nately, the hearings were so heated emotionally on so many issues that clear reading was not possible. Nevertheless, it appeared that the public was suspicious of the concept. Although giving certain travelers (i.e., cars with three or more passengers) free passage was usually considered acceptable, putting a surcharge on single-occupant cars was often considered discrimination and as unconstitutional and undesirable as wiretapping. Politicians seemed particularly vulnerable to such arguments.

Through an effective pricing policy, the Golden Gate District could financially support a balanced and integrated transportation system. Without an inventive pricing policy, the district cannot as effectively influence automobile and private car or van poolers. It must rely on highly attractive transit systems to control automobile use and balance its systems. In the end, the Golden Gate Bridge District may not be able to generate enough revenue to support its operations.

The key to moving forward is widespread public discussion of the potential benefits that a pricing policy can produce when it is properly integrated with an overall transportation strategy.

Implementating a City Congestion-Pricing Demonstration: Overcoming the Hurdles

Thomas Higgins, Public Policy Analyst

I first became interested in the pricing of roads during congested periods while I was doing transportation policy analysis for the California legislature in 1975. I did several studies for the legislature on various types of transit systems and became convinced that none of the systems examined—automated guideways, demand-responsive modes, various rail systems—had much potential for alleviating congestion or pollution unless it was coupled with some form of restraint on the automobile.

As a result, I was drawn to the work of the Urban Institute, which was examining the possibility of demonstrating an efficient restraint measure—congestion pricing. Since I joined the Urban Institute as a consultant, one of my main responsibilities has been to assess the feasibility of demonstrating an areawide or corridor-pricing scheme in some western cities. As a result of my assessment work in Seattle, Portland, Berkeley, and San Francisco, I have formed certain suggestions and hunches on the issues of demonstrating congestion pricing.

CONCERNS ABOUT CONGESTION (OR ROAD) PRICING

The scheme that the Urban Mass Transportation Administration (UMTA), through its Service and Methods Demonstration Program, is hoping to demonstrate is one that covers a congested area or zone rather than a particular corridor (such as a bridge) or a spot (such as an arena). Thus, in talking with decision makers, planners, and so on, I and others at the Urban Institute have discussed the use of window stickers to regulate peak-hour use of primarily single-occupant vehicles moving into, within, and across a congested zone (the areawide approach) or just across the zone cordon (cordon approach). Typically we have discussed the possible application of the scheme for at least $1.00/d. We have stressed that UMTA can help to provide transit to the zone to take up diverted demand; explained the use of revenues to directly compensate the poor or other adversely affected parties; pointed to Singapore to reassure cities that enforcement is possible; argued that the impacts on business interests are uncertain but that business might benefit from the scheme, as seems to be the result with automobile-free zones in Europe; and offered UMTA demonstration assistance to pay for site-specific designing and planning work, the stickers, enforcement staff, and evaluation study to accompany any demonstration. Thus far we have created some interest, but we have also uncovered many concerns.

1. Congestion may not be sufficiently bothersome to motorists or decision makers to justify what, at first glance, looks like an approach that has many uncertain effects. Also, congestion in some cities is worse on arteries that lead into the central business district (CBD) than it is in the CBD itself, in which case areawide or cordon schemes might not be best.
2. The effects on business are uncertain, but business is sure to object, particularly parking interests. Likewise, the poor, packed onto transit vehicles (even improved transit vehicles) will undoubtedly be angered as the lone rich drive by in automobiles.
3. UMTA probably cannot sufficiently improve transit into the zone through capital and operating grants. Revenues will be generated from the scheme, but perhaps not enough or quickly enough to do the job, in which case the peak-hour loading problem of transit use is exacerbated.
4. Being the first U.S. city to implement the concept would be difficult because of unforeseen failures and side effects. For example, the Singapore corridor scheme relies on mailing citations. It is doubtful that would work here.

COPING WITH PRICING CONCERNS

I would like to suggest some ideas for coping with these concerns of localities and making implementation of an UMTA pricing demonstration more likely. Some suggestions relate to what we need to start doing and others to what we need to stop doing.

First, we need to recognize that the problems of implementing a congestion-pricing demonstration will not be overcome by continued talk of efficiency, optimization,

and maximization of social benefits. The focus of economists and analysts must turn toward political, institutional, and implementation analysis if congestion pricing on roads is to have any chance of taking place. All of us would do well to begin reviewing—if we have not already—the new and growing body of literature on the politics of implementation. We should also involve decision makers in interviews, discussions, and workshops on pricing proposals. Analysts and program managers may know a lot about the theory of road pricing but have a lot to learn about how theory does and does not come to be implemented. The literature on implementation is not well developed, but it can sensitize us—as can decision makers—to common problems and possible solutions in implementation (1).

