawrence H. White, "Comment on Block," unpub. manuscript, p. 1.

¹⁰See on this Robert Conquest, *The Great Terror* (Edmonton, Alberta: 1990); ibid., *The Harvest of Sorrow* (New York: Oxford University Press, 1986); Stephane Courtois, Nicolas Werth, Jean-Louis Panne, Andrzej Paczkowski, Karel Bartosek and Jean Louis Margolin, *The Black Book of Communism: Crimes, Terror, Repression*, trans. from French by Jonathan Murphy and Mark Kramer (Cambridge, Mass.: Harvard University Press, 1999); R.J. Rummel, *Death by Government* (New Brunswick, NJ: Transaction Publishers, 1994); ibid., *Democide: Nazi Genocide and Mass Murder* (New Brunswick, N.J.: Transaction Publishers, 1992); ibid., *Statistics on Democide* (Charlottesville, Va.: Center on National Security and Law, University of Virginia, 1997).

But we do not need to resort to mass murderers of a gargantuan scale to make the point that White misconstrues what it is to "attribute" responsibility for an act to someone. It applies to moderate mass murderers as well. Janet Reno took responsibility for the unjustified killing of some 86 innocents including women and children at Waco,¹¹ as did Tim McVeigh for 168 people, also including women and children, at the Murrah Federal Building in Oklahoma City.¹² Perhaps—likely, even—some of these would have otherwise died of natural causes, had these nefarious deeds not taken place. Yet, we still "attribute" all 86 to Reno, and all 168 to McVeigh, this alternative possibility notwithstanding. Hence, there is no need at all to determine the contrary-to-fact conditional of how many people would have perished on the nation's roads were they privatized, and to subtract this number from the 40,000 or so who are butchered under governmental management.

The highway fatality rate need not at all be zero under a system of private ownership to entitle us to attribute to government all the fatalities currently occurring under public sector auspices. Very much to the contrary, just as we attribute to murderers all the deaths they cause, we must do the very same thing for governmental road managers.

Let us now consider the analysis presented above at the outset of this chapter. According to it, if road deaths are 40,000 under the aegis of the state, and would have been 15,000 with markets providing roads, then we attribute only 40,000 - 15,000 = 25,000 fatalities to the present management. Nonsense. We hold these bureaucrats responsible for the entire amount of misery they have caused.

However, it cannot be denied that it is an interesting, nay, a fascinating question, to ask how the number of highway deaths

¹¹http://www.Firearmsandliberty.com/waco.massacre.html.

¹²Strange why one of these two has been executed, and the other, not.

might change with a move to privatization. White makes much of the fact that

many drivers would choose to patronize roads without low fatality rates but with other desirable features, such as no speed limit. There may currently be too few deaths on the highways, in the sense that consumers in a free market would demonstrate a preference for higher speeds over fewer deaths.¹³

I regard this as a wildly unreasonable speculation. No, it cannot be ruled out of court on logical grounds alone. It involves no inner self-contradiction. But it is so radically out of step with all of our empirical knowledge of how the world works. Why is the White scenario so unrealistic?

First of all, it is not clear that travel speed per se, always and at all levels, is causally related to deaths. Obviously, *ceteris paribus*, the faster a vehicle moves, the more likely it is to come to no good end. However, going fast, even ninety miles per hour on a clear day on a straightaway with no other vehicles within sight is undoubtedly less dangerous than weaving in and out of heavy traffic at sixty miles per hour in a thoroughfare designed for travel at thirty-five miles per hour.

Second, under free enterprise, typically, but rarely if ever under the careful supervision of the nanny state, it is possible to have your cake and eat it too. In this case, it is to attain *both* speed and safety. It does not much strain the imagination to suppose that under a free society, there might be some road owners who would adopt a "fast but safe" policy. For example, they might place a minimum speed requirement on their customers of, say, ninety miles per hour,¹⁴ charge more for this privilege, but keep large distances between cars. As long as the elasticity of speed

¹³White, "Comment on Block," p. 2.

¹⁴If it were a three-lane highway, the "slow" lane might be obliged to travel at 90 mph, the medium lane at 110 and the fast lane at 130.

with regard to price were positive, this could be a profitable entrepreneurial decision. That is, people would pay sufficiently more for being able to go fast to more than offset the road owner for loss of additional consumers.

So "speed" is really not the answer. We can have quicker transportation,¹⁵ and greater safety, both. White¹⁶ takes me to task for my insufficient defense of "daredevils and high-speed freaks . . . who prefer to travel deadlier highways." It cannot be doubted that there are some such people. Who has not seen wild-eyed young kids drag racing on our city streets amidst normal traffic? Perhaps the best example of this barbarous behavior is Rodney King, arrested for speeding at near one hundred miles per hour through city streets.¹⁷ In White's interpretation, private enterprise would cater to such individuals, instead of outlawing them as at present, and thus deaths would rise as we moved from public to private provision.

Nonsense on stilts. I have no doubt that the marketplace would accommodate such tastes. It does so for a plethora of weird desires;¹⁸ why not this one too? Where there is money to be made, there will be an entrepreneur arising to provide the

¹⁵Do you ever strictly adhere to statist speed limits? If you do, you'll find that you are by far the slowest vehicle on the roadway. Do 50 in a 50 mph zone and people will give you the finger for clogging up traffic; ditto for 60 and 70 mph. Why do the road socialists perpetrate this policy on us? For one thing, if they inculcate rules that everyone breaks, there will always be a "criminal" to fine. For another, and more ominously, it may well be part of the phenomenon against which Ayn Rand, "America's Persecuted Minority: Big Business," in *Capitalism: The Unknown Ideal*. (New York: Signet, 1967), warned us. By converting all of us into lawbreakers, the government can rely upon our guilt to better rule us.

¹⁶White, "Comment on Block," pp. 2–3.

¹⁷For an analysis of this episode, see Walter Block, "Decentralization, Subsidiarity, Rodney King and State Deification," *European Journal of Law and Economics* 16, no. 2 (November): 139–47.

¹⁸Sado-masochism, child pornography, fetishes that beggar description.

supply. However, I draw the opposite conclusion from White regarding the implications of all this for highway fatalities. In my reasoning, people with outré tastes tend to be segregated by market forces.¹⁹ Rich live with rich, poor with poor, hippies with hippies, fundamentalists with fundamentalists. Voluntary residential patterns emerge, too, with regard to race and national origin and ethnicity,²⁰ sexual preference,²¹ even age.²² Why should matters be any different as far as "daredevils and high-speed freaks"²³ are concerned?

But if this is so, then such denizens would tend to congregate together with one another. Then, to be blunt about this, they would then kill each other in a voluntary manner, and stop doing so to the rest of us. Such roads would constitute a sort of "Murder Park"²⁴ on wheels. The private "freak roads" could be offered chicken races, where two cars race toward each other at breakneck speeds, and the one who swerves away from the other at the last minute loses, and is denigrated as "chicken," a fate worse than death for these worthies. They could try to establish land

²¹Richard Posner, *Sex and Reason* (Cambridge, Mass.: Harvard University Press, 1992).

²²Young people congregate in Manhattan, older ones in Florida.

²³I assume that there is a large difference between a high-speed freak and a person who merely wishes for quicker transit time, i.e., that the former will take other risks that the latter would reject out of hand.

²⁴Murder Park is an imaginary institution where people are given loaded pistols, and agree to shoot one another. For further explication of this vital industry, see Walter Block, "Kuflik on Inalienability: A Rejoinder," unpublished ms.; idem, "Radical Privatization and other Libertarian Conundrums," *International Journal of Politics and Ethics* 2, no. 2 (2002): 165–75.

¹⁹On market zoning, see Bernard Seigan, *Land Use Without Zoning* (Toronto: D.C. Heath).

²⁰Thomas Sowell, *Race and Economics* (New York: Longman, 1975); idem, Ethnic America (New York: Basic Books, 1981); idem, *The Economics and Politics of Race: An International Perspective* (New York: Morrow, 1983); idem, *Race and Culture: A World View* (New York: Basic Books, 1994).

speed records in crowded conditions, in sharp contrast to those who attempt to do so in places like the Salt Flats of Utah under relatively safe conditions.²⁵ Drag races might even become rather pedestrian. Who says that everyone should stay to the right, or even left, while driving. Surely, this is far too restrictive for the "free spirits" we are now describing. All of these rules, for that matter, are merely bourgeois prejudices.

Yes, the death rate of this small tiny ilk might well skyrocket,²⁶ but that would reduce the overall death rate from vehicle fatalities, as they killed each other off, and left alone the general public which suffered all too long from their depredations. So White's assessment that road owners might well cater to dangerous drivers tells against his very own thesis that this implies more overall traffic fatalities. Says White: "The speedy driver has a right to endanger himself and others by speeding so long as the road owner and they consent. And consent they do, if they enter a clearly-marked no-speed-limit highway."27 Yes, dangerous (not merely "speedy") drivers are a menace to all other motorists. But if they voluntarily slaughter one another, this will make it less likely they will pulverize us, not more likely. I stand by my contention that private entrepreneurs will "generally find it profitable . . . to virtually eliminate highway deaths." Yes, a few weirdos will perish under free enterprise, and bad cess to them.

White now moves on to a different issue:

Is government . . . *criminally responsible* for these deaths? The answer to this question hinges on whether we consider individuals to be coerced into driving on dangerous highways. In a

 $^{^{25}}$ The record is currently 763 miles per hour; www.landspeed.com/ (11/103).

²⁶The Darwin Awards "commemorate the remains of individuals who contribute to the improvement of our gene pool by removing themselves from it in really stupid ways." See on this www.darwinawards.com/(11/1/03).

²⁷White, "Comment on Block," p. 3.

sense they are not, if voluntarily entering a government highway *ipso facto* constitutes a waiver of liability claim against accidental fatality. In a sense they are, if government has legally prohibited potential highway entrepreneurs from offering alternative roads.²⁸

Again, White takes on the role of apologist for governmental depredations. Of course the apparatus of the state "has legally prohibited potential highway entrepreneurs from offering alternative roads."²⁹ The road socialists could scarcely maintain their monopoly over this vital command post of the economy were this not true. This being the case, it is exceedingly difficult to see how motorists can be considered to be "voluntarily entering a government highway." Nor is it possible to see how an act taken under duress can "constitute a waiver of liability claim against accidental fatality."

Here is the scenario. First, the government banishes, by legislative fiat, all chance at relatively safe private roads, leaving as the only alternative governmental, hell-hole highways. Then, given that it would be impossible for masses of people to travel on nongovernment road and street options such as helicopters, motorists venture out onto these booby trapped traffic arteries and are slaughtered like flies. Along comes White who asserts that, since the put upon public "voluntarily enter[ed] a government highway, [this] ipso facto constitutes a waiver of liability claim against accidental fatality." Using "logic" of this sort, we can conclude that if a gunman forces a victim to jump to his death off the roof of a skyscraper by threatening to shoot him if he does not, the latter "voluntarily" plunged to the concrete below. No. When government precludes private highways by threatening violence against all those who would provide these services, and as a result the people have little or no alternative but to patronize these death traps, we may not at all conclude that their

²⁹Ibid.

entrance onto the public streets and highways was a "voluntary" one. Very much to the contrary, when you eliminate a safe alternative, "allowing" people to venture out onto a very much more dangerous one, you are forcing them to make this choice under duress. So, yes, the government is very much criminally responsible for the deaths they cause, all of them, not just those subtracted by the number who would perish on private roads, White to the contrary notwithstanding.

As I write this, I read an editorial in the local paper, The *Times-Picayune* entitled "111 is greater than 53."³⁰ According to the editorialist, in the two years prior to the repeal of the mandatory helmet law for motorcyclists in Louisiana, there were 53 fatalities for drivers of this vehicle, while the comparable figure for a similar time period afterward was 111. Yes, but every one of those 53 was what we can characterize as a coercive death: drivers were laboring under a coercive law. Similarly, every one of those 111 was what we can characterize as a "voluntary" death: drivers were free to assume these risks or not. (Helmet wearing is not illegal when it is not mandated.) A similar point may be made in comparing road fatalities under public and private aegis.

This author further beclouds the real issues when he says:

It is an important libertarian principle that we judge government by the same standards we apply to ordinary criminals. The question is: does liability fall on the landowner for an accident involving two other parties on his premises?³¹

White is absolutely correct when he calls for equal treatment of public and private or "ordinary" criminals.³² But there are none of the latter in the present scenario; here, there are only the

³⁰October 31, 2003, p. B6.

³¹White, "Comment on Block," pp. 3–4.

³²My paper, Block (2004b), is an attempt to do just that.

government criminals who prevent private entrepreneurs from setting up road and highway businesses, and the contrary-to-fact conditional, selfsame private entrepreneurs who would set up road and highway businesses were they only allowed to do so by law. So the question: "does liability fall on the landowner for an accident involving two other parties on his premises?" must be answered for only these two, government criminals³³ and private entrepreneurs, not any "ordinary criminals."

The first issue has already been answered: yes, the road socialists cause some 40,000 highway fatalities, and they are morally, and should be legally, responsible for all of them. Suppose now a system of private highways on which, say, five thousand people die annually. Should the private road owners be legally responsible for any of them? It all depends upon the contract in operation between these entrepreneurs and their customers. If nothing at all is specified, we must resort to implicit contracts, a dangerous legal arena. But, while we cannot fully and confidently predict the operation of a now nonexistent highway industry, it seems altogether likely that the private road owners would insist upon contracts not holding themselves liable for whatever few fatalities still occurred in this venue. That being the case, White's question can be answered definitively: in the free society, no street owner would be liable for any traffic deaths that occurred on his premises.

This, of course, is not to deny that present day courts would have none of this. Given our litigious society, there is no doubt that private road owners would be subjected to all sorts of law suits by those who had been hurt in traffic accidents.³⁴ It is unlikely in the extreme that judges of this ilk would allow such

³³I apologize for the continual use of this phrase. I find I am quite unable to resist.

³⁴If you can sue gun manufacturers for crimes committed with their product, there is no limit to the search for deep pockets or for perversions of liability. See on this Rothbard (1982b).

contracts. Most probably, they would be rendered null and void for being against "the public interest," or "public policy." But we are now discussing law in the free society, not in its present fever swamp. Under libertarian law, contracts between "consenting capitalists"³⁵ would not be set aside in so cavalier a manner.

³⁵Robert Nozick, *Anarchy, State, and Utopia* (New York: Basic Books, 1974), p. 163 speaks of "capitalist acts between consenting adults."

18 Open Letter to Mothers Against Drunk Driving^{*}

Ithough I shall be criticizing you, even severely, please do not take this amiss. I mean your organization no harm. Quite the contrary. My two children, in their early twenties, are both new drivers. I would suffer more than I can tell you if anything were to happen to them as a result of drunken driving. I am thus a supporter of yours. I am on your side. Please take what I say as no more than friendly amendments to your plans and proposals. Some of the following critiques may sound harsh, but friends do not mince words with each other in life and death situations, and I would like you to consider me a friend of yours. We may disagree on means, but certainly not on ends.

EXPANSION

First, you must expand your scope of operations. While drunk driving is of course a major calamity on our nation's roads, it is far from the only one. There are quite a few others, even besides the "big three" of speed, weather conditions and driver

^{*}The chapter first appeared as Walter Block, "Roads, Bridges, Sunlight and Private Property: Reply to Gordon Tullock," *Journal des Economistes et des Etudes Humaines* 8, no. 2/3 (June–September 1998): 315–26.

error.¹ What difference does it really make if our children and loved ones die in a traffic fatality emanating from drunkenness or any of these other conditions? Happily there is no need to change even the MADD name if you adopt this suggestion. Only instead of the first "D" standing for "drunk" it could refer to "death," as in Mothers Against Death Drivers. *All* of these things—alcohol, drugs, speeding, malfunctioning vehicles, badly engineered roads, weather conditions, whatever—are threats to our families' lives. Why single out any one of them?

A possible defense of the status quo is to borrow a leaf from the economists, and defend the present, limited, status of MADD on grounds of specialization and division of labor.² True, no one organization can do everything. Better to take on a limited agenda and do it well than to take on too much and accomplish little or nothing.

The list put together by the National Highway Traffic and Safety Administration is much larger. See on this www.nhtsa.dot.gov/. See also Traffic Safety Facts 2001 from the National Highway Traffic Safety Administration at www.nrd.nhtsa.dot.gov/pdf/nrd-30/NCSA/TSFAnn/TSF2001.pdf, and the Fatality Analysis Reporting System (FARS) database at www.fars. nhtsa.dot.gov queryReport.cfm?stateid=0&year=2001.

²See on this Adam Smith, *An Inquiry into the Nature and Causes of the Wealth of Nations* (New York: Modern Library, [1776] 1965).

¹Sam Peltzman, "The Effects of Automobile Safety Regulation," *Journal of Political Economy* 83, no. 4 (1975): 677–725, lists the following:

Vehicle speed . . . alcohol consumption . . . the number of young drivers . . . changes in drivers incomes . . . the money costs of accidents . . . the average age of cars . . . the ratio of new cars to all cars (because it has been suggested that while drivers familiarize themselves with their new cars, accident risk may increase) . . . traffic density . . . expenditures on traffic-law enforcement by state highway patrols expenditures on roads . . . the ratio of imports to total car (because there is evidence that small cars are more lethal than large cars if an accident occurs) . . . education of the population . . . and the availability of hospital care (which might reduce deaths if injury occurs).

But this insight applies only when to take on additional tasks is to dilute the focus of an enterprise. If you truly oppose fatalities only from the single cause of alcoholism, well and good. MADD as presently constituted then needs no broadening of vision. But if your goal is decrease the senseless roadway slaughter of innocents which stems from *any* cause, which I strongly suspect is the case, then to include the contributions from other sources does not weaken the mission; on the contrary, it fortifies it.

PRIVATIZATION

My second suggestion is far more radical. Please hear me out. There are very important matters at stake. True, the highway fatality rates have been declining in recent years.³ But 41,480, the number of people who perished as a result of improper automobile use in 1998, for example, is still far too high. Desperate circumstances require radical solutions.

The radical suggestion I offer is that MADD adopt as one of its major policy planks the proposal that our nation's roadways be privatized. And this includes not only the federal interstate highway system, but every byway, country road, city street and even sidewalk—wherever vehicle related deaths have occurred. Why? There are several reasons.

First, it is not at all true that speech, alcohol, drugs, etc., are ultimately responsible for vehicular death. Rather, they are only the proximate causes. The underlying explanation is that the managers of the roads, those in charge of them, have failed to deal with these problems. The reason Chrysler went broke is only indirectly related to car size, changing styles, competition,

³According to the Fatality Analysis Reporting System (FARS) of the National Highway Traffic and Safety Administration (NHTSA), for 1999, highway deaths for 1998 were 41,480; for 1997, 42,103; for 1994, 40,676; for 1993, 40,115; and for 1979, 51,093. Since the number of passenger miles was increasing during this time period, the actual safety improvement given by these statistics on a mile-traveled basis is understated.

imports, the price of oil and gas, etc. This company was bankrupted because its managers failed to meet these challenges. When a restaurant shuts down, it is not due to such proximate causes as poorly cooked food, poor service, bad location, unclean premises, etc. Rather, this circumstance is due to the fact that the owners, operators, managers of the restaurant failed to address these problems.

Second, with a system of private highways and streets, the various owners would compete with one another to provide service for their customers (including, preeminently, safety). Those who failed (e.g., pursued policies detrimental to the "health of children and other living things") would be forced either to change the error of their ways or go belly up. Those who saved lives by better dealing with drunkards, speeders, etc., would earn profits and thus be enabled to expand the base of their operations.

Third, this is precisely the system—privatization—that vastly outstripped that of the U.S.S.R. in providing computers, cars, clothes and a plethora of other products and services. Yet, instead of borrowing a leaf from our own success and applying it to highways, we have instead copied the discredited Soviet economic system and applied it to our network of roadways. That is, our highway network is governmentally owned and managed. *This* is why people die like flies on these roads, and suffer from traffic congestion serious enough to try the patience of a saint (which also exacerbates casualties through road rage).

Fourth, the rules of the road that would minimize automobile accidents (this goes for most other valuable economic recipes) do not come to us from on high, imprinted on stone tablets. Rather, they have to be learned, oft-times by hard and difficult experience. The time-honored and traditional capitalist way of learning is by allowing all entrepreneurs, willing to risk their own money, free rein to do exactly as they please. The ones who hit upon the best way of proceeding earn profits; those who do not either have to copy the successful or fall by the wayside. It is precisely this, the magic of the marketplace, which has brought us our world-class standards of living. But this learning process cannot possibly take place when politicians, bureaucrats, and other members of the *nomenklatura* class determine the rules of the road, and do not lose an iota of their personal fortunes when they err in this way, or, indeed, are guilty of any other sort of highway mismanagement.

We all deplore highway casualties. But at least when they occur, let us have a system wherein someone in authority loses money thereby. There is nothing that concentrates the managerial mind more. At present, when deaths take place, there is no one in a position to ameliorate matters who suffers financially. Surely we may expect better results from a system that monetarily rewards the successful and punishes those who fail than from one which does neither.

Take a case in point. It is perhaps a truism that "speed kills." Yet, the rate of fatalities has decreased after the elimination of the 55 mph speed limit. Some analysts have suggested that it is not the average rate of travel that is determinative, but rather the variance in speed. That is, we might all be safer with a slow lane speed requirement (both minimum and maximum) of 60 mph, a middle lane of 70 mph and a fast lane of 80 mph, than with the present minimum of 40 mph and maximum of 70, typical of many highways. I don't know the answer to this question. But I do know the best way to answer it: unleash a new breed of road entrepreneurs on it. Allow each of them to address this issue as they wish. Then, using the same system we as a society have utilized to improve the quality of cars, computers and clothes, among other things, we shall find the answer.

Take another example, closer to the concerns of MADD. How best to stop driving while drinking? Heavier penalties? More emphasis on driver education? More police monitoring? Rewards for exemplary driving? Payment for joining Alcoholics Anonymous? Again, the same principles apply. Privatize the avenues of vehicular transportation, and rely upon the new owners, under the tutelage of the free enterprise profit-and-loss system, to find solutions. One of this new breed of highway proprietors, of course, would be MADD. Under such a system, a revitalized and reinvigorated MADD, as an organization, would be able to implement its own policies on drinking while driving, speeding, whatever. It would have to take its chances in competition with all other entrants into this industry, but that is the way of the market system.

At present, in contrast, under a road system that would bring a smile to the face of a Russian Commissar, there is simply no managerial role for MADD to play. Compare your situation with that of Ducks Unlimited, Western Wilderness Society, or any other environmental group. They are not relegated to the sidelines in their analogous field, limited to offering advice, and, in a word, begging the powers that be. They can of course do these things. But they can *also* buy up vast tracts of land (they would be unable to do this in the U.S.S.R.) and manage them as they please.⁴ Why should MADD accept its present inferior status, *vis à vis* these other groups?

CONCLUSION

Two final points. There are those who will dismiss these suggestions as the ravings of a lunatic. They will throw up all sorts of obstacles and objections: the specter of having to place a coin in a toll box of every home you pass by in the street; of having your house surrounded by private road owners who deny access and egress; of crazy road owners who would demand weird behavior, such as forcing everyone to travel in reverse gear. However, there is a wealth of published material refuting these and all other criticisms of private highway ownership and

⁴Terry Anderson and Donald R. Leal, *Free Market Environmentalism* (San Francisco: Pacitic Institute, 1991), pp. 64, 90, mention the case of the National Audubon Society's Rainey Wildlife Sanctuary in Louisiana. When natural gas was discovered on their property, this organization chose to develop it, something of a departure from their typical reaction to such circumstances.

management.⁵ Before giving in to the "nattering nabobs of negativism," you owe it to yourself to at least familiarize yourself with this literature.

