Eliminate, Decrease, or Improve Regulation of Urban Public Transportation?

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For several decades our country pursued a one-sided urban transportation policy of highway construction and fostered only private transportation. While many billions of dollars of public funds were expended to develop automobile travel, supplemented by a much larger expenditure of private resources for the same purpose, public transportation in most cities either disappeared or deteriorated to a level of service unacceptable to the majority of its potential passengers. The result of this policy that failed to treat urban transportation as a coordinated multimodal system has been a highly deficient transportation service that leaves many transportation needs unmet. Not only transit but also private automobiles function under conditions unsuitable for them. For many urban trips the excellent potential mobility of the automobile cannot be realized because of congestion. These conditions have been a major factor in the development of crisis conditions in our urban areas in general. Today, it is difficult to estimate whether the social, financial, and environmental problems are more serious in Newark, Detroit, or Los Angeles.

Correction of this course through the introduction of a policy that should foster transportation of people by a coordinated set of modes rather than maximizing vehicular travel started during the mid-1960s, but the progress in improving public transportation has been slow for several reasons. First, the level of transit financing has been far below the needs, and it is still one or two orders of magnitude lower than the corresponding level of financing of highways. Second, the transit industry sadly lacks expertise. After decades of fighting for survival, many transit agencies are far behind the times in their operations, marketing, planning, and other activities. Equipment suppliers also show a serious lack of technical capability, and the government agencies that deal with urban transportation are no better off in this respect than private industry. Third, there is a very active opposition to all improvements in public transportation from a variety of different interests, opponents of cities, and professional critics who oppose all changes. Much of the criticism is destructive rather than constructive. It attempts to emphasize all the problems of the existing programs without recognizing their successes and suggesting any alternatives. Similar or much worse problems in other areas of urban transportation (e.g., construction of unneeded bridges; wasteful public subsidy of huge parking garages; and excessive smog, noise, and congestion) are generally ignored.

A serious problem in improving urban transportation in general is lack of understanding of the extremely complex economic, social, and technical relationships. Some basic concepts are confused either because of poor understanding or by the design of those who are interested in perpetuating the existing, highly inefficient urban transportation system. It is nearly amusing to note that, while the areas that need more attention to achieve real and effective solutions (improvement of bus and rail technology, planning, operating, marketing practices, and so on) are seriously neglected, an extraordinary emphasis is placed on two types of unrealistic solutions. First, numerous proposals are heard for the introduction of exotic technology that looks like urban transportation for the twenty-first century but that is often so unsound that it will never exist (PRT, dual mode, and others). At the same time another group is arguing strongly for solutions of organizational problems that resemble an idealized nineteenth century that in real life never was (free market, no need for protection of public interest).

All of these problems have converted the United States from a leading country in urban transportation into a country that lags several decades behind others, not only in technology and management of public transportation but also in organizational and policy matters and, most importantly, in understanding of the issues by politicians, the public, and theoreticians. One of the latest causes of confusion has been the often indiscriminate criticism of the regulation of urban transportation. Although some critics correctly point out certain obvious weaknesses of the existing regulations and suggest realistic and constructive improvements, others go so far as to suggest that all regulation is harmful and should be discontinued, since free market forces would result in more efficient public transportation.

The critics of regulation are well represented at this conference, while the representation of transit operators, regulatory agencies, and other groups that are involved in actual urban problems at the operating level is quite small. Even more paradoxical is the fact that the cities that have developed the most successful public transportation systems, using advanced concepts of regulation (total integration of transit services on regional basis), have no representatives here. I have serious doubts whether the composition of this conference will allow a realistic analysis of urban public transportation and the development of constructive suggestions for improvements in our cities.

REGULATORY CONSTRAINTS

Most critics of the present regulations start with the premise that regulation represents a severe and unnecessary constraint on the operations of public transportation. This attitude is based on a number of concepts and assumptions that are questionable at best:

1. The main objective in urban public transportation is to make it a profitable business rather than to provide
adequate service for the public.

2. Free market forces should be used in urban transpor-
tation instead of regulation. The fact that free mar-
cet conditions do not and cannot exist in urban transpor-
tation in the real world is seldom even mentioned.

