



# **BART**

Annual Report  
1977-1978



# message from the president & the general manager

This has been an exciting year for BART, witnessing a great deal of achievement and a clear demonstration of the District's ability to work effectively in difficult times.

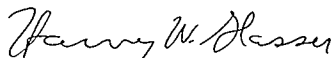
For the first time in its history, BART has a secure, permanent financial base. While the Jarvis/Gann Initiative has partially affected our revenues, the District has been able to reduce costs without cutting train service and in addition, has managed to inaugurate its long-planned Sunday service.

Much of this achievement has been due to improvement in the staff's ability to maintain rolling stock. BART's 10-car trains are made up from the 4th largest rail transit car fleet in the U.S. Many of our new workers seeing 350 cars a day on the road cannot remember the time when there were less than 200 cars available for service.

The cloud of major litigation hanging over BART has been dispelled. The settlement approved by our Board allowed badly needed funds to be made available for service and support facilities and provided that BART obtain access to badly needed data previously withheld from us by the lawsuit.

Most importantly, the BART Board has demonstrated its ability to work effectively as a team. Rising above its minor differences, our Board worked harmoniously to support state legislation which made permanent the BART 1/2 cent sales tax. The Board's clear vision and general unanimity has enabled us to provide the stability and strength through a series of delicate negotiations during the past year. It is with that same singleness of purpose that the Board presently is conducting an international search for a general manager to replace Frank C. Herring, who will be leaving us in December.

The focus of our efforts, however, is not on our past achievements but on our goals. The much awaited direct Richmond/Daly City service has been delayed pending approval by the California Public Utilities Commission of the BART SORS system. All other 1977/78 goals which were related to service improvements were met including permanent Sunday service as of July 2, 1978 (which happens to be my birthday). BART public relations, passenger information, and employee morale all need improvement. Our unique capacity to have one flawed train slow the entire system has given it a bad public image which is not fully deserved. In spite of its difficulties, BART is moving rapidly towards maturity and acceptance as a major regional transportation service. With tough, prudent management and an active, well-informed Board of Directors, BART looks forward confidently not to miracles but to consistent, solid achievement — and on-time trains!



Harvey W. Glasser, M.D.  
President



Progress continued on many fronts during the 1977/78 fiscal year and I am happy to report that in the coming months we should achieve substantially higher levels of service.

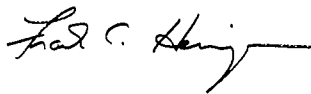
During the 1977/78 period, our financial performance was better than expected. BART generated over \$6 million more in revenues and tax assistance than it spent, a rare achievement in the public sector. In addition, the passage of Assembly Bill 1107 guarantees BART 75 percent of the half-cent sales tax levied in the three District counties. This ensures continued financial stability and means that in the future fare increases will only be necessary to keep up with the rate of inflation.

There was considerable progress in technical matters. The failure rate of trains continued to decline. The number of cars in a mechanically ready state increased dramatically, reaching an all-time high of 403 on May 24, 1978. This is a long way from the low level of less than 200 on August 13, 1975. The increased car availability helped us in two ways: it enabled the District to provide more cars during the morning and evening rush periods, and it allowed service to be expanded to Saturday and Sunday. This additional service means that the major investment the people of the Bay Area have made in the BART system is being better utilized.

Considerable effort has been directed at improving the automatic train control system. Extensive modifications enabling BART to run safely with trains at more frequent intervals and at normal speed in wet weather were completed in March and the California Public Utilities Commission began hearings into the matter in April. We are confident that the PUC, after reviewing the testimony, will allow BART to remove delay-causing operating restrictions that have severely limited the number of trains in service at one time. We expect a dramatic improvement in service to result.