⁵See on this Block, "Roads, Bridges, Sunlight and Private Property: Reply to Gordon Tullock;" idem, "Compromising the Uncompromisable: Speed, Parades, Cigarettes," Asian Economic Review 40, no. 1 (April 1998): 15-29; idem, "Private Roads, Competition, Automobile Insurance and Price Controls," Competitiveness Review 8, no. 1: 55-64; "Road Socialism," International Journal of Value-Based Management 9 (1996): 195-207; Walter Block and Matthew Block, "Roads, Bridges, Sunlight and Private Property Rights," Journal des Economistes et des Etudes Humaines 7, no. 2/3 (June-September 1996): 351–62; Block, "Theories of Highway Safety," Transportation Research Record #912 (1983): 7-10; idem, "Public Goods and Externalities: The Case of Roads," Journal of Libertarian Studies 7, no. 1 (Spring 1983): 1-34; idem, "Congestion and Road Pricing," Journal of Libertarian Studies 4, no. 3 (Summer 1980): 299-330; idem, "Free Market Transportation: Denationalizing the Roads," Journal of Libertarian Studies 3, no. 2 (Summer, 1979): 209-38; anthologized in Tibor R. Machan, The Libertarian Reader (Totowa, N.J.: Rowman & Littlefield, 1982): 164-83; Michelle Cadin and Walter Block, "Privatize the Public Highway System," The Freeman 47, no. 2 (February 1997): 96-97; John Cobin, "Market Provisions of Highways: Lessons from Costanera Norte," Planning and Markets 2, no. 1 (1999); Gerald Gunderson, "Privatization and the 19th-Century Turnpike," Cato Journal 9, no. 1 (Spring/Summer 1989): 191–200; W.T. Jackman, The Development of Transportation in Modern England (Cambridge: Cambridge University Press, 1916); Dan Klein, "The Voluntary Provision of Public Goods? The Turnpike Companies of Early America," Economic Inquiry (October 1990): 788-812; Dan Klein, John Majewski, and Christopher Baer, "Economy, Community and the Law: The Turnpike Movement in New York, 1797-1845," Journal of Economic History (March 1993): 106-22; idem, "From Trunk to Branch: Toll Roads in New York, 1800–1860," Essays in Economic and Business History 11 (1993): 191–209; Dan Klein and G.J. Fielding, "Private Toll Roads: Learning From the Nineteenth Century," Transportation Quarterly (July 1992): 321-41; idem, "How to Franchise Highways," Journal of Transport Economics and Policy (May 1993): 113–30; idem, "High Occupancy/Toll Lanes: Phasing in Congestion Pricing a Lane at a Time," Policy Study 170 (November 1993); Roth (1987); Gabriel Roth, A Self-Financing Road System (London: Institute of Economic Affairs, 1966); idem, Paying for Roads: The Economics of Traffic Congestion (Middlesex, U.K.: Penguin, 1967; idem, The Private Provision of Public Services in Developing Countries (Oxford: Oxford University Press, 1987); Murray N. Rothbard,

Last but not least, why have I written an open letter to you, MADD, and not taken up my case with the authorities? For one thing, private organizations such as MADD are what have made this country great; government bureaucrats, operating way past their capacities, have always brought us down. For another, those presently in charge of our roadways are not just part of the problem, they pretty much are the problem. When and if a Nuremberg-type trial is ever held for those responsible for thousands upon thousands of unnecessary traffic fatalities, these are the very people who will be prime candidates for occupancy in the dock.

MADD has a passion for saving lives. This, indeed, is what MADD is all about. That puts this organization head and shoulders above all others concerned with preserving life on our highways. But more is needed to be done. Far more. It is time for a radical departure from previous activity, in order, paradoxically, to build on previous good work. It is time for highway privatization, with MADD taking a lead role in this initiative.

For a New Liberty (New York: Macmillan); William C. Woolridge, Uncle Sam, The Monopoly Man (New Rochelle, N.Y.: Arlington House, 1970).

19 Road Privatization: Rejoinder to Mohring

The thought many people will have when first confronted with the notion that roads, highways and streets ought to be privatized is likely that yes, it might be a good idea for the government to contract out to business firms some minor tasks: perhaps salting or bulldozing in snow conditions, maybe cleaning, possibly even pot hole repair or paving. Suppose they were convinced that the advocate of such an initiative meant, not merely contracting out a few such functions, but radically privatizing: allowing private enterprise to conduct, not some, but all functions related to vehicular traffic; that is, turning over responsibility for vehicular traffic entirely to the marketplace; allowing entrepreneurs to assemble the land upon which new thoroughfares were to be built; to manage and charge from them and, gulp!, earn profits thereby. Then, presumably the reaction of most people would be to question the very sanity of anyone making such an outlandish proposal.

There is a wealth of literature attesting to the fact that, historically, many of the first roads were privately built turnpikes; so that there is no reason, at least in principle, why such should not be the case even in modern times. Many of these studies underline the claim that roads provided by the government kill thousands of people per year; that these deaths are attributable, *not* to factors such as speeding, weather conditions, driving while intoxicated, vehicle malfunction or driver error, which are not under the control of the bureaucrats charged with running the roads, but rather to the lack of managerial skill in so doing.

Then there is the issue of traffic congestion: it is bad, and it is getting worse. The average motorist¹ spent 26 more hours per year in bumper-to-bumper traffic in 2000 *than* he did in 1990. Things have come to such a pass that the word "gridlock" has now entered our vocabulary. And this, too, stems not from any intrinsic source, but from statist mismanagement of our roadway system. For one thing, prices are rarely charged for road usage; but congestion is no more than an excess of demand over supply. At a zero price, it is no surprise that shortages should erupt. For another, on the rare occasions that prices are charged, they are not market clearing, peak-load prices, which would tend to iron out rush hour demands. On the contrary, commuters,² who aggravate the peaks and troughs, are charged less than other motorists with more flexible schedules.³

The present chapter, however, is not directly concerned with congestion and traffic deaths as being part of the case for privatization of traffic conduits. They are mentioned only by way of introduction. Our present burden is to overcome difficulties in privatizing roads, by dealing with objections and transition problems.

³Nor must we forget the fact that this Sovietization of our transport system which leads to traffic congestion also promotes "road rage," another new addition to our lexicon, and thus also raises traffic fatalities.

¹See http://www.tripnet.org/CensusDataCongestionJun2002.PDF.

²Typically, for bridges and tunnels, lower prices are charged upon purchase of a monthly ticket of about twenty-two trips. But who is more likely to make so many trips into the center of the city each month? Obviously, commuters. Thus, the counter-peak load pricing engaged in by the apparatus of the state exacerbates the problem instead of alleviating it.

OBJECTIONS

SIMILARITY?

The main objection to highway privatization we will consider is articulated in "Congested Roads" by Herbert Mohring. This article is a frontal attack on the idea of road privatization. This is somewhat more than passing curious, in that Mohring begins with an avowal that there is no real intrinsic difference between road transportation and pretty much anything else:

Economists' basic theories of price and value—the tools they use to determine the optimal input combinations and output levels for a dam, a steel mill, or an orange grove, or to place a value on any of them—can, without fundamental alteration, provide the same services for transportation activities.⁴

And again:

If the standard tools of microeconomics can be used to understand the supply and demand for transport, then might it not be possible to rely on market processes—the method on which we rely to provide most commodities—to provide transport services?⁵

Even in terms of congestion, he analogizes road services along the lines of that provided by the department store and the cinema:

The wait for service in a department store is typically substantially longer during the week before Christmas than in late January. As for quality of product, as the number of people attending a movie performance increases, the odds of finding a seat

⁴Herbert Mohring, "Congested Roads: An Economic Analysis with Twin Cities' Illustrations," in Gabriel Roth, ed., *Street Smart: Competition, Entrepreneurship and the Future of Roads* (New Brunswick, N.J.: Transactions Publishers, 2006), p. 142.

⁵Ibid.

with an unencumbered view of the screen diminishes. And, of course, in driving on urban roads, more congestion means more time consuming and, for most, less pleasant trips.⁶

However, despite what this author can only see as superficial resemblances, roads are very different for him than practically all other products; in his view, the latter can be provided by the private market place for a profit, while the former cannot. One reason for this is the following:

Neither widget buyers nor widget⁷ sellers ever see the backward-bending part of the AVC curve . . . because the difference between SRMC and AVC⁸ is built into the price they pay. Not so for road users: in deciding whether and when to make trips, most travelers take into account the costs congestion imposes on them. Few worry about the costs their trips impose on others by slowing *them* down. *The unrecognized external cost or "externality" of travel some times forces road users into the backwardbending part of AVC*.⁹

Market failure

This is par for the course for traditional neoclassical economic analysis, according to which there are all sorts of "market failures" out there, and "externalities" are one such. In contrast, from the Austrian economic perspective¹⁰ from which the present

⁹Mohring, "Congested Roads," p. 145.

¹⁰Murray N. Rothbard, "The Present State of Austrian Economics," Working Paper from the Ludwig von Mises Institute (November). Reprinted in *The Logic of Action One: Method, Money, and the Austrian School*

⁶Ibid., p. 143.

⁷This is Mohring's word for pretty much all goods other than road services.

⁸These curves are depicted in Mohring's figure 1, which is marred by the fact that the AVC and the SRMC do not cross at the bottom point of the former.

author writes, there is no such thing as market failure, and "externalities"¹¹ of the sort mentioned by Mohring are but an example of illogical analysis.

The main reason, in this case, that Mohring's charge against free enterprise fails is that there simply is no "externality." Rather, there is an "internality," which he does not recognize as such. Road users, under present, socialistic,¹² institutional arrangements, need not take into account the extra waiting time they impose on other motorists because they are not charged a price that incorporates this imposition. Rather, the price they face is precisely the same whether at peak-load highway use times (e.g., rush hours) or at any other time of the day. Typically, this price is zero. In the case of positive prices, as for some limitedaccess highways, tunnels and bridges, it still does not vary at all in response to congestion.¹³

¹²Walter Block, "Road Socialism." International Journal of Value-Based Management 9 (1996): 195–207.

¹³Indeed, as we have seen (text accompanying footnote 2, above), there is a pricing perversity, insofar as people who utilize roadways during high demand times actually pay less; thus, they are encouraged by the

⁽Cheltenham, U.K.: Edward Elgar Publishing, 1997), pp. 111–72; reprinted in *Journal des Economistes et des Etudes Humaines* 6, no. 1 (March 1995): 43–89; idem, "Toward a Reconstruction of Utility and Welfare Economics," in *The Logic of Action: Method, Money and the Austrian School I*; Ludwig von Mises, *Human Action*, 3rd ed. (Chicago: Regnery, 1966).

¹¹Technically speaking, "externalities" are costs (or benefits, which we herein ignore) to third parties based on trades in the market. These fall into two categories: physical, on the one hand, and nonphysical or pecuniary, on the other. For the Austrian, a physical negative externality such as smoke pollution is no such thing; rather, it is a trespass of wayward smoke particles onto the lungs, lawns and other property of third parties. The reason this occurs has nothing to do with "market failure." Rather, it is the failure of government to uphold private property rights. As to the nonphysical or pecuniary, such as where *A* opens up a store across the street from *B* and competes away from him some of the latter's customers, this, too, is not a market "failure" but rather a paradigm case of the workings of free market and competition.

In fact, Mohring contradicts himself on this issue. Remember, he is saying that there is something unique about road services, compared to all other goods, e.g., "widgets," such that the former is somehow guilty of this market failure of externalities, wherein motorists do not take into account the time costs they impose on others of their ilk, while this malfunction, somehow, does not take place in the latter case. But he is also on record as stating: "The wait for service in a department store is typically substantially longer during the week before Christmas than in late January."¹⁴ Why is this? That is, why is it that the market failure of externalities, wherein buyers do not consider the time costs of others, does not afflict, also, department store customers? The reason is simple. Department stores are privately owned.¹⁵ Thus, there is economic incentive for their proprietors to act rationally, lest they suffer losses and be forced into bankruptcy. By Mohring's own admission, they do so; e.g., they charge higher prices "during the week before Christmas than in late January." Thus, December shoppers are lead by Smith's "invisible hand"¹⁶ to take into account the wishes of other customers, and to not impose, or at least to reduce the imposition they make on their scarce and valuable time.

In sum, there is no intrinsic difference in this regard between highway or street transit, and any other good (widget). If *either* is in the hands of private enterprise, pricing will gravitate toward a situation in which the customer's time, as well as money, is taken into account. In contrast, if *either* is in the hands of government, pricing will *not* gravitate toward a situation in which the customer's time, as well as money, is taken into account. Then, truly,

government, not at all by the market, to ignore the time costs they impose on others.

¹⁴Mohring, "Congested Roads," p. 146.

¹⁵At least on this side of the G.U.M. stores of the late and non-lamented U.S.S.R.

¹⁶Adam Smith, An Inquiry into the Nature and Causes of the Wealth of Nations (New York: Modern Library, [1776] 1965).

there will be a "failure." But it will be a government failure, not a market failure.¹⁷

Pricing

Next, Mohring launches into a defense of the case for pricing of road services. He unfortunately relies upon "a benevolent highway authority" as the linchpin of his analysis.¹⁸ But if the Public Choice school¹⁹ of thought has taught us anything, this is an unlikely scenario at best. He predicates his analysis, too, on the basis of sufficient information, without asking whether markets or statist bureaucracies are most likely to generate the requisite knowledge. Yet, if we have learned anything from the disarray of the Soviet experiment, it is that central planners cannot

¹⁸Ibid.

¹⁷In Mohring's treatment of the equilibration between arterial roads and expressways (p. 146), he speaks of the motorists of each "imposing costs" (illustrated in his figure 2). This is the same fallacy, under different guise. There is no more of an "externality" in that case than in the present one under consideration. Both stem from incomplete privatization of what could be fully private property in a free society.

¹⁹Charles W. Baird, "James Buchanan and the Austrians: The Common Ground," Cato Journal 9, no. 1 (Spring/Summer, 1989): 201-30; James D. Gwartney, Richard E. Wagner, eds., Public Choice and Constitutional Economics (London: JAI Press, 1988); James M. Buchanan, "Public Choice and Public Finance," What Should Economists Do? (Indianapolis: Liberty Press, 1979); James M. Buchanan and Gordon Tullock, The Calculus of Consent: Logical Foundations of Constitutional Democracy (Ann Arbor: University of Michigan, 1971). For a critique of Public Choice, although not on these grounds, see Walter Block and Thomas J. DiLorenzo, "Is Voluntary Government Possible? A Critique of Constitutional Economics," Journal of Institutional and Theoretical Economics 156, no. 4 (December 2001): 567-82; idem, "The Calculus of Consent Revisited," Public Finance and Management 1, no. 3 (2001): 37-56; Murray N. Rothbard, "Public Choice: A Misshapen Tool," Liberty (1989): 20-21; idem, "Buchanan and Tullock's The Calculus of Consent," in The Logic of Action Two: Applications and Criticism from the Austrian School (Cheltenham, U.K.: Edward Elgar Publishing, 1997), pp. 269-74.

rely on anything like accurate assessments of economic reality.²⁰ In contrast, entrepreneurs sink or swim on the quality of the information they can generate. The market, weeding-out process ensures that those with better knowledge, *ceteris paribus*, will continually out perform and eventually bankrupt those with inferior data, thus tending to continually improve matters in this regard. Needless to say, this is a phenomenon lacking in governmental operation.

There is no question but that governmental pricing of highway services would be more efficient than its present policy of not charging at all. Certainly, pricing would do wonders in terms of alleviating traffic congestion. However, for the advocate of road privatization, this constitutes something of a vexing issue. Given that governmental ownership is an unmitigated evil, is it a step in the right direction, or in the wrong one, to render this evil more efficient, through pricing, in this case? Certainly, no advocate of the freedom philosophy could advocate a more efficiently run, Nazi concentration camp, e.g., one which would kill more innocent people per dollar spent. True, government managed roads are scarcely equivalent to a concentration camp. On the other hand, statist roads do constitute rather more than just a bit of a charnel house. Given that some 40,000 people perish on our nation's highways each year, how much of this is attributable to government ownership? This is very difficult to discern.

²⁰Ludwig von Mises, *Socialism* (Indianapolis, Ind.: LibertyPress/Liberty/Classics, 1981); Hans-Hermann Hoppe, *A Theory of Socialism and Capitalism: Economics, Politics and Ethics* (Boston: Dordrecht, 1989); Peter J. Boettke, *Why Perestroika Failed: The Politics and Economics of Socialist Transformation* (New York: Routledge, 1993); Hans-Hermann Hoppe, "Socialism: A Property or Knowledge Problem?" *Review of Austrian Economics* 9, no. 1 (1996): 147–54.

GOVERNMENT RESPONSIBILITY?

Gabriel Roth states as follows:

Statistics compiled by the International Bridge, Tunnel and Turnpike Association (IBTTA) show the accident rate on roads operated by its members to be 0.6 deaths per 100 million vehicle-miles, compared to 0.9 deaths per 100 million vehicle-miles on the US interstate system, one of the safest non-commercial road systems in the world.²¹

Were we to extrapolate from this figure, we would conclude that privatization would reduce traffic fatalities from roughly 42,000 per year to two thirds of that, or to 28,000, a reduction of 14,000. In this calculation, we ascribe to government ownership one third of all such deaths, or those 14,000 per year. These are not Nazi type statistics, but they are far from insignificant.²² However, Roth adds the following to his letter: "Note that the IBTTA roads are toll roads, not necessarily privately-owned. Thus, attributing to government ownership one third of the death toll is an underestimate."

Perhaps a better way to approximate government culpability in this regard is to utilize the "two to one" rule. That is, there is a plethora of evidence attesting to the fact that private enterprise is twice as efficient as its statist counterpart in providing services such as garbage collection, fire protection, postal delivery, etc. ,e.g., private sanitation could remove two times more garbage per dollar spent as its public counterpart.²³ If we use this insight

²¹Private communication with the author in December of 2002.

²²To put this in context, fewer than 3,000 people were murdered in the World Trade Center tragedy of 9/11/01.

²³See on this Roger Ahlbrandt, "Efficiency in the Provision of Fire Services," *Public Choice* 16 (Fall 1973): 1–15; James T. Bennett and Manuel H. Johnson, "Tax Reduction Without Sacrifice: Private Sector Production of Public Services," *Public Finance Quarterly* 8, no. 4 (October 1980): 363–96; Roger D. Blair, Paul B. Ginsberg and Ronald J. Vogel, "Blue Cross-Blue

as the basis of our calculation for roadway deaths, then we can infer that, under privatization, only one half as many people need die, that is, 20,000, and the other half, or 20,000 would be saved. It is the latter figure, not merely 14,000, who are slaughtered due to governmental negligence in this calculation.

But this "two to one" literature underestimates the efficiency of private over public enterprise in two distinct ways; one, it does not take fully into account that the services are often merely "contracted out" by the government to the so called "private" enterprises. That is, these business firms are not at all stand alone members in good standing of the market. Rather, they have won government-rigged contracts, with all the inefficiency implied therein. Suppose, when this phenomenon becomes incorporated into the analysis, that the rule shifts from "two to one" to "three to one." If so, than the pure market is not twice as efficient as the state, but thrice. If so, then the death toll per annum of 40,000 would decline not to 20,000, but rather to 10,000, with a saving of 30,000 lives. But even this figure is likely to be an underestimate of the true enormity of public ownership and management of highways, in that this literature, also, only imperfectly takes into

Shield Administration Costs: A Study of Non-Profit Health Insurers." Economic Inquiry 13 (June 1975): 237-51; Thomas E. Borcherding, Budgets and Bureaucrats: The Sources of Government Growth (Durham, NC: Duke University Press, 1977); Kenneth W. Clarkson, "Some Implications of Property Rights in Hospital Management," Journal of Law & Economics 15, no. 2 (October 1972): 363-84; W. Mark Crain and Asghar Zardkoohi, "A Test of the Property Rights Theory of the Firm: Water Utilities in the United States," Journal of Law & Economics 21, no. 2 (October 1978): 395-408; David G. Davies, "The Efficiency of Public Versus Private Firms: The Case of Australia's Two Airlines," Journal of Law & Economics 14, no. 1 (April 1971): 149-65; ibid., "Property Rights and Economic Efficiency-The Australian Airlines Revisited," Journal of Law & Economics 20, no. 1 (April 1977): 223–26; H.E. Frech, "The Property Rights Theory of the Firm: Empirical Results from a Natural Experiment," Journal of Political Economy 84, no. 1 (February 1976): 143-52; Cottom M. Lindsay, "A Theory of Government Enterprise." Journal of Political Economy 84 (October 1976): 1061-77. I owe these citations to Randy Holcombe.

account quality of service. Posit, then, that when we fully incorporate this phenomenon into our calculations, that the proper rule of thumb would be that markets are four times more efficient than bureaucrats. Then, the number of people slaughtered on our roads would be 8,000 per year, with a savings of 32,000 lives.²⁴

If so, this casts doubt on the goal of promoting greater governmental efficiency on the roadways, even under the assumption that our only goal was the utilitarian one of reducing fatalities. Yes, if they began peak-load pricing and engaging in other quasi-market activities, there might be a marginal decrease in the death toll. But this would inevitably come at the cost of putting off the day of complete privatization. There is no such thing as a "social" rate of time preference, on the basis of which we could unambiguously compare the present discounted value of a small number of lives saved, in the short run, with a more efficient government enterprise, versus a larger number of people safeguarded, later, under full privatization, so any exact calculation

²⁴Even this is likely to be a vast underestimate, and for two reasons. First, it does not take cognizance of the fact that, in many cases, these so-called "private" workers are unionized. In the fully free society, there would be no institutions of this sort. See Walter Block, "Labor Relations, Unions and Collective Bargaining: A Political Economic Analysis," *Journal of Social Political and Economic Studies* 16, no. 4 (Winter 1991): 477–507.

Second, was the Soviet Union even fully one fourth as efficient as the American (this is the implication of the analysis in the text, if we assume that that the former had zero privatization, and the latter 100 percent, an obvious overestimate)? Paul A. Samuelson (*Economics*, 5th ed. [New York: McGraw Hill, 1961], p. 830), depicts a convergence between the economies of the U.S. and the U.S.S.R. He claims (*Economics*, 12th ed. [New York: McGraw Hill, 1985], p. 837) that between 1928 and 1983, the growth rate for the Soviet Union was a remarkable 4.9 percent per year, higher than that for the U.S. Mark Skousen (*The Making of Modern Economics* [New York: M.E. Sharpe, 2001], p. 416; and "The Perseverance of Paul Samuelson's *Economics*," *Journal of Economic Perspectives* 11, no. 2 [Spring 1997]: 137–52) properly debunks these outrageous claims. There are recalls for all sorts of things: toasters, cars, tires: why none for Nobel Prize winning economists such as Samuelson, who has mislead an entire generation of economic students?

must remain speculative. However, this at least constitutes a reasonable argument against blithely assuming that the goal of social policy must necessarily be to marginally improve state highway operation.

There is also, in addition to utilitarian concerns, a matter of simple justice. Government simply has no business nationalizing an industry that for many years was run under private auspices. This smacks of the nationalization practices of the late and unlamented "evil empire" of the Soviet Union. To add insult to injury, the state manages highways on a coercive basis. With its compulsory tax levies on gasoline, it forces people to pay for road usage, whether they wish to do so or not. With its eminent domain powers, it seizes private property from their rightful owners.

Eminent domain

Mohring states: "Assembling rights of way for . . . roads would be prohibitively expensive unless the state could be induced to use its powers of eminent domain on their behalf."²⁵ There are several difficulties with this position. First of all, the state need not be "induced" to do any such thing. Rather, this is the very essence of government, to seize that which does not belong to it. The history of the state is the history of such theft.²⁶

²⁵Mohring, "Congested Roads," p. 147

²⁶Is this too harsh a characterization of eminent domain? Not really. Stripped of its legal imprimatur, there is no real difference between compelling a person to "sell" his land at a price he is unwilling to accept, on the one hand, and outright theft on the other. Suppose a criminal holds me up at gunpoint, demanding my wallet. As I comply with his wish, I object, on the ground that he is stealing from me. A philosophical robber, he is willing to bandy words with me. "Theft," he says, "not a bit of it. Don't ever say I'm stealing from you. On the contrary, I offer you the following 'payment' for your wallet." Whereupon he hands me a paper clip, or a rubber band, or a piece of tissue paper or a blob of used bubble gum. When he does so, he converts what would otherwise constitute an outright theft into a forced

Second, this bespeaks a level of economic unsophistication that is rather surprising, emanating as it does from a professor in that field. For, surely the true costs are higher, far higher, when government seizes property than when it purchases it; the costs are only hidden in the former case. Let us suppose that a given man would sell his land only for \$100,000. The government comes along and expropriates it, giving him \$10,000 for him, the figure that the bureaucrats compute as "fair market value." For Mohring, the "cost" of this land is only the \$10,000 in out of pocket expenses for the state. But the true cost, the alternative cost, is the much higher figure of \$100,000.

But what of the possible objection that this property owner "really" values his holdings at, say, \$50,000, and is "jacking up" his price since someone wants to buy it for a road, and he can act the part of the "holdout?" Even if this is true, Mohring's calculations are still amiss, albeit by not as much. In this scenario, Mohring still counts the costs of this part of the road assemblage at \$10,000, whereas, by stipulation, the true figure is five times that (not tenfold, as it was in the previous scenario). This is still a whopping underestimate. But there is a more serious rejoinder to this objection: such figures are necessarily hidden from outside observers. The only person privy to these costs is the property owner himself. The government, Mohring, the present author, none of us knows the alternative or opportunity cost of this land apart from its owner. All of these numbers are made up, suitable for illustration purposes only. There is no warrant for saying that the property owner is acting the part of the "holdout." All we outside observers know, all we can ever know, is that he demands, say, \$100,000 for his land at the present point in time. We cannot know any such thing as that he would really sell his

trade, or eminent domain. (In Canada, this act is more accurately called "expropriation.") Yet, is there any real difference as far as I am concerned in the two scenarios, one where he steals my wallet, outright, and the other where he gives me something worth less to me than my possession? There is not.

land for \$50,000, or \$10,000, or any other such figure, and is only "jacking up" his price to "unrealistic" levels in order to "take advantage" of the desperation on the demand side.

