Regional Transit Connection: A Multioperator Ticket Clearinghouse Experiment

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The Regional Transit Connection (RTC) is a one-stop ticket and pass clearinghouse for the San Francisco Bay Area that provides a simple method for employers to sell transit tickets and passes to their employees at the worksite. The program began in September 1984 as an UMTA demonstration project with the Metropolitan Transportation Commission as the project sponsor. After federal demonstration funds were expended, the program was extended through September 1987 using local funds. During its 26 months of operation, the RTC has worked out agreements with eight major Bay Area transit operators for sale of transit tickets and passes and enrolled 64 employers and employer consortiums representing 270 separate firms. Sales for October 1986 (the most recent month of operation) totaled \$232,000, with the cost/revenue ratio reduced to 4 percent. Plans for expanded clearinghouse opportunities include enrolling new employers, promoting regional sales at selected retail outlets and establishing a regional transit sales office.

The Metropolitan Transportation Commission (MTC), the regional transportation planning organization for the nine-county San Francisco Bay area, received a demonstration grant in fall 1983 from UMTA to develop and implement a coordinated transit ticket program for the major Bay Area transit systems through increased employer participation. In June 1984, MTC contracted with a local consulting firm to set up, operate, and market a transit ticket clearinghouse (one-stop shop) to provide a simple method enabling employers to sell transit tickets and passes at the worksite. This program, known as the Regional Transit Connection (RTC), began operation in September 1984 with one member employer. After 17 months of operation, when the UMTA grant terminated, 42 employers or consortiums of employers representing approximately 150 firms had joined the program. Because it was premature to determine the success and long-term viability of the project, the MTC in conjunction with local transit operators extended the program with local funds through September 1987. At that time, a decision was to have been reached as to whether the program should be continued on a long-term basis.

The major accomplishments during the RTC's 2 years of operation were

- Working out agreements with the eight transit operators for sale of transit tickets and passes,
- Developing and refining all the necessary operating procedures to run the program.
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- Enrolling 64 member employers or consortiums of employers representing approximately 270 firms, and
- Completing 26 months of operation, with ticket and pass sales for the most recent month (October 1986) totaling \$232,000 and the cost/revenue ratio reduced to 3.8 percent.

The development and evaluation of the RTC during the project 2-year duration is the subject of this report.

The San Francisco Bay Area encompasses nine counties and 93 cities. Over 5 million people live in this 7,000-mi² area. Unlike most major metropolitan areas in the United States, which are served by a single dominant transit system, the San Francisco Bay Area is served by eight different major transit systems and several smaller systems. Figure 1 shows the service areas of the eight major transit systems.

Although the major concentrations of employers are in the central business districts of San Francisco, Oakland, and Silicon Valley, residential communities are scattered throughout the region. Consequently, workers who commute to employment centers in Oakland, San Francisco, and San Jose may use several different transit systems.

The RTC was the first entity in the Bay Area to offer the full menu of transit tickets and passes of the eight major transit operators. A complete listing of the transit fare prepayment items by operator is shown in Figure 2. Although ticket and pass sales through employers had previously existed on a limited scale, the concept of a regional transit clearinghouse was new to the Bay Area. The RTC was implemented in addition to existing sales and distribution methods practiced by the eight major transit systems. These distribution methods included sales at district headquarters, retail outlets, and transit operator information center outlets.

The following project objectives were developed as a means by which the project could be evaluated.

- 1. Increase private sector involvement in promotion of public transportation services.
- 2. Allow employers to take advantage of tax credits and deductions allowed under federal law. (The Tax Reform Act of 1984 established as a tax-exempt employee benefit an employer-subsidized transit pass of up to \$15/month.)
- 3. Provide a convenient mode of distribution for transit tickets and passes.
- 4. Enroll 50 or more employers in the clearinghouse program.
- 5. Develop an experimental database concerning which marketing strategies work and which do not.