3. The conditions and characteristics of long-
distance freight transportation are virtually identical
with those of passenger transportation in cities (see the
paper by Hedges in another part of this Special Re-
port). It should be clear that this is simply not so,
without presenting here the basic explanations about the
differences in levels of service required by the two dif-
ferent customers (freight and passengers), environ-
mental aspects, social costs and benefits, pricing con-
siderations, and so on.

4. All regulation in urban transportation, even the
establishment and enforcement of safety standards, is
burdensome (1). This is probably true for every op-
erator who wants to make a profit and does not care about
his customers or any public interest, but all competent
operators, be they private or public, working at a profit
or with public support, are very much interested in
meeting reasonable standards and have no major prob-
lems with them. Shouldn't protection of the public in-
terest, including economic and safety aspects, be given
the ordering significance in public transportation?

5. Regulation was initially introduced to solve prob-
lems that, for some unexplained reason, would not exist
today. The problems of substandard service, unre-
sponsiveness to social needs, a focus on profitable ser-
vices only, economically wasteful competition (elimi-
nated from all other utilities), all of which are inherent
in unregulated services, are virtually ignored. If regu-
lation that solved these problems was removed, could
they be simply wished away?

6. We should adopt solutions from the developing
countries that resemble those we had decades ago rather
than follow the examples of Western European cities,
some of which are well ahead of us. Karachi, Manila,
and Istanbul are discussed more than Munich, Amster-
dam, and Gothenburg!

7. Problems relevant to one mode of urban trans-
portation—taxis—are discussed, but it is implied that
the discussion covers urban public transportation.
Transit services that perform the vast majority of urban
public transportation in all large and many medium-
sized cities are generally ignored.

THE GRAND ILLUSION: FREE MARKET
IN URBAN TRANSPORTATION

It would be out of place to discuss here the merits and
limitations of the free market, but it appears useful
to point out that the basic conditions required for the
free market to function include (a) the purchaser of
service must pay at least the marginal cost of the ser-
vices he or she uses, (b) spillover costs and benefits
are not significant, and (c) the ratio of operating cost
to capital is approximately equal among the competing
suppliers (2). All three conditions are strongly violated
in cities. Urban passenger transport is therefore one
of the classical examples of activities in which the free
market model cannot be applied. To create such con-
ditions, toll booths should be erected at most intersec-
tions in the city and different levels of tolls should be
charged at different hours of each day, which is like
Vickrey's proposal for marginal pricing of parking by
interconnecting the meters in every block and increas-
ing their rates according to occupancy (3). It is theo-
retically interesting but totally impractical.

The extremely serious shortcomings that result from
the application of free market practices to urban trans-
portation can be easily seen by analyzing the conditions
that now exist in cities that do not have adequate regula-
tion. Both of these are characterized by good operations
on lucrative routes and at peak hours but entirely inade-
quate services at other locations and times. Often pas-
sengers have to pay a separate fare on each bus line;
there is no adequate central information about the whole
system; smaller paratransit vehicles, such as taxis and
 jitneys, operate in great numbers and considerably con-
tribute to the traffic congestion; their passenger pickup
along streets is a particularly serious impediment to
traffic flow; passengers are sometimes not dropped off
where they wish if the driver is in a hurry to pick up
additional fares. Briefly, the comfort and service to
passengers are completely secondary to the interest of
the driver to maximize his profits (4, 5).

The general trend of consolidating all utilities (elec-
tricity, telephone, water, solid-waste collection, and
others) into single municipal agencies or other forms of
companies has also occurred in public transportation.
City after city, independently of each other, has found
that it would be in the public interest and much more
economical to operate all transit services as a coordi-
nated system. Major European cities made this change
in most cases between 1910 and 1940; in the United
States, consolidation took place generally between 1940
and 1970.

The highest level of transit organization has been de-
veloped in several cities during the last 10 years. Re-
gional agencies in the form of authorities, districts, or
federations have been formed in Hamburg, Munich,
Stockholm, and several other cities. These organiza-
tions have completely united all public transportation
services into one functional system. Not only different
transit modes, such as buses, light rail, and rapid
transport, but also suburban rail and suburban buses have
been integrated into a single coordinated system. Sched-
ules, transfer points, and information are integrated and
passengers pay a single fare regardless of what
mode they use for their travel (6). Few experts familiar
with urban transportation would dispute the fact that
cities like Paris, Hamburg, Cologne, Gothenburg, and
Stockholm have some of the best public transport sys-
tems in the world.