PERFECT COMPETITION

The next difficulty in which Mohring enmeshes himself is that he maintains that roads cannot be privatized because they do not meet the very stringent and irrelevant conditions of so called "perfect" competition: "Expressways are so large and have so much capacity that, in selling their services, private owners would not be subject to the sorts of market pressures that firms experience in the competitive markets of economic texts."²⁷

And again:

In the markets that populate economics texts, Adam Smith's invisible hand maximizes social benefits without government intervention. Would the many virtues of emulating textbook-competitive markets in pricing and developing roads make it desirable to turn over the duties of the Federal Highway Administration and state departments of transportation to free enterprise? Sadly [sic] to say, before such a step becomes optimal, problems must be solved that result from differences between the technology of roads and that which justifies *laissez faire* in dealing with the firms that populate textbook competitive markets.²⁸

There is so much wrong with this contention it is difficult to know where to start in refuting it. Beginning with a *reductio ad absurdum* might not be a bad way to address this claim. "Perfect competition" requires, among other things, completely homogeneous goods or services, thousands (or millions, depending upon which neoclassical economist is holding forth) of buyers and sellers, total complete and full information about every aspect of the

²⁷Mohring, "Congested Roads," p. 147.

²⁸Ibid., p. 158.

good on all sides, no transactions costs, zero profits, equilibrium, etc. To say that no real world industry can meet these stringent conditions is a vast understatement. But that is just the point. If Mohring were to implement his requirement, there would be, there could be, no private industries at all. Every last economic activity known to man would either be owned and run by the government (e.g., the Soviet system) or "owned" privately²⁹ but managed or controlled by it (e.g., the fascist system).

The point is, "perfect competition" is a totally made up scenario, having nothing whatsoever to do with the real world; it is used by mainstream economists such as Mohring as a stick with which to beat up on real life business firms. Perfect competition functions in economics as would the ravings of a madman in criminology who insisted he would kill (or at least consider illegitimate) all people who were not eight feet tall and did not weigh less than one hundred pounds.

In contrast to this ersatz concept is the Austrian concept of real competition, rivalrous competition. Here, it is not necessary that everyone be all-knowing, nor that all products be homogeneous,³⁰ that there be an indefinitely large numbers of buyers and sellers such that none of them can have any effect on price,³¹ etc. All that is required is that there be no laws criminalizing entry into an industry. Then, there can be rivalrous competition. The Austrian is no "nose counter." Mere large numbers, or their absence, neither ensure nor preclude competition in this sense.

²⁹I.e., in name only.

³⁰Actually, this amounts to a demand that there be only one product. If there are more than this amount, then, necessarily, they cannot all be homogeneous. But if so, then perfect competition is, to that extent, vitiated, since there must of necessity be a dilution in the number of buyers and sellers of it.

³¹This requirement too, is illogical in that it violates the rules of mathematics. It is impossible that no one buyer or seller has exactly zero effect on price, and yet all of them, together, do. A million times zero is still zero, despite the best efforts of mainstream economists to defend the opposite conclusion.

Microsoft is *not* a monopoly,³² nor was IBM before it, despite each of them accounting for a large share of the computer market in their respective eras. This is because entry is legal; anyone can start up a computer business whenever he wishes to do so. Nor does anything like competition prevail in the taxi industry, despite the fact that, in any given large city, there are literally tens of thousands of firms in this industry. This is because entry is pre-cluded by law.

Nor can we acquiesce in the notion that mere technological considerations can "justify *laissez-faire*" or fail to do so. To agree with this premise is to ignore the normative-positive distinction. The only consideration that can justify *laissez-faire* or fail to do so are those pertaining to rights, or ontology.

CENTRAL PLANNING

Above, when we discussed Mohring's views on eminent domain, we had occasion to remark upon his surprising unsophistication, for an economist, on this issue. This might be due to the fact that despite his graduate degree and his professional affiliations, he is more of a "transportation planner"³³ than he is dismal scientist. His article bespeaks almost ignorance of even the possibility that the highway industry might be privatized. He looks at the issue of roadway provision solely as a transportation planner, equivalent to the manner in which a Soviet central planner viewed the entire economy.

This author spends much time and effort in this regard. One of his conclusions is that:

³²William Anderson, Walter Block, Thomas J. DiLorenzo, Ilana Mercer, Leon Snyman, and Christopher Westley, "The Microsoft Corporation in Collision with Antitrust Law," *Journal of Social, Political and Economic Studies* 26, no. 1 (Winter, 2001): 287–302.

³³Mohring, "Congested Roads," p. 148; he speaks of his "transportationplanning computer programs" (p. 11).

As figure 1 suggests, the direct effect of congestion on tolls would have made the average road user worse off. Almost all would have paid more for the trips they continued to take and would no longer have taken some trips that formerly yielded net benefits. While all travelers would have benefited from faster trips, toll payments would have exceeded the value of these time savings for most. Only two small groups would have reaped net benefits from congestion pricing regardless of the uses to which revenues were put. There were then-current mass-transit users and very high-income auto travelers. Tolling would have induced some travelers to divert from auto to bus. ... On the most congested roads, for auto users with incomes greater than about \$80,000 a year, travel-time savings would have exceeded their toll costs. On less congested roads, only travelers with incomes well into the six-figure range would have had net benefits.³⁴

The clear implication of this is that it would be unwise, inefficient, and counterproductive to charge a price for road use.³⁵ But let us take a moment for common sense to prevail. If private owners would, on this account, be legally prohibited from charging a price for use of their property, this would just about spell the death knell for any privatization efforts. For all practical purposes, we would be stuck with present institutional arrangements, which, in addition to featuring bumper-to-bumper traffic, also constitute carnage for motorists. Another difficulty with Mohring's analytic framework is that it "proves" far too much. If it is improper for street and highway owners to charge prices, and if department stores³⁶ resemble roadways in terms of congestion

³⁴Mohring, "Congested Roads," p. 154.

³⁵If this were really true, private enterprise would give away these services for free, as loss leaders or as part of a larger package, in much the same way as Disneyland gives "free" use of its thoroughfares to pedestrians, as malls do the same for shoppers in its internal streets, and indeed, for its outer streets and often, parking spaces.

³⁶Other businesses earmarked by great cyclicality include movie theaters, restaurants, football (Super Bowls), baseball (the World Series), hotels, air transport, cruise ships, etc.

and peak-load demands for their services, by Mohring's own admission, then the logical implication is that these amenities should not engage in pricing either.³⁷ But more: all, or at least virtually all, goods and services are cyclical in this regard. That is, no one buys much of anything, typically, on any weekday between 2:00 a.m. and 5:00 a.m., or on Christmas day. Congestion prices, then, would be improper for just about anything, under this line of "reasoning." But there is only one institution that need not charge prices for its wares, since it can finance them through compulsion (e.g., taxation), and that, of course, is government. Mohring's analysis, then, if it "suggests" anything, leads right back to the Sovietization of (virtually) the entire economy, something the civilized world has been attempting to escape from lo these many years, and something, since at least the fall of the "evil empire" in 1989, one would have thought all scholars would eschew. Not so, it would appear, for Mohring.

Some problems?

Mohring concludes with a litany of problems that undermine the case for road privatization. He starts off, once again, on a fallacious foot:

The increasing congestion that accompanies increasing travel on a given road is the transportation counterpart to the increasing short-run marginal cost of widgets that accompanies increasing output from a given widget factory. Both increases result from more intensive use of durable capital equipment the law of diminishing returns at work.³⁸

Nothing could be further from the truth. Increasing marginal costs simply have nothing whatsoever to do with congestion. The former is entirely a phenomenon of diminishing returns to a fixed factor; the latter stems from variable demand and/or prices

³⁷Mohring, "Congested Roads," p. 143.

³⁸Ibid., p. 157.

pegged below equilibrium levels. In the case of roadways, the prices are set by government exceedingly below that which would prevail in the evenly rotating economy of free enterprise; in fact, they are zero! It is no wonder at all that at such low, nay, non-existent prices, demand should upon more than one occasion outstrip supply.

Again Mohring repeats his misleading notion that "travelers usually take into account the congestion they will encounter but not the congestion they will cause."³⁹ This is true, but only in the absence of market prices, which, in the words of Adam Smith, lead motorists "as if by an invisible hand" to take the latter phenomenon into account.

What are the specific difficulties that Mohring sees with road privatization? They are as follows:

1. Indivisibilities and economies of scale.

It cannot be denied that there are indeed indivisibilities and economies of scale with regard to road provision. But the same applies to the manufacture and supply of virtually all other goods and services, apart, of course, from those that satisfy the very strict requirements of perfect competition, a null set. In other words, indivisibilities and economies of scale serve not only as an insuperable barrier, for Mohring, for road privatization, but, also, if he is logically consistent, which he is not, for everything else under the sun as well.

States our author: "Unregulated road entrepreneurs could not generally be relied on to set marginal cost prices."⁴⁰ The obvious rejoinder to this is that neither could anyone else be relied upon to do this either (apart from imaginary firms in the nevernever land of perfect competition).

³⁹Ibid.

⁴⁰Ibid., p. 159

Inadvertently, perhaps, Mohring provides evidence for the fact that private-enterprise road operation is very robust. He states:

the California Private Transportation Company (CPTC) built an expressway in the median strip of heavily traveled State Route 91 (SR 91) which connects Orange and Riverside Counties in Southern California. Fearing monopolistic excesses, the California Department of Transportation (CalTrans) attached strings to the right to build SR 91. It required lower—initially zero—tolls for vehicles with more than two passengers and limited the rate of return that CPTC may earn.⁴¹

The fact that a private enterprise, CPTC in this case, could even contemplate remaining in business under these very onerous conditions is ample testimony to its ability. At the best of times, it is difficult for entrepreneurs to compete with government; for the latter can give away their product for free, and finance their losses out of tax revenues, while this option is not open to the former. Can you imagine if there were government restaurants where meals could be had for free, and *still* private providers were able to turn a profit? Surely this would constitute strong evidence for the viability of the one, and the absence of such for the other.

Another difficulty with Mohring's presentation is that he supports the notion that CalTrans "feared monopolistic excesses." What is this other than the pot calling the kettle black, when the former, but not the latter, is of that color? If there is any "monopoly" in this scenario, it is surely CalTrans, *not* CPTC. It is CalTrans, *not* CPTC, that can endure in business even if rejected, totally, by consumers. It is CalTrans, *not* CPTC, that can force travelers to finance it through taxation. It is CalTrans, *not* CPTC, that is prevented from bankruptcy, no matter how poor a job they do. It is CalTrans, *not* CPTC, that can manage its roads so that people die like flies on their premises, without any necessary

⁴¹Ibid., p. 162.

financial repercussions. If there is any "monopoly" of the piece, surely it is CalTrans, *not* CPTC.

2. Acquiring rights of way for private roads

States Mohring: "if road entrepreneurs are to obtain rights of way at less than overwhelming costs, action by the state is essential." 42

However, we have already seen that eminent domain is not so much cheaper than private action in assembling a land package as it is better at camouflaging costs. When the government commandeers a right of way at an artificially low price, the true cost is not limited to this out of pocket expense, but rather includes, also, the alternative or opportunity cost suffered by the owner, which is an intrinsically subjective matter.

3. Sufficient toll revenues

Mohring asks: "How can we tell whether toll revenues would be great enough to justify publicly or privately financed road expansion?"⁴³

One might be excused for thinking that, for him, the question as to whether a good or service can be provided by markets depends upon its costs. But here we would run into a problem: if the costs are greater than the benefits,⁴⁴ does that mean that the state or private enterprise should undertake them? "Neither" would appear to be the proper answer, but there does not seem

⁴²Ibid.

⁴³Ibid., p. 163.

⁴⁴We stipulate that these can be meaningful terms despite their inherent subjectivity. See on this William Barnett II, "Subjective Cost Revisited," *Review of Austrian Economics* 3 (1989): 137–78; James M. Buchanan and G.F. Thirlby, *L.S.E. Essays on Cost* (New York: New York University Press, 1981); James M. Buchanan, *Cost and Choice: An Inquiry into Economic Theory* (Chicago: Markham, 1969); Thomas J. DiLorenzo, "The Subjectivist Roots of James Buchanan's Economics," *Review of Austrian Economics* 4 (1990): 180–95; Mises, *Human Action*; Murray N. Rothbard, *Man, Economy, and State*, 2 vols. (Auburn, Ala.: Ludwig von Mises Institute, 1993); idem, "Buchanan and Tullock's *The Calculus of Consent.*"

to be room for his answer in his lexicon. Alternatively, suppose that the benefits are greater than the costs. Again, we are like a ship without a rudder in terms of determining whether this means that the good in question should be nationalized by government or produced by profit-making firms.

If revenues are not great enough to exceed costs, then the issue is not whether governments or markets should be assigned to produce the good or service in question. Rather, from the perspective of promoting consumer welfare, no one should do so. Let us take a real world example of a case where costs always exceed revenues: rat burgers, mud pies, and dirty water. Here, the costs of putting together a factory to produce these items, hiring the necessary labor, conducting sufficient advertising, will always exceed the revenues there from, since there will be no customers for them at any positive price. Should the state then supply them? To ask this is to answer it.

4. Equity and pricing

Mohring announces himself as having "long supported marketable peak period road scholarships for the poor" on grounds of equity,⁴⁵ since he thinks that overall "congestion pricing would, indeed, be regressive."⁴⁶ But bread and movies, too, are regressive. Surely, the poor spend a higher proportion of their income on these items than the rich. The clear implication, here, is either that no charges should be made for these items, e.g., everyone should get all the bread and movies he needs "for free," or, if there is to be pricing for them, then the poor should receive a subsidy to help them with these purchases.

But the bread and movies enjoyed by the impoverished in a relatively free⁴⁷ country such as the U.S. are the envy, not only of

⁴⁵Mohring, "Congested Roads," p. 165.

⁴⁶Ibid., p. 164.

⁴⁷James Gwartney, Robert Lawson, and Walter Block, *Economic Freedom* of the World, 1975–1995 (Vancouver, B.C.: Fraser Institute, 1996).

those in the lower deciles of the income distribution in most other nations, but even of their middle classes. Thus, the implication is that if you want to help the poor, the best way to accomplish this task is not to undermine the capitalist system with government subsidies, but rather to rely on free enterprise to help the poor, as it has always and everywhere done.

On similar grounds, when tariffs are reduced as a step toward an economically freer society, it is incompatible with this initiative to award funds for retraining superfluous employees no longer working in their fields of comparative advantage, or to give out businesses subsidies. Investment, whether in physical or human capital, brings rewards in its train when done correctly, e.g., in the interests of the consumers. When there is misallocation of either of these types of resources, the free-market ethic implies that those responsible bear the costs, and not be able to shift them onto the general public through extra taxes and subsidies or "scholarships."

These subsidies or "scholarships" have to come from somewhere; presumably, they will be based on coercive tax levies. Mohring is on record as castigating "robber barons," the railroad owners who benefited from nineteenth century eminent domain powers.⁴⁸ But in advocating subsidies or "scholarships" for the poor who will have to pay more for road usage under pricing, he himself is taking on the role of "robber baron."

⁴⁸Mohring, "Congested Roads," p. 162.

20 Aiding and Abetting Road Socialism: The Case of Robert Poole and the Reason Foundation¹

In this chapter we take it for granted that governmental ownership and control of roads is unjustified, on the grounds that it is based on coercion (the tax revenues upon which it is based are compulsory), and needlessly kills thousands of people (over and above the much lower number who would likely die under privatization²). Given these premises, what is the proper attitude of the libertarian toward those directly responsible for this irresponsible, mischievous and even murderous scheme?

To ask this question is pretty much to answer it. Not to put too fine a point on it, but those responsible for the perpetration of highway socialism are guilty of the deaths of tens of thousands

¹www.rppi.org/ps305.pdf; www.rppi.org/ps294.pdf; and www.rppi.org.

²See Lawrence H. White, "Comment on Block," (unpublished manuscript) on this claim.

of people in the U.S. alone.³ This being the case, and combining that insight with libertarian theories of punishment, it is clear that the guilty parties would be made to pay for their crimes⁴ in a fully libertarian society. The Nuremberg trials would be the model followed in such proceedings. As in the case of the Nazis,⁵ there would be no statute of limitations on murder.⁶ Nor would we shrink from *ex post facto* jurisprudence. Libertarian law is timeless. Unjustified killing is just as much a violation of proper jurisprudence for modern man as it was for the ancient caveman, and as it will be for the future spaceman. The sooner this message

⁵It is more than passing curious that mass-murdering Communists are treated differently than mass-murdering Nazis. Although this can only be speculative, this is perhaps due to the fact that the former were allied with the victors in World War II and not the other way around.

⁶Is it too harsh to claim that those responsible for road deaths are guilty of murder? Surely, there was no intent to kill such victims. Perhaps manslaughter is the more accurate characterization, since it would appear that the authorities are guilty of no more than "reckless disregard" for the lives of others. For the criminal code of Louisiana, see www.legis.state.la.us/ tsrs/search.htm. See the appendix for definitions of manslaughter and negligent homicide, and then you decide, gentle reader, into which category our road and highway managers fall.

³It is one of the errors of Rummel who calculates the number of people killed by their own governments, that he does not include roadway fatalities. R.J. Rummel, *Death by Government* (New Brunswick, N.J.: Transaction, 1996) calculates the total number of noncombatants killed by their own governments during twentieth century as 169,198,000. But, he neglects to include the deaths on the nation's highways attributable to government operation.

⁴Murray N. Rothbard, *The Ethics of Liberty* (Atlantic Highlands, N.J.: Humanities Press, 1982), pp. 54, 85–96; Stephan Kinsella, "Estoppel: A New Justification for Individual Rights," *Reason Papers* 17 (Fall): 61; idem, "Punishment and Proportionality: The Estoppel Approach," *Journal of Libertarian Studies* 12, no. 1 (Spring, 1996); idem, "New Rationalist Directions in Libertarian Rights Theory," *Journal of Libertarian Studies* 12, no. 2 (Fall, 1996): 313–26; idem, "A Libertarian Theory of Punishment and Rights," 30 *Loyola Los Angeles Law Review* (1997): 607–45.

gets out, moreover, the better off we shall be in reducing "man's inhumanity to man."

So much is pretty straightforward, at least in the libertarian neck of the woods. Perhaps a more interesting question is, what can be said, not about the actual managers of streets and thoroughfares, but rather of private citizens who aid and abet them? There are many such, unfortunately. At present, we will focus on only one of them, the Reason Foundation, and its Reason Public Policy Institute. This organization in one place advertises itself ,not as an avowedly libertarian one, but rather as one that "explores and promotes the twin values of rationality and freedom as the basic underpinnings of a good society."⁷ But if "freedom" is used in any reasonable way, it certainly implies private property, the rule of law, and *laissez faire* capitalism, phenomena incompatible with government ownership, operation and control of roads and highways.⁸

However, in another place, Reason explicitly claims the libertarian mantle:

Mission Statement: The mission of Reason Foundation is to advance a free society by developing, applying, and promoting libertarian principles, including free markets, individual liberty, and the rule of law. We use journalism and public policy to change the frameworks and actions of policymakers, journalists, and opinion leaders.⁹

It is my contention that Reason is not living up to its selfstyled claim to be guided by libertarian strictures, nor to "promote libertarian principles," at least not in the arena of surface

⁷www.rppi.org.

⁸There are, to be sure, private groups other than Reason also operate as collaborators with the National Highway Safety Traffic Administration (NHSTA) and the Department of Transportation (DOT). However, none of them characterize themselves as pro freedom, let alone libertarian.

⁹www.reason.org/mission.html.

transportation. Let us consider some specific difficulties with the Reason analysis of roadways, along the lines mentioned above.

Critique

BIG RIGS

In June 2002, two Reason colleagues and I¹⁰ accomplished the seemingly impossible. We persuaded both the American Trucking Associations and the National Safety Council—traditionally on opposite sides of the fence over big-rigs known as Longer Combination Vehicles—to endorse a concept we called Toll Truckways. Our June 2002 report¹¹ proposed that these highly productive trucks (long doubles and triples) be allowed to operate into states where they are currently banned by federal law, provided that they operate on new, barrier-separated truck-only lanes designed for heavy-duty service.¹²

One problem here is that Poole is functioning, not as a libertarian critic of road socialism, but rather as and aid and abettor to the planning authorities, a non-paid consultant as it were. It is easy to imagine an analogous group functioning in the Soviet Union, circa 1965, giving advice to the U.S.S.R. collectivized farm bureaucrats, or to those in charge of that country's steel mills.

Another difficulty is with Poole's characterization of these vehicles as "highly productive trucks." They may well be just that, as a means for transporting cargo, at least when compared to carrying sacks on one's back, or using bicycles, motorcycles, cars or even smaller trucks. But, how about when contrasted to railroad trains? Then it would appear, even to the meanest eye,

¹⁰This was written by Robert Poole, Director, Transportation Program, Reason Public Policy Institute and Founder, Reason Foundation (www.rppi.org/robert.html).

¹¹www.rppi.org/ps294.pdf

¹²Robert Poole. See www.rppi.org/surfacetransportation14.html.

all bets are off. For, while one of these super trucks can carry two or even three container loads of product, a train can transport as many as 156 boxcars.¹³ Then, there is the matter of speed. Maximum legal velocity on most highways is seventy miles per hour. Trains, in very sharp contrast, are capable of *multiples* of that speed.¹⁴

It is not my place to give economic advice to the central planning authorities.¹⁵ We can safely leave such "analysis" to Poole

¹⁵The enormity of the deviation between calling for the government to cease and desist from killing people on the roads, and the sort of specific advice given to them from Reason may be seen in the detailed plans created by the latter for the former. Here is where Poole thinks his truckway policies can best be introduced: I-80 across Iowa and Illinois, linking current LCV operations in the West with those on the Indiana and Ohio turnpikes; I-90 from Cleveland to the New York state line, linking LCV operations on the Ohio Turnpike and New York Thruway; I-15 in California, from the logistics center in Barstow to the Nevada line (where LCVs now operate); I-75 from Detroit to Toledo, a spur off the Ohio Turnpike; I-75 from Toledo south to Florida, connecting both to Tampa and to the Florida Turnpike (where long doubles are legal); I-5 the length of California's Central Valley; I-94 from Chicago to the Twin Cities; I-65 from Gary, Indiana (on the Indiana Turnpike) to Nashville; I-81 from Knoxville, Tennessee to Harrisburg, Pennsylvania, both major logistics centers; I-76, the Pennsylvania Turnpike, which links directly to the LCV-friendly Ohio Turnpike. Nor is Poole satisfied, even, with this level of detail. He continues:

Our study also contains specific recommendations for legislative provisions needed to enable pilot toll truckways to exist, most importantly the legalization of LCV operations on such truckways in states currently subject to the LCV freeze, the ability to

¹³"CN boxcars jump tracks . . . FORT LAWRENCE—No one was injured when 10 empty boxcars belonging to a 156-car freight train derailed here late Friday night, blocking the main rail line." www.herald.ns.ca/sto-ries/2004/05/23/fNovaScotia247.raw.html.

¹⁴Some commentators (re: the German Inter City Express) speak of average speeds of 125 miles per hour, and top speeds of 174 (www.okeating.com/hsr/ice.htm); others, re: the Japanese Shinkansen Bullet Train www.o-keating.com/hsr/bullet.htm) mention an average speed of 164 mph.

and his colleagues. But it is more than passing curious that he did not instead advise government to rescind a welter of union and other anti-railroad legislation¹⁶ that has handcuffed that industry. With a healthy railroad sector, these super trucks of which Poole is so enamored would be reduced from cross country to local trips, radically reducing the need for them.

SEAT BELTS

Even though fans of individual liberty often (and rightly) decry the paternalism embedded in seatbelt laws, most Americans take little offense at such state-sponsored nannying. However, nannying does not just make us less free; when it distracts law enforcement from its proper role, it can also make us less safe. When government assumes many duties, it is tougher to do the important ones right.

Government officials are more on the mark when they call for enforcement of drunk driving laws. But here again, law should focus on recklessness, whether it's encouraged by alcohol, fatigue, general stupidity or high-speed lipstick application.

Forty-nine states have seatbelt laws, and in many cases, the laws allow officers to pull over motorists whose only crime is not wearing a seatbelt. While the officer takes time to give the seatbelt scofflaw a scolding and a ticket, plenty of other drivers embark on the kind of harebrained maneuvering that often ends with a reckless driver colliding into a good driver. It's these red-light-running, left-turn-at-any-cost daredevils who enrage and endanger good drivers.¹⁷

charge tolls on the truckways, and a mechanism for interstate compacts to facilitate the majority of such truckways which need to involve more than one state. (See www.rppi.org/surfacetransportation14.html)

¹⁶The Railway Labor Act www.nmb.gov/documents/rla.html and www.socialstudieshelp.com/Eco_Union_Legislation.htm).

¹⁷Ted Balaker, "Strapped: Unbuckling seat belt laws," see, www.reason.com/hod/tb052704.shtml; May 27, 2004.

