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Potential for a Full-Service Transit Agency

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ABSTRACT

About 20 ridesharing programs out of a total of about 250 such programs in the United States are currently affiliated with public transit agencies. Such affiliation is a major step toward the advantages of a full-service transit agency, but its pros and cons need to be carefully considered by both the transit agency and the existing ridesharing program. Several aims sought by local ridesharing programs through their affiliation decision are identified and a similar scheme to assist in making affiliation decisions is offered; it is hypothesized that transit agencies will differ substantially in their ability to reach such affiliation goals. Results of a study of 13 ridesharing programs in transit agencies tend to confirm this hypothesis, although little quantitative evaluation information is available. Further study is recommended to remedy this lack of evaluation information and to consider the relative merits of (a) close cooperation between ridesharing and transit agencies and (b) the option of merging these two types of programs.

About 250 ridesharing programs are currently organized and providing services to employers and the public in cities across the United States. Before the 1973 oil embargo, there were no such programs in the country. Now their influence extends into most large employers, many of whom have designated transportation coordinators to help their own staff get to work with more reliability, sociability, and energy efficiency plus reduced effects on traffic congestion.

Concurrently with the increase in the number of ridesharing programs, the cost of public transit has risen rapidly. For example, total U.S. transit expenses increased by 12 percent per year between 1972 and 1980 while ridership increased by only 3 percent per year, resulting in a quintupling of transit deficits, from \$0.5 to \$2.6 billion. Increasing transit costs and deficits and the slowing or reversal of ridership increases have led to a vigorous search for countermeasures, among which the full-service transit agency is an important example.

A full-service transit agency serves a diversified travel market with correspondingly diversified resources, providing regular fixed-route bus service in areas of higher trip density and demand-oriented service such as ridesharing assistance where that would be a more economical solution. The full-service transit agency concept has also been referred to as the new partnership between public and private

agencies in providing transportation services (1,p.13):

The driving force behind the new private-public agency concept is cost-effectiveness, with the increasing knowledge that the full-blown public approach is proving too costly and inflexible to serve many of the small and unique trip demands that make up so much of today's urban scene. The time-honored business practice of market segmentation is being applied--finding the right product for each segment.

The private-public transit agency will support company-based vanpools, contract with private carriers including taxi operators where they are the most cost-effective modes, provide a computerized service to "match" persons interested in carpooling, and orchestrate the many special transportation services provided by social service agencies. It will support parking-management programs, special traffic lanes for all multi-passenger vehicles, and new programs for staggered or flexible work hours to relieve peaks of traffic congestion. It will work closely with the business community on joint financing of facilities and services and on coordinated proposals for new govern-

ment-funded programs. In Norfolk, conventional bus routes are being terminated in low-density residential areas and replaced by private entrepreneur jitneys operating over the old routes but at a fraction of the earlier subsidy. In Michigan, vanpool-driving employees are applying to the Public Utilities Commission for operators' licenses to exchange their vans for full-size buses. This is not being opposed but rather encouraged by the cognizant transit authorities.

Because affiliation with (or initiation of) a local ridesharing program is a major step toward the full-service concept, such affiliations are being considered by a number of transit agencies. About 20 transit agencies include ridesharing in their services, and at least one major ridesharing agency (Seattle-King County Commuter Pool) is in the process of merging with the local transit operator (Seattle Metro). Two other ridesharing programs, in Dallas and Fort Worth, Texas, have been included in the new regional transit agencies that were recently formed around those cities. Therefore, it is timely and relevant to ask, Have such affiliations in the past worked out well enough to justify active interest by both transit agencies and ridesharing programs?

The issues relevant to the choice of organizational form and affiliation for a local ridesharing program are examined in this paper in three ways. First, current affiliation practices and preferences are briefly reviewed. Second, a simple scheme is proposed for assisting in the process of deciding among the different affiliation possibilities of ridesharing agencies. Third, the results of a recent survey of transit agencies with ridesharing programs are presented as evidence of both the feasibility and hazards of such affiliation. This paper is addressed to transit managers and other local decision makers who are considering the best organizational location for a local ridesharing program.