Second, and more specific to congestion pricing, it is clear that a first requirement for the implementation of any pricing scheme is that it attack a problem perceived by motorists and decision makers. Areawide and cordon schemes are better suited to clogged business district networks than to specific arteries or bridges. At least in several western cities, it is arterial congestion, particularly commuter congestion leading into and out of cities, that is often perceived as the greatest problem. Pricing is still a good solution to these problems and compares well with ramp metering, roadway expansion, or certain traffic management techniques. Hence, UMTA program managers must be willing to consider plans other than downtown areawide or cordon schemes if cities are to become interested. In San Francisco, where there is long-standing vocal concern among decision makers about congestion caused by commuters from surrounding counties, the peak-hour pricing of two bridges and a southern portal to the city is of some interest to decision makers. A downtown window-sticker pricing scheme is not so attractive, partly because peak-hour congestion on the downtown networks is not perceived as being so severe. UMTA program managers should give thought to designing and demonstrating corridor- and bridge-pricing schemes as well as the areawide and cordon concepts. Of course, the political ease of proceeding with any pricing experiments must be weighed against the national benefits of demonstrating a scheme. Limited corridor-pricing experiments might tell little about the effect on downtown business or the results might not be of interest to cities that experience downtown network congestion. Still, experience to date, at least in western cities, argues that UMTA program managers should keep an interest in studying and demonstrating a variety of pricing mechanisms.

Third, the fact that a downtown cordon or areawide scheme might have disadvantages for business and the poor is one of several adverse effects that need to be recognized and allowed for rather than sidelined. The only available and credible analysis on the effects of road pricing and automobile restraints suggests that businesses—except for parking interests—and the poor might not suffer. Certainly, enough revenues should be generated to compensate the poor in some way. The problem is that no conceivable amount of analysis can tell decision makers what will be the exact impacts on specific segments of the population. Gaining this knowledge is one of the purposes of the demonstration. Not only do city decision makers suspect this, but they must be told this very fact in any honest portrayal of how implementation is to proceed.

Actually, the problem of reactions from business and the poor is really no different from that of transit interests that fear more loading at peak periods or commuter associations and county supervisors in surrounding counties: Each is a party that may potentially be adversely affected by cordon, areawide, or corridor pricing. Each affected party can block the design and implementation of a pricing scheme. How can their potential opposition be met, and how can UMTA avoid the politically uncomfortable posture of seeming to side with one set of affected parties over another?

One way is to require that a committee of affected parties be formed to arrive at—if this is possible—compromises that might lead to a feasible demonstration design. For a pricing scheme at city boundaries, the committee would be comprised of supervisors from surrounding counties, city decision makers, transit operators, businesses, low-income people, private carriers, and other affected parties. Initially the committee would be charged with the responsibility of driving toward compromises on demonstration variables, including revenue allocation; project duration; period, place, and amount of pricing; complementary transit developments; and project controls.

The incentive for joining a committee and entering into discussions with UMTA is initially twofold—gaining UMTA approval and support for ongoing transit plans (as is clearly important to Berkeley, for example) and apportioning demonstration revenues between such potential uses as compensation payments and transit improvements. Once it has been formed, the committee would also be charged with working out compromises among its members and with UMTA on all the project variables. It is probable that, while some cities might be lured into committee discussions with UMTA in anticipation of revenue generation and possible approval of transit plans, strong local interests on the committee will drive proposed demonstration variables to the safe and short side. UMTA therefore needs to consider whether it is prepared to demonstrate a cordon scheme, for example, with (a) short, renewable duration contracts, subject to, say, 6-month renewals; (b) sticker prices of less than $1.00/d; (c) pricing only one peak rather than two or all day; (d) exemptions or reductions for zone residents and taxis as well as emergency vehicles; and (e) veto control of the project variables vested in the committee of affected parties.

The advantages of the committee to both UMTA and the city are several: The committee would ensure against politically infeasible pricing designs from consultants and staff doing on-site planning and designs. It would serve to share the risk of proceeding with a potentially good concept with uncertain outcomes. And it would ensure that UMTA or the city was not siding with any one interest but with a cluster of varied and agreed parties.

Fourth, unforeseen and unlikely failure and adverse outcomes must be insured against. We often test alternative public programs by maximizing risks—promising too much when information is lacking and vesting commitment before we are positive about outcomes. Admitting to risk and planning for it by way of insurance mechanisms are better ways to approach risk. If, for example, the possible side effect is an effect on parking interests, there is a need to think about a public policy analog to insurance policies in the private sector. Is it possible, for example, that UMTA might negotiate an agreement with the demonstration sponsor at the outset of the demonstration to specify what transfer payments might accompany different levels of severe, though unlikely, consequences of the demonstration?

