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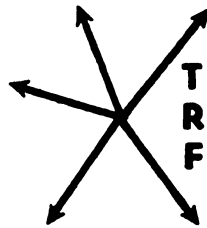
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TRANSPORTATION RESEARCH FORUM

Some Policy Perspectives on Transit Organization: The "Public Marketing Agency"

by *Brian E. Sullivan, Ph.D.*

PUBLIC TRANSPORTATION, or "transports en commun," as it is more graphically described in French, has been with us since the earliest days of recorded history. The efficiencies possible from having a number of people get together and travel in a single large conveyance, rather than individually, historically first became evident in the marine environment and then moved to roads, rails and finally the sky.

Over time, there have been several major events affecting, or affected by, public transport including the development of mechanized propulsion, the introduction of public transit within cities and, in this century, the widespread growth of individual mobility occasioned by the automobile. At each of these stages, the amount and nature of service offered underwent major changes, usually extending over several decades. The western democracies in particular are experiencing such adjustments now, as the relative roles of the automobile and public means of conveyance are being re-evaluated, with the latter receiving greater prominence, initially in urban areas and if early indicators are borne out, in the intercity/rural realm as well.

In 1972, this writer published a paper on new forms of public transport administration, noting that the renewed interest in transit worldwide had produced some interesting new kinds of institutions. Of particular note was the fact that a number of recently developed organizations displayed a common structural theme: the establishment of the planning/marketing or "demand" function in an enterprise separate from that for the operations/maintenance or "supply" function.

The following examines developments in this area during the 1970's with an emphasis on the expected benefits of such an approach, along with a review of the initial concepts.

TRANSIT POLICIES AND ORGANIZATIONAL FORM

In the 1960's and early 1970's, the need to provide new or increased public funds in support of transit services became apparent in a growing number of jurisdictions. In some cases, this took the form of straight-forward subsidies to privately-owned firms. But with many others, the establishment of a publicly-

owned transit operation was the accepted approach, whether in the form of an independent authority or as a department of local government.

Some jurisdictions had problems with the above however; private firms could not be purchased by the public sector, either because they weren't for sale, or because local policies preferred privately-run operations. At the same time, public officials were concerned that simply paying a lump sum subsidy to an incumbent would not give good value for money or at least in their circumstances, would make substantial service improvements difficult to achieve.

A different kind of problem occurred in those regions where there was more than one carrier, but where it was felt desirable to offer to the public an integrated network of service. Often, this involved coordination between local buses and commuter rail; however, relations between the principal urban carrier and suburban independents also arose as an area needing attention.

In a study by this author of rural public transport in a western Canadian province, the matter of institutional arrangements was investigated.⁽¹⁾ Confronted by a mixture of publicly and privately owned operators and potential operators, both large and small, the problem of how to structure a program such that policy and service objectives would be properly carried out appeared paramount. In an attempt to produce a solution, a survey was carried out of a number of transport systems whose organizational basis was **other than** one of the two traditional alternatives of a simple subsidy or public ownership.

This survey of new practice employed both a literature search, including reviews of relevant legislation, as well as personal interviews. The results were included in the study referenced above and were later developed and summarized for publication as a research document of the Canadian Transport Commission.⁽²⁾ Some of the agencies examined are described in table 1, and references are given to the more basic of the supporting documentation. Three of these undertakings are described in some detail below.

Hamburg V-Bund: Hamburg is a large commercial city in Germany, possessing well-

TABLE I

SOME PUBLIC TRANSPORT SYSTEMS DISPLAYING PUBLIC MARKETING AGENCY APPROACH PRIOR TO 1972

- Hamburg Verkehrsverbund:** (V-Bund) a transport "federation" or "community" of operating companies, which plans and merchandises an integrated regional system and distributes revenues to each of the constituent operators.⁽³⁾
- GO Transit:** an agency created by the Provincial government to plan, merchandise and fund suburban commuter rail and (subsequently) co-ordinated suburban express bus services and dial-a-buses, involving both publicly and privately-owned firms.⁽⁴⁾
- Swiss PTT:** the Swiss Post, Telephone and Telegraph system provides a country-wide network of bus services, well integrated with other public transport modes, using a mix of Postal-operated buses and private contractors.⁽⁵⁾
- Amtrak:** a publicly-owned corporation which plans, merchandises and funds a nation-wide network of intercity passenger trains, the majority of whose lines are operated under contract by individual railroads.⁽⁶⁾
- South-Eastern Pennsylvania Transportation Authority (SEPTA):** a regional transit authority which offers the public an integrated network, whose operations are provided both by SEPTA itself and by means of contracts with railroads for the operation of suburban trains.⁽⁷⁾