Thus we find that the most successful solutions have
been achieved through well-planned, fully coordinated
transit systems that have unified operation.

THE FAMILIES OF PUBLIC TRANSPORT
MODES

Considerable confusion is created by the frequent ten-
dencies to search for a single best mode of urban trans-
portation. While experts often correctly suggest a
change of emphasis on individual modes, the extreme
modal advocates often downgrade all modes except the
one they believe is the best. Thus, in addition to the
automobile advocates who disparage any significant role
for transit, we have bus advocates, rail advocates, and
the latest group) paratransit advocates, many of whom
are converts from the group of automobile advocates.
The fact is that each one of these modes has its place in urban transportation. There is no vehicle that can beat the private automobile in dispersed suburban travel, it is extremely difficult to find a substitute for a bus service on transit routes that have moderate passenger volumes, and there is no mode that will attract and serve heavy passenger volumes more efficiently than rail rapid transit. If all the modes are ordered by their characteristics into a family of transit modes, it is obvious that the close relatives in this family (such as taxi and dial-a-bus, dial-a-bus and regular bus, or light rail and rapid transit) show a certain overlapping in their domains. However, modes that are less closely related (such as dial-a-bus and articulated bus or taxi and rapid transit) are not competing modes in any way. If modes become competitive, that is a clear sign that numerous other factors are influencing and distorting the efficiencies of one of them. For example, it cannot be more economical or efficient to transport 40 people from point A to point B in 20 taxis operated by 20 drivers than in one bus operated by one driver, unless we assume that the taxis are old vehicles that are poorly cleaned and maintained and that the drivers would work for vastly substandard wages, while the bus is highly luxurious, is inefficiently scheduled, has poorly designed doors for passenger exchange, and is driven by a unionized driver who earns an excessively high wage. By the same token, there is no reasonable way that a bus would more economically transport a single passenger from his office to the airport than would a taxi.

IS PARATRANSIT A PANACEA?

The extensive recent literature on paratransit (9) includes some very good and precise definitions of the advantages and limitations of individual paratransit modes. However, the extreme proponents of deregulation often tend to see paratransit not as a useful component of urban transportation but as its only solution. Let us briefly review the characteristics of each paratransit mode and the regulatory conditions it requires to yield the best service it is potentially capable of providing.

1. Dial-a-bus has been proved a very useful mode for service in low-density areas that cannot support regular bus transit. It offers services that fill the basic need of some population groups and a convenience for other groups. Its limitation is that, due to rather low occupancies, the service often requires public assistance per passenger-kilometer that is several times higher than that for regular transit. Such assistance is more objectionable to provide for low-density high-income areas than for much better patronized transit in urban areas. Operation of dial-a-bus services must be precisely regulated with respect to its served area, level of service, price, and so on.

2. Jitneys represent nothing but a unified group of private operators with vehicles of lower capacity than minibuses that operate without fixed schedule. In view of the inferior economy of minibuses on all but very low-volume routes (7), there is serious question whether jitneys can ever be a more economical mode than regular buses, unless they are operated with substandard wages for the drivers and with low levels of comfort, convenience, and safety for the public. Experience in numerous cities shows this quite clearly. In addition to contributing to the chaotic conditions in the cities they serve (4), jitneys generally offer services that are considerably inferior to the standards we are used to in our regular and express buses, freeway flyers, and rail transit modes. Although he gives a generally favorable description of jitneys, Farmer (5) clearly shows that their service at different times of the day varies highly in reliability and, much more seriously, that it often applies "flexible" pricing, which in this case means overcharging the passenger.

Grava's recent article on jitneys (4) is quite illuminating about this mode. A careful reading of the article clearly shows that the jeepneys of Manila, like jitneys wherever they exist, represent an extremely primitive mode of transportation that offers a low level of service and creates major chaos in the streets. If Grava's unsupported hope that "proper policing, both on street and of administrative factors [i.e., regulation—my comment] could go far in expediting the performance of jeepneys" is not readily accepted, the whole concept must be considered worthless.

