Case Studies on Increasing Transit Revenues: Southern California

Joel Woodhull, Southern California Rapid Transit District, Los Angeles

The Southern California Rapid Transit District (SCRTD) has been able to expand its operating funds significantly during the past few years, as have most other operating agencies, by taking advantage of some new sources of funds. In 1969, SCRTD operated out of the fare box. State funds came along in 1970, some local support began in fiscal year 1973, and the first federal operating funds came in fiscal year 1975.

State funding has been and continues to be the most important source to supplement the fare box. State funds even exceeded fare revenues in fiscal years 1975 through 1977, as can be seen in Figure 1. Almost all of the state funds are derived from the 0.25 percent sales tax levied under California's Transportation Development Act (TDA). Although this source was provided by the state legislature, it has some of the characteristics of a local funding source in that the tax proceeds are returned directly to the county in which they were collected; the state does not impose any redistribution among counties. The TDA funds qualify as the local share to meet federal matching requirements. They have made it possible to maximize the use of available federal operating funds.

The county of Los Angeles is the primary provider of operating funds from within the area served, but the actual source of the county funds is federal revenue sharing. Therefore, many effects of the county funds were to lower the fare at the time of the energy crisis and to initiate a large growth in service, which was then maintained by the input of federal funds.

County funds constitute the controlling interest. Each year, after considerable positioning and bargaining and eleventh-hour decisions, the county contribution is set. It controls because it is provided to meet the deficit remaining after all other sources have been fully used. If additional funds should become available during the year, the county contribution would be cut back accordingly, but it cannot be enlarged if the funding gap should prove larger than expected.

As a result of this bargaining process, only about half of the county funds actually support an increment of service. The other half supports a senior-citizen fare discount increment beyond the federally mandated level. Federal operating funds are also inherently constrained in this fashion; in the current fiscal year, about 12 percent of the section 5 funds must be used to subsidize the low fare for elderly and handicapped persons rather than provide a higher level of service.

The state, or TDA, funds have been quite free of constraints on system management. Currently, legislation is being written to ensure that productivity is maintained, but the legislators are not trying to set the operating parameters for managers. The emphasis of the new legislation is on more thorough and consistent reporting requirements and on regular performance and financial audits.

There is one revenue component that deserves mention even though it is too small to show up in Figure 1. A year ago, a minibus shuttle service was begun to help solve a severe entertainment-related parking problem in Westwood, one of the numerous downtowns of Los Angeles. The SCRTD board requires that any service provided for the exclusive benefit of a specific local area be subsidized from sources other than general area-wide funds. Through a joint effort of the Los Angeles City Council and local businessmen, parking meter revenues were made available to support the bus service. These are revenues that normally would be used to construct more off-street parking.

Why has Los Angeles been able to gain so much non-fare revenue from the same sources that furnish only smaller proportions of the total revenues in other large cities? The dominant reason is that, even though SCRTD has a large bus operation in absolute terms, the system is actually rather small in relation to the population of the area served. Therefore, funds based on the population of the area (a reasonable basis in many respects) tend to allow rapid initial service buildup.

SCRTD's ability to finance significant growth may turn out to be short-lived. There is concern over the long-term magnitude of transit's subsidy requirements, and the future seems to promise rhetoric about productivity in lieu of increased financial support. At the same time, there is growing interest in alternative services—paratransit rather than the automobile than necessity, then, SCRTD is turning again to the fare box.

There may have been some good reasons for lowering fares in the mid-1970s as public support increased, but people quickly get used to a low price, and it is difficult to raise fares again. Nevertheless, there seemed to be a general feeling that present users should pay a higher portion of costs.

In California, the legislative analyst is influential in any matters related to legislation and, without giving a clear rationale, the legislative analyst said that the user should be expected to pay at least 40 percent of the operating cost of public transportation. A rationale that leads to approximately the same result is based on the minimum cost of public transportation. This is what the cost would be if cost were not demand dependent, that is, if all the demand that could be accommodated were present. This would result in a maximum practical average passenger occupancy of the buses of about 30 persons (a guess). A fare that would cover the cost of such an operation would cover about 40 percent of the cost of the SCRTD system as it currently operates. If fares are set below this level, an awkward situation arises. Even if lines are run with unacceptable overloads, fares do not cover the cost of providing the service, but people automatically assume that a lot of money is being made if an overload situation occurs.