CURRENT AFFILIATION PRACTICES AND PREFERENCES

The distribution of ridesharing agencies by affiliation was surveyed in 1978 (2) and has probably not shifted much since then. The results of that survey show a predominance of affiliations with metropolitan planning organizations (43 percent), cities or counties (22 percent), and state departments of transportation or energy (17 percent), for a total of 82 percent. Transit operators are the next most frequent, with 12 percent, which would indicate that about 30 of today's 250 ridesharing agencies have transit affiliations. This figure is roughly consistent with known ridesharing programs in transit agencies, which serve the following 20 areas and perhaps others:

Baltimore area, Maryland
 Birmingham, Alabama
 Dallas, Texas
 Ft. Worth, Texas
 Golden Gate Bridge Corridor, California
 Hampton, Virginia
 Houston, Texas
 Lansing, Michigan
 Melbourne, Florida
 Minneapolis-St. Paul, Minnesota
 Nashville, Tennessee
 Norfolk, Virginia
 Orange County, California
 Phoenix, Arizona
 Portland, Oregon

Santa Clara County, California
 Seattle, Washington (in process)
 Tacoma, Washington
 Tulsa, Oklahoma
 Winston-Salem, North Carolina

Thus, about 8 percent of ridesharing programs are known to be affiliated with transit agencies, and about 6 percent of the nation's total of some 300 urban transit systems have ridesharing programs. The remaining ridesharing agencies are divided among business or nonprofit corporations, chambers of commerce, and university administrations.

PROPOSED BASIS FOR CHOICE OF AFFILIATION

The choice of organizational form and affiliation for ridesharing programs has always been largely determined by local conditions and preferences, and especially by the amount of interest and support available from different organizations. Hence, the affiliation decision is not usually conducted in an impartial or academic setting, and to speak of objective criteria for the decision may be artificial. In addition, there is as yet no systematic comparison of results available for each major type of affiliation, although examples can be found of outstanding ridesharing programs of each type. Nevertheless, it is possible to identify several goals that are commonly sought in organizing a ridesharing agency, and to consider how well different affiliations are likely to meet those goals. Based on previous work (3,p.48), the goals suggested for consideration are

- High visibility for the program together with an image of solidarity and continuity
- An active client and service orientation, responsive both to local employers and the public
- Facilitation of commitments to ridesharing by employers
- Relative independence and flexibility for exploring new ideas or acting quickly in emergencies
- Ability to participate in relevant transportation activities, particularly coordination with transit planning and marketing and with parking management
- Adequacy and stability of funding
- Encouragement and easy use of donated support
- Ability to interact successfully with legislative bodies

It is hypothesized that the ability of transit agencies to meet such goals on a ridesharing program varies with the policies and capabilities of individual operators. The service of ridesharing promotion and assistance is different in character from the service of fixed-route transit buses with which transit operators are most familiar. However, both have the same goal of providing commuting alternatives to the single-occupant automobile. Transit agencies usually have a high degree of visibility and stability, and many transit operators are keenly attuned to the needs of employers for commuting services. For example, a recent U.S. Conference of Mayors survey (4) shows that 58 percent of all transit operators have programs marketing passes through employers, and 85 percent of these programs have employers reselling the passes to employees at discounts. Many transit agencies also track new developments and employment growth as a guide for modification of bus routes.

Although no complete test of the foregoing hypothesis has been made, a recent study of 13 ridesharing programs affiliated with transit operators

has produced much relevant information on the subject (5). In the next section, the results of that study are summarized and comments are provided on the problem areas identified in the study and the study's implications for the hypothesis discussed in this section.

SUMMARY OF RIDESHARING PROGRAMS IN SELECTED TRANSIT AGENCIES

The ridesharing programs considered in the study referred to in the preceding section (5) were sponsored by the following operators, in declining order of the size of their bus fleets: Mass Transit Administration, Maryland Department of Transportation; Metropolitan Transportation Commission in Minneapolis-St. Paul, Minnesota; Santa Clara County Transit District and Orange County Transit District, both in California; Tri-Met in Portland, Oregon; Metropolitan Transit Authority in Houston, Texas; Pierce Transit in Tacoma, Washington; Tidewater Regional Transit District in Norfolk, Virginia; Metropolitan Transit Authority in Nashville, Tennessee; Peninsula Transportation District in Hampton, Virginia; Capital Area Transit Authority in Lansing, Michigan; and the Transit Authority in Winston-Salem, North Carolina. The Regional Transportation Authority's program in Chicago, Illinois, now discontinued, was also included.