developed motorbus, rapid transit, light rail, commuter rail and urban ferry services. In the mid-1960's, operations were provided by a city-owned corporation, the federal railways, the federal post office, two privately owned light railways, a marine transport concern, and a number of independent bus operators. The travelling public was faced with an uncoordinated, confusing collection of hardware, with duplication in some corridors and underservice in certain suburban markets. While many of these enterprises had access to government support, ridership was in decline.

A review of the situation brought the conviction that a "*sine qua non*" for a successful programme of transit improvements was an institutional arrangement that would permit coordination of services without physically consolidating all operators into one firm. Such a move was required if the most appropriate 'travel' mode were to be assigned to a given type of traffic; furthermore, economies would result from reducing duplication while new traffic opportunities would be opened up by better interconnections and re-deployment of resources.

The structure established in Hamburg was the "transport community" or Verkehrsverbund (V-Bund, for short), an entity with its own staff reporting to a board of directors drawn from the carriers and the urban community served. The V-Bund assumed responsibilities formerly held by each of the carriers for market research, service design, pricing and merchan-

dising. Revenues derived from the integrated system were paid back to the carriers by the V-Bund, according to a rather complicated formula based on the contribution to output made by each.

The V-Bund came into being in 1966. Within five years, integration was complete: patrons could use one ticketing arrangement and one user information source, regardless of the carrier(s) involved. Interconnection of routes in terms of stations and schedules was greatly improved. Ridership began to grow soon after the transport community was established and continued its climb as new investments were made in plant and equipment.

At about the same time that Hamburg was examining its transport problems, the Government of Ontario concluded that the establishment of high-quality commuter train service along Toronto's suburban lakeshore would be a feasible alternative to the construction of additional freeway capacity in the corridor.

The line in question was owned by the Canadian National Railways (CN). There was a limited service already in existence: two commuter trains per day, operating over a portion of the line, using 40-year old cars. The challenge was to devise an arrangement with CN that would result in a modern, high-quality service reflecting the province's goals that would at the same time be practical to operate. The solution adopted was to vest responsibility for the design, pricing and promotion of the service with the Ontario Department of High-

ways, who would then provide CN with equipment and pay a set fee for operation. Service provided in this way was given the name "GO Transit" (named for Government of Ontario).

The service was successful from its inception, with ridership targets rapidly reached and with a substantial proportion of its patrons being drawn from the ranks of automobile commuters. An exceptionally good public attitude developed in response to the high quality of the product, with its clever "packaging" and promotion. The same scheme was employed in subsequent arrangements to provide feeder buses and to plan/fund other regional rail and bus services. As in Hamburg, the customer enjoyed one fare system and one information source, and he benefitted from tightly interconnected schedules, both with respect to time and place.

The South Eastern Pennsylvania Transportation Authority (SEPTA) structure reveals a variation on the above themes. It was faced with a worn-out set of rail commuter, rapid transit, urban and suburban light rail and bus services, provided by four different privately-owned companies. Philadelphia is a city with a strong core, dependent on good public transport, and a decision was taken to arrest the decline in transit and to make improvements.

In the traditional way, the Authority acquired the basic city operation from the Philadelphia Transit Company and the suburban light rail and bus lines of Red Arrow Lines. But it was not in any position to buy all or part of the Penn Central Transportation Company or Reading Lines, the two railways which provided a dense web of commuter services. For these, SEPTA established "purchase-of-service" contracts under which the railways received a fee for the operations of trains, adjusted according to actual performance. The transit authority, in turn, began a capital programme to provide new cars and took up responsibility for research, design, pricing and merchandising activities, as described for Hamburg and Toronto.