The most easily written policy may be one against loss of parking business. The most difficult would be one against excessive losses in travel time by people who switch to transit. Clearly, there must be a constraint on the nature and degree of insured risk, as there is with any carrier. Furthermore, it might be advisable to get

mutual designation of a third party to arbitrate disagreements. In California, there are Local Agency Formation Commissions (LAFCOS) that play the role of this third party, mediating for public organizations, particularly on incorporation issues. In short, if local decision makers are to seriously consider pricing demonstrations, it is necessary to be honest and clear about possible failures in congestion-pricing demonstrations and ways to ensure against such occurrences.

SUMMARY

The central lesson from our initial experience with suggesting cordon and areawide pricing demonstrations is that only half the problem of implementation is in the cities; the other half is in the offer itself. Analysts, economists, and program managers need to do much more homework on the politics of implementation in general, as well as the politics of pricing in particular. Decision makers need to be queried on what trade-offs should enter into the discussion of a pricing demonstration to make such a demonstration more likely. A menu of several pricing options—with applicability to some but not all urban areas—needs to be offered to cities. At sites that express interest in the study and design of demonstrations, a committee of affected parties should be formed and charged with the task of devising compromises on demonstration revenues and other important project variables. UMTA should be prepared to institute short-term renewable contracts for demonstrations, share veto control over certain project variables with the sponsor, and develop policies with sponsors to ensure against possible failures and adverse outcomes.

REFERENCE

1. J. L. Pressman and A. B. Wildavsky. Implementation. Univ. of California Press, Berkeley, 1973.

Transportation Planning in Los Angeles

Norman H. Emerson, Graham O. Smith, and Wendy P. Stern, Office of Research, Office of the Mayor, City of Los Angeles

Even the most cursory reflection on events since 1970 indicates that society is being propelled into a period of major transition. Municipal officials, governors, and others are now recognizing that we are entering an era of limits—a discovery that our resources for expansion, whether by private enterprise or public program, are limited.

The late 1960s and early 1970s saw the emergence of environmental concern, bringing with it a virtual revolt against the continued construction of freeways and street-widening programs—the circulation system of postwar urban expansion. The underlying motivation of this revolt may have been aesthetic concern, coupled with an uneasy anxiety that we might indeed be destroying our own dream of the future. It was followed, early in 1973, by the dramatic Arab oil embargo, which demonstrated that we were very much overextended and that many of the systems we had constructed were founded on an illusion of self-sufficiency. Most recently, recession and inflation have not only curbed much new construction but have also raised the specter of potential governmental insolvency.

Los Angeles has experienced particularly severe throes of the environmental and energy revolutions and has only escaped financial emergencies to date because of its extremely conservative charter limitations concerning fiscal matters. Our postwar pattern of rapid physical growth, based on a simple policy of planning to accommodate demand, was combined with unprecedented growth in automobile ownership and created the very circumstances that have contributed to the severity of our recent experiences. In those years we gladly exchanged an extensive interurban rail system for private automobiles and systematically filled in the open space between our towns with a carpet of low-density single-family homes, first expanding the surface street systems wherever necessary and then superimposing an elaborate freeway network on the entire metropolitan region, facilitating yet more low-density growth on the periphery.

Except that it has been more pronounced, there is nothing unique about the process that has occurred in Los Angeles. It has been a prototype for subsequent American urbanization and, even as concerned planners seek alternatives, the larger society continues its pursuits on these same basic assumptions. Without the constraints that have begun to emerge during the last decade, America (and indeed the rest of the world) would be happy to continue the process.

After 25 years of unprecedented mobility and prosperity, our citizens now find themselves facing a puzzling hiatus in which the orthodox solutions seem to be ineffectual or, worse, tend to exacerbate our problems. The administrative agencies we set up to accommodate the pattern persist, guarding their prerogatives jealously, as do the fragmented jurisdictions that emerged during the same period.

To some of us, the obvious message of the environmental, energy, and fiscal challenges is to increase the efficiency of our systems. In transportation we must either provide new and more efficient facilities that are competitive with existing modes, or we must somehow increase the efficiency of use of the existing modes themselves. Neither will be easily achieved: In the first instance we must compete with a system that has provided our citizens unprecedented freedom of movement and that is supported by facilities that represent more than 50 years' massive investment. In the second, our efforts will run the risk at every turn of being perceived by our citizens as harrassments rather than public services, the more so because they follow on the most frenetic period of accommodative public works programs in history. We will give special attention to this supremely sensitive subject of governmental efforts to render existing transportation modes more efficient later