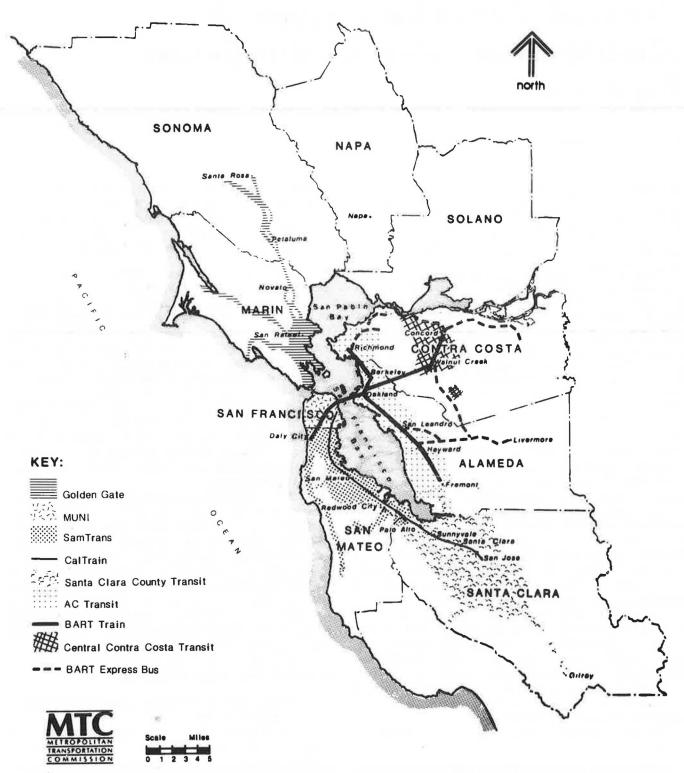


FIGURE 1 Service boundaries of the eight major San Francisco Bay Area transit operators.

1) AC TRANSIT		(4) CENTRAL CONTRA COSTA TRANSIT		
20-Ride Ticket Books		40-Ride Punch Card	\$22.00	
Express Zone 1	\$15.00	Commuter Card	15.00	
Express Zone 2	20.00	Monthly E&H Pass	8.00	
Express Zone 3	25.00			
Marachau Ross 1	30.00			
Transbay Zone 1 Transbay Zone 2	37.00	(5) GOLDEN GATE		
Transbay Zone 3	45.00	Transbay Ticket Books		
Monthly Passes		Zone 2 (Saus. Fer.)	\$33.30	
		Zone 3 & 9	20. 60	
Local Adult	\$30.00	(Lark. Fer.)	39.60	
Local Senior	5.00	Zone 4	45.90	
Local Handicapped	5.00	Zone 5 & 7	60.30	
Transbay Zone 1 Transbay Zone 2	54.00	Zone 6 & 8	66.60	
Transbay Zone 2	67.00			
Transbay Zone 3	81.00	99159 PMS 0 X		
Youth	16.00	(6) MUNI		
		Monthly Passes		
(2) BART		Adult Fast Pass	\$23.00	
\$32.00 Adult	\$30.00	Senior/Handicapped	4.50	
\$21.00 Adult	20.00	Youth Pass	5.00	
\$16.00 Sr. Citizen	1.60			
\$16.00 Handicap./Youth	1.60			
\$10.00 Nandicap./ Touch	1.00	(7) SAMIRANS		
(3) CALTRAIN		Monthly Passes		
Monthly Passes		50¢ Ride Value \$1.00 Ride Value	\$21.00 42.00	
	440.00	\$1.00 Ride value	52.50	
Zone 1 to S.F.	\$42.20	1 22 12	63.00	
Zone 1 to S.F. Zone 2 to S.F. Zone 3 to S.F.	49.25	\$1.50 " " \$1.95 " "	70.00	
	56.25	Discount	6.00	
Zone 4 to S.F.	63.25	DISCOURC	0.00	
Zone 5 to S.F.	70.35			
Zone 6 to S.F.	75.75	to come or any ordered the	ANTIN	
Single zone	36.00	(8) SANTA CLARA COUNTY TRANSIT		
Interzone (Sticker) Required 1 Zone	42.20	Ride Cards		
2 Zones	49.25	20-Ride Regular	\$12.00	
	56.25	40-Ride Express	40.00	
3 Zones		10-Ride Handicap.	1.00	
4 Zones 5 Zones	63.25 70.35			
Interzone (No Sticker Required)	70.33	Monthly Passes	400 00	
1 Zone	42.20	Regular	\$20.00	
2 Zones	49.25	Express	29.00	
3 Zones	56.25	Handicapped	3.00	
4 Zones	63.25			
5 Zones	70.35			
Super Pass				
Sticker	13.00			
Bus/Rail Pass	40.00			
Parking Permit	3.00			

FIGURE 2 RTC ticket offerings.