The study sought to learn about (a) the benefits and costs to transit operators of the 13 ridesharing programs, (b) what services and incentives were offered, (c) how evaluation was conducted, and (d) what problems were encountered. The principal findings of the study were as follows:

- The major benefits sought and reported by the operators were improved efficiency (through reduced cost per trip in ridesharing modes and reduced peak-to-base ratio of bus service), increased effectiveness (such as offering ridesharing alternatives to employers and areas that cannot be served by fixed-route buses), and enhanced public image (by having a broader family-of-transportation-services outlook and helping to soften the impact of transit service cutbacks). In one program, public costs per vanpool passenger trip were shown to be about 17 percent of bus subsidy costs per passenger trip (\$0.25 versus \$1.50).

- Typical, first-year costs of the programs were between \$50,000 and \$150,000, while typical annual costs of established programs varied between \$0.12 and \$0.35 per capita, averaging \$0.24 and ranging as high as \$0.78.

- The most essential ridesharing services were carpool and vanpool formation assistance; energetic brokerage of ridesharing to employers (usually assisted by an advisory committee with private-sector representation); and facilitation of company-based employee transportation coordinators (ETCs). Important incentives were park-and-ride (or pool) lots, preferential parking, high-occupancy-vehicle (HOV) lanes (planned to grow to be an HOV lane network in Santa Clara County), HOV bypass on ramps, operation of third-party vanpools or seed vans for trial and later transition, and land-development requirements that encourage ridesharing efforts to mitigate the need for parking.

- Few operators had conducted evaluations of the results of their ridesharing programs, which appear to require some reeducation of the transit staff and board so that they will understand different performance measurement and analysis techniques.

- Problems were encountered either internally (personalities, turfism, resistance to change, lack

of independence) or externally (labor union objections, low public response) by about one-half of the programs. However, most problems are solvable or of short duration; there are several sources of technical assistance for coping with problems that arise, including the FHWA National Ridesharing Information Center, UMTA's Public Transportation Network project, and the transit operators participating in this study.

COMMENTARY ON PROBLEMS MENTIONED IN STUDY

It is worthwhile to expand on the internal and external problems with ridesharing programs that were identified by their transit operators during the foregoing study.

Internal problems usually relate to organizational and personal inertia. Ridesharing promotion is different from provision of conventional transit service and will call for adaptations on the part of the transit staff. Also, some of the existing transit staff may view the ridesharing program either as competition for scarce funding or as a threat to their current position or advancement potential. Finally, the desirability of integrating ridesharing with transit marketing and administrative services should be tempered by the need of the ridesharing program to have its own outreach staff who are (a) trained in promotion of ridesharing and transit options to employers and (b) fully responsible to the ridesharing director.

Internal competition per se is not unhealthy in an organization. To the extent that such competition is for providing the most efficient mix of transit and ridesharing services in each corridor and area of the region, a wider choice of modes is made available to commuters, and total ridesharing and transit usage is likely to increase. Probably a loose coupling of the ridesharing unit to the transit organization--such as reporting to the general manager or an assistant general manager without close day-to-day supervision--will best foster the development of a creative, customer-oriented ridesharing service that can be integrated without losing the advantages of internal competition.

The possible external problems mentioned by respondents were labor union objections and public awareness. None of the agencies studied has had significant labor problems, and only two had to develop special modifications of their labor agreements as a result of their ridesharing programs. It is very significant that so few labor problems have been encountered because most transit managers fear the repercussions from labor if vanpooling appears to erode the transit market. Indeed, a full-service transit operator should be providing the types of affordable service best suited to the public demand, which may require reducing bus service in areas where it becomes too expensive or replacing it with ridesharing options.

A more frequently mentioned external problem was maintaining public interest. This problem is common to all types of ridesharing programs and cannot be ignored. It is necessary to maintain commuter awareness of the ridesharing services to make using the services extremely easy and to facilitate ridesharing incentives where possible, otherwise the demand for these services will diminish and program productivity will decrease.

CONCLUSIONS

In terms of the organizational affiliation goals of ridesharing programs that were identified in the third section of this paper, the authors believe

that results of the study of 13 ridesharing programs in transit agencies confirm their basic hypothesis: the ability of transit agencies to meet the goals of a ridesharing program varies with the policies and capabilities of individual transit operators. Specifically,

- Many respondents achieved high visibility through their transit agency affiliation. Others felt that their program was subordinated to the transit interests of the agency, with a loss of vigor in marketing ridesharing. Program continuity was good in all cases except Chicago, where the ridesharing program was cancelled in 1983.