According to the analytic framework developed above, it would be one thing for a free-market oriented analyst to note that were roads privatized, those that focused on seat belts, i.e., assigned their police forces to concentrate on such violations, would likely lose out in the profit-and-loss war with other highway firms who addressed more important issues, such as driver recklessness. That would be an eminently sensible point to make, and if the road socialists adopted this insight, well, at least lives would be saved.

However, it is entirely a different and more problematic matter to be gratuitously dispensing advice to those who are responsible for road carnage in the first place. This sort of stance plays fast and loose with the job of the free-market advocate which is, wait for it, to be advocating free markets, and not advice intended to render more efficient institutions which are very much the opposite of free enterprises.

"We" are losing tax base

Two of the biggest challenges facing public officials in America today are deteriorating roads and highways and a lack of funding to pay for needed improvements. Since the Interstate Highway System was completed in the early 1990s, we have witnessed a continual decline in the overall condition of our nation's road infrastructure. There are several reasons for this.

First, the purchasing power of the fuel taxes *we* now collect the principal means of highway finance in the U.S.—has declined dramatically since the 1950s. Second, vehicle fuel economy has risen dramatically during the same time, so we do not collect the same amount of taxes on a per mile basis as we once did. And third, many officials are unwilling to increase fuel taxes because of intense voter opposition to new or higher taxes of any kind.¹⁸

¹⁸Transportation Finance Summit conference background and purpose, March 3–4, 2004; brochure.

The obvious question is, Who is this "we?" The above quote comes from a press release for the Transportation Finance Summit that took place March 3–4, 2004 in the Grand Hyatt, Washington, D.C. As one of the sponsors of the event was the Reason Foundation, it would appear that this organization includes itself, and is included by all the others, in the general "we."

However, there are those of us libertarians who would not consent to any such inclusion. Wringing hands over the declining real value of taxes is something somewhat incompatible with advocacy of the free society.¹⁹ Nor is this merely a debate between limited-government libertarians and anarcho-capitalists. Surely, it is a contradiction for a libertarian of *any* stripe to countenance fuel taxes *per se*, let alone any increase in them.

Why is this any different than if a group ostensibly devoted to "freedom as the basic underpinnings of a good society"²⁰ were to take part in a general dissatisfaction with the fact that income or sales or property or any other taxes for that matter were too low, and that the real value of the government's take had slipped? Surely, were any group or individual to take part in such hand-wringing in any other context, their (lack of) libertarian credentials would be clear. Why should it be any different in this case?

¹⁹In any case, the responsibility for this decline is yet another government entity, the central banking system which creates inflation. See on this, Milton Friedman, *Studies in the Quantity Theory of Money* (Chicago: University of Chicago Press, 1956); Milton Friedman and Anna J. Schwartz, *Monetary Statistics of the United States: Estimates, Sources, Methods* (New York: National Bureau of Economic Research, 1970); idem, *Monetary Trends in the United States and the United Kingdom, Their Relation to Income, Prices, and Interest Rates, 1867–1975* (Chicago: University of Chicago Press, 1982); Murray N. Rothbard, *The Mystery of Banking* (New York: Richardson and Snyder, 1983).

²⁰www.reason.org/.

ROAD DEATHS

States Poole:

[O]ur highway systems are in trouble. They face four main problems:

1. Traffic Congestion. In the 68 largest U.S. metro areas, motorists lose a total of \$72 billion per year in wasted fuel and time, due to traffic congestion;

2. Lack of Expansion. From 1987 to 1997, U.S. vehicle miles traveled increased 34 percent, yet only 3 percent more lane-miles were added;

3. Funding Shortfalls. In 1997, the U.S. invested \$43 billion in rebuilding and capacity additions, but to [sic] simply to maintain the system's asset value, we should have spent \$51 billion—to keep pace with growth would have required \$83 billion; and

4. Anti-highway Politics. A large coalition of environmental, urban planning, and transit organizations opposes highway expansion and advocates shifting highway funds to public transit, bikeways, etc. Their mantra is: "We can't build our way out of congestion."

The U.S. highway system is failing to satisfy its customers, and its ability to do so is more constrained with each passing year. We need a new highway paradigm for the 21st century.²¹

Minor difficulty: the people who use U.S. highways are not "customers." Very much to the contrary, those accurately depicted by such verbiage make a decision as to whether or not to patronize a given supplier, and are as free to pay and receive the service as they are to eschew it and not be billed for it. For example, movies, bookstores and groceries: each of them deals with customers. In very sharp contrast indeed, *all* residents of the

²¹www.rppi.org/pbrief19.html.

country pay for streets and roads, whether or not they wish to "purchase" this service, not merely those who venture out on to them. Failure to distinguish between a customer and a victim does not bespeak a very sophisticated analysis.

Major problem: there is a gigantic elephant in the room. Somewhere in the neighborhood of 40,000 people in the U.S. *per-ish* on the nation's system of Sovietized roads.

CAR POOLS

The recently released journey-to-work figures from the 2000 census reveal what many of us have long suspected: carpooling is a flop. Despite the expenditure of billions of dollars adding carpool lanes to congested freeways, carpooling declined from 13.4 percent of work trips in 1990 to 11.2 percent in 2000. Carpooling's mode share declined in thirty-six of the largest forty metro areas—including highly congested Los Angeles and San Francisco. So what do we do now?

Here is another statement on this subject by Poole:

Some transit advocates have resented the use of these lanes by carpools from the outset, reminding us that high-occupancy vehicle (HOV) lanes were originally conceived as busways and should be converted, accordingly. Some highway advocates argue vociferously for converting most carpool lanes to general purpose (GP) lanes. And the Federal Highway Administration's Value Pricing office tries valiantly to persuade metro areas to convert underperforming HOV lanes to HOT lanes. What's been missing from this discussion has been serious quantitative analysis of the tradeoffs involved.²²

With all due respect, it is my contention, in sharp contrast, that what is missing from this discussion is not at all a "serious quantitative analysis of the tradeoffs involved" but rather one that asks whether a public entity is the sort of institution from

²²www.rppi.org/carpoollanes.html.

which we can ever expect good results, given that there is no market test of profit and loss to weed out under performing entrepreneurs, and to encourage successful ones.

TRAFFIC DIRECTION

Poole has very strong opinions on the one way vs. two way street controversy, heavily favoring the former.²³ His reasons are only peripheral to our present concerns, so I will not rehearse them here.

Suppose governments ran restaurants and there was a vociferous debate over whether the tablecloths should be red or green, made out of cloth or plastic, or should exist at all. Posit, further that a group, call it Treason, ardently favored one or the other of these alternatives, it matters not which. What could we deduce from this one fact? My claim is that we could infer that this group, whatever else it was, was not a libertarian one. For, any organization worthy of that name would surely recognize a far more important question that all sides to the controversy had ignored: should government be running restaurants in the first place, putting completely to the side the issue of, given that they are, what type of tablecloth should they choose?

The same reasoning applies in the present case. Yes, there are indeed important considerations that rest on whether streets are one or two way. But there is such a thing as specialization and division of labor in all things, political economy specifically included. It is the task of those other than libertarians to involve themselves in these issues. Regarding this one political philosophy, the overwhelming question is *not* the direction of traffic flows, but rather the propriety of a necessarily coercive institution being placed in charge of making such a decision.

²³www.rppi.org/onewaystreets.html.

PARTNERING WITH THE DEVIL

Here, Poole advocates Public-Private Partnerships²⁴ in order to address traffic problems in Wisconsin. Again, the details of this specific case do not concern us. What does is that so-called Public-Private Partnerships are anathema to the free-enterprise system, and this analyst swallows them whole, without question.

Let us thrust ourselves into the scenario depicted above: state-run restaurants. Now, the "libertarian" commentator urges a PPP²⁵ for this industry. This means, if it means anything at all, that private enterprise combines with government in some sort of unholy alliance, and becomes a creature combining the characteristics of both. But that can only be a first approximation, since the two are necessarily incompatible. For government rests on coercion,²⁶ and the market is the quintessentially voluntary institution. So, what trait must this mischievous combination of the two take on? Clearly those of the former. If an organization is in part based on coercive levies, and part on voluntary contributions, then, as a whole, it takes on that of the former. This is because if a group is coercive part of the time, then it is a coercive group.²⁷

²⁵When in Rome . . .

²⁴www.rppi.org/ps304.pdf. Somewhat disconcertingly, there is even an abbreviation for Public-Private Partnerships: PPP. This is troublesome, since it would appear that in this literature, the concept is ubiquitous enough to deserve an abbreviation. For shame.

²⁶If you don't believe that, try not paying your taxes and see what happens to you. For a more rigorous defense of this claim, see Hans-Hermann Hoppe, *A Theory of Socialism and Capitalism: Economics, Politics and Ethics* (Boston: Dordrecht, 1989; idem, *The Economics and Ethics of Private Property: Studies in Political Economy and Philosophy* (Boston: Kluwer, 1993); idem, *Democracy—The God That Failed: The Economics and Politics of Monarchy, Democracy, and Natural Order* (New Brunswick, N.J.: Transaction, 2001); Rothbard, *The Ethics of Liberty*; Lysander Spooner, *No Treason* (Larkspur, Colo.: Pine Tree Press, 1966).

²⁷Hitler and Stalin themselves were not entirely evil men. Part of the time they slept, and perpetrated no evil. At other times, they engaged in

But more. An unholy alliance of public and private tends to obliterate the crucial line between them. As there is no more important distinction in all of political economy than that which divides coercion and non-coercion, such combinations tend to blur this crucial difference. To see such perversions advocated by a self-claimed libertarian organization is surely problematic.

OUTSOURCING

Poole is on record as supporting contracting out: the cooperation of public and private authorities wherein the former subcontracts with the latter for support and services.²⁸ In his article, "Outsourcing Repairs Can Speed Up Road Improvements, Cut Costs: Guide Highlights Most Successful Road Privatization Methods and Contracts," this author advocates just that.

One difficulty is that such endeavors only further entrench government involvement in this industry. If, thanks to such outsourcing, governments are able to more efficiently run projects which should have been private in the first place, then it will become just that more difficult to promote overall privatization. Another is that outsourcing is but a subset of PPPs, and thus heir to all the shortfalls of that mode of business. Blurring the line between public and private will hardly promote the latter at the expense of the former, the presumed goal of the libertarian.

Here is a direct quote from this initiative:

State, county, and city governments are grappling with severe budget deficits and looking for ways to cut costs. To assist in this cause, a new Reason Foundation report demonstrates the savings that highway and road maintenance outsourcing can

acts characterized by mutual consent. In fact, strictly speaking, probably the majority of their time was not spent on mass murder. We only see them as the mass murderers they were, not because most of their waking days were given over to such acts, but because, compared to other people, these acts were disproportionately overrepresented.

²⁸www.rppi.org/020403.html.

bring and outlines the most effective ways for public officials to go about the privatization process.

"We're facing double trouble—our roads are in bad shape and most governments are running deficits. Public officials can significantly trim costs, and potentially save other programs, by outsourcing road repairs and maintenance," said Geoffrey Segal, director of government reform and privatization at the Reason Foundation. "This . . . guide . . . [is designed] to help governments stretch tax dollars by taking advantage of private sector efficiencies and management approaches that can reduce costs and improve the quality of service."²⁹

The obvious rejoinder to all this is that if the "State, county, and city governments" are in such dire straits with regard to street and road management, why come to their aid with offers of private-enterprise expertise, which would still leave these inept bureaucrats in control of the operation? Why does this organization, ostensibly devoted to libertarianism, not suggest to them that they divorce themselves entirely from these amenities they have so mismanaged?

Then, there is, of course, the additional problem that if the statist managers are so incompetent, how can we expect them to successfully contract to private firms parts of their enterprise? For, surely, the task of subcontracting is a skill that can be done well or not. Poole implicitly assumes they can acquit themselves well in this particular regard, when they have failed so dismally in all else. But he offers no reason why this should be the case.

As anyone who has ever had to serve as a general contractor for house building or repair knows full well, to pick the best carpenters, electricians, plumbers, etc., to contractually obligate them to finish their jobs on time without compromising on quality, to orchestrate matters so that they do not hinder each other,

²⁹Geoffrey F. Segal, et al., *Contracting for Road and Highway Maintenance* (Santa Monica, Calif.: Reason Foundation, 2003), p. 2.

are no mean tasks. But the same entrepreneurial abilities, if not more difficult ones, are required of roads authorities to subcontract tasks in that arena. Is it written in stone somewhere that state bureaucrats have some sort of comparative advantage in such responsibilities? Poole vouchsafes us no answer to this question.

MEGAPROJECT FAILURES—AND WHAT TO DO ABOUT THEM

States Poole:

We all know at least some of the projects: the Channel Tunnel, Boston's Big Dig, Japan's Kansai Airport. These and many other megaprojects (costing over one billion dollars) all too often cost fifty to one hundred percent more than initially estimated. And their usage is often less than half as much as forecast. These are not necessarily boondoggles—I happen to think there was a good case for all three of the above—but there's a very real question of whether they, and other megaprojects, would have gotten built at all had the true cost and usage been known beforehand.³⁰

In other words, what is needed regarding these megaprojects is *not* to leave the decision over whether to embark upon them or not solely to individual investors, but, rather, for the government to continue to make these determinations, only on the basis of more accurate information. However, there is good and sufficient explanation for the fact that government was operating in the dark in these cases, and shall necessarily continue to do so for the expected future: it does not benefit from the automatic feedback mechanism of the market, which weeds out those economic actors who operate on the basis of incomplete or erroneous information, and encourages those who do not. Then, too, Hayek³¹

³⁰www.rppi.org/surfacetransportation10.html.

³¹F.A. Hayek, "Socialist Calculation I, II, & III," *Individualism and Economic Order* (Chicago: University of Chicago Press, 1948), pp. 119–208.

has done yeoman work in underscoring the fact that the state, but not the marketplace, tends always to operate in the dark. The central planners simply have no way of amalgamating, gathering, mobilizing and utilizing the scattered and subjective knowledge of specific time and place possessed by numerous market participants; in contrast, the price system is a marvelous mechanism for accomplishing precisely these tasks.

More radically, Mises stresses appraisement: if there are no entrepreneurs out there estimating the values of goods, then socialist enterprises of the sort now under discussion simply cannot rationally plan. But with governments in charge of roadways, and with private enterprise relegated to the secondary position of subcontracting, then the process of accurate price generation is to that extent compromised.³²

TEMPORARY OR PERMANENT?

"Should New Toll Lanes Have Temporary or Permanent Tolls?" asks Poole, and he answers as follows:

³²For more on the latter type of analysis, see Walter Block and Kenneth M. Garschina, "Havek, Business Cycles and Fractional Reserve Banking: Continuing the De-Homogenization Process," Review of Austrian Economics 9, no. 1 (1995): 77-94; Richard Ebeling, "Introduction," in Ebeling, ed., The Global Failure of Socialism (Hillsdale, Mich.: Hillsdale College Press, 1992); Jeffrey M. Herbener, "Ludwig von Mises and the Austrian School of Economics," Review of Austrian Economics 5, no. 2 (1991): 33-50; Murray N. Rothbard, "The End of Socialism and the Calculation Debate Revisited," Review of Austrian Economics 5, no. 2 (1991): 51-76. Reprinted in The Logic of Action One: Method, Money, and the Austrian School (Cheltenham, U.K.: Edward Elgar Publishing, 1997), pp. 408–37; idem, "The Present State of Austrian Economics," working paper from the Ludwig von Mises Institute (November 1992), reprinted in The Logic of Action One: Method, Money, and the Austrian School (Cheltenham, U.K.: Edward Elgar Publishing, 1997), pp. 111-72, reprinted in Journal des Economistes et des Etudes Humaines 6, no. 1 (March 1995): 43-89; idem, "Mises and Hayek Dehomogenized," Review of Austrian Economics 6, no. 2 (1992): 113-46; idem, "A Final Word: Calculation, Knowledge and Appraisement," Review of Austrian Economics 9, no. 1 (1995): 141-42; Odd Stalebrink, "The Hayek and Mises Controversy: Bridging Differences," Quarterly Journal of Austrian Economics 7, no. 1 (Spring, 2004): 27-38.

It's the question that's taking Washington, D.C. by storm (well, at least a little corner of D.C.): should tolls authorized to support new congestion-relief lanes (such as HOT lanes or Rep. Mark Kennedy's FAST Lanes) be temporary or permanent? The Joint Economic Committee held a briefing session for congressional staffers on this question last month (June 27) and I was one of three panelists. I made the case that such tolls should be seen as a long-term, permanent measure, both for replacement and expansion of the lanes and to preserve the powerful benefits of market pricing for congestion management.³³

One problem with this answer is that it further indicates there is no level of minutia of government highway operation from which Poole will restrain his involvement. Let no one attack the analogy of restaurant tablecloths mentioned above as excessive.

Another is that he does not seem to realize that these fees are akin to taxes,³⁴ in that they swell the coffers of government, and thereby reduce command over goods and services enjoyed by the people. Even a libertarian advocate of limited government would have to acquiesce in the notion that at present, the state spends far more than the optimal amount of the wealth of the citizenry. If so, then any program that further enhances their spending power is to be rejected, not supported.

States Rothbard on this issue:

Taxes, and the tax bite into their earnings, keep going up, on the federal, state, county and local levels of government. Semantic disguises don't work any more: call them "fees," or "contributions," or "insurance premiums," they are taxes nevertheless, and they are increasingly draining the people's substance.³⁵

³³June 2003: www.rppi.org/surfacetransportation10.html

³⁴They do not resemble taxes, but rather payments for services in private markets, in that road use is a choice; no one is coerced into driving. However, with the state monopolizing the roads, the degree of free choice is less than it would otherwise be.

³⁵Murray N. Rothbard, *Making Economic Sense* (Auburn, Ala.: Ludwig von Mises Institute, 1995), p. 16.

It, of course, cannot be denied that under any reasonable privatization scenario for highways, their owners would charge peak load pricing fees—higher during rush hours and lower at other times—that would tend to quell congestion.³⁶ But the stark fact is that we are not now enjoying an era of private road enterprise. It makes all the difference to a libertarian, or at least it should, that these amenities are now in the compulsory public sector. Yes, there is a choice as to which roads to use, and at what times of day or days of the week, but we are coercively obliged to pay taxes to this selfsame enterprise, therefore its activities and cannot properly be viewed in the benign way that Poole seems them.

I have criticized a plethora of advice given by Reason to the roads authorities as highly improper. What kind of advice to the state *is* legitimate? Tell them to cease and desist. The model has been established by John Galt.³⁷

Rothbard also weighs in on this question:

The economist, of course, is a technician who explains the consequences of various actions. But he cannot advise a man on the best route to achieve certain ends without committing himself to those ends. An economist hired by a businessman implicitly commits himself to the ethical valuation that increasing that businessman's profits is good.... An economist advising the

³⁶So inept are present authorities (who, now, can ever mention this word without Eric Cartman's pronunciation of it ringing in their ears?) that they actually engage in the very opposite policy. That is, they exacerbate the peaks and valleys of daily travel, not counter them. Typically, a road, bridge or tunnel authority will offer a monthly or yearly pass at a price per trip lower than that which would otherwise obtain. Regular travelers, then, get a bargain, compared to all others. But which type of motorist is more likely to utilize these amenities during rush hours, toward the city in the morning, and away from it in the evening? Precisely the regular users, who, at the lower per trip price, are now encouraged take to the highways even the more.

³⁷See Ayn Rand, "America's Persecuted Minority: Big Business," reprinted in *Capitalism: The Unknown Ideal* (New York: Signet, 1957).

government on the most efficient way of rapidly influencing the money market is thereby committing himself to the desirability of government manipulation of that market. The economist cannot function as an adviser without committing himself to the desirability of the ends of his clients.³⁸

The point, here, is that, in giving advice to the state about roads, Poole is "thereby committing himself to the desirability of government" action in this regard. Does this mean that the libertarian can never advise the state? No. If he confines himself to pointing out the economic inefficiency, immorality and other related problems, he does no violence at all to libertarianism. For example, if he is called upon to testify about rent control or the minimum-wage law, and limits himself to pointing out the errors and flaws of this legislation, he is on firm ground. But if he attempts to fashion a "better" or "more effective" law, he diverges from this philosophy. If he gives counsel on taxation, he must call for a reduction, or elimination. And, returning to our present concern, if he advises government on highways, qua libertarian, he must content himself with showing its defect, and calling for privatization. Not contracting out, but privatization. Certainly any attempt to play the role of efficiency expert for the bureaucrats would be ruled out of court on the basis of this criterion.

OBJECTIONS

In this section, we consider some objections to the thesis maintained above, to wit, that Poole's (and Reason's) support for government, surface-transportation arteries cannot be reconciled with the freedom philosophy.

³⁸Murray N. Rothbard, *Man, Economy, and State with Power and Market,* Scholar's Edition (Auburn, Ala.: Ludwig von Mises Institute, 2004), p. 1362.

CASTING THE FIRST STONE

Poole might object to the criticisms made above on the ground that they come with particular ill grace from me, personally, in that I have been employed over the years by several public universities. What is the big difference, he might say, between working for the government and giving it free advice? If anything, the former might even be considered worse than the latter, insofar as the connection is deeper and more enduring.

This argument must be rejected, and on several grounds. First, it is an *argumentum ad hominem*. Even if it is otherwise correct, it in no way exonerates his behavior. All it does is indict my own. But he would still be guilty, as charged. Just because I misbehaved, does not mean he has not.

Second, there is all the world of difference, as far as libertarianism is concerned, between aiding and abetting the state in its ill advised, ill considered, dangerous, mischievous and even murderous road system, on the one hand, and infiltrating into the state's educational system with the goal of examining and transmitting to students a political-economic philosophy that is consonant with economic freedom. That is, stipulate for argument's sake, that during the years I was involved in public education,³⁹ my teaching did not promote Marxism, socialism, or even a centrist, mixed economy; but, rather, to the extent that positive economics leaks out into the normative realm, the very

³⁹Full disclosure regarding my employment at public universities: from August 1997–May 2001, I was professor and Chair of the Department of Economics and Finance, College of Business Administration, University of Central Arkansas, Conway, Arkansas 72035; from September 1975–June 1979, I was assistant professor, Economics Department, Rutgers University, Newark, New Jersey 07102; from September 1971–June 1974, I was assistant professor, Economics Department, Baruch College, C.U.N.Y., New York, New York 10010; from September 1968–June 1971, I was instructor, Economics Department, Rutgers University, Newark, New Jersey 07102, and from September 1967–June 1968, I was instructor, Stony Brook, S.U.N.Y. 11794.

opposite. There is simply no comparison between this sort of activity and Reason's promotion of statism.

What about the propriety of a libertarian such as myself working for the state apparatus in the first place? Just as "the Constitution is not a suicide pact" neither is libertarianism. According to the "logic" of those who see a contradiction in such an act, so would walking on the public sidewalks, driving on the streets, using the post office to mail a letter, and perusing a book at the public library be incompatible with this philosophy. But that would mean that the advocate of the free market could not live in society, and this is by no means required by the nonaggression axiom. For one thing, the taxes of libertarians, along with many others, were taken so as to finance these goods and services. It seems harsh to condemn him for using them, after he has been forced, at the point of a gun, to pay for them. For another, according to this theory, the government has stolen from him the wherewithal to fund these items. Therefore, it is a virtue to seize them back from these criminals.⁴⁰

GIVING AID AND COMFORT TO THE ENEMY

Let us now posit, if only *arguendo*, that many of my previous publications, and, indeed, the contents of the present book, give hints on better road management. For example, I suggest that automobiles damaged in traffic accidents be placed on poles adjacent to the highway, as a warning to motorists. How, then, am I different than Poole/Reason, which, as we have seen above, offers a plethora of advice to the National Highway Safety Traffic Administration (NHSTA) and the Department of Transportation (DOT). We *both*, seemingly, are guilty of the same offense.

⁴⁰For more on this see Walter Block and Gene Callahan, "Is There a Right to Immigration? A Libertarian Perspective," *Human Rights Review* 5, no. 1 (October–December 2003).

One of the questions I am often asked is: as a libertarian who urges separation of state⁴¹ from highways and streets, am I not afraid that the minions of the government will read my material, adopt it to their institutions of road socialism, and thus improve this misbegotten system? Is this not something I would regret?

My answer, to myself and to others is that yes, I would regret it if the government bureaucrats read my publications and improved the operation of their roadways. I realize that there is some slight "danger" of this very thing occurring. However, that will not stop me from writing about it. For my intention is *not* to marginally improve the present transportation system, but rather to replace it, root and branch, with free-market, private property right institutions.⁴²

The difference between Poole and myself is that my suggestions about highway safety are not at all an attempt to help the road socialists. They are not even addressed to the present highway authorities. Rather, they are part and parcel of an attempt to make the case in behalf of roadway privatization. True, during this process all sorts of nuggets appear that might be of use to them.⁴³ Am I supposed *not* to write in behalf of private streets since the road planners might peruse this material?⁴⁴ In contrast,

⁴³Would I willingly and happily see a copy of the present book sold to them? No, I would not. On the other hand, it would be exceedingly difficult to ensure that it did not fall into their hands.