ORGANIZATIONAL ROLES

Major participants in planning, operating, and evaluating the RTC are as follows:

- UMTA funded the demonstration and was responsible for monitoring all project activities and expenses.
- The Metropolitan Transportation Commission (MTC), as the grant recipient and project sponsor, had ultimate responsibility for policy decisions and for coordinating consultant, transit operators, and advisory board roles.
- The Regional Transit Association (RTA), an organization of the six largest transit systems in the Bay Area, served as an oversight body during the demonstration.
- The eight Bay Ara transit operators were responsible for processing transit ticket request forms in accordance with predetermined schedules.

- A project Advisory Committee with public and private sector representatives was responsible for review and recommendation of the overall program.
- Crain & Associates, which designed all procedures and systems necessary to run the RTC, currently operates the program, and with MTC is responsible for its evaluation.

PROJECT ADMINISTRATION

In the follow sections, how the RTC works, project organization, the roles of the various participants, and issues that were resolved during the planning and operational phases of the program are discussed.

How the RTC Works

The RTC uses two methods to sell transit tickets and passes: consignment sales and over-the-counter sales.

Consignment Sales

Under this sales option, employers purchase tickets and passes on consignment and then sell them to their employees. The employer and the RTC both sign the Employer Agreement Form, which describes the responsibilities of both parties. The RTC assists the employer in determining the amount and variety of tickets and passes to order and schedules a delivery date. To be cost-effective, the RTC devised a schedule whereby it would visit operators and employers only once each month.

Over-the-Counter Sales

This sales option was offered to selected companies that had no internal mechanism for selling tickets and passes and where there was a reasonable expectation that a high volume of ticket and pass sales would occur, on the basis of the number of employees at the worksite and easy access to transit systems from the worksite.

Operational Issues

Ticket Distribution Schedule

In planning the clearinghouse operation, the first major consideration for the RTC staff was how to set up a schedule for ticket distribution that would be agreeable to all three parties (RTC, operators, and employers) and would require single monthly visits to operators and employers.

The schedule is cost-effective because it calls for a single monthly visit to each outlet. It does, however, cause a continuing although minor problem because RTC staff must simultaneously deal with ticket and pass orders for two different months. If an employer enters the system in January, for example, the RTC processes and delivers its February order in January, but payment and return of unsold items occur at the end of February, at which time the March ticket order has already been delivered.

Ticket Orders Versus Sales

In the early months of the project, there was often a large discrepancy between the number of tickets and passes ordered and the number sold. The RTC wished to avoid this problem because it led to unnecessary accounting time for both the RTC and the operators. By the end of the first 6 months of operation, this problem was largely solved because employers became more aware of their employees' transit needs and because in taking an employer's first ticket order, the RTC staff could offer guidance based on the selling experience of a similar employer.

Sales Volume and Geographic Area Served

Another operational issue that persists concerns employers whose monthly sales volume and geographic location do not justify providing the RTC service.

If the RTC continues beyond its currently funded operation through September 1987, it appears that some companies with low monthly sales (e.g., under \$500) should be dropped. At the end of the second year of operation, 10 companies are below the \$500 mark.

Security

Security was carefully considered during the RTC planning phase, and specific measures were taken to ensure a safe operation. Typical measures are that all staff handling cash or tickets are bonded, that each delivery is verified by both an RTC and employer representative, and that the employers assume full responsibility for all tickets in their possession.

Computerization

Computerization of RTC accounting began early in the project. The objective was to produce monthly summaries and to verify total sales to each employer. Spreadsheets were also created to chart employer orders, to determine the number of tickets needed from each operator to match employer orders, and to determine the amount owed to the operator for current monthly ticket sales.

MARKETING AND EMPLOYER RESPONSE

Planning Activities and Marketing Efforts

Efforts to market the RTC began in October 1984. Initial enrollment of companies was somewhat slower than anticipated for three principal reasons. First, it is often difficult to identify the right person to contact within a company. The initial approach to candidate employers was through a letter to the top executive, unless the company had a designated transportation coordinator. When this approach brought little response, the RTC staff shifted its emphasis and first attempted to determine the appropriate individual to contact within a company, usually someone within human resources or personnel management.