The agencies listed in the table each evolved independently, according to the needs and perceptions of the area which they were to serve. Following the age-old dictate that the essence of research is to distill simple laws from the complexities of real world phenomena, some considerable effort by the author went into extracting an element common to each of the above organizations. This element eventually appeared to be a consistent structural arrangement in which all of the "supply" elements (principally operations and maintenance) were assigned to one enterprise and all the "demand" elements (market research, service design, pricing, merchandising, funding) to

another. Put differently, all of those aspects of public transportation with an industrial orientation were performed by an operating company in the traditional fashion, while all of those relating to the consumer or to the public policy realm were performed by a separate group. A contractual arrangement bound the one party to the other and spelled out the responsibilities of each.

The precise institutional form for each undertaking examined varies considerably as does the descriptive name, when such is used. To provide a convenient label for the variety of authorities displaying an organizational split between supply and demand, the term "public marketing agency" (p.m.a.) was devised by the author for all creatures dealing with demand. Authorities such as SEPTA, which both operate certain services themselves and contract out for others, were described as using a "public marketing agency approach."

TWO EARLY BASIC ADVANTAGES

The assignment of marketing responsibilities to a separate agency can offer powerful advantages, two of which are described below.

Purchase of Service: A government wishing to establish a new or improved commuter rail service would logically expect to describe to the railroad just what was wanted; after all, "he who pays the piper shall call the tune."

Looked at in a more general way, following the norms of the business world: the marketing department measured demand and specifies a product while the production or operations department is responsible for meeting this specification. The production department thus tends to control costs while satisfactory revenues depend upon the marketing undertaking. Although the former is vitally important, the crux of an enterprise is its ability to design a product or service that satisfies consumer needs at a suitable price, thereby producing revenue.

A government body entering into a purchase-of-service agreement finds itself naturally falling into the marketing role. It has already satisfied itself as to need, or it wouldn't be trying to establish a new service or expand the old. Through this same mental process, it will have created at least a conceptual plan, describing the intended service and what it is to do. Finally, it must provide the funds for an operation to take place, either by what it extracts from the consumer or by an appeal to the public treasury.

Coordination without consolidation: efficiencies in public transport come from being able to carry large numbers of people on one vehicle or train. However, many of the desire-lines for travel in a metropolitan area do not possess a sufficient volume to warrant opera-

tion of their own direct, no-transfer service; if these desire lines are to be provided for, it is necessary to arrange connections between other routes that already exist to service other needs.

The most straightforward way of facilitating this inter-connection of services is for all routes in a region to be run by one company. However, problems can arise since it is not always possible, or indeed desirable, to physically merge all operations. These can be overcome if the responsibility for service design lies with a public marketing agency, i.e., if it is independent of operations; in such cases, a fully integrated package can be offered to the public, even though individual routes are provided by different companies.

NEW PUBLIC MARKETING AGENCIES SINCE 1972

During the 1970's a number of new public transport agencies have been established that display a public marketing approach. Some have been deliberately modelled on earlier successes (as with V-Bunds) while others again represent independent development.

This author was directly involved in the creation in 1973 of the British Columbia Bureau of Transit Services and its related Act, and in the preparation of legislation in 1978 establishing the successor Urban Transit Authority of British Columbia. From the experience of working in a public marketing agency for five years, plus from published and unpublished remarks of those associated with similar such agencies in table II, the earlier list of advantages of this form of organization can be expanded.

Purchase of service: the remarks made earlier under this topic still hold, but an even more important aspect than "he who pays the piper shall call the tune" has come to the fore. This is the realization that the establishment of separate "supply" and "demand" groups, with the attendant contractual relationship between the two, introduces an added level of management discipline and permits significantly better evaluation of performance than is found with traditional arrangements.

The concept of an arm's length relationship between groups within a single corporate or conglomerate body cannot be explicitly ascribed to any transit planning/marketing authority. Rather, it is a principle widely applied in large businesses, where separate activities are established as "profit" or "cost" centres, and where format transfer prices (market-set or otherwise) clarify relations between each. Sloan's work in organizing General Motors pioneered in this regard;⁽¹⁶⁾ more recently, Shapiro has focused on the need for

this sort of discipline between marketing and production for companies of all kind.⁽¹⁷⁾

When the separation of marketing from operations takes place, the scope and quality of service is determined by the marketing group, which is directly responsible to the elected officials who furnish the operating subsidy. The operating group, by contrast, becomes a cost center. This means, basically, that operations management is given certain industrial tasks to perform (moving and maintaining vehicles), which are capable of evaluation using simple efficiency measures.