⁴⁴As a practical matter, the odds of our roads masters delving into truly libertarian literature on this issue are exceedingly small—think, Soviet collectivized planners reading about private property farming.

⁴¹I, of course, advocate separate of church and state, education and state, police and state. Indeed, I regard the government as a sort of virus. The more we can separate ourselves from its baleful influence, in whatever of its manifestations, the better off we shall be.

⁴²This does not mean, either, that I counsel attempts to undermine the present road system, to hasten its alteration to one based on the principles of free enterprise. It is already quite bad enough; with friends of the ilk that it now has, it hardly needs any "help" from libertarian enemies in further undermining it.

Poole is very far from advocating the complete elimination of the highway bureaucracy. Instead, he is indeed giving aid and comfort to what I can only consider to be the enemy.

THE PERFECT IS THE ENEMY OF THE GOOD

Let us posit that Reason is actually reducing the number of traffic deaths.⁴⁵ In contrast, since no bureaucrat, we may suppose, will ever read any radical free enterprise material such as the present book, it can have no such beneficent, practical effect whatever. Nor, it may readily be conceded, will libertarian privatization efforts succeed any time in the near term.⁴⁶

Poole might then argue radical privatization schemes are all well and good in theory, but that he is undertaking efforts with actual payoffs in the present. Part of a loaf in the hand, to mix metaphors, is far better than a total loaf in the bush.

It cannot be denied that there is something to this argument. Getting into bed with the state can sometimes pay off in tangible benefits. Of course, these will only be short run. As far as the Reason strategy is concerned, state control of roads will endure indefinitely; that organization certainly does not oppose it. It is

⁴⁵Actually, a search of their material does not reveal any such concern. However, they are vitally interested in traffic congestion, their suggestions to our rulers on this matter are eminently reasonable, and overcrowded conditions on the highways may exacerbate their danger. Thus, it is not entirely unreasonable to suppose that Reason may be properly given credit for reducing the number of road deaths by a small amount.

⁴⁶I am tempted to say, "will never succeed." Even within the libertarian community, this issue is far from being the number one concern. To think that the NHSTA and the DOT will one day be forced to cede their authority to private road owners would appear to be the stuff of fantasy. And yet, and yet. There was a time, too, when the mighty Soviet Union seemed impregnable to change. And then one day Communism was swept away into the dust-bin of history, a place it so richly deserved. Who is to say that our present institutional arrangements, on the basis of which people are dying like flies, will endure forever?

not that Poole and his colleagues have not "landed a glove" on the DOT. They have not even tried. Worse, they have supported the statists, contenting themselves with rearranging the deck chairs of a sinking *Titanic*.⁴⁷

What would we say if a different group, call it Treason, was advising the USSR on its steel factory? This, too, could conceivably save a few lives. How about saving lives by urging softer whips on the slave plantation? Or fewer executions in the concentration camps? Are we being unduly harsh? I think not. In *all* these cases, some few lives are saved by supporting those responsible for the deaths in the first place.

The evidence does not bear out great antipathy toward the present regime. There is no "hold the nose" attempt on the part of Reason to deal with these monsters. Rather, Poole *et al.* actually brag about being efficiency experts for the state. These people are part of the problem, not the solution. How about others, such as the Eno Foundation? They are just as bad. But, unlike Poole and his colleagues, there is no claim on their part to be libertarians.

⁴⁷Well, okay, rearranging the row boats on this ship; after all, we are conceding to the Reason that due to its efforts, some few lives may be inadvertently saved.

Part V

Conclusion

21 An Interview with Walter Block

Interviewers: Bruce Armstrong, Troilus Bryan, Mike Cust, Chris Delanoy, Jeff Dick, Matthew Johnston

UESTION: Suppose the state is taken out of the equation; let's presume private road owners can write and enforce the rules of the road. As it is in their best interest to ensure safety, the roads will be used more and therefore become more profitable. Given that this is the case, do you speculate that road rules will become more strict or less? Do you think drunk driving, speed limits and seat belt laws would be scrapped by these private road owners—and they would instead institute a contract agreement with each driver stating that if they cause death, injury, or property damage to other travelers on these private roads, they must take full responsibility for restitution?

WALTER BLOCK: It is difficult for me to speculate as to how a free market in roads would actually operate. I'm a theoretical economist, not the entrepreneur to whom such questions would be better addressed. However, with that proviso, here are my thoughts. I speculate that some road owners would have more strict rules, others less strict, some slightly lenient, and others

very lenient. Then, the market would sort things out. That is, possibly, consumer desires would impel road entrepreneurs into either a more or less strict stance, I don't know which. Or, possibly, such diversity would endure. In some venues (bars, hockey) there are less strict rules; in others (tea parties, basketball) there are more strict rules. In hockey, for example, they allow and even encourage the players to fight; this is strictly banned in basketball. Some road owners might go one way on this, others, the other way, and the market (the blessed market; the "magic of the marketplace") would confer greater profits on those who supply consumers with a better product (rules of the road in this case) at a lower price. I am trying to apply economic analysis as it is commonly applied to ordinary issues (bubble gum, beans, beer) to an area (roads) to which it is unusual to do so.

QUESTION: I have heard it argued that privatizing roads will lead to cleaner air. Drivers having to pay the market price for roads would find it more costly to drive, prompting a shift to bus, trolley, train and car-pooling. I realize this is crystal-ball gazing, but do you foresee an increase in driver cost, or a decrease? If, as I'm sure you will suggest, the bottom line decreases making driving more accessible to all, how will you answer the greens who will condemn such an assault on planet earth?

WALTER BLOCK: I foresee a decrease in cost in road use compared to now. This is the ordinary expectation when we privatize things like garbage removal, postal services. There is even a general "rule of two" promulgated by Steve Hanke, E.S. Savas, and others: it costs the public sector roughly twice as much to do anything as the private. I'd be amazed if roads were an exception.

Air pollution, with one exception to be mentioned below, is entirely a separate issue. The reason we have it at all is due to a government failure to uphold private property rights, in that pollution is merely and simply an uninvited border crossing, a trespass of dust and other particles, as it were. So, air pollution could rise, fall or stay the same as we moved to road privatization. It all depends upon the state upholding, or failing to uphold, private property rights in this domain. The one exception is that lawsuits for pollution would be much easier with private rather than public roads. No longer would you have to sue millions of separate auto owners. Now, you could sue one or just a few road owners for being bawdy houses, not of sex, but of aiding and encouraging pollution on their property, which then leaks out onto other people's property.¹

QUESTION: Will there be a role for government in "urging" private property owners to sell their land to road construction companies? Building a large highway, for exampl, can be a daunting task. If property owners hold out and refuse to sell their property to a road company, the whole project could grind to a halt. Can government step in and encourage the sale—much the same as with the railroads of the 1800s using the government right of eminent domain?

WALTER BLOCK: Eminent domain is totally and completely inconsistent with free enterprise and libertarianism. It amounts to no more and no less than land theft. The whole point of my (and my son's) debate with Gordon Tullock was on this issue. He said that private road ownership would be impossible without eminent domain laws (expropriation as it is called in Canada), and I (we) denied this. In a nutshell, our argument was that it is possible to burrow under holdouts' property or bridge over it, without violating their property rights.²

QUESTION: In the United States, what bureaucratic encumbrances and agencies would stand in one's way if they were to actually start a company that intended to purchase, own and control all roads and streets in an entire state?

¹See on this the magnificent Murray N. Rothbard, *The Ethics of Liberty* (Atlantic Hightlands, N.J.: Humanities Press, 1982).

²See also Walter Block and Richard Epstein, "Debate on Eminent Domain," *NYU Journal of Law & Liberty* 1, no. 3 (2005): 1144–69. Listen to it at www.mises.org/multimedia/mp3/Block-Epstein.mp3.

WALTER BLOCK: Zoning authorities; bureaucrats in charge of land use; the Environmental Protection Agency; the Department of Transportation; the National Highway Traffic Safety Administration.

QUESTION: How would the private ownership of roads affect metropolitan commuters? Would the costs to use streets go up? Would congestion problems decrease, remain the same, or diminish?

WALTER BLOCK: Road privatization would help everyone, except for bureaucrats, politicians, "civil servants" employed by present statist road managers, etc. I claim that the cost of street use would decrease. See the "rule of two" mentioned above. Congestion problems would decrease, as peak-load pricing (charging more during rush hours than at 3 a.m., which irons out the variations in demand during the day) would become the order of the day. Right now, the government engages in anti-peak-load pricing, which exacerbates the problem. They commonly sell monthly tickets to bridges, tunnels, etc. at a cheaper price per trip than otherwise. But who uses such tickets? Employees, not casual shoppers, visitors. And when do they use these tickets? Precisely during rush hours.

Nor is this any accident. The principle holds true (congestion is a government failure) in many other cases too. Compare congestion during Christmas with the post office and private firms. The former tell you not to mail during the peak-load times; the latter roll up their sleeves, put on extra workers, and satisfy consumers.

QUESTION: How can you reconcile burrowing under someone's property with such issues as mineral rights? At what point above and below do property rights stop?

WALTER BLOCK: There are two theories on this. The first, the erroneous one, is called the *ad coelum* doctrine. Here, if you own an acre of land on the surface of the planet, you own territory right down to the center of the earth, in narrowing circles; e.g., your property comes to a point there (along with everyone else's). In effect, you own a cone (think ice cream cone) of land,

with the top, the acre on the surface of the earth, and the bottom point at its center. Also, your property extends into the heavens, in ever widening circles, again in a cone like formation. The problem with this, for the libertarian, who based property rights on the Locke-Rothbard-Hoppe theory of homesteading, is that you did nothing at all to mix your labor with the land 1,000 miles below the surface. As a practical matter, moreover, you would have the right to forbid airplanes from traveling over your acreage, even 30,000 feet above. Remember, according to this mischievous doctrine, your ownership extends from the core of the earth upward, to an indefinitely far distance. What this implies for ownership of other planets is just another *reductio ad absurdum* of this view.

In the latter, correct homesteading view, you own only that which you mix your labor with. If you farm, you own only as far down as the roots of your plants; maybe just a few feet more, to preclude anyone from doing something under your land that disturbs your crops. Say, ten feet down or so, depending upon the texture of the earth. If you build a house, then your property extends in a downward direction only so far as to preclude anyone else from caving in your house from below; again, the exact distance would depend upon how firm is the earth below your foundation. If your house extends downward for fifty feet, you might own, say, to one hundred feet below.

Merely farming or building a house, then, gives you *no* mineral rights whatsoever. Someone else could drill for oil, or mine tin, or whatever, five thousand feet below your property, if they were there first. Thus, there is no reason, in principle, that the hold out against the road developer could always preclude the latter from building a tunnel under, or a bridge over, this land.

QUESTION: Would building a structure above someone's land effectively covering their home be an invasion of their property rights?

WALTER BLOCK: It depends upon how high above. Yes, it would or might well be an invasion if you built ten or one hundred

feet above, but maybe not if you did so two hundred feet above, and almost certainly not if you did so four hundred feet above.

QUESTION: Can you elaborate on the hypothetical road privatization of one or more municipalities in Saskatchewan.

WALTER BLOCK: In rural Saskatchewan there is a good gravel road built to the doorstep of every farmhouse. Yet many highways are filled with potholes and are quite treacherous to travel. Currently, the municipalities create and upkeep local roads and the province does so for the highways.

Municipal property taxes which pay for roads and schools among other things are too high for the liking of most land owners. Tax revolts have recently ignited in southern Saskatchewan by farmers who were simply too pinched to pay land taxes.

One option to reduce taxes that has been suggested is for two or more municipal districts to combine and pool resources and share administration costs. This should, in theory, lower taxes. Another idea which I would like to promote is the privatization of all municipal services and the dismantling of this third level of government all together in rural areas.

Why launch road privatization in rural Saskatchewan? Because you would have a far greater chance of influencing the opinions of a few hundred farmers of the privatization of a rural municipality than you would have of convincing city people that they could live without city hall. Farmers are already self-reliant. They snowplow their own roads for instance. And Saskatchewan, where the taxes are high and the rural voters are alienated by the urban/socialist dominated legislature, is a great place to harness discontent.

QUESTION: So here are some questions these farmers will need answered before they would sign on to such an experiment in *laissez-faire* capitalism:

If a company bought up and operated as a business all of the roads in one or more municipalities—how would they best collect revenue from the users of these roads? Note that in an area perhaps one hundred miles squared there may be a few hundred points of entry from non-company territory. There will also be visitors, some frequent and some not. Perhaps these local roads will need to be paid for in full by locals?

WALTER BLOCK: It is hard to say how they would best collect revenue from the users of these roads. This is an entrepreneurial decision. It is like asking, before the advent of Disney World, would they charge by the ride, or have an entrance fee? Would they make it cheaper if you purchased a week, month, year long ticket?

Now that I've ducked your eminently reasonable question, let me speculate about it. One possibility would be a charge per mile, depending upon the time of day, day of the week. Another would be a fixed fee. A third would be some combination, thereof. Perhaps the road owner (likely to be a company the shares of which are owned by the local farmers) would allow choice in this regard to its customers. Those road companies that served consumers well would profit and be able to expand, those that did not would suffer losses, and would be more likely taken over by better managers. Probably, visitors would be charged more, unless the place was trying to attract tourists.

Let's look at private roads in malls. Some allow you to park for free, if they want to encourage attendance. Others charge a fee, unless you make a purchase. Practices vary. So might they in Saskatchewan. All we can say is that if different pricing policies long endure, then they all satisfy consumer needs. If not, the efficient ones will out-compete the inefficient ones.

QUESTION: Heavy trucks which haul grain and livestock down these gravel roads are responsible for much of the degradation. Perhaps the drivers of these trucks would need to pay more road access fees than would drivers of cars and pickup trucks?

WALTER BLOCK: Here I am on firmer ground. We once did have private roads, several centuries ago. They charged more for heavier wagons, horses, and more axles. They also charged based on the width of a wheel. A lot for thin wheels which churned up the dirt roads (think ice skates) and less for wide wheels which tamped them down (think steam rollers). I have little doubt that heavy trucks would pay more, lots more. Possibly, they would be charged inversely to the pressure in their tires.

On the other hand, if we had private roads, we would most likely have economic freedom all around. This means, in effect, no unions. But organized labor ruined the railroads. Without railroad unions, the railroads would likely carry most freight, and those big trucks would be far scarcer on the highways (confined to short hauls). So, this question might be moot.

QUESTION: Many of these country roads come to a dead end at one farmers' house. In effect, the road is a "driveway" which is primarily used by that one farm family. Would a farmer be able to buy his own road?

WALTER BLOCK: Sure. Why not? That is like asking, would someone be able to buy his own newspaper, restaurant, shoe store. Of course, anyone can bid for anything he wants in a free society. On the other hand, there is such a thing as specialization and the division of labor. It is likely that there will arise road specialists, who could take these tasks off the hands of the farmers (with the agreement of the latter). In similar manner, not every farmer is his own carpenter, plumber, roofer, restaurateur, etc.

QUESTION: What if an individual bought a road that led to his farmyard but, in addition, was also used (during the era of state owned roads) by a neighbor to reach an otherwise cut-off piece of property? Now, for some reason (perhaps the two neighbors hate each other) the new owner of the road decides to deny passage of his neighbor. What are the likely resolutions to this problem?

WALTER BLOCK: I cover this question in chapter 1 of this book. Suppose you live on a street, and all of a sudden its owner says either you can't get out onto the street at all, or he'll charge you one million dollars each time you do so. Do you have to ride a helicopter, or become a great pole-vaulter, to get off your own property? Not at all! Under present institutional arrangements, before you buy a house or any piece of property, you get title insurance. You want to be protected against anyone else claiming he really owns the house you just bought. Well, in an era of private roads, you would also buy access insurance. You wouldn't want to be trapped on your own property. No one would buy any real estate at all unless he were sure that this sort of entrapment couldn't happen to him. Indeed, it is in the financial interest of the owner *not* to do this, since he wants to attract, not repel, people from living adjacent to his road, so that he can make more profit from them.

QUESTION: If a man wants to live alone in a rural area where there currently is no road—would he likely bear the brunt of the cost of building and maintaining it? Once built will he own it?

WALTER BLOCK: Yes, he would bear the full brunt of making the road, just like he now bears the full brunt of carting bricks, plaster, cement, to this out-of-the-way place. And of course, he would then own the road, just like he now owns his house. There would be no government subsidy, such as provided by the post office, to deliver mail at out of the way places for the same price as that which obtains in the city, where it is cheaper to deliver mail, thanks to economies of scale.

QUESTION: Ditching government. Let's say that *laissez-faire* capitalists within a particular municipality are successful at substituting a free-market enterprise for every local, state-run service; education, roads, sewer, etc. Let's say that local taxes peel back to about 50 percent of their former levels (even though they should be zero because the government now provides zero services). How do you think that local citizens can work together to eject the municipal government? Or do you think it is possible? Keep in mind free-market solutions are now proven to work better and a majority of the local population understands that the local government is useless bunch of bandits.

WALTER BLOCK: I'm not sure I fully understand this question. The only way to eject any government (municipal, state, federal) is to have a near majority or more of libertarians who vote the rascals out of office.

QUESTION: Did the original inhabitants of North America "own" the land? Did they have "property rights" and was this land stolen from them (the Indians) by the white man? If so what

is the antidote to this wrongdoing? Do "we" the current owners of this land give it back when and where an heir to the original owners can be found? Can there be parallels drawn between property stolen from the Russian or Cuban aristocracies in the communist revolutions with property stolen from Indians in North America? What's the difference? These questions are all relevant to road building, since if the Native Americans really own virtually all the land, and they do not wish to sell it for roads, that pretty much ends expanding this form of transportation. If reparations are paid to them in the form of land, we may be forced to destroy most of our highways.

WALTER BLOCK: First of all, even if I accept your premise in its entirety, that the Indians really own most of the territory of the U.S., it is by no means clear that they would wish all or even most of the roads to be turned back into farmland or forests or hunting preserves, or whatever. Surely, most of this acreage is worth far more in support of highways and streets than for these other purposes. If the Natives own it, why would they want to suffer the vast economic losses entailed in such conversions? Because farms and woodlands are more consistent with their "culture"? Unlikely in the extreme. They now preside over a plethora of western, oriented, gambling establishments, due to loopholes in the law, and it is difficult to argue that these are part of their traditions. No, profit maximization is no monopoly of white, blacks or orientals.

Second, it is by no means clear that the Indians are the rightful owners of anything like the entire U.S. Under libertarian law, they could justly claim only those parts of the land that they homesteaded, or occupied, not hunted over. They owned those paths that they used to get from their winter to their summer places. This is based on the Lockean-Rothbardian-Hoppean homesteading theory. I estimate that they owned, in this way, at most 1 percent of the land in the US.³

³See on this several articles I wrote on the topic: Walter Block, "On Reparations to Blacks for Slavery," *Human Rights Review* 3, no. 4

The antidote to land theft, and some land was indeed stolen from the Indians, is reparations, or, better yet, return of the stolen land. Yes, indeed, "we" the current owners of this land must give it back when and where an heir to the original owners can be found. But possession is properly 9/10ths of the law. The present owner is always presumed to be the rightful owner. The burden of proof to the contrary falls upon he who would overturn such property titles. This applies to all claimants, throughout history, without exception. There is no statute of limitation on justice for the libertarian. However, the further back in time you go, especially if there was no written language, the harder it is to meet this burden of proof. In the case of the Indians, lacking a written language, and the theft having taken place so many years ago, there is little hope for much in the way of justified land reparations. In Canada, the courts have allowed the testimony of tribal elders to be determinative in such matters. But a proper court would dismiss this as mere hearsay.

QUESTION: I have heard that you are working on a new book. Can you tell us a little bit about it—and when it will be ready for our consumption?

WALTER BLOCK: My new book, to be published by the Ludwig von Mises Institute, will be on road privatization. It will be based on my extant publications on this subject, plus lots of new material not previously published. Possibly, material generated in this present interview process will be used in it. Let me turn things around a bit: I have got a question for you: what would be a good title for the book? The working title is something like "Road Privatization," but, hopefully, we can do better.

QUESTION: I just wanted to ask what you think is the outlook for the future of liberty currently, and also what projects or

⁽July–September): 53–73; Walter Block and Guillermo Yeatts, "The Economics and Ethics of Land Reform: A Critique of the Pontifical Council for Justice and Peace's 'Toward a Better Distribution of Land: The Challenge of Agrarian Reform'," *Journal of Natural Resources and Environmental Law* 15, no. 1 (1999–2000): 27–69.

actions you believe to be effective, and get some advice for libertarians (and other liberty lovers) to take in order to live more freely. After all, roads will not be privatized unless the climate for freedom is far greater than at present.

WALTER BLOCK: When I started in the libertarian movement, in around 1963 or so, there were probably, literally, one hundred libertarians in the entire world. Now, using that word, libertarian, in the same way as earlier, there must be tens of thousands of us if not hundreds of thousands. We have made great strides. In the early days, if I didn't know the person as a libertarian, they probably weren't one. Now, there are entire libertarian *organiza-tions*, let alone individuals, of which I'm entirely unaware.⁴

I think the prospects for increasing our numbers is great. Maybe not for increasing them proportionately, since it is easier to grow in percentage times when you have virtually zero. If we doubled our size once a year in the early days, we might still be able to do so once every few years, nowadays.

But, we face obstacles. Two of the greatest exponents of the philosophy, who stand head and shoulders over everyone else in terms of the numbers of people they've converted to the one, true faith, have recently passed away (Murray Rothbard and Ayn Rand). This will make our task far more difficult.

QUESTION: How should we proceed? In the same old ways: writing, lecturing, teaching at university, promoting the Libertarian Party.⁵ I don't think we have any comparative advantage in rabble rousing, or in picking up the gun.

WALTER BLOCK: My natural inclination is to refuse to answer this question (I know, I know, I have already started to answer it; don't ask). My reason for this "refusal" is that the prospects for liberty have nothing to do with my own commitment to the

⁴See on this www.policyexperts.org/organizations/organizations.cfm. I should mention perhaps my own favorite libertarian-promoting organization: the Mises Institute, www.mises.org.

⁵www.lp.org.

process of trying to obtaining it. That is, I am going to keep trying, at exactly the same pace, no matter what the prospects are. My reasoning has little to do with the likelihood of success. I do it because I think it's my moral obligation to do it, because I want to pass onto the next generation the flag, or the torch or the banner that's been passed onto me, and because it is just so much *fun*.

However, you've asked me a civil question, so I suppose I should take a hack at it. So, here goes. I'm a pessimist on the outlook for liberty. I think humans are hard-wired, based on sociobiological consideration, to be anti-freedom. We, as a species, have lived for millions of years in groups of twenty to thirty in caves and forests, where markets couldn't, or anyway, didn't function. As a result, I contend, we are not biologically built to appreciate markets. Every time I get a new freshman class, I have to demonstrate to their utter amazement and consternation that minimum wages don't help the poor, that free trade does, that markets, not welfare, help the poor, etc., etc. I think the reason for this is not merely the TV programs they've seen, or children's books (for how, then, do we explain *them*?) but rather that our species is biologically biased against economic freedom. It will always be a hard slog to promote liberty. Looking back over history, over the entire world, there are very few instances of freedom we have had. Yes, two hundred years ago in the U.S. and Great Britain; but these were aberrations. As social scientists, we do not have to explain these statistical outliers; rather, we have to account for the 99.99 percent of human history where freedom is not an ideal. It is perhaps a testimony to the libertarian movement that the freedom philosophy has rarely been stronger throughout all of history, but in only a dozen or so countries.

What are the best means of attaining freedom? Well, I'm a methodological individualist on this (as on most things). That is, different strokes for different folks. Some will best be convinced by folk songs, or movies, or novels (e.g., *Atlas Shrugged*). Some by teachers and writers (my own comparative advantage, plus this best suits my personality). Some by political parties, or by a move to New Hampshire, or by setting up a new country.

Readers should note that Free West Net attempted to pay Dr. Block 1.2 grams of gold for his scheduled two hours of time answering our questions. Walter generously donated this real money back to us, and also generously allowed us to consume substantially more than two hours of his time.