Second, the internal decision processes to implement the program are somewhat complex and time-consuming. Typically, several departments must review the contract document before a management decision is made. The average time it took RTC staff to obtain a signed contract during the program's first year, from date of initial personal (not mail) contact to delivery of contract, was 2 to 3 months. (During the second year of operation, when marketing efforts were discontinued and the RTC responded only to employer-initiated inquiries, this time shortened to approximately 4 weeks.)

A total of 361 firms were contacted by the RTC during its first year of operation. By the end of the first year, 37 (10 percent) of the firms had joined the program, 34 percent were in the process of making a decision, and 55 percent had declined to participate.

The MTC and RTC staff agreed that the goal of the second year was to refine operations and further reduce the cost/revenue ratio. Thus marketing efforts were discontinued, although the RTC continued to respond to all inquiries from employers who had previously been contacted and those who had heard about the RTC by word of mouth. During the second year, 31 additional firms joined the RTC.

Number of Employers Contacted, by Geographic Area

Figure 3 shows the location of the 64 RTC member employers or consortiums of employers as of October 1986. Of these 64 firms, 10 manage buildings or business parks that house a number of tenants so that the number of firms whose

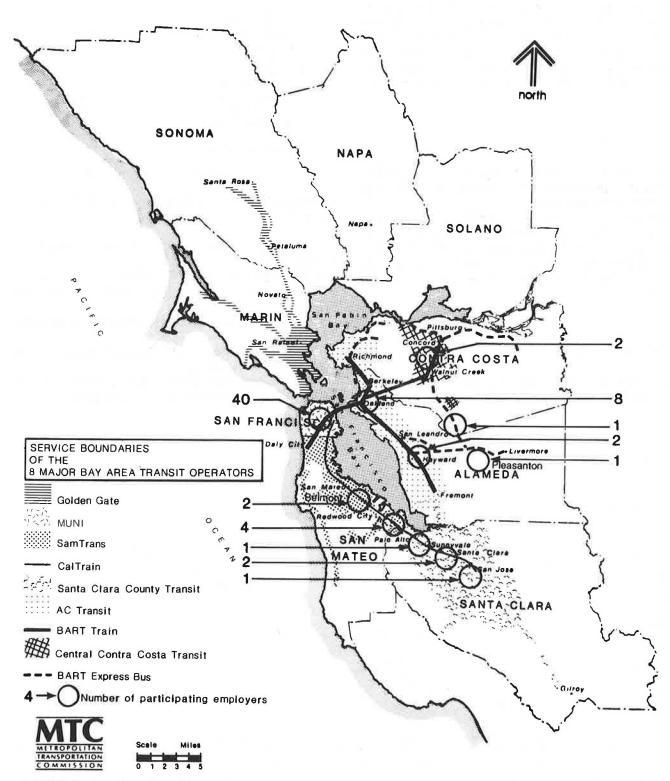


FIGURE 3 Location of member employers.

employees can purchase transit tickets and passes from the RTC is greater than 64 (about 270, although some of these are small firms with less than 10 employees).

During the first year, marketing efforts were concentrated in San Francisco. Reasons for this concentration of effort were (a) San Francisco is well served by six of the eight public transit systems, (b) the lack of parking facilities and high parking costs encourage transit use by commuters, and (c) there is a large concentration of commuters within a single building. In the first year, 23 of the member employers (62 percent) were located in San Francisco, most of these within the financial district. During the second year, after marketing efforts were discontinued, 27 additional firms joined the RTC. Again, most of these (18, or 67 percent) were located in San Francisco.

Value of Tickets Sold

Figure 4 shows the growth in RTC sales over 26 months. The number in parentheses indicates the number of participating employers for selected months.

Two transit systems, the San Francisco Muni and the Bay Area Rapid Transit (BART), account for about 80 percent of all ticket sales. The San Francisco Muni serves all of San Francisco; BART brings commuters from the East Bay (Alameda and Contra Costa Counties) into downtown Oakland and San Francisco.

Factors Influencing Participation

The following table presents a profile of employers participating in the RTC as of October 1986.

Profile of Participating Employers

	No.
Number of Employers	64
Type:	
Public	10
Private	54
Size (employees):	
Small (to 100)	5
Medium (100 to 500)	20
Large (500+)	39
Location:	
Central business district	38
Single site, urban	8
Business park	11
Single site, suburban	7
Transit Coordination:	
Have coordinator	18
Do not have coordinator	46

The principal reasons cited by employers for joining the RTC are the following:

- The program provides low- or no-cost benefit for employees.
- The program is a means to fulfill the transportation systems management (TSM) requirements of the local jurisdiction.
- The program makes it easier for employees to use public transit.
- Through participation in the RTC, companies gain a good image within the community.
- The program provides a way for management firms to offer an amenity to tenants in multioffice buildings.