The primary function of the planning and marketing group is to generate ridership in accordance with public policy. Marketing management is responsible for attracting riders to the transit vehicles and for justifying transit subsidies to elected officials and to the public. This is primarily a political function, and while measures such as "the proportion of operation costs covered by fares" is a useful tool in evaluating the effectiveness of service design, they are really only a subset of a broad collection of economic, social and political objectives.

The separation of marketing and operations, and the insulation of the latter somewhat from the political sphere, permits the use of clear, unequivocal measures for operating companies to evaluate themselves and to be evaluated. As a general rule, the required task of an operator is to minimize the cost of producing a stated amount of service, subject to quantitative reliability and safety constraints.

For a performance system to be meaningful, there must be the opportunity for the p.m.a. to influence the operating company. One way is by the use of penalty clauses such as that originally established by SEPTA in the event of late running of its trains. The fines so collected were used for betterment of facilities of a minor nature. One railroad found to its chagrin that its penalties were funding physical improvements not only on its own lines but also on those of another contractor.

A second method is possible with smaller privately owned bus companies: the existence of a fixed term contract with competitive-bidding for operation of the routes at the end of each term. Performance as well as cost can be used in awarding tenders. In British Columbia, small city incumbent operators can and do fail to retain their contract when the services go out to tender. For those new or substantially re-designed small-city systems implemented between 1974 and 1978, most of the six firms that had been operating under the earlier traditional "franchise" arrangement failed to win contracts under competitive bidding.

A third technique can be used with large bus operations, both public and private, where

TABLE II
SOME ADDITIONS TO THE RANKS OF PUBLIC
MARKETING AGENCIES DURING THE 1970's

Chicago Regional Transit Authority: a multi-county agency which has planning and funding responsibility for the basic central city operator (Chicago Transit Authority), commuter railroads, and privately and publicly owned suburban bus companies.⁽⁹⁾

VIA Rail Canada: a corporation owned by the Canadian government which plans, merchandises and funds a nation-wide network of intercity passenger trains, whose actual operation is provided by publicly and privately owned railroads.⁽¹⁰⁾

San Diego Metropolitan Transit Development Board: an agency which disburses funds for all transit in its territory but whose planning activities are directed at establishment of a fixed-guideway system.⁽¹¹⁾

British Columbia Bureau of Transit Services (BTS, and successor British Columbia Urban Transit Authority (UTA): province-wide agency which funds large and small city transit, has planning/marketing responsibilities, but undertakes no operations on its own. BTS was solely provincial; reflecting new funding arrangements, UTA has regional commissions drawn from elected representatives of local government.⁽¹²⁾⁽¹³⁾

Knoxville Transit Authority/Knoxville Transportation Brokerage System: a region-wide system is provided using a traditional central city operator, along with privately-operated buses, vans and taxis. The planning/marketing or "demand-side" activities broadly discussed in this paper are described as a "brokerage" concept in Knoxville. The private resources are coordinated, promoted and encouraged; the whole system functions so as to get the right supplier to meet the needs of consumers.⁽¹⁴⁾⁽¹⁵⁾

Denmark: as of 1 April, 1978, each county council outside the greater Copenhagen area is to work out a plan for public transport. Counties may establish a p.m.a. for purpose of providing service, but need not be responsible for day-to-day operation.⁽²⁰⁾

Norontair: a p.m.a. begun in 1971 to provide Third Level air service in northern Ontario. Owns aircraft and contracts with three small air carriers for service to 20 communities.⁽²¹⁾

Saskatchewan Local Transit Authority: for short distance rural service, the province will fund authorities formed by local governments who contract with microbus (van) operators. The first route to commence runs from Beechy to Outlook.⁽²²⁾

Verkehrsverbund Rhein-Ruhr: officially founded on 30 October 1978 with a common fare structure on 19 short distance public transport undertakings and the Deutsche Bundesbahn. The service area is bounded by Wesel, the Dutch frontier, Neuss, Ennepe, Hagen, Dortmund and Recklinghausen. 7.7 million people live in this area and there are 713 public transport routes totalling 1273 km.⁽²³⁾

regular-interval tendering of the system would prove impractical: the transfer of marginal routes to another carrier. While only representing a small portion of a company's operation, it does represent a diminution of empire, something any sales-maximizing manager (as most are) dislikes. This may sound somewhat drastic but is really no different than the practice of large intercity bus companies, who sell off unprofitable lines to independent concerns,

from time to time. This technique has recently been applied with certain routes in the County of San Diego.