I hope that we live to see the day that there is a better market for Dr. Block's specialized knowledge and uncompromising vision toward liberty. In our opinion he should be on the board of directors of several (not yet existing) companies which build the free-market structures in the future, needed to replace the decrepit disasters which are the institutions of the State. Appendices

Annual U		ligilway Falai	lities from 1957
Year	Fatalities	Vehicle Miles	Rate/100M Vehicle Miles
1957	38,702	646,915	5.98
1958	36,981	664,915	5.56
1959	37,910	700,478	5.41
1960	38,137	718,845	5.31
1961	38,091	737,535	5.16
1962	40,804	766,852	5.32
1963	43,564	805,423	5.41
1964	47,700	846,500	5.63
1965	49,163	887,640	5.54
1966	51,524	927,915	5.55
1967	51,559	965,132	5.34
1968	53,831	1,019,726	5.28
1969	55,032	1,066,108	5.16
1970	53,672	1,114,098	4.82
1971	53,761	1,183,524	4.54
1972	55,704	1,264,614	4.40
1973	55,113	1,316,207	4.19
1974	46,078	1,282,790	3.59
1975	45,500	1,330,074	3.42
1976	45,523	1,402,380	3.25
1977	47,878	1,467,027	3.26
1978	50,331	1,544,704	3.26

APPENDIX I

Annual U.S. Street & Highway Fatalities from 1957

continued on following page

Year	Fatalities	Vehicle Miles	Rate/100M Vehicle Miles
1979	51,103	1,529,133	3.34
1980	51,091	1,527,295	3.35
1981	49,301	1,552,803	3.17
1982	43,945	1,595,010	2.76
1983	42,589	1,652,788	2.58
1984	44,257	1,720,269	2.57
1986	46,056	1,835,000	2.51
1987	46,385	1,921,000	2.41
1988	47,093	2,026,000	2.32
1989	45,555	2,107,040	2.16
1990	44,529	2,147,501	2.07
1991	41,162	2,172,214	1.89
1992	39,235	2,239,828	1.75
1993	40,115	2,296,585	1.75
1994	40,676	2,359,984	1.72
1995	41,798	2,422,696	1.73
1996	41,907	2,485,848	1.69
1997	41,967	2,560,373	1.64
1998	41, 471	2,618,701	1.60
1999	41,611	2,692,335	1.50
2000	41,821	2,749,803	1.50
2001	42,116	2,781,462	1.51
2002*	42,815	2,829,645	1.51

Data from Federal Highway Administration http://www.publicpurpose.com/hwy-fatal57+.htm

* Preliminary data

www-nrd.nhtsa.dot.gov/departments/nrd-30/ncsa/AvailInf.html.

It cannot be denied that death rates per passenger mile traveled have declined over the past half century. It would be unfair to deny that governmental policies should be credited for at least part of this decrease. Limited-access highways and seat-belt legislation must be mentioned in this context. However, the evidence marshaled in this book suggests that had private, profitmaking entrepreneurs been in charge of managing the nation's roads instead of government bureaucrats, the fall would have been even more precipitous in terms of these rates. And in the place of a rather steady 40,000 road fatalities, many fewer would have perished.

APPENDIX II

§31. Manslaughter¹

A. Manslaughter is:

- (1) A homicide which would be murder under either Article 30 (first degree murder) or Article 30.1 (second degree murder), but the offense is committed in sudden passion or heat of blood immediately caused by provocation sufficient to deprive an average person of his self-control and cool reflection. Provocation shall not reduce a homicide to manslaughter if the jury finds that the offender's blood had actually cooled, or that an average person's blood would have cooled, at the time the offense was committed; or
- (2) A homicide committed, without any intent to cause death or great bodily harm.
 - (a) When the offender is engaged in the perpetration or attempted perpetration of any felony not enumerated in Article 30 or 30.1, or of any intentional misdemeanor directly affecting the person; or
 - (b) When the offender is resisting lawful arrest by means, or in a manner, not inherently dangerous, and the circumstances are such that the killing would not be murder under Article 30 or 30.1.
- B. Whoever commits manslaughter shall be imprisoned at hard labor for not more than forty years. However, if the victim was killed as a result of receiving a battery and was under the age of ten years, the offender shall be

¹www.legis.state.la.us/lss/lss.asp?doc=78399.

imprisoned at hard labor, without benefit of probation or suspension of sentence, for not less than ten years nor more than forty years.

Amended by Acts 1973, No. 127, §1; Acts 1991, No. 864, §1; Acts 1992, No. 306, §1; Acts 1994, 3rd Ex. Sess., No. 115, §1.

§32. Negligent homicide²

- A. Negligent homicide is the killing of a human being by criminal negligence.
- B. The violation of a statute or ordinance shall be considered only as presumptive evidence of such negligence.
- C. Whoever commits the crime of negligent homicide shall be imprisoned with or without hard labor for not more than five years, fined not more than five thousand dollars, or both. However, if the victim was killed as a result of receiving a battery and was under the age of ten years, the offender shall be imprisoned at hard labor, without benefit of probation or suspension of sentence, for not less than two nor more than five years.

Amended by Acts 1980, No. 708, §1; Acts 1991, No. 864, §1.

²www.legis.state.la.us/lss/lss.asp?doc=78409

Bibliography

- Ackerman, Alan T. 1994. "Federal Condemnation Framework." In Current Condemnation Law: Takings, Compensation and Benefits, A.T. Ackerman, ed. Chicago: American Bar Association.
- Accident Facts. 1977. Chicago: National Safety Council.
- Ahlbrandt, Roger. 1973. "Efficiency in the Provision of Fire Services." *Public Choice* 16 (Fall).
- Anderson, William L. 2004. "Immigration Quandary" (June 24); www.mises.org/fullarticle.asp?control=567&id=68
- Anderson, Terry L., and Peter J. Hill, eds. 1996. *The Privatization Process: A Worldwide Perspective.* Lanham, Md.: Rowman & Littlefield.
- Anderson, Terry, and Donald R. Leal. 1991. *Free Market Environmentalism*. San Francisco: Pacific Institute.
- Anderson, William, Walter Block, Thomas J. DiLorenzo, Ilana Mercer, Leon Snyman, and Christopher Westley. 2001. "The Microsoft Corporation in Collision with Antitrust Law." *Journal of Social, Political and Economic Studies* 26, no. 1 (Winter).
- *Appraisal of Real Estate, The.* 1992. 10th ed. Chicago: Appraisal Institute.
- Armentano, Dominick T. 1972. *The Myths of Antitrust.* New Rochelle, N.Y.: Arlington House.

- ——. 1982. Antitrust and Monopoly: Anatomy of a Policy Failure. New York: Wiley.
- ——. 1991. Antitrust Policy: The Case for Repeal. Washington, D.C.: Cato Institute.
- Armstrong, Don. 1982. *Competition vs. Monopoly*. Vancouver, B.C.: Fraser Institute.
- Asch, P., and D.T. Levy. 1987. "Does the Minimum Drinking Age Affect Traffic Fatalities?" *Journal of Policy Analysis and Management* 6 (Winter).
- Ashton, T.S. 1955. An Economic History of England. London: Methuen.
- Baird, Charles W. 1989. "James Buchanan and the Austrians: The Common Ground." *Cato Journal* 9, no. 1 (Spring/Summer).
- Baker, Robert F. 1971. *The Highway Risk Problem*. New York: John Wiley and Sons.
- Balaker, Ted. "Strapped: Unbuckling Seat Belt Laws" (May 27, 2004); www.reason.com/hod/tb052704.html
- Banfield, Edward C. 1970. *The Unheavenly City*. Boston: Little, Brown.
- Barnett, William II. 1989. "Subjective Cost Revisited." *Review of Austrian Economics* 3.
- Barnett, William II, and Walter Block. 2007. "Saving and Investing: A Praxeological Approach." New Perspectives on Political Economy 3, no. 2.
- Bates, Regis J., and Donald Gregory. 1998. Voice and Data Communications Handbook. New York: McGraw Hill.
- Baumol, William J. 1963. "Urban Services: Interactions of Public and Private Decisions." In *Public Expenditure Decisions in the Urban Community*, Howard G. Schaller, ed. Baltimore, Md.: Johns Hopkins Press.

- Becker, Gary. 1957. *The Economics of Discrimination*. Chicago: University of Chicago Press.
- Beito, David T. 1988. "Voluntary Association and the Life of the City." *Humane Studies Review* (Fall).
- ——. 1989. "Owning the Commanding Heights." Essays in Public Works History 16.
- —. 1993. "From Privies to Boulevards: The Private Supply of Infrastructure in the United States during the Nineteenth Century." In *Development by Consent: The Voluntary Supply of Public Goods and Services,* Jerry Jenkins and David E. Sisk, eds. San Francisco: ICS Press.
- Beito, David T., and Linda Royster Beito. 1998. "Rival Road Builders: Private Toll Roads in Nevada, 1852–1880." *Nevada Historical Society Quarterly* 41 (Summer).
- Benson, Bruce L. 1981. "Land Use Regulation: A Supply and Demand Analysis of Changing Property Rights." *Journal of Libertarian Studies* 5, no. 4 (Fall).
- ——. 1989. "Enforcement of Private Property Rights in Primitive Societies: Law Without Government." *Journal of Libertarian Studies* 9, no. 1 (Winter).
- —. 1993. "The Impetus for Recognizing Private Property and Adopting Ethical Behavior in a Market Economy: Natural Law, Government Law, or Evolving Self-Interest," *Review of Austrian Economics* 6, no. 2 (Spring).
- ——. 1998. To Serve and Protect: Privatization and Community in Criminal Justice (New York: University Press, 1998).
- Bennett, James T. 1980. *Better Government at Half the Price*. Boston: Green Hill Publishing.
- Bennett, James T., and Thomas DiLorenzo. 1983. "On Weather Forecasting." Journal of Labor Research.

- ——. 1989. Unfair Competition: The Profits of Non-Profits. New York: Hamilton Press.
- Bennett, James T,. and Manuel H. Johnson. 1980. "Tax Reduction Without Sacrifice: Private Sector Production of Public Services." *Public Finance Quarterly* 8, no. 4 (October).
- Bethell, Tom. 1998. *The Noblest Triumph: Property and Prosperity Through the Ages.* New York: St. Martin's Press.
- Bish, Robert L., and Robert J. Kirk. 1974. *Economic Principles and Urban Problems*. Englewood Cliffs, N.J.: Prentice-Hall.
- Bish, Robert L., and Robert Warren. 1972. "Scale and Monopoly Problems in Urban Government Services." Urban Affairs Quarterly 8, no. 1 (September).
- Blair, Roger D., Paul B. Ginsberg, and Ronald J. Vogel. 1975. "Blue Cross-Blue Shield Administration Costs: A Study of Non-Profit Health Insurers." *Economic Inquiry* 13 (June).
- Block, Walter. 1975. "On Value Freedom in Economics." *The American Economist* 19 (Spring): 38–41; www.mises.org/etexts /valuefreedom.pdf; http://141.164.133.3/faculty/Block/ Blockarticles/valuefreedom.htm
- —. 1977. "Coase and Demsetz on Private Property Rights." Journal of Libertarian Studies 1, no. 2 (Spring); www.mises.org/ journals/jls/1_2/1_2_4.pdf
- —. 1979. "Free Market Transportation: Denationalizing the Roads." Journal of Libertarian Studies 3, no. 2 (Summer). www.mises.org/journals/jls/3_2/3_2_7.pdf
- ——. 1980. "On Robert Nozick's 'On Austrian Methodology'." Inquiry 23 (Fall).
- ——. 1980a. "Congestion and Road Pricing." Journal of Libertarian Studies 4, no. 3 (Summer); http://www.mises.org/journals /jls/4_3/4_3_6.pdf.

- ——. ed. 1980b. Zoning: Its Costs and Relevance for the 1980s. Vancouver, B.C.: Fraser Institute.
- —. 1982. Amending the Combines Investigation Act. Vancouver, B.C.: Fraser Institute.
- ——. 1983a. "Theories of Highway Safety." Transportation Research Record #912; www.walterblock.com/publications/ highway_safety.pdf
- —. 1983b. "Public Goods and Externalities: The Case of Roads." Journal of Libertarian Studies 7, no. 1 (Spring); reprinted in The Legacy of Ludwig von Mises, Peter J. Boettke and Peter Leeson, eds. (Cheltenham, U.K.: Edward Elgar). www.mises.org/journals/jls/7_1/7_1_1.pdf
- ——. 1985. *Defending the Undefendable*. New York: Fox and Wilkes.
- —. 1986. "Trading Money for Silence." University of Hawaii Law Review 8, no. 1 (Spring): 57-73. Reprinted as "Trading Money for Silence?" In Economic Imperialism: The Economic Approach Applied Outside the Traditional Areas of Economics, Peter Bernholz and Gerard Radnitzky, eds. New York: Paragon House; http://141.164.133.3/faculty/Block/Blockarticles/tradingmoneyforsilence.htm
- —. 1989. "Comment on William Stanbury's 'Privatization in Canada: Ideology, Symbolism or Substance?" In *Privatization and State-Owned Enterprises: Lessons for the U.K., Canada and the U.S.,* Paul MacAvoy, William Stanbury, George Yarrow and Richard Zeckhauser, eds. Boston: Kluwer.
- —. 1989. "The Justification of Taxation in the Public Finance Literature: An Unorthodox View." Journal of Public Finance and Public Choice 3 (Fall 1989); http://www.walterblock. com/publications/justification_taxation.pdf

—. 1990. "Comment on Alan Walters' 'Deregulation and Privatization: Lessons from the U.K.'" In *The Law and Economics* *of Competition Policy,* Frank Mathewson, Michael Trebilcock and Michael Walker, eds. Vancouver, B.C.: Fraser Institute.

- ——. 1990b. "The Process of Privatization." In O. Yul Kwon, ed., International Privatization: Global Trends, Policies, Processes, Experiences. Saskatchewan: Institute for Saskatchewan Enterprise.
 - —. 1991. "Labor Relations, Unions and Collective Bargaining: A Political Economic Analysis." *Journal of Social Political and Economic Studies* 16, no. 4 (Winter).
- —. 1992. "Institutions, Property Rights and Externalities: The Case of Water Quality, in Agriculture and water Quality: Proceedings of an Interdisciplinary Symposium," Murray H. Miller, J.E. FitzGibbon, Glenn C. Fox, R.W. Gillham and H.R. Whiteley, eds. (Guelph, On.: Guelph Centre for Soil and Water Conservation, University of Guelph Press).
- ——. 1994. "Libertarianism vs. Libertinism." Journal of Libertarian Studies 11, no. 1 (Fall).
- ——. 1994b. "Total Repeal of Anti-trust Legislation: A Critique of Bork, Brozen and Posner," *Review of Austrian Economics* 8, no. 1.
- —. 1995. "Ethics, Efficiency, Coasean Property Rights and Psychic Income: A Reply to Demsetz." *Review of Austrian Economics* 8, no. 2; http://www.mises.org/journals /rae/pdf/ rae8_2_4.pdf
- —. 1996. "Road Socialism." International Journal of Value-Based Management 9; http://walterblock.com/publications/road _socialism.pdf
- ——. 1997. "Tobacco Advertising." International Journal of Value-Based Management 10, no. 3 (May).
- ——. 1998a. "A Libertarian Case for Free Immigration." Journal of Libertarian Studies 13, no. 2 (Summer); http:// www.mises. org/journals/jls/13_2/13_2_4.pdf

- . 1998b. "Roads, Bridges, Sunlight and Private Property: Reply to Gordon Tullock." *Journal des Economistes et des Etudes Humaines* 8, no. 2/3 (June–September); http:// 141.164.133.3/faculty/Block/Blockarticles/roads2_vol8.htm
- —. 1998c. "Private Roads, Competition, Automobile Insurance and Price Controls." *Competitiveness Review* 8, no. 1; http://141.164.133.3/faculty/Block/Blockarticles/privateroads.htm
- —. 1998d. "Compromising the Uncompromisable: Speed, Parades, Cigarettes." Asian Economic Review 40, no. 1 (April); http://walterblock.com/publications/speed_parades .pdf
- ——. 2002a. "Radical Privatization and other Libertarian Conundrums." *International Journal of Politics and Ethics* 2, no. 2.
- ——. 2002b. "On Reparations to Blacks for Slavery." Human Rights Review 3, no. 4 (July–September).
- —. 2002c. "Homesteading City Streets; An Exercise in Managerial Theory." *Planning and Markets* 5, no. 1 (September); http://www-pam.usc.edu/volume5/v5i1a2s1.html; http://www-pam.usc.edu/
- ——. 2003a. "Decentralization, Subsidiarity, Rodney King and State Deification." European Journal of Law and Economics 16, no. 2 (November).
- —. 2003b. "Overcoming Difficulties in Road Privatization." Etica e Politica/Ethics & Politics; http://www.units.it /etica/2003_2/block.htm
- ——. n.d. "Kuflik on Inalienability: A Rejoinder." Unpublished manuscript.
- 2004a. "Open Letter to Mothers Against Drunk Driving (MADD)." Process de Mercado: Revista Europea de Economia Politica (Market Processes: European Journal of Political Economy) 1, no. 1 (Primavera).

——. 2004b. "Radical Libertarianism: Applying Libertarian Principles to Dealing with the Unjust Government, Part I." *Reason Papers* 27 (Fall)3.

——. 2005. "Road Privatization: A Rejoinder to Mohring." *Privatize Roads and Highways*. Lewiston, N.Y.: Edwin Mellen Press.

- Block, Walter, and William Barnett. n.d. Unpublished manuscript. "An Austrian Critique of Neo-Classical Monopoly and Monopsony Theory."
- Block, Walter, and Matthew Block. 1996. "Roads, Bridges, Sunlight and Private Property Rights." *Journal des Economistes et des Etudes Humaines* 7, no. 2/3 (June–September).
- http://141.164.133.3/faculty/Block/Blockarticles/roads1_vol7. htm
- Block, Walter, Geoffrey Brennan, and Kenneth Elzinga, eds. 1985. Morality of the Market: Religious and Economic Perspectives (Vancouver, B.C.: Fraser Institute).
- Block, Walter, and Gene Callahan. 2003. "Is There a Right to Immigration? A Libertarian Perspective." *Human Rights Review* 5, no. 1 (October–December).
- Block, Walter, and Tom DiLorenzo. 2000. "Is Voluntary Government Possible? A Critique of Constitutional Economics." *Journal of Institutional and Theoretical Economics* 156, no. 4 (December).
- ——. 2001. "The Calculus of Consent Revisited." Public Finance and Management 1, no. 3; electronic journal, url: www.spaef.com; http://www.spaef.com; http://spaef.com/ PFM_PUB/pubv1n3.html
- Block, Walter, and Kenneth M. Garschina. 1996. "Hayek, Business Cycles and Fractional Reserve Banking: Continuing the De-Homogenization Process." *Review of Austrian Economics* 9, no. 1; http://www.mises.org/journals/rae/pdf /rae9_1_3.pdf; http://www.mises.org/journals/rae/pdf/r91_3.pdf

- Block, Walter and David Gordon. 1985. "Blackmail, Extortion and Free Speech: A Reply to Posner, Epstein, Nozick and Lindgren." Loyola of Los Angeles Law Review 19, no. 1. http://141.164.133.3/faculty/Block/Blockarticles/blackmail.htm
- Block, Walter, and Guillermo Yeatts. 1999–2000. "The Economics and Ethics of Land Reform: A Critique of the Pontifical Council for Justice and Peace's 'Toward a Better Distribution of Land: The Challenge of Agrarian Reform," *Journal of Natural Resources and Environmental Law* 15, no. 1.
- Boettke, Peter J. 1993. Why Perestroika Failed: The Politics and Economics of Socialist Transformation. New York: Routledge.
- Bonavia, Michael R. 1954. *The Economics of Transport*. London: Cambridge University Press.
- Borcherding, Thomas, ed. 1977. *Budgets and Bureaucrats: The Sources of Government Growth*. Durham, N.C.: Duke University Press.
- ——. from JSTOR: http://www.jstor.org/search/cc99333c. 10675477751/1–10?Configsortorder=SCORE&frame=nofram e&dpi=3&config=jstor
- Boudreaux, Donald. 1997. "A Free Market Case Against Open Immigration?" "Notes From FEE." *The Freeman* (October).
- Boudreaux, Donald, and Thomas J. DiLorenzo. 1992. "The Protectionist Roots of Antitrust," *Review of Austrian Economics* 6, no. 2.
- Brimelow, Peter. 1995. *Alien Nation: Common Sense about America's Immigration Disaster*. New York: Random House.
- British Columbia Report 21 (August 1996).
- Brownlee, O.H. and Walter W. Heller. 1956. "Highway Development and Financing." *American Economic Review* (May).

- Bruce-Briggs, Barry. 1978. *The War Against the Automobile*. New York: Dutton.
- Buchanan, James M. 1952. "The Pricing of Highway Services." National Tax Journal 5, no. 2 (June).
- ——. 1964. "What Should Economists Do?" The Southern Economic Journal 30, no. 3.
- ——. 1969. Cost and Choice: An Inquiry into Economic Theory. Chicago: Markham.
- ——. 1975. The Limits of Liberty. Chicago: University of Chicago Press.
- ——. 1979. "Public Choice and Public Finance." What Should *Economists Do?* Indianapolis: Liberty Press.
- ——. 1990. "The Contractarian Logic of Classical Liberalism." In Liberty, Property, and the Future of Constitutional Development, Ellen Frankel Paul and Howard Dickman, eds. Albany: State University of New York Press.
- Buchanan, James M., and G.F. Thirlby. 1981. *L.S.E. Essays on Cost.* New York: New York University Press.
- Buchanan, James M., and Gordon Tullock. 1971. *The Calculus of Consent: Logical Foundations of Constitutional Democracy*. Ann Arbor: University of Michigan.
- —. 1997. "Buchanan and Tullock's The Calculus of Consent." The Logic of Action Two: Applications and Criticism from the Austrian School. Cheltenham, U.K.: Edward Elgar Publishing.
- Buchanan, James M., Robert D. Tollison, and Gordon Tullock, eds. 1980. Toward a Theory of the Rent-Seeking Society. College Station: Texas A&M University.
- Buchanan, Patrick J. 2002. The Death of the West: How Dying Populations and Immigrant Invasions Imperil Our Country and Civilization. New York: St. Martin's Press.

- Burchard, John. 1970. "Design and Urban Beauty in the Central City." In James Q. Wilson, ed., *The Metropolitan Enigma*. Garden City, N.Y.: Doubleday.
- Butler. 1985. *Privatizing Federal Spending*. New York: Universe Books.
- Buxbaum, R.G., and T. Colton. 1966. "Relationship of Motor Vehicle Inspection to Accident Mortality." *The Journal of the American Medical Association*.
- Cadin, Michelle, and Walter Block. 1997. "Privatize the Public Highway System." *The Freeman* 47, no. 2 (February); http:// www.fee.org/vnews.php?nid=3701
- Callahan, J.M. 1970. "States Move Slowly on Safety Projects." Traffic Digest and Review (March).
- California Journal 1978. "Diamond Lanes Experiment" (January).
- Campbell, H.E. 1973. "The Wet Pavement Accident Problem: Breaking Through." *Traffic Quarterly* (April).
- Caplan, Bryan. 1996. "A Practical Proposal for Privatizing the Highways and Other 'Natural' Monopolies." *Economic Notes* 72. London: Libertarian Alliance.
- Castle, Gilbert. 1976. "The 55 MPH Speed Limit: A Cost-Benefit Analysis." *Traffic Engineering* 45 (January).
- Cirillo, J.A. 1968. "Interstate System Accident Research Study II, Interim Report II." *Public Roads* 35 (August).
- Clarkson, Kenneth W. 1972. "Some Implications of Property Rights in Hospital Management." *Journal of Law & Economics* 15, no. 2 (October).
- Coase, Ronald, H. 1937. "The Nature of the Firm." *Economica* 4 (November).
- ——. 1960. "The Problem of Social Cost." Journal of Law and Economics 3 (October).

——. 1988. The Firm, The Market and The Law. Chicago: University of Chicago Press.

——. 1992. "The Institutional Structure of Production." American Economic Review 82, no. 4 (September).

- Cobin, John M. 1999. "Market Provisions of Highways: Lessons from Costanera Norte." *Planning and Markets* 2, no. 1.
- Conquest, Robert. 1986. *The Harvest of Sorrow*. New York: Oxford University Press.

——. 1990. The Great Terror. Edmonton, Alberta: Edmonton University.

- Cook, P.J., and G. Tauchen. 1984. "The Effect of Minimum Drinking Age Legislation on Youthful Auto Fatalities, 1970–1977." *Journal of Legal Studies* 13.
- Cooper, Norman L. 1971. *Urban Transportation: An Answer.* Bloomington: Bureau of Business Research, Indiana University.
- Cooter, Robert D. 2001. *The Strategic Constitution*. Princeton, N.J.: Princeton University Press.
- Cordato, Roy E. 1992. Welfare Economics and Externalities in an Open Ended Universe: A Modern Austrian Perspective. Boston: Kluwer.
- Courtois, Stephane, Nicolas Werth, Jean-Louis Panne, Andrzej Paczkowski, Karel Bartosek, and Jean Louis Margolin. 1999. *The Black Book of Communism: Crimes, Terror, Repression.* Trans. from French by Jonathan Murphy and Mark Kramer. Cambridge, Mass.: Harvard University Press.
- Cowen, Tyler, ed. 1988. *The Theory of Market Failure: A Critical Examination*. Fairfax, Va.: George Mason University Press.
- Crain, M.W. 1980. *Vehicle Safety Inspection Systems*. Washington, D.C.: American Enterprise Institute for Public Policy Research.