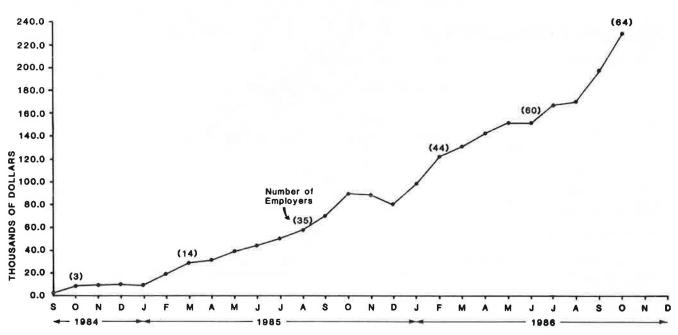


FIGURE 4 RTC revenue, by month.

Coast).

 Companies lack parking space in rapid-growth areas that no longer have adequate on-street or inexpensive off-street parking.

The two principal reasons an employer would not join the RTC are the following:

- The firm does not have the personnel or does not want to spend the time to administer the program.
- A small percentage of the firm's employees use public transit.

The first reason is often cited by companies that operate on a tight profit-loss margin and by public agencies that operate on a stringent budget. Other reasons offered, which correlate with the first reason, are as follows:

- The firm does not have the right physical space to sell the tickets, that is, there is no general place accessible to employees that also offers the security required for cash transactions.
 - The employer has no way to handle cash transactions.
- Accounting is done by a parent firm (often on the East
- It is too difficult to accommodate a new program, usually because of the company's strict accounting procedures.

To summarize, businesses vary in terms of their interest and willingness to participate in the RTC because of these factors:

Factor	Likely to Join RTC	Unlikely to Join RTC
Location	CBD, high- density area	Low-density area
Access to transit	Good	Limited
Number of employees	Over 200	Under 200
Type of business	Mix of employees with regular hours working in	High percentage of professional employees
	single location	High percentage of sales staff working out of the office
		Manufacturing firms with odd hour shifts
Profit-loss margin	High	Low

PROJECT COSTS

Monthly Costs by Task

A breakdown of RTC project costs by task for two typical months is presented in Table 1. September 1985 represents project costs at the end of the first year of operation; October 1986 represents a typical month. Only operating costs are given in the table; one-time costs associated with setting up the RTC, printing, and promotional materials and documentation are excluded. The number of sites served is subdivided by consignment sales (that is, sales of tickets and passes through individual employers), and over-the-counter sales. These sales reach all employees within the building where the sale is conducted and in some cases employees from adjacent office buildings.

In the next section, the 10 activities that represent the monthly operating costs given in Table 1 are described.

Operating Costs

Administration costs include project management and costs associated with security such as insurance against loss or theft of the ticket inventory and rental of a safe deposit box as a repository for the tickets.

The cost of taking orders from employers increases with the number of employers served. However, the cost per employer decreases with the percentage of repeat customers because setup costs are spread out over time. Employer orders are kept on the word processor and revised as necessary each month.

The cost of ordering from transit operators consists of the courier's time to aggregate and phone in orders and the word processor's time to update the operator order form for the current month. Estimating the number of tickets needed to fill employer orders takes most of the time, because some tickets and passes are good for a whole quarter or indefinitely and can be reused the next month to fill new employer orders (1).

The cost of the transit operator pickups and returns task varies somewhat depending on the number of operators visited each month. Some transit operator tickets and passes are good indefinitely or for a whole quarter, so the courier can skip runs to these operators during some months.

Collating tickets per employer orders is a task that currently takes the better part of a day to accomplish. The courier must take into account the estimate in the task of ordering from transit operators the nonmonthly (good quarterly or indefinitely) tickets still on hand at each employer.

The cost of employer pickups and deliveries increases as the number of employers increases. In September 1985, the average time to serve an employer was just under 1 hr. About one-third of this time was spent processing tickets with the employer representative. The remaining time was for travel, visits to the safe deposit box to keep the value of tickets carried within insurance limits, and productivity loss (e.g., breaks and phoning central office).