More on co-ordination without Consolidation: the early interest in integrating service aspects of metropolitan bus and rail remains high, but an important variation has appeared in the past five years: that involving the use of paratransit as a feeder and/or supplement to conventional transit.

Paratransit, has numerous definitions but, in practice, it involves public passenger services other than conventional fixed routes provided by the principal operator in a region. For dispersed, low volume flows associated with rural areas or the suburban fringe, the use of paratransit can improve the cost-effectiveness of transit. Serious pursuit of this class of services brings about the same kind of integration issues as are discussed above. Since a multiplicity of taxicabs firms, small independent bus companies, and van-pools can be involved. In his work with paratransit in Knoxville, Davis and other⁽¹⁵⁾ used the term "brokerage" to refer to the sorts of activities ascribed here to a public marketing agency.

The flexibility of the public marketing agency can permit both public and private carriers to operate on the same routes or service area: the City of St. Albert (in Alberta) contracts with publicly owned Edmonton Transit to run its basic day-long local and interurban services, but has local rush hour extras provided by a small, privately owned school bus firm. The service to the passenger is fully integrated but St. Albert benefits from the use of part-time labour for otherwise expensive peak-period work. Strathcona County Transit, structured the same way to serve suburban Sherwood Park, uses a small bus operated by a taxicab firm as a scheduler feeder route by day, and a geographically wide-ranging dial-a-bus (replacing publicly run scheduled routes) by night.

The Consumer's Needs and the Community's Needs: the existence of a separate planning/marketing body makes it easier to ensure that transit design matters reflect not only the needs of the operator but also the needs of the individual consumer and the community at large. The problem of operations dominance of traditional transit systems has been well documented by Schneider.⁽¹⁸⁾ When marketing is done in a separate agency, there is no reason for one interest to dominate the others: operations, consumer and town planning can all receive full consideration. There is a benefit for the operating company here too: if marketing folk want a particular service feature upgraded (say, cleanliness of vehicles), they must be prepared to pay for it and have that expenditure justified in their budget in terms of their objectives.

Marketing professionals have as their focus of concern the individual consumer, and as a result, most p.m.a.'s follow suit. However, an entirely separate profession exists to deal with communities of individuals: the town planner. Both disciplines undertake much of the same kind of work in the transport urban (basic market research, service design, and various forms of merchandising), one being at a micro

scale, the other macro. Consequently, a public marketing agency can prove to be an attractive environment for both and indeed, in British Columbia, town planning questions are basic inputs to decision-making of the UTA of BC and its predecessors. Not only are community needs thus incorporated into transit, but town planners employed by the transit agency can effectively carry forward the needs of public transport to their counterparts on city staffs.

Town planning decisions can have a vital impact on the success of transit, and vice versa. The arrangement of land uses sets the pattern of demand for public transport; low density, widely dispersed areas are expensive to serve well while a metropolitan layout featuring a limited number of well-defined urban and suburban nodes puts good service within most financial means. At the same time, the proper location of transit focal points (rail transit stations or bus interchanges) can help, to a greater or lesser extent, make community plans "happen."

SOME OBSERVATIONS ON IMPLEMENTATION

This paper has thus far presented a very positive outlook on what the structural separation of marketing from operations can do to improve the performance of transit. What follows below is a description of two important areas that require careful attention by anyone intending to implement this organizational concept.

Operating Company Concerns: there is a feeling amongst some operating company management that governments are attempting to intrude overly much into technical areas. While by no means a universal concern, it did briefly become an issue of discussion at the 42nd Congress of the International Union of Public Transport (U.I.T.P.).⁽¹⁹⁾

While the public marketing agency could be perceived as posing this kind of threat, it also can provide a wide range of opportunities for operating management to have a say on broad policy and land use issues that they might otherwise be unlikely to influence. The appointment of operating company people to a p.m.a. board is one technique. Others include the use of joint-agency staff committees and the filing of some p.m.a. professional and management positions from operating company ranks.