- Crain, W. Mark, and Asghar Zardkooi. 1998. "A Test of the Property Rights Theory of the Firm: Water Utilities in the United States." *Journal of Law & Economics* 21, no. 2 (October).
- Crandall, Robert, and Jerry Hausman. 2000. "Competition in U.S. Telecommunications Services: Effects of the 1996 Legislation." In *Deregulation of Network Industries: What's Next?*, S. Peltzman and C. Winston, eds. Washington, D.C.: AEI-Brookings.
- Crandall, R.W., H.K. Gruenspechl, T.E. Keeler, and L.B. Lave. 1986. *Regulating the Automobile*. Washington, D.C.: Brookings Institution.
- Cuzán, Alfred G. 1979. "Do We Ever Really Get Out of Anarchy?" *Journal of Libertarian Studies* 3, no. 2 (Summer).
- Davies, David G. 1971. "The Efficiency of Public Versus Private Firms: The Case of Australia's Two Airlines." *Journal of Law & Economics* 14, no. 1 (April).
- ——. 1977. "Property Rights and Economic Efficiency—The Australian Airlines Revisited." *Journal of Law & Economics* 20, no. 1 (April).
- De Jasay, Anthony. 1985. The State. Oxford: Basil Blackwell.
- Demsetz, Harold. 1976. "Toward a Theory of Property Rights." American Economic Review 57.
- —. 1979. "Ethics and Efficiency in Property Rights Systems, in Time." In Mario Rizzo, ed., Uncertainty and Disequilibrium: Explorations of Austrian Themes. Lexington, Mass.: D.C. Heath and Co.
- De Palma, Andre, and Robin Lindsey. 2000. "Private Toll Roads: Competition under various ownership regimes." *The Annals of Regional Science* 34.
 - —. 2001. "A Model of Curb Rights In Private Urban Transit Markets." *Canadian Transportation Research Forum*. Proceedings of the 36th Annual Conference.

- DiLorenzo, Thomas J. 1990. "The Subjectivist Roots of James Buchanan's Economics." *Review of Austrian Economics* 4.
- —. 1996. "The Myth of Natural Monopoly," Review of Austrian Economics 9, no. 2; http://www.mises.org/journals/ rae/pdf /rae9_2_3.pdf
- DiLorenzo, Tom, and Walter Block. 2001. "Constitutional Economics and the Calculus of Consent." *Journal of Libertarian Studies* 15, no. 3, (Summer); http://www.mises.org /journals/jls/15_3/15_3_2.pdf
- Downs, Anthony. 1970. *Urban Problems and Prospects*. Chicago: Markham Publishing.
- Duda, J.L. 1977. Program Evaluation Support for the Motor Vehicle Diagnostic Inspection Demonstration Projects, 11: Costs and Benefits. Falls Church, Va.: Computer Sciences Corporation.
- Duesterberg, Thomas J., and Kenneth Gordon. 1997. *Competition and Deregulation in Telecommunications: The case for a New Paradigm*. Indianapolis, Ind.: Hudson Institute.
- Dyckman, John W. 1971. "Transportation in Cities." In *Economics* of Urban Problems, Arthur F. Schreiber, Paul K. Gatons, and Richard B. Clemmer, eds. Boston: Houghton Mifflin.
- Eaton, J.D. 1995. *Real Estate Valuation in Litigation*. Chicago: Appraisal Institute.
- ——. 2002. "Watch This Airspace." *The Economist* (June 22–28).
- Ebeling, Richard. 1992. "Introduction." In *The Global Failure of Socialism*, Richard Ebeling, ed. Hillsdale, Mich.: Hillsdale College Press.
- Egmose, L., and T. Egmose. 1986. "Speed Limits Save Lives." Journal of Traffic Medicine 14.
- Enke, Stephen. 1955. "More on the Misuse of Mathematics in Economics: A Rejoinder." *Review of Economics and Statistics* (May).

Epstein, Richard A. 1985. *Takings: Private Property and the Power of Eminent Domain*. Cambridge, Mass. and London: Harvard University Press.

-----. 1992. Forbidden Grounds: The Case Against Employment Discrimination Laws. Cambridge, Mass.: Harvard University Press.

- Evers, Williamson. 1996. Victim's Rights, Restitution and Retribution. Oakland Calif.: Independent Institute.
- Faigin, B.M. 1976. 175 Societal Costs of Motor Vehicle Accidents. Washington, D.C.: U.S. Department of Transportation, National Highway Traffic Safety Administration.
- Fatality Analysis Reporting System (FARS). 2001. Database at http://www.fars.nhtsa.dot.gov/queryReport.cfm?stateid =0&year=2001
- Fishel, William A. 2001. The Homevoter Hypothesis: How Home Values Influence Local Government Taxation, School Finance, and Land Use Policies. Cambridge, Mass.: Harvard University Press.
- Fitzgerald, Randall. 1989. When Government Goes Private: Successful Alternatives to Public Services. New York: Universe Books, 1989.
- Fletcher. George P. 1985. "Paradoxes in Legal Thought," Columbia Law Review: 1263.
- Flew, Antony. 1982. "Could There Be Universal Natural Rights?" Journal of Libertarian Studies 6, no. 3–4 (Summer/Fall).
- Foldvary, Fred. 1994. Public Goods and Private Communities: The Market Provision of Social Services. Cheltenham, U.K.: Edward Elgar.
- Forester, Thomas, Robert F. McNown, and Larry D. Singell. 1984. "A Cost Benefit Analysis of the 55 mph Speed Limit." Southern Economic Journal 50 (January).

- Fowles, Richard, and Peter D. Loeb. 1989. "Speeding, Coordination and the 55-MPH Limit: Comment." American Economic Review 79, no. 4 (September).
- Frech, H.E. 1976. "The Property Rights Theory of the Firm: Empirical Results from a Natural Experiment." *Journal of Political Economy* 84, no. 1 (February).
- Friedman, David. 1979. "Private Creation and Enforcement of Law: A Historical Case." Journal of Legal Studies 8 (1979).
- —. 1989. *The Machinery of Freedom: Guide to a Radical Capitalism*.2nd ed. La Salle, Ill.: Open Court.
- —. 1992. "How to Think About Pollution; or Why Ronald Coase Deserved the Nobel Prize." *Liberty* 5, no. 3 (January); http://www.daviddfriedman.com/Libertarian/ The_ Swedes.html
- Friedman, Milton. 1956. *Studies in the Quantity Theory of Money*. Chicago: University of Chicago Press.
- ——. 1962. Capitalism and Freedom. Chicago: University of Chicago Press.
- -----. 1991. "Say 'No' to Intolerance." Liberty 4, no. 6 (July).
- Friedman, Milton, and Anna J. Schwartz. 1970. *Monetary Statistics* of the United States: Estimates, Sources, Methods. New York: National Bureau of Economic Research.
- —. 1982. Monetary Trends in the United States and the United Kingdom, Their Relation to Income, Prices, and Interest Rates, 1867–1975. Chicago: University of Chicago Press.
- Fuchs, V.R., and I. Leveson. 1967. "Motor Accident Mortality and Compulsory Inspection of Vehicles." *Journal of the American Medical Association* 201 (August).
- Galbraith, John Kenneth. 1958. *The Affluent Society*. Boston: Houghton-Mifflin.

Garber, Nicholas J., and Ravi Gadirau. 1988. *Speed Variance and Its Influence on Accidents*, unpublished manuscript, AAA Foundation for Traffic Safety, Washington D.C. (July).

General Motors Quarterly (1974): 28.

- Gordon, David 1993. "Toward a Deconstruction of Utility and Welfare Economics," *Review of Austrian Economics* 6, no. 2.
- Gordon, David. 1997. "The Invisible Hoppe." *The Mises Review* (Winter). http://www.mises.org/misesreview_detail.asp ?control=47&sortorder=issue.
- Grampp, W.S. 1950. "Some Effects of Rent Control." Southern Economic Journal (April).
- Graves, Philip E., Dwight R. Lee, and Robert L. Sexton. 1989. "Statutes Versus Enforcement; The Case of the Optimal Speed Limit." *American Economic Review* 79, no. 4 (September).
- Gunderson, Gerald. 1989. "Privatization and the 19th-Century Turnpike." *Cato Journal* 9, no. l (Spring/Summer).
- Gwartney, James, Robert Lawson and Walter Block. 1996. *Economic Freedom of the World*, 1975–1995. Vancouver, B.C.: Fraser Institute.
- Gwartney, James D., and Richard E. Wagner, eds. 1988. *Public Choice and Constitutional Economics*. London: JAI Press.
- Hadfield. Gillian. 2001. "Privatizing Commercial Law." Regulation 24, no. 1 (Spring 2001).
- Hanke, Steve H. 1987. "Privatization." In *The New Palgrave: A Dictionary of Economics,* James Eatwell, Murray Milgate and Peter Newman, eds. London: Macmillan Press.
- ——. 2003. "Money and the Rule of Law in Ecuador." Speech given in Quito, October.
- —. citations of articles from JSTOR: http://www.jstor.org/ search/cc99333c. 10675478690/1-3?configsortorder= SCORE& frame=noframe&dpi=3&config=jstor

- Haritos, Z. 1974. "Theory of Road Pricing." *Transportation Journal* 13 (Spring).
- Hauer, Ezra. 1971. "Accidents, Overtaking, and Speed Control." Accident Analysis and Prevention 3 (January).
- Haveman, Robert H. 1970. *The Economics of the Public Sector*. New York: John Wiley and Sons.
- Hayek, F.A. 1931. *Prices and Production*. London: Routledge and Sons.
- -----. 1944. The Road to Serfdom. Chicago: University Chicago Press.
- ——. 1945. "The Use of Knowledge in Society." American Economic Review 35 (no. 4).
- -----. 1948. "Socialist Calculation I, II, & III." *Individualism and Economic Order.* Chicago: University of Chicago Press.
- ——. 1960. The Constitution of Liberty. Chicago: University of Chicago Press.
- -----. 1973. *Law, Legislation and Liberty*. Chicago: University of Chicago Press.
- ——. 1975. Collectivist Economic Planning. Clifton, N.J.: Augustus M. Kelley, 1975.
- Hazlett, Thomas W., and Matthew L. Spitzer. 1997. *Public Police toward Cable Television: The Economics of Rate Controls*. Washington, D.C.: The AEI Press.
- Hecht, Jeff. 2002. "A Fiber Optic Chronology." www.sff.net/people/Jeff.Hecht/chron.html
- Heldman, Peter K. 1997. Competitive Telecommunications: How to Thrive Under the Telecommunications Act. New York: McGraw Hill.
- Herbener, Jeffrey M. 1991. "Ludwig von Mises and the Austrian School of Economics." *Review of Austrian Economics* 5, no. 2.

- Herrnstein, Richard J., and Charles Murray. 1994. *The Bell Curve: Intelligence and Class Structure in American Life*. New York: Free Press.
- Heyne, Paul 1991. *The Economic Way of Thinking*. 6th ed. New York: Macmillan.
- High, Jack. 1984–1985. "Bork's Paradox: Static vs. Dynamic Efficiency in Antitrust Analysis," *Contemporary Policy Issues* 3.
- Hoppe, Hans-Hermann. 1988. *Praxeology and Economic Science*. Auburn, Ala.: Ludwig von Mises Institute.
- ——. 1989. *A Theory of Socialism and Capitalism: Economics, Politics and Ethics.* Boston: Dordrecht.
- *——. 1993. The Economics and Ethics of Private Property: Studies in Political Economy and Philosophy. Boston: Kluwer.*
- ——. 1996. "Socialism: A Property or Knowledge Problem?" Review of Austrian Economics 9, no. 1.

-----. 1998–1999. "The Private Production of Defense." *Journal of Libertarian Studies* 14, no. 1 (Winter).

- ——. 2001. Democracy—The God That Failed: The Economics and Politics of Monarchy, Democracy, and Natural Order. New Brunswick, N.J.: Transaction Publishers.
- Hoppe, Hans-Hermann, and Walter Block. 2002. "Property and Exploitation." International Journal of Value-Based Management 15, no. 3.
- Hoskin, A. 1986. "Consequences of Raising the Speed Limit." Journal of Safety Research 17.
- Hudgins, Edward L., ed. 1996. *The Last Monopoly: Privatizing the Postal Service for the Information Age*. Washington, D.C.: Cato Institute.
- Hudson, James L. 1986. "The Philosophy of Immigration." Journal of Libertarian Studies, 8, no. 1 (Winter); http:// www. mises.org/journals/jls/8_1/8_1_5.pdf

- Hummel, Jeffrey Rogers. 1990. "National Goods vs. Public Goods: Defense, Disarmament and Free Riders." *The Review of Austrian Economics* 4.
- Interagency Land Acquisition Conference. 1992. Uniform Appraisal Standards for Federal Land Acquisitions. Washington, D.C.: U.S. Government Printing Office.
- Jackman, W.T. 1916. *The Development of Transportation in Modern England*. Cambridge: Cambridge University Press.
- Jondrow, James, Marianne Bowes, and Robert Levy. 1983. "The Optimal Speed Limit." *Economic Inquiry* 21 (July).
- Journal of Libertarian Studies 13, no. 2; http://www.mises.org/jlsdisplay.asp
- Kain, John F. 1971. "A Re-appraisal of Metropolitan Transportation Planning." In *Economics of Urban Problems: An Introduction*, Arthur Schreiber, Paul Gatons, and Richard Clemmer, eds. Boston: Houghton Mifflin.
- Kamerud, Dana B. 1983. "The 55 MPH Speed Limit: Costs, Benefits and Implied Tradeoffs." *Transportation Research* 17A (January).
- Kanner, Gideon. 2001. "Comment on Exxon v. Hill." Just Compensation (December).
- Kantor, Shawn E. 1998. *Politics and Property Rights: The Closing of the Open Range in the Postbellum South*. Chicago: University of Chicago Press.
- Khursheed, Aaiysha F., and Thomas E. Borcherding. 1998. "Organizing Government Supply: The Role of Bureaucracy." In *Handbook of Public Finance*, Fred Thompson and Mark T. Green, eds. New York: Marcel Dekker.
- Kinsella, Stephan. 1992. "Estoppel: A New Justification for Individual Rights." *Reason Papers* 17 (Fall).

- ——. 1996a. "Punishment and Proportionality: The Estoppel Approach." *Journal of Libertarian Studies* 12, no. 1 (Spring).
- ------. 1996b. "New Rationalist Directions in Libertarian Rights Theory." *Journal of Libertarian Studies* 12, no. 2 (Fall).
- ——. 1997. "A Libertarian Theory of Punishment and Rights." 30 Loyola L.A. Law Review.
- ——. 1998–1999. "Inalienability and Punishment: A Reply to George Smith." *Journal of Libertarian Studies* 14, no. 1 (Winter).
- Kirzner, Israel. 1973. *Competition and Entrepreneurship*. Chicago: University of Chicago Press.
- Klein, Dan, and G.J. Fielding. 1992. "Private Toll Roads: Learning From the Nineteenth Century." *Transportation Quarterly* (July).
- ——. 1993a. "How to Franchise Highways." Journal of Transport Economics and Policy (May).
- ——. 1993b. "High Occupancy/Toll Lanes: Phasing in Congestion Pricing a Lane at a Time." *Policy Study* 170 (November).
- Klein, Dan, and J.A. Waller. 1971. "Modification of Driver Behavior vs. Modification of the Driving Environment." *Traffic Quarterly* (April).
- Klein, Dan, John Majewski, and Christopher Baer. 1993a. "Economy, Community and the Law: The Turnpike Movement in New York, 1797–1845," *Journal of Economic History* (March).
- ——. 1993b. "From Trunk to Branch: Toll Roads in New York, 1800–1860," Essays in Economic and Business History 11.
- Klein, Daniel 1990. "The Voluntary Provision of Public Goods? The Turnpike Companies of Early America." *Economic Inquiry* (October).
- —. 2002. "The Voluntary Provision of Public Goods: The Turnpike Companies of Early America." In *The Voluntary City*,

David T. Beiko, P. Gordon and Alexander Tabarrok, eds. Ann Arbor: University of Michigan Press.

- Kochan, Donald J. 1998. "'Public Use' and the Independent Judiciary: Condemnation in an Interest Group Perspective." *Texas Review of Law and Politics* 3.
- Kolko, Gabriel. 1963. *Triumph of Conservatism*. Chicago: Quadrangle Books.
- Kraft, Gerald and Thomas A. Domencich. 1968. "Free Transit." presented at the Transportation and Poverty Conference, mimeographed. Brookline, Mass.: American Academy of Arts and Sciences. Cited in Lewis M. Schneider, "The Fallacy of Free Transportation." *Harvard Business Review* 47 (January– February 1969).
- Krecke, Elisabeth. 1992. "Law and the Market Order: An Austrian Critique of the Economic Analysis of Law." paper presented at the Ludwig von Mises Institute's Austrian Scholar Conference, New York City, October 9–11.
- Kreml, F.H. 1971. "On Highway Safety." *Traffic Digest and Review* (March).
- Krutilla, John V. 1963. "Welfare Aspects of Benefit Cost Analysis." In Public Expenditure Decisions in the Urban Community, Howard G. Schaller, ed. Baltimore, Md.: Johns Hopkins Press.
- Lachmann, L. 1956. *Capital and Its Structure*. London, England: Bell and Sons.
- Landes, William M. and Richard A. Posner. 1979. "Adjudication as a Private Good," *Journal of Legal Studies* 8.
- Lathrop, Jr., William. 1972. "Reversible Roadway Controls." *Traffic Quarterly* (January).
- Lave, Charles A. 1985. "Speeding, Coordination and the 55-MPH Limit." *American Economic Review* 75, no. 5 (September).

. 1989. "Speeding, Coordination and the 55-MPH Limit: Reply." *American Economic Review* 79, no. 4 (September 1989).

- Lave, L.B., and W.E. Weber. 1970. "A Benefit Cost Analysis of Auto Safety Features." *Applied Economics* 2.
- Lemennicier, Bertrand. 1996. "La Privatisation des rues." *Journal des Economistes et des Etudes Humaines* 7, no. 2/3 (June–September).
- Leoni, Bruno, and Eugenio Frola. 1977. "On Mathematical Thinking in Economics." *Journal of Libertarian Studies* 1, no. 2 (Spring).
- Levin, Michael. 1997. Why Race Matters. Westport, Conn.: Praeger.
- Levy, David T., and Peter Asch. 1989. "Speeding, Coordination and 55-MPH Limit: Comment." *American Economic Review* 79, no. 4 (September).
- Lincoln Highway, The. 1935. Lincoln Highway Association. New York: Dodd, Mead.
- Lindsay, Cottom M. 1976. "A Theory of Government Enterprise." Journal of Political Economy 84 (October).
- Lindblom, Charles E. 2001. *The Market System: How It Is, How It Works, and What to Make of It.* New Haven, Conn.: Yale University Press.
- Locke, John. 1948. "An Essay Concerning the True Origin, Extent and End of Civil Government." In *Social Contract*, E. Barker, ed. New York: Oxford University Press.
- —. 1960. "An Essay Concerning the True Origin, Extent and End of Civil Government." In *Two Treatises of Government*, Peter Laslett, ed. Cambridge: Cambridge University Press. Pp. 27–28.
- Loeb, P.D. 1985. "The Efficacy and Cost effectiveness of Motor Vehicle Inspection Using Cross-sectional Data—An Econometric Analysis." Southern Economic Journal 52 (October).

- —. 1987. "The Determinants of Motor Vehicle Accidents with Special Consideration to Policy Variables." *Journal of Transport Economics and Policy* 21 (September).
- —. 1988. "The Determinants of Motor Vehicle Accidents—A Specification Error Analysis." Logistics and Transportation Review 24 (March).
- Loeb. P.D., and B. Gilad. 1984. "The Efficacy and Cost Effectiveness of Vehicle Inspection—A State Specific Analysis Using Time Series Data." *Journal of Transport Economics and Policy* 18 (May).
- Lusvardi, Wayne C. 1998. "The Death of Rights of Ways." *Right of Way*, International Right of Way Association (July–August).
- Lusvardi, Wayne C., John Wright, and Todd Amspoker. 2000. "Appraising Linear Subordinate Easements in Utility Corridors." *Appraisal Journal* (July).
- Lusvardi, Wayne C., and W.B. Charles. 2001. "Bandwidth Blackmail? What Price an Easement. Setting Market Value in Fiber Optic Corridors." *Public Utilities Fortnightly* (July 1).
- Machan, Tibor R., ed. 1978. "Against Nonlibertarian Natural Rights." *Journal of Libertarian Studies* 2, no. 3 (Fall).
- —, ed. The Libertarian Reader. Totowa, N.J.: Rowman & Littlefield.
- —. 1995. "A Defense of Property Rights and Capitalism," in *Introducing Applied Ethics*, Brenda Almond, ed. Oxford: Blackwell, 1995.
- Margolis, Julius. 1955. "A Comment on the Pure Theory of Public Expenditure." *Review of Economics and Statistics* (November).
- Matteoni, Norman E., and Henry Veit. 1990. *Condemnation Practice in California-Supplement*. Berkeley, Calif.: Continuing Education of the Bar.

- McChesney, Fred. 1991. "Antitrust and Regulation: Chicago's Contradictory Views," Cato Journal 10.
- McFarland, R.A. 1958. "Health and Safety in Transportation." *Public Health Reports* 73, no. 8 (August).
- McGee, Robert W. 1994. "The Fatal Flaw in NAFTA, GATT and All Other Trade Agreements," *Northwestern Journal of International Law & Business* 14, no. 3.
- Megginson, William L., and Jeffrey M. Netter. 2001. "From State to Market: A Survey of Empirical Studies on Privatization." *Journal of Economic Literature* 39 (June).
- Meiburg, Charles O. 1963. "An Economic Analysis of Highway Services." *Quarterly Journal of Economics* 77 (November).
- Metropolitan Transportation Problem, The. 1956. Washington, D.C.: Brookings Institution.
- Meyer, John R. 1964. "Knocking Down the Straw Men." In *City and Suburb*, Benjamin Chinitz, ed. Englewood Cliffs, N.J.: Prentice-Hall.
- ——. 1970. "Urban Transportation." In *The Metropolitan Enigma*, James Q. Wilson, ed. Garden City, N.Y.: Doubleday.
- Meyer, John R., John F. Kain, and Martin Wohl. 1965. *The Urban Transportation Problem*. Cambridge, Mass.: Harvard University Press.
- Milgrom, Paul R., Douglass C. North and Barry R. Weingast. 1990. "The Role of Institutions in the Revival of Trade: The Law Merchant, Private Judges, and the Champagne Fairs," *Economics and Politics* 2, no. 1.
- Mises, Ludwig von. [1933] 1975. "Economic Calculation in the Socialist Commonwealth," in *Collectivist Economic Planning*, F.A. Hayek, ed. Clifton, N.J.: Kelley.
- -----. [1949] 1966. Human Action. Regnery: Chicago.
 - —. 1969. Bureaucracy. New Rochelle, N.Y.: Arlington House.

- ——. 1981. Socialism. Indianapolis, Ind.: LibertyPress/Liberty-Classics.
- Mohring, Herbert. 1965. "Urban Highway Investments." In *Measuring Benefits of Government Investments*, Robert Dorfman, ed. Washington, D.C.: Brookings Institution.
- ——. 2006. "Congested Roads: An Economic Analysis with Twin Cities' Illustrations." In *Street Smart: Competition, Entrepreneurship and the Future of Roads,* Gabriel Roth, ed. New Brunswick, N.J.: Transactions Publishers.
- Mohring, Herbert D., and Mitchel Harwitz. 1962. *Highway Benefits*. Evanston, Ill.: Northwestern University Press.
- Morris, S.S. 1973. "Freeways and the Urban Traffic Problem." *Traffic Quarterly* 27 (October).
- Nader, Ralph. 1972. *Unsafe at Any Speed*. New York: Grossman Publishers.
- National Highway Traffic and Safety Administration. http:// www.nhtsa.dot.gov/
- ——. 2001. Fatality Analysis Reporting System (FARS) database, http://www.fars.nhtsa.dot.gov/queryReport.cfm?stateid= 0&year=2001
- Nelson, James C. 1962. "The Pricing of Highway, Waterway and Airway Facilities." *American Economic Review, Papers and Proceedings* (May).
- Netter, D. 1952. "Toll Roads and the Crisis in Highway Finance." National Tax Journal 5, no. 2 (June).
- Newbery, David M. 2001. *Privatization, Restructuring and Regulation of Network Industries.* Cambridge, Mass.: MIT Press.
- Noble, Charles M. 1971. "Highway Design and Construction Related to Traffic Operations and Safety." *Traffic Quarterly* (November).