The cost of processing returns involves the courier's time to tally the tickets on hand and to check that tally against the difference between tickets ordered and sold, as summarized on the master control sheet for each transit operator.

The cost of ticket and cash accounting involves the accountant's time to audit the sales forms, process payments from employers, and pay the transit operators.

Marketing costs include coordination and outreach only; documentation and development of promotional materials are excluded. Marketing costs remained fairly constant over the first year.

Over-the-counter sales costs are directly related to the number of sales sites because they involve the labor to staff the sale and travel costs to and from the site. The cost of procuring tickets and passes is buried in general operations.

Cost/Revenue Ratio

RTC revenues are increasing as the number of employer sites increases. The rate of increase in costs is being reduced by the learning process. Figure 5 shows cost as a percentage of revenue. As shown in Figure 5 and Table 1, the ratio was reduced to 11.7 percent in September 1985 after the project had been in

TABLE 1 TYPICAL RTC COSTS AND REVENUES

		Septem	ber 1985	Octob	er 1986
Operating Cost		n	%	n	%
Administratio	n	\$2,502	30.3	\$1,744	19.7
Taking employ	er orders	312	3.8	620	7.0
Ordering from transit operators		229	2.8	451	5.1
Transit operator pickups & returns		361	4.4	700	7.9
Collating tid	kets per employer orders	130	1.6	404	4.6
Employer Pick	ups and deliveries	683	8.3	1,375	15.5
Processing re	turned tickets	251	3.0	404	4.6
Ticket and Cash accounting		յ253	15.2	2,271	25.7
Marketing ^a		2,073	25.1	-	
Over-the-cour	iter sales ^b	468	5.7	873	9.9
Total Cost		\$8,262	100.2	\$8,842	100.0
	Consignment sales	33			60
# Sites	Over-the-counter	_4			4
	Total	37			64
Cost/site		\$223			\$138
\$ Revenues		70,520		2	31,717
Revenue/site		1,906			3,621
Cost Revenue	Ratio (%)	11.7			3.8

^aMarketing efforts were discontinued in January 1986.

 $^{^{\}rm b}$ Over-the-counter (OTC) sales costs isolated here are for labor costs to staff the sale site on each day of OTC sales; procurring tickets and passes from transit operators and other costs related to the OTC sales are included in the above cost categories.

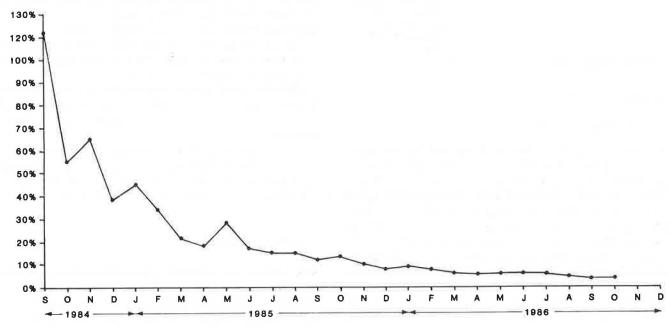


FIGURE 5 RTC cost as a percent of revenue, by month.

operation for 1 year. In October 1986, after 26 months of operation, the cost/revenue ratio was reduced to 3.8 percent.

SUMMARY AND CONCLUSIONS

The Regional Transit Connection began operation in September 1984 as a one-stop transit shop providing a simple method for employers to sell transit tickets and passes at the worksite. After 2 years of operation, the RTC was working well. The RTC has provided transit users with a convenient method for purchasing tickets and passes and has increased the role of the private sector in promoting public transit services.

During the first year of RTC operation, procedures were developed and refined to ensure smooth operation. Such procedures included a ticket distribution schedule, agreements with transit operators and employers, and a computerized system of accounting.

Marketing and outreach efforts resulted in enrollment in the RTC of 64 employers and employer consortiums representing approximately 270 separate firms. The principal reasons cited by employers for joining the RTC are that it is a low- or no-cost benefit to its employees, and for new San Francisco office building projects it is a means to fulfill one of the city's transportation systems management (TSM) requirements.

Ticket and pass sales steadily increased over time after an initial 4-month period of moderate growth. The cost/revenue ratio has shown an improving trend as procedures were refined and the number of employers increased. After 2 years of operation, the cost/revenue ratio was reduced to 3.8 percent and was expected to stabilize under ongoing operations.