- Contacts with the public and local employers were generally enhanced, with some transit agencies facilitating ridesharing at employer locations that were off of transit routes instead of extending transit service to them. In other cases, transit and ridesharing promotions were unrelated.

- Employer commitments to ridesharing tended to be difficult to obtain and were usually limited to distribution of ridesharing information; however, this is a problem common to all ridesharing agencies.

- Independence and flexibility were often hampered by being a small part of a large transit agency. The offsetting advantage was better coordination with transit decisions; however, many respondents believed that their ridesharing potential was being underused.

- Adequacy and stability of funding both were problems with some transit-sponsored ridesharing programs and not with others, much as for independent ridesharing programs. However, more adequate and stable funding are key reasons that Seattle-King County Commuter Pool recently agreed to a merger with Seattle Metro, which suggests that the ridesharing program of a large transit agency does not have to be underfinanced.

No information was sought in the survey on donated financial support or on the ability to interact with legislative bodies.

In conclusion, the authors believe that there are enough potential advantages for ridesharing programs due to affiliation with transit agencies that they should consider such affiliation carefully. However, the advantages are not assured, so they should be the object of negotiation and prearrangement instead of being based on an assumption that everything will work out well.

The case for advantages for the transit agency is less conditional. All of the transit operators that were contacted perceive significant benefits of some kind from their ridesharing programs. Nevertheless, the extent of the benefits, especially in terms of greater patronage per dollar spent, is not well-known and can be presumed to vary considerably. Adoption of a ridesharing program is a necessary but not a sufficient condition for creating a full-service transit agency; that is, the potential is there, but requires understanding and effort to be realized.

FURTHER STUDY NEEDS

There are two areas in which further work is recommended.

Benefits of Ridesharing to Transit Operators

The first and perhaps the most important question asked by a transit manager is "What are the benefits of a full-service transit approach to my agency?"

There is still scant evidence with which to provide a quantitative answer in terms such as the effects on deficit per passenger, total patronage, or peak-to-base ratio.

The only way in which this evidence can be developed is through careful evaluation studies of selected operators who have incorporated an in-house ridesharing program. Ideally, such a study should begin before the ridesharing program is initiated or expanded so that baseline data can be gathered to permit before-and-after comparisons.

Such an evaluation study would not be easy or inexpensive to carry out. It would necessarily involve the operations and planning staffs to collect and analyze the data needed. The study could be affected by external events, such as changes in gasoline prices, that would complicate the analysis and raise the need for a control transit agency that did not have a ridesharing program. The period of the study should be at least 1 year, preferably 2 years, to allow the ridesharing program to get established (typically a 6- to 12-month process) and its effects to begin to develop. The measured benefits should include effects on ridesharers, transit users, and the community as well as on the transit agency. UMTA and/or the American Public Transit Association (APTA) are probably the most likely sponsors of such a study.

Cooperative Efforts with Existing Ridesharing Programs

In most urban areas, there is already a ridesharing program in operation. Thus, the usual decision facing most transit operators, if they have decided that ridesharing could complement transit services, is "Should I undertake a more cooperative effort with the existing program or consider a merger?" Speaking more broadly, transit operators both with and without a ridesharing program face the question "How can I improve the effectiveness of present cooperative efforts between transit and ridesharing services?"

Many transit operators are already cooperating with their local ridesharing agency. For example, the transit general manager in Kansas City would not consider starting an in-house ridesharing program because of his close working relationship with the existing ridesharing program. In other cases, the ridesharing and transit programs may operate in a competitive mode. The correct action will depend on local circumstances.

To assist in making such a decision, much could be learned from the experiences of those transit operators who have already undertaken joint cooperative actions with an independent ridesharing program. The authors suggest that there is another potential role for UMTA and/or APTA here: to conduct a study of several of these cooperative efforts compared with several examples of in-house ridesharing programs of transit agencies. The principal study objectives could be to describe

- The type of cooperative efforts that are conducted in both situations and

- The comparative cost and effectiveness, or advantages and disadvantages, of such efforts for both in-house and independent ridesharing programs.

As an example, some transit agencies restrict the geographic scope of their ridesharing programs to areas not currently served by transit routes or even to areas not likely to be served by transit. The evidence now available suggests that less restrictive policies would produce fewer vehicle trips and,

in the long run, more efficient transit service. However, restrictive policies are unlikely to be abandoned without convincing statistics on such effects.

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