The 60 percent subsidy can be viewed as support for an acceptable frequency of service, a subsidy needed because that unlimited demand on which the minimum fare level is predicated does not actually exist. If the greater density of ridership that once characterized transit is regained, service can be increased on the basis of additional fare revenues. Of course, there may have to be further public support to make present levels of service acceptable.
Making the fare structure more equitable is a way to gain more revenue with the least loss of passengers. In the SCRTD system, even with a simple ring-zone system, the effective fares per kilometer varied among passengers by a factor of 10 to 1. A full-fledged staged-fare system would have been too cumbersome. Rider-ship data showed a very consistent relationship between average ride length and stop spacing; very few people are willing to endure more than 20 or 30 stops.

SCRTD’s local service on surface streets attracts rides that average 5 km (3 miles) in length, but service on freeways attracts rides of more than 9.5 km (6 miles). This distinction between observed riding patterns led to a fare structure that ignores travel distance on local lines but levies distance-step charges for freeway travel.

In general, there is a choice between faster freeway service at a higher price, and slower street travel at the lower flat fare. Consequently, there has been some noticeable switching between local and express lines—an individual testing of cost/benefit ratios. The average absolute subsidy per express rider is still higher than for local riders, but it is about the same as a percentage of costs. The question of whether the subsidy per passenger on express lines should be as low as for local services remains to be answered.

It appears that fare revenue will make up 40 percent of the costs of operation as targeted. This means an annual rate of revenue generation about 15 percent higher than that of 1976, with almost a third of this increase being attributed to restructuring; the impact on ridership is about what was expected.

In the early part of this decade, it was feared that transit subsidies would simply increase wages or encourage inefficient service, and wages did increase significantly, of course. But the steeply increasing plot of total revenue portrayed in Figure 1 does not tell the whole story. In Figure 2, those revenues are shown in constant dollars, deflated by the amount of the consumer price index for the Los Angeles area.

At the time that the rapid increase in service was getting under way, it was commonly assumed that passenger response would lag considerably behind service improvement. For the system as a whole, that pessimism was not borne out. The number of passengers climbed about as rapidly as service was added. Any new service takes time to mature, of course, and most of the new services that were instituted may never approach the system’s average productivity. But the same system effect that hurts in a decrease is working for us as service increases. An expanded system tends to attract riders to the older services as well as to the new ones.

Some of the rapid rise in demand would have to be attributed to the energy crisis, of course, and perhaps to the lowering of fares, which came as the crisis was winding down.

On the cost side, productivity will be improved by innovation. New hardware will be of some assistance, but new methods of managing resources will probably be more important. The first step is to be able to measure inputs and outputs satisfactorily. The reporting requirements in section 15 of the Urban Mass Transportation Act may lead to a system of measurements that will say how well one operator does in relation to the rest, but the requirements will not measure internal productivity improvements. SCRTD has been building its own information base for several years and has one of the better ridership monitoring programs in the United States.

The basic resource for the program is the riding check, which entails recording the number of passengers boarding and alighting at each stop along a route, as well as the type and amount of fare paid by each passenger. This results in a number of useful reports, which are used to guide planners in making the service adjustments that are required to increase productivity. Changes in productivity can be tracked, and management can be made aware of which lines require special attention.

SCRTD must continue to become more accountable. People tend to view all tax sources as local, and they want their share returned in the form of service. In Los Angeles, perhaps to a greater degree than elsewhere, this concern for one’s full share seems to dominate any tendency to support a service for the benefit of the region as a whole. Political advantages are perceived by many local elected officials in controlling the resources and operation of their own local bus system.
as opposed to being served by the regional carrier. However, people may see the need for supporting SCRTD if they are convinced that they are now being treated fairly. To provide accountability, SCRTD is developing a system of area accounts. Operational and ridership data are broken down by census tract, and it can be re-aggregated according to any meaningful area definitions, such as planning areas, municipalities, or councilmen’s districts. Then it can be related to demographic data, so that political determinations of fair distribution can be made.