Future Funding Arrangements

Funding during the first year of operation was provided by an UMTA demonstration grant. After the UMTA funds were expended, local funds were provided through September 1987 to extend the RTC for an additional 2 years. The goal during this time period was to continue attracting new employers to the RTC and to maintain the cost/revenue ratio at or below 4 percent. A decision to continue funding the RTC on a long-term basis is in large part based on the fact that the RTC is more cost-effective than individual transit operator efforts.

The transit operators have agreed to continue the RTC through June 1988, using a cost-sharing formula whereby each participating operator pays an amount commensurate with the services received. This formula is based on an RTC operating cost not exceeding 4 percent of gross revenue, a minimum fee of \$100 per month for each participating operator to cover marketing and outreach efforts, and a cost sharing based on the number of units sold for each operator.

RTC Expansion Opportunities

Three additional services have been tentatively identified as opportunities to expand the RTC.

Regional Ticket Office

The major function of a regional ticket office would be to sell tickets and passes of all the eight major transit systems and to

provide transit schedules, maps, and other information at a highly visible central location. This proposal is considered long term, as it requires evaluation of storefront location sites, development of operating procedures and guidelines, and agreement on a secure financing arrangement (2).

Over-the-Counter Sales

The RTC has demonstrated the effectiveness of this sales system, whereby a temporary storefront is established at a major worksite and sales are conducted during a 3-hr period. This sales option is more expensive to run than the regular RTC consignment operation. However, a surcharge could be levied on employers for the additional costs. There has been some interest expressed by downtown developers in San Francisco to pay this surcharge in order to meet one of their TSM requirements.

Delivery to Selected Outlets

This option calls for the RTC to deliver tickets and passes to selected retail outlets in San Francisco and to transit agency ticket outlets. There would be no start-up cost for this activity because the new delivery points would simply be another RTC customer and all procedures for adding new customers are in place (2).

Transferability of Project

The San Francisco Bay Area experience in planning and implementing a regional transit ticket and pass clearinghouse for employers should be transferable to many metropolitan areas, particularly those with a multiple-operator setting. Metropolitan areas served by a single transit operator may wish to start an employer ticket sales program. An important element in developing this type of program is that the participating transit operators have fare prepayment items to offer and that such items are available to employers on a consignment basis. The findings of this demonstration show that employers are willing to sell tickets and passes at the worksite provided that their employees would use and benefit from the service and that the program can be easily administered.

Experience elsewhere shows that transit operators need to make a long-term commitment to an employer pass program because it takes years to build an employer base. In Boston, the Massachusetts Bay Transportation Authority (MBTA) initiated an employer pass program 12 years ago and has gradually increased employer participation to 800 companies. (Telephone communication, Nov. 17, 1986, with Ernest Deeb, MBTA) The Chicago Transit Authority (CTA) has approximately 400 employer accounts after a 9-year commitment to an employer pass program. This program is currently benefitting from word-ofmouth publicity after the first 2 years of intensive marketing efforts. (Telephone communication, Dec. 16, 1986, with Glen Schofield, CTA) A newer program initiated by the Southern California Rapid Transit District (SCRTD) has 16 employers in its Corporate Pass Program (Telephone communication, Nov. 29, 1986, with Terry Davis, SCRTD).

Employer pass programs supplement other distribution and sales methods, such as sales through retail vendors, in-station sales, and mail order (3). At the CTA, employer sales represent approximately 17 percent of total pass sales; at the older and better established program of the MBTA, 60 percent of the total pass sales are through employers.

A common policy among transit properties that sponsor employer pass programs is that there is no commission paid to an employer, whereas a commission is usually paid to retail vendors and other distribution outlets. It is therefore possible that a long-term commitment to an employer pass program can reduce the cost of a transit operator's total sales and distribution budget (3).

Of particular significance in initiating an employer pass program was the experience in San Francisco's financial district, where office building projects of gross area 100,000 ft² or more can meet one of the city's transportation systems management (TSM) requirements by selling transit tickets and passes on-site to employers. This requirement enhanced the success of the RTC in San Francisco and was particularly timely in view

of the growing interest of major metropolitan areas in implementing TSM ordinances. The results of the RTC experience in the San Francisco Bay Area should provide other metropolitan areas, especially those with TSM requirements, some practical information on how to plan and implement a regional transit clearinghouse and attract employers to its services.

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