- North, Douglass C. 1981. Structure and Change in Economic History. New York: Norton.
- ——. 1990. Institutions, Institutional Change and Economic Performance. New York: Cambridge University Press.
- North, Gary. 1990. *Tools of Dominion: The Case Laws of Exodus*. Tyler, Texas: Institute for Christian Economics.
- ——. 1992. *The Coase Theorem*. Tyler, Tx.: The Institute for Christian Economics.
- Nozick, Robert. 1974. *Anarchy, State, and Utopia*. New York: Basic Books.
- Offitbank. 2002. "California Water Bonds Under Scrutiny." www.offitbank.com/prodserv/market_comm/ca_water.asp
- Ohashi. T.M., T.P. Roth, Z.A. Spindler, M.L. McMillan, & K.H. Norrie. 1980. *Privatization Theory & Practice*. Vancouver, B.C.: Fraser Institute.
- Oi, W. 1977. "Safety at any Price?" The American Enterprise Institute Journal on Government and Society (November–December).
- Olmsted, Robert A. 1974. "Response to [William Vickrey's] Improving New York's Transit Service—An Economist's View." *City Almanac* 8 (April).
- Olson, Jr., Mancur. 1965. *The Logic of Collective Action*. New York: Sehocken Books.
- Oppenheimer, Franz. [1914] 1975. *The State*. New York: Free Life Editions.
- Owen, Wilfred. 1956. *The Metropolitan Transportation Problem*. Washington, D.C.: Brookings Institution.

——. 1972. The Accessible City. Washington, D.C.: Brookings Institution.

Peltzman, Samuel. 1975. "The Effects of Automobile Safety Regulation." *Journal of Political Economy* 83, no. 4.

- Peltzman, Samuel, and Clifford Winston, eds. 2000. *Deregulation* of Network Industries: What's Next? Washington, D.C.: AEI Brookings.
- Peterson, Shorey. 1950. "The Highway from the Point of View of the Economist." In *Highways in Our National Life: A Symposium*, Jean Labatut and Wheaton J. Lane, eds. Princeton, N.J.: Princeton University Press.
- Picchi, Robert H. 2002. "Managing the Telecom Value Curve." Public Utilities Fortnightly. *Public Utilities Report* (July 15).
- Pirie. Madson. 1986. *Privatization in Theory and Practice*. London: Adam Smith Institute.
- Plewes, James C., and Maurice H. Yeates. 1972. "The Urban Rush Hour: An Analysis of the Yonge Street, Toronto Subway System." *Traffic Quarterly* 26 (April).
- Poole, Robert. 1976. *Cutting Back City Hall*. New York: Reason Press.
- Poole, Robert W., Jr. 1988. Private Tollways: Resolving Gridlock in Southern California. Los Angeles: Reason Foundation. Policy Study 111 (May). http://www.reason.org/ps111.pdf
- —. 1996. Privatizing Wisconsin's Interstate Highways. Los Angeles: Reason Foundation. Policy Study 203 (April). http://www.reason.org/ps203.html
- Ponsonby, G.J. 1958. "The Problem of the Peak, with Special Reference to Road Passenger Transport." *The Economic Journal* (March).
- Posner, Richard A. 1986. *Economic Analysis of Law*. 3rd ed. Boston: Little Brown.
- ——. 1992. Sex and Reason. Cambridge, Mass.: Harvard University Press.
- ——. 1999. Natural Monopoly and Its Regulation. Washington, D.C.: Cato Institute.

- Rae, John B. 1972. "The Mythology of Urban Transportation." *Traffic Quarterly* (January).
- Ramsey, Bruce. 2002. "Surveying Property Rights'—A Review of Bernard Siegan, Property Rights: From Magna Carta to the Fourteenth Amendment, 2001." *Liberty* (June).
- Rand, Ayn. 1967. "America's Persecuted Minority: Big Business." Reprinted in *Capitalism: The Unknown Ideal*. New York: Signet.
- Rasmussen, Douglas, B. 1980. "A Groundwork for Rights: Man's Natural End." *Journal of Libertarian Studies* 4, no. 1 (Winter).
- Read, Leonard E. 1958. *I, Pencil*. Irvington-on-Hudon, N.Y.: Foundation for Economic Education; http://www.econlib .org/library/Essays/rdPncl1.html
- *Regulation and Automobile Safety.* 1975. Washington, D.C.: American Enterprise Institute for Public Policy Research.
- Renshaw, Edward F. 1962. "The Economics of Highway Congestion." Southern Economic Journal (April).
- "Report of the Secretary's Advisory Committee on Traffic Safety." U.S. Department of Health, Education, and Welfare." February 29, 1968.
- Richman, Sheldon. 1994. Separating School and State: How to Liberate American's Families. Fairfax, Va.: Future of Freedom Foundation.
- Robbins, Lionel. 1932. An Essay on the Nature and Significance of *Economic Science*. London: Macmillan.
- Ross, William D. 1956. "Comment." American Economic Review (May).
- Roth, Gabriel. 1966. *A Self-Financing Road System*. London: Institute of Economic Affairs.
 - —. 1967. Paying for Roads: The Economics of Traffic Congestion. Middlesex, England: Penguin.

- ——. 1987. The Private Provision of Public Services in Developing Countries. Oxford: Oxford University Press.
- Rothbard, Murray N. 1962. *Man, Economy and State: A Treatise on Economic Principles*, 2 vols. Princeton, N.J.: D. Van Nostrand.
- ——. 1970. Power and Market: Government and the Economy. Menlo Park, Calif.: Institute for Humane Studies.
- ——. 1973. For a New Liberty. New York: Macmillan.
- —. 1977. "Toward a Reconstruction of Utility and Welfare Economics." San Francisco: Center for Libertarian Studies, Occasional Paper #3. Reprinted in *The Logic of Action One: Method*, *Money, and the Austrian School*. Cheltenham, U.K.: Edward Elgar, 1997.
- ——. 1978. Reconstruction of Utility and Welfare Economics. New York: Center for Libertarian Studies.
- ——. 1982a. The Ethics of Liberty. Atlantic Highlands, N.J.: Humanities Press.
- —. 1982b. "Law, Property Rights, and Air Pollution." Cato Journal 2, no. 1 (Spring). Reprinted in Economics and the Environment: A Reconciliation, Walter Block, ed., Vancouver, B.C.: Fraser Institute, 1990; http://www.mises.org/rothbard/lawproperty.pdf
- -----. 1983. *The Mystery of Banking*. New York: Richardson and Snyder.
- ——. 1989. "Public Choice: A Misshapen Tool." *Liberty* (May).
- —. 1990. "Law, Property Rights, and Air Pollution." In *Economics and the Environment: A Reconciliation*, Walter Block, ed. Vancouver, B.C.: Fraser Institute.
- . 1991. "The End of Socialism and the Calculation Debate Revisited." *Review of Austrian Economics* 5, no. 2. Reprinted in *The Logic of Action One: Method, Money, and the Austrian School.* Cheltenham, U.K.: Edward Elgar, 1997.

- —. 1992. "The Present State of Austrian Economics." Working Paper from the Ludwig von Mises Institute (November). Reprinted in *The Logic of Action One: Method, Money, and the Austrian School.* Cheltenham, U.K.: Edward Elgar, 1997. Reprinted in *Journal des Economistes et des Etudes Humaines* 6, no. 1 (March 1995).
- ——. 1993. *Man, Economy and State*. Auburn, Ala.: Ludwig von Mises Institute.
- ——. 1995a. Classical Economics: An Austrian Perspective on the History of Economic Thought. Cheltenham, U.K.: Edward Elgar.
- ——. 1995b. *Making Economic Sense*. Auburn, Ala.: Ludwig von Mises Institute.
- ——. 1997. "Toward a Reconstruction of Utility and Welfare Economics." In *The Logic of Action One: Method, Money and the Austrian School.* Cheltenham, U.K.: Edward Elgar.
- —. 1997. "Buchanan and Tullock's The Calculus of Consent." The Logic of Action Two: Applications and Criticism from the Austrian School. Cheltenham, U.K.: Edward Elgar Publishing.
- ——. 1998. *The Ethics of Liberty*. New York: New York University Press, 1982.
- —. 2004. Man, Economy, and State with Power and the Market. Scholar's Edition. Auburn, Ala.: Ludwig von Mises Institute. http://www.mises.org/rothbard/mespm. pdf
- Royster, Charles. 1999. *The Fabulous History of the Dismal Swamp Company.* New York: Vintage Books.
- Rudell, William. 2000. "Taxes and Fees for Telecommunications Carriers and Cable Systems." Paper presented at Local Telecommunications Infrastructure Seminar, Law Seminars International, November 9–10, Los Angeles. Unpublished manuscript. Richards, Watson and Gershon, attorneys, Los Angeles.

- Rummel, R.J. 1992. *Democide: Nazi Genocide and Mass Murder*. Rutgers, N.J.: Transaction Publishers.
- ——. 1994. Death by Government. New Brunswick, N.J.: Transaction Publishers.
- ——. 1997. Statistics on Democide. Charlottesville, Va.: Center on National Security and Law, University of Virginia.
- Salerno, Joseph T. 1990. "Ludwig von Mises as Social Rationalist." *Review of Austrian Economics* 4.
- —. 1990. "Postscript: Why a Socialist Economy is Impossible." In Ludwig von Mises, *Economic Calculation in the Socialist Commonwealth*. Auburn Ala.: Ludwig von Mises Institute.
- —. 1992. "Mises and Hayek Dehomogenized." Review of Austrian Economics 6, no. 2.
- ——. 1995. "A Final Word: Calculation, Knowledge and Appraisement." *Review of Austrian Economics* 9, no. 1.
- Samuelson, Paul A. 1954. "The Pure Theory of Public Expenditure." *Review of Economics and Statistics* (November).
- —. 1955. "Diagrammatic Exposition of a Theory of Public Expenditure." *Review of Economics and Statistics* (November).
- -----. 1961. Economics. 5th ed. New York: McGraw Hill
- —. 1985. Economics, 12th ed. New York: McGraw Hill.
- Savage, Ian. 1998. *The Economics of Railroad Safety*. Boston: Kluwer Academic Publishers.
- Savas, E.S. 1974. "Municipal Monopoly vs Competition in Delivering Urban Services." In*Improving the Quality of Urban Management* 8, Willis D. Hawley and David Rogers, eds. Urban Affairs Annual Reviews London: Sage Publications.
- ——. 1982. How to Shrink Government: Privatizing the Public Sector.
 Chatham, N.J.: Chatham House Publishers.

- Scheiner, James I., and Grover Starling. 1974. "The Political Economy of Free-Fare Transit." *Urban Affairs Quarterly* (December).
- Schelling, T.C. 1978. *Micromotives and Macrobehavior*. New York: Norton.
- Schneider, Lewis M. 1969. "The Fallacy of Free Transportation." Harvard Business Review 47 (January–February).
- Scholefield, Joshua, and Archibald W. Cockburn, eds. 1932. *Pratt* and MacKenzie's Law of Highways, 18th ed. London: Butterworth.
- Schreiber, Arthur, Paul Gatons, and Richard Clemmer, eds. 1971. Economics of Urban Problems: An Introduction. Boston: Houghton Mifflin.
- Schumpeter, Joseph A. 1942. *Capitalism, Socialism and Democracy.* New York: Harper.
- ——. 1950. *Capitalism, Socialism and Democracy*. New York: Harper.
- Sellers, Charles. 1991. *The Market Revolution: Jacksonian America* 1815–1846. New York: Oxford University Press.
- Semmens, John. 1981. "Road to Ruin." The Freeman (December).
- ——. 1983. "The Privatization of Highway Facilities." Transportation Research Forum (November).
- ——. 1985. "Highways: Public Problems and Private Solutions." The Freeman (March).
- ——. 1987a. "Intraurban Road Privatization." Transportation Research Record.
- ——. 1987b. "Using Competition to Break the U.S. Road Monopoly." Heritage Foundation (December 14).
- ——. 1988a. "Privatization: Saving While Serving the Public." Goldwater Institute (April 25).

- —. 1988b. "Taking Over the Roads." *Liberty* (November).
- ——. 1991a. "Why We Need Highway Privatization." Laissez Faire Institute (March).
- ——. 1991b. "Private Highways? They're Cheaper, Better, Fairer." Phoenix Gazette (April 3).
- ——. 1992a. "The Rationale for Toll Roads: You Get What You Pay For." *Phoenix Gazette* (December 16).
- ——. 1992b. "Highway Privatization: What Are the Benefits for Arizona?" Goldwater Institute (December).
- ——. 1993a. "From Highways to Buy-Ways." Spectrum (Fall).
- ——. 1993b. "How to Solve Mandatory Auto Insurance." Goldwater Institute (July).
- ——. 1994a. "Highway Investment Analysis." Arizona Department of Transportation (December).
- 1994b. "Privatize Driver's License, Registration System." *Tribune* (December 25).
- -----. 1995a. "Privatizing Vehicle Registrations, Driver's Licenses and Auto Insurance." *Transportation Quarterly* (Fall).
- ——. 1995b. "Selling the Roads: Privatizing Transportation Systems." *Liberty*.
- ——. 1996. "Goodbye, DMV." *Liberty* (January).
- ——. 1996 "Selling the Roads: Privatizing Transportation Systems." Liberty.
- Sherrill, R. 1977. "Raising Hell on the Highways." *New York Times* Sunday Magazine Section (November 27).
- Shugart II, William F. 1987. "Don't Revise the Clayton Act, Scrap It!," *Cato Journal* 6.
- Sidak, J. Gregory, and Daniel F. Spulber. 1998. Deregulatory Takings and the Regulatory Contract: The Competitive Transformation

of Network Industries in the United States. New York: Cambridge University Press.

- Siegan, Bernard. 1972. Land Use Without Zoning. Toronto: D.C. Heath.
- Simon, Julian. 1989. *The Economic Consequences of Immigration*. Oxford: Basil Blackwell.
- Skousen, Mark. 1997. "The Perseverance of Paul Samuelson's *Economics.*" Journal of Economic Perspectives 11, no. 2 (Spring).
- ——. 2001. The Making of Modern Economics. New York: M.E. Sharpe.
- Smerk, George M. 1965a. *Urban Transportation: The Federal Role.* Bloomington: Indiana University Press.
- ——. 1965b. "Subsidies for Urban Mass Transportation." *Land Economics* 41 (February).
- Smith, Fred L. 1983. "Why Not Abolish Antitrust?" *Regulation* (January–February).
- Smith, Adam. [1776] 1965. *An Inquiry into the Nature and Causes of the Wealth of Nations*. New York: Modern Library.
- Smith, Eric, and Randall Wright. 1992. "Why is Automobile Insurance in Philadelphia So Damn Expensive." *American Economic Review* 82, no. 4 (September).
- Snyder, Donald. 1989. "Speeding, Coordination and the 55-MPH Limit: Comment." *American Economic Review* 79, no. 4 (September).
- Solomon, D. 1964. "Accidents on Main Rural Highways Related to Speed, Driver and Vehicle." Federal Highway Administration, U.S. Department of Transportation (July).
- Sommers, Paul M. 1985. "Drinking Age and the 55 MPH Speed Limit." *Atlantic Economic Journal* 13 (March).
- Sowell, Thomas. 1975. Race and Economics. New York: Longman.

- —. 1981. Ethnic America. New York: Basic Books.
- —. 1982. "Weber and Bakke, and the Presuppositions of 'Affirmative Action'." In Discrimination, Affirmative Action and Equal Opportunity, Walter Block and Michael Walker, eds. Vancouver, B.C.: Fraser Institute.
- ——. 1983. The Economics and Politics of Race: An International Perspective. New York: Morrow.
- ——. 1994. *Race and Culture: A World View.* New York: Basic Books.
- Spooner, Lysander. [1870] 1966. *No Treason*. Larkspur, Colo.: Pine Tree Press.
- Stalebrink, Odd J. 2004. "The Hayek and Mises Controversy: Bridging Differences." *Quarterly Journal of Austrian Economics* 7, no. 1 (Spring).
- Statistical Abstract of the U.S. 1993 (for the year 1991), Table 1030.
- Stone, Andrew, Brian Levy, and Ricardo Paredes. 1996. "Public Institutions and Private Transactions: A Comparative Analysis of the Legal and Regulatory Environment for Business Transactions in Brazil and Chile." In L.J. Alston, et al. *Empirical Studies in Institutional Change*. Cambridge: Cambridge University Press.
- Stonier, Alfred W., and Douglas C. Hague. 1964. *A Textbook of Economic Theory*. 3rd ed. New York: John Wiley and Sons.
- Stringham, Edward. 1998–1999. "Justice Without Government." Journal of Libertarian Studies 14, no. 1 (Winter).
- Tannehill, Morris, and Linda Tannehill. 1984. *The Market for Liberty*. Lansing, Mich.: Self Published.
- Thompson, Wilbur R. 1968. *A Preface to Urban Economics*. Baltimore, Maryland: Johns Hopkins Press.
- Tiebout, Charles M. 1957. "A Pure Theory of Local Expenditures." *Journal of Political Economy* (October).

- Tinsley, Patrick. 1998–1999. "With Liberty and Justice for All: A Case for Private Police." *Journal of Libertarian Studies* 14, no. 1 (Winter).
- Torgerson, Harold W. 1956. "Comment [on Brownlee and Heller]." *American Economic Review* 46 (May).
- Tripp, Sir Alker. 1950. "The History of the Modern Highway in England." In *Highways in Our National Life: A Symposium*, Jean Labatut and Wheaton J. Lane, eds. Princeton, N.J.: Princeton University Press.
- Tullock, Gordon. 1994. *The New Federalist*. Vancouver, B.C.: British Columbia: Fraser Institute.
- —. 1996. "Comment on 'Roads, Bridges, Sunlight and Private Property,' by Walter Block and Matthew Block." *Journal des Economistes et des Etudes Humaines* 7, no. 4 (December).
- —. 1998. "Comment on Roads, Bridges, Sunlight and Private Property, by Walter Block and Matthew Block." Journal des Economistes et des Etudes Humaines..
- Turrettini, John. 2002. "What's My Line? Why Did a Railroad End Up in the Telecom Business?" *Forbes* (July 22).
- U.S. Bureau of the Census. 1976. *Statistical Abstract of the United States, 1976.* Washington, D.C.: U.S. Government Printing Office.
- U.S. Department of Health, Education, and Welfare. 1968. "Report of the Secretary's Advisory Committee on Traffic Safety (February 29).
- Vickrey, William. 1952 approx. Monograph #10. New York: Mayor's Committee on Management Survey, n.d., concerning New York City.
- ——. 1952. "The Revision of the Rapid Transit Fare Structure in the City of New York." Technical Monograph N3. New York: Mayor's Committee on Management Survey.

- ——. 1963. "Pricing and Resource Allocation in Transportation and Public Utilities." *American Economic Review* (May).
- ——. 1971. "Maximum Output or Maximum Welfare? More on the Off-Peak Pricing Problem." Kyklos 24.
- —. 1973. "Transit Fare Increases a Costly Revenue." Unpublished, cited in Rothbard, For a New Liberty. New York: Macmillan.
- ——. 1974a. "Breaking the Bottleneck by Sophisticated Pricing of Roadway Use." *General Motors Quarterly* (Spring).
- ——. 1974b. "Improving New York's Transit Service—An Economist's View." City Almanac 8 (April).
- —. n.d. "Review of Herbert Mohring." Transportation Economics. Unpublished manuscript.
- Vuchic, Vukan R. 1973. "Skip-Stop Operation as a Method for Transit Speed Increase." *Traffic Quarterly* 27 (April).
- Walker, Michael A. 1988. *Privatization: Tactics and Techniques.* Vancouver, B.C.: Fraser Institute.
- Walters, A.A. 1961. "The Theory and Measurement of Private and Social Cost of Highway Congestion." *Econometrica* (October).
- —. 1968. The Economics of Road User Charges, International Bank for Reconstruction and Development, Staff Occasional Paper #5.
 Baltimore, Md.: Johns Hopkins University Press.
- Waters, L.L. 1959. "Free Transit: A Way Out of Traffic Jams." Business Horizons (Spring).
- Watson, Peter L., and Edward P. Holland. 1978. "Study of Traffic Restraints in Singapore." World Bank Staff Occasional Papers. Washington, D.C.: International Bank for Reconstruction and Development.
- Webb, Sidney, and Beatrice Webb. 1922. *English Local Government*. New York: Longmans, Green.

- White, Harrison C. 2002. *Markets from Networks: Socioeconomic Models of Production*. Princeton, N.J.: Princeton University Press.
- White, Lawrence H. "Comment on Block." Unpublished manuscript.
- Whitehead, Roy, and Walter Block. 2001. "Should the Government be Allowed to Engage in Racial, Sexual or Other Acts of Discrimination?" *Northern Illinois University Law Review* 22, no. 1 (Fall).
- Whitehead, Roy, Walter Block, and Lu Hardin. 1999. "Gender Equity in Athletics: Should We Adopt a Non-Discriminatory Model?" *University of Toledo Law Review* 30, no. 2 (Winter).
- Williams, A.F., R.F. Rich, P.L. Zador, and L.S. Robertson. 1975. "The Minimum Drinking Age and Fatal Motor Vehicle Crashes." *Journal of Legal Studies* 4.
- Williams, A.F., P.L. Zador, S.S. Harris, and R.S. Karpf. 1983. "The Effect of Raising the Minimum Drinking Age on Involvement in Fatal Crashes." *Journal of Legal Studies* 12.
- Williams, Walter. 1982. "On Discrimination, Prejudice, Racial Income Differentials, and Affirmative Action." In *Discrimination, Affirmative Action and Equal Opportunity*, Walter Block and Michael Walker, eds. Vancouver, B.C.: Fraser Institute.
- Williamson, Oliver. 1985. *The Economic Institutions of Capitalism*. New York: Free Press.
- Wilson, James Q. 1970. "Urban Problems in Perspective." In *The Metropolitan Enigma*, James Q. Wilson, ed. Garden City, N.Y.: Doubleday.
- Winch, David M. 1963. *The Economics of Highway Planning*. Toronto: University of Toronto Press.
- Wohl, Martin. 1971. "Must Something Be Done About Traffic Congestion?" Traffic Quarterly (July).

- Wollstein, Jarret B. 1974. *Public Services Under Laissez Faire*. New York: Arno Press.
- Woolridge, William C. 1970. *Uncle Sam, The Monopoly Man.* New Rochelle, N.Y.: Arlington House.
- Yagar, Sam. 1973. "Potential Demand Response to Improved Roadway Service." *Traffic Quarterly* (January).

INTERNET SOURCES

(The following addresses were verified and accessed March 8, 2007)

http://business.aynrand.org/essays.html chapter 17, note 14

http://www.cdc.gov/nchs/fastats/acc-inj.htm

http://www.darwinawards.com

- http://www.fars.nhtsa.dot.gov/queryReport.cfm?stateid=0&ye ar=2001 chapter 18, note 1
- http://www.Firearmsandliberty.com/waco.massacre.html
- http://www.herald.ns.ca/stories/2004/05/23/fNovaScotia247.raw.html chapter 20, note 13
- http://www.ibtta.techriver.net/website/article.asp?id=247# chapter 20, note 8

http://www.landspeed.com/

http://www.legis.state.la.us/lss/lss.asp?doc=78399

http://www.legis.state.la.us/lss/lss.asp?doc=78409

http://www.legis.state.la.us/tsrs/search.htm chapter 20, note 6

http://www.lp.org/

- http://www.mises.org/blog/archives/002009.asp.
- http://www.mises.org/fullarticle.asp?control=385&month=17& title=Watch+Your+Language&id=19

http://www.mises.org/jlsdisplay.asp

http://www.nhtsa.dot.gov/

http://www.nmb.gov/documents/rla.html

http://www.nrd.nhtsa.dot.gov/pdf/nrd30/NCSA/TSFAnn/TS F2001.pdf chapter 18, note 1

http://www.nwi.org/Maps/LandChart.html chapter 8, note 5

http://www.ohnonews.com/mcveigh.html

http://www.o-keating.com/hsr/bullet.htm

http://www.o-keating.com/hsr/ice.htm

http://www.policyexperts.org/organizations/organizations.cfm

http://www.publicpurpose.com/hwy-fatal57+.htm

http://www.railserve.com/JJHill.html

http://www.reason.org/mission.html chapter 20, note 9

http://www.reason.com/ hod/tb052704.shtml

http:www.reason.org/

http://www.reason.org/ps305.pdf

http://www.rppi.org

http://www.rppi.org/020403.html

http://www.rppi.org/carpoollanes.html

http://www.rppi.org/onewaystreets.html chapter 20, note 23

http://www.rppi.org/pbrief19.html

http://www.rppi.org/ps294.pdf

http://www.rppi.org/ps304.pdf

http://www.rppi.org/ps305.pdf

http://www.rppi.org/robert.html

http://www.rppi.org/surfacetransportation10.html

http://www.rppi.org/surfacetransportation14.html

- http://www.socialstudieshelp.com/Eco_Union_Legislation.htm
- http://www.spaef.com
- http://www.spaef.com/PFM_PUB/ pubv1n3.html http://www. tripnet.org/CensusDataCongestionJun2002.PDF
- http://www-nrd.nhtsa.dot.gov/departments/nrd-30/ncsa/AvailInf.html
- http://www-nrd.nhtsa.dot.gov/pdf/nrd-30/NCSA/TSFAnn /TSF2001.pdf

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From the Foreword by Brad Edmunds



WALTER BLOCK is professor of economics at Loyola University New Orleans.

Ludwig von Mises Institute 518 West Magnolia Avenue Auburn, Alabama 36832-4528 Mises.org