Any implementation programme requires careful handling of this element, if the protagonists wish to ensure that the advantages of a p.m.a. are obtained without jeopardizing the smooth day-to-day delivery of vehicle-miles.

Variety of Forms: At first reading, one might get the impression that the public marketing approach refers to one specific kind of

organization, the temptation being to focus on the most clear-cut examples of Go Transit of VIA Rail Canada. Nothing could be further from the case. What is being presented here is a principle which can be, and is, applied in a number of ways reflecting local conditions.

There are examples of public marketing agencies that exist as part of the principal urban operating company, S.E.P.T.A. providing one such case. In such situations, the p.m.a. is used only to contract with railroads or other firms to provide coordinated service.

Other variations exist; the transport federation (V-Bund) has included on its board of directors persons drawn from operating companies, assuring feedback. Some agencies serve largely as decision-making bodies, "farming out" much of the actual planning tasks to consultants or back to the operators themselves. Still others have a special purpose nature, such as the San Diego M.T.D.B., whose activities are formally directed away from existing bus services and towards the establishment of new fixed-guideway systems.

RURAL AND URBAN

It is interesting to note that many of the recent examples of p.m.a.'s deal with rural public transport. Not only do the principles described above apply, but there are four practical specific's to bear in mind: (a) it provides an ideal way to assist existing intercity rural bus services or to introduce new lines by such carriers; (b) it represents a similar contracting procedure to that followed with school buses (where not publicly run), easing the way for service and operations co-ordination; (c) it is the organizational form following by both U.S. and Canadian major rail passenger providers, offering the opportunity for easy joint-venturing; and (d) it is the ideal mechanism for co-ordinating the efforts of a vast array of social service agency transport initiatives.

The U.S. Urban Mass Transportation "section 18" programme provides an important first-step funding for rural public transport. Might one expect to see an American version of the large scale, region wide rural p.m.a.'s of Denmark and Germany?

SUMMARY AND CONCLUSIONS

This decade has seen a growing interest in the use of public transport to achieve mobility, economic and other goals. A dissatisfaction in a number of circumstances with the traditional operator-based form of organization has led to a number of different institutional arrangements. An examination of these has revealed that a common theme has been the separation of "demand-side" activities, those of a marketing and policy nature, from "supply-side" or industrial elements.

The foregoing text and tables have described the reasons for the creation of the various agencies and the physical work that they accomplished. A more difficult point to resolve is whether or not these enterprises have seen better fulfillment of public goals than traditionally organized systems. Certainly, the prime goal of increasing ridership has been met by all p.m.a.'s examined in the period 1970-1975. However, the keen observer could also point to numerous successes with traditional structures, so separation of marketing and operations is not the only way to deliver service well.

An alternative way of testing the success of PMA's is to see if they have been relatively stable over time: constant change would suggest dissatisfaction. Of those discussed in this paper, GO Transit, the British Columbia Bureau of Transit Services and Amtrak have experienced adjustment, while the rest have remained relatively the same. Even with these three however, the reason for change was primarily due to new requirements set by government: in the first two cases, there was a desire to incorporate an additional level of government into the structure (in both cases, local); in the third, a realization that the initial "for-profit" nature of the firm was inappropriate and should be replaced by one more accurately reflecting economic dictates.

Based on the apparent accomplishment of physical and ridership goals and the fact that no jurisdiction has reverted from a p.m.a. to a traditional form, it seems possible to conclude that this means of organization performs well, although without exclusive rights to success. It should be clear, however, that a p.m.a. provides sufficient advantages in the areas of performance, co-ordination and innovation that it could be a valuable asset in many jurisdictions' efforts to improve public transportation, both intercity/rural or urban/suburban, regardless of physical mode.

These same advantages may also prove of value to other members of the public sector. The specific features of a p.m.a. that would be useful include: and emphasis on the user rather than the supplier; a mix of large and small, private and public enterprises; and the use of contractual "transfer prices" and other performance disciplines.

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