Environmental concerns and impending declines in energy resources would seem to point toward significant expansion of transit services in the long run. It is hard to be optimistic about financial support in the short run, however. Any funds that can be made available must be used to improve service, rather than to make up for deficiencies in resource management. A major effort will be made to demonstrate productivity gains to the analysts who tend the purse strings.

Transit operators, however, cannot control all of the important factors. Funding mechanisms have a large impact on service deployment and on productivity. For example, federal operating funds are distributed so as to reflect densities of urbanized areas. Within Los Angeles County, these funds are distributed according to bus-kilometers of service. It is easiest (least costly) to put bus-kilometers in the least dense areas, so that is where most of the federal and state subsidy money has gone. If there is a problem it is not that transit operators are unresponsive to the will of the funding entities, but that they do exactly what they are coerced into doing by the funding mechanisms.

Case Studies on Increasing Transit Revenues: Atlanta

Terrell W. Hill, Chicago Transit Authority

In 1968, a proposal for public transit in Atlanta was pushed too quickly into referendum and was defeated; at that juncture there was great puzzlement over what would happen to Atlanta. The Chamber of Commerce had sponsored a study that indicated, among other things, that without a major transportation system Atlanta simply might not survive. But getting a transit system in Atlanta was no easy proposition.

Atlanta has an irregular terrain, and there is no rectilinear grid system anywhere in the community. Downtown was at a place called Five Points, and the road network was built from Five Points with practically no parallel streets. Atlanta proper is split between two counties. Its urbanized area probably covers nine counties. The city of Atlanta has a population of probably 500 000; within Fulton County, it is probably 800 000; within De Kalb County, there are 400 000 more people.

In most states it would be possible to form an authority that takes in several counties but not in Georgia, where the concept of a state-authorized local authority is more like a state-authorized local joint venture. When the 1968 proposal, which had involved an ad valorem property tax, was rejected, a number of problems were left unsolved—financial, legal, urban design, and transportation.

The better part of the fall of 1970 was spent taking the 251 members of the Georgia State Legislature to lunch, one at a time, to explain the purpose of public transportation. Once that was done, it was possible to go to the state legislature and ask for a plan to make it possible to have transit in Atlanta. A key meeting was held in the mayor’s office one morning; all members of the bodies that appointed the board of directors of the transit authority were invited to discuss what to ask of the legislature. The meeting developed into an acrimonious debate.

The black community in metropolitan Atlanta was clearly opposed to having a sales tax; they favored an income tax, because an income tax meant that much of the black community in Atlanta would pay no tax, while the richer people in the suburbs would pay it. The suburbanites, in turn, countered that to be fiscally responsible there had to be a sales tax. A payroll tax was also considered.

The options were a 1 percent payroll tax, a 0.5 percent sales tax, or a 1 percent income tax. Although those options were the most feasible, 19 other taxes were considered as well. A wheelage tax on vehicles would have brought in about $30/automobile, but there were not that many vehicles in the area. A gasoline tax of about 1 cent/l (4 cents/gal) was expected. An ad valorem tax and value capture were also considered.

As the discussion in the meeting raged back and forth, the mayor asked how many people ride the system. On the basis of this figure, he did a calculation and announced that, for an additional 0.25 percent sales tax, everyone could ride free. He therefore proposed a 0.75 percent sales tax and no fares. For about 3 days nothing happened, but then all the phones began ringing. It seemed that every newspaper in America wanted to know about this exciting proposal. Suddenly, the issue was not whether to build a transit system and whether to take over the private bus operation but what the fare was going to be. The debate on how much to charge for the transit system became an enormous issue; there was no debate on whether to have it.

The black community, which had been violently opposed to the sales tax, suddenly began to realize that a transit fare was far more regressive than a sales tax, and that it was in its vested interest to have the sales tax and free rides, so they argued very strongly for no fare. The suburban contingent from De Kalb County and North Fulton County argued that there absolutely had to be a fare for the sake of fiscal responsibility and proposed a fare of 30 cents. They finally settled on 15 cents, which the mayor accepted with the proviso that there be a flat fare across the region. That eliminated trying to set up zones, which at that time would have been nonsensical.

The choice of a 15-cent fare turned out to be a great