An important role of jitneys in many cities is to provide a separate class of travel, i.e., to serve for segregation of some people from the crowds. Is introduction of a public transport service that creates and promotes segregation of people what we need for progress in our urban areas? Like PRT, jitney is a mode that in our urban areas? Like PRT, jitney is a mode that is frequently suggested as an innovation without the definition of its merits and actual application. Unless its place between the private automobile, taxi, and regular bus is much more precisely defined than has been done so far, promotion of this mode should be rejected and disregarded.

3. Taxis, which offer the most personal but highest cost service of all public transport modes, have a role in cities of all sizes. The critics of the extremely stringent regulation of their number in many of our cities have a valid point. The riding public would certainly benefit from an increase in their number. Regulation of their fares and basic conditions of service remains absolutely necessary.

4. Vans should be encouraged because of their higher efficiency than the private automobile, but their use should not be encouraged on routes that duplicate already lightly traveled suburban transit routes that must be operated for other reasons. Encouragement or discouragement of their use can usually be achieved by inducements from various government agencies or regulatory bodies.

5. Car pools, a private rather than a public mode, neither need to nor can be regulated. It is in the public interest to encourage their use but, as for vans, this encouragement can only be achieved through indirect regulatory measures by the public agencies, such as increased parking rates, tolls, and special permission to travel certain lanes. The treatment of car pools should not, however, be the same as or better than the treatment of minibuses or buses, because they have lower capacity: The passenger is the unit in urban transportation, not the vehicle.

Finally, a few relevant comments about the major urban transportation modes, transit and automobile. Transit requires full integration under a single or several coordinated agencies. Better integration is achieved through improved rather than decreased regulation. It is time not only to eliminate obsolete labor practices but also to completely revise the union-management relationship (10). The economy and efficiency of transit service will be improved by adequate financing, better management, and the support of public policies rather than by eroding its position through uncontrolled competition or by the discontinuance of its service.

The private automobile, often considered to be outside of this problem, is actually the main culprit in all relationships in urban transportation. Unless the automobile is regulated much more stringently than it is
now, public assistance to public transportation will have to be continued and probably increased. The enormous direct and indirect subsidies of automobile travel force the subsidy of all other modes. Regulation of automobile use in cities can be achieved through a number of measures ranging from conversion of some streets to pedestrian malls and full control of parking rates to the licencing solution recently introduced in Singapore (see the paper by Watson and Holland in another part of this Special Report). Most of these solutions would reduce automobile use either through higher charges or through physical prohibition, and they would yield not only a greatly improved economy of transit and reduced negative impacts of automobile travel but also a higher level of service for the remaining automobile users because of the improved operational conditions on urban streets.

CONCLUSIONS

The preceding discussion leads to the following conclusions:

1. Discussions of regulation in urban transportation often imply that they are relevant to all cities and all modes. Actually, they focus on paratransit only and are therefore relevant only to small cities and low-density areas, with the exception of taxis, which are applicable to all cities.

2. Urban transportation is a classical example of an area in which free market conditions do not exist. The proposals that free market forces should be a substitute for public regulation are therefore utopian and contrary to experience with all other municipal services.

3. Revision of some regulatory practices is desirable. In some areas revision should mean a decrease of regulation (entry of taxis); in other areas it should mean an improvement and increase in regulation of such things as levels of service, fares, comfort, and safety standards.

4. In spite of the often-heard opinions that the conditions in Western European cities are very different from ours, there are considerable similarities in population densities, average incomes, and automobile ownership (11). The experiences of cities that have better transportation than our cities (Gothenburg, Hannover, Rotterdam) are therefore highly relevant for us, and we should study them carefully. On the other hand, there is not much we can learn from cities that have chaotic traffic conditions and rudimentary forms of public transportation, such as Istanbul, Damascus, and Manila.

5. The goal of public regulation in urban transportation is not to maximize the profits of operators but to ensure adequate public service and protect public interests, including those of users, the community, and the entire urban environment.

REFERENCES