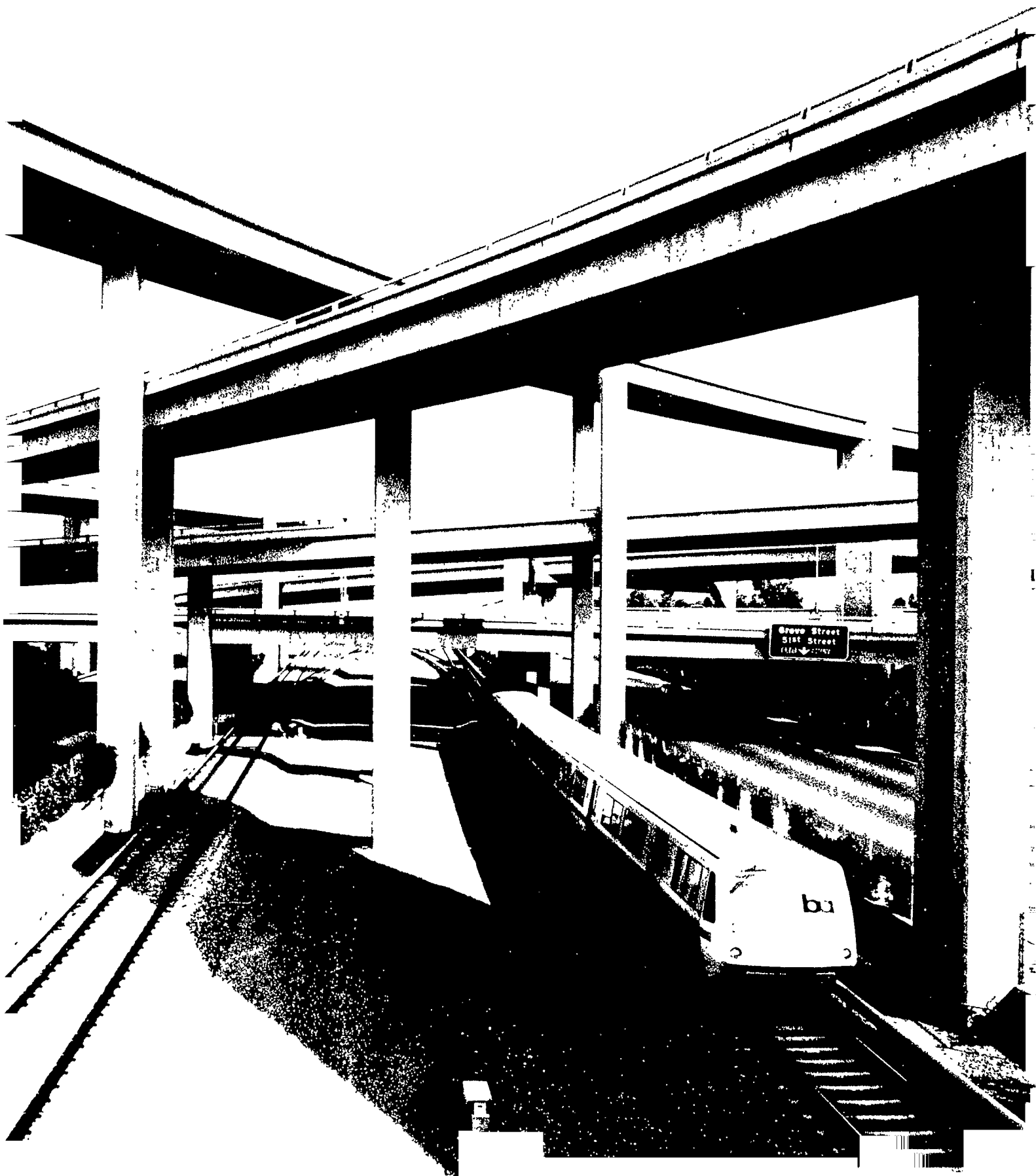
BART has operated for more than six years and has provided transbay service between the East Bay and San Francisco for four years. During this period there have been many problems. But also during this time, significant progress has been made. I believe the BART system is becoming an integral part of Bay Area transportation and is demonstrating its value to the public and its potential for the future.

At the close of the fiscal year I announced my intention to leave the District at the end of the calendar year, 1978. I have enjoyed my three years here as General Manager. They have been challenging. I am proud of the 2,000 men and women who make possible the daily BART operations as well as the longer run improvements in rapid transit service. It has been a pleasure and privilege to work with them. I am confident that they will continue to provide the people of the San Francisco Bay Area with an increasingly improved transit system.



Frank C. Herring  
General Manager





## overview

At the close of the fiscal year, BART was operating more trains and more rail cars than ever before. Ridership continued to grow. The ratio of operating revenues to operating expenses was improving, excluding the one-time and extraordinarily high electric rate due to the 1977 drought. BART was using less electricity to carry more passengers. Settlement of a lawsuit against the major designers and equipment suppliers of the system resulted in additional money for improvements (The District successfully adjusted to the impact of the Jarvis/Gann property tax initiative.) Additional parking facilities at stations were completed, modifications were made to the automatic control system, and the District maintained an enviable safety record. While many problems remain, progress was made in solving technical difficulties and the District is now on a firm financial footing.

## ridership & operations

BART ridership continued to grow and, at year's end, weekday patronage was in excess of 144,885 trips, almost two percent higher than anticipated in the 1977/78 budget.

Total patronage for the year was 38,655,206, a 12 percent increase over the 34,599,088 the year previous, and 2.3 percent higher than the forecast. Night ridership (after 8:00 p.m.) averaged 9,000 as the fiscal year ended, 22.1 percent higher than a year ago. Regular Saturday service, which was inaugurated on January 7, 1978, averaged 56,398 during the first six months of 1978. During the first month a 50-cent maximum fare was offered to acquaint riders with the new service.

On November 21, 1977, buses operated by the Alameda-Contra Costa Transit District (AC Transit) were idled by a 10-week strike that had an impact on BART, especially during the busy holiday season.

An estimated 12,000 bus ride trips were immediately diverted to rapid transit trains. On November 28, 1977, about 192,000 riders were carried on

BART. This was the highest revenue day in the history of the District.

Unfortunately, the overflow conditions occurred as BART engineers were changing automatic train control circuits. The technical work slowed some service, as did the heavy rains at the time, making the already overcrowded conditions worse. With every available car at work, the number of malfunctions per day increased temporarily — particularly during the last week of the AC Transit work stoppage.

On February 2, 1978, shortly after AC Transit buses were back in service, BART operated free all day and accommodated an estimated 250,000 riders — an all time record. Although BART did not collect an estimated \$100,000 in revenues that day, it appeared that the goodwill gained more than made up for the loss. Another gain from the free day was the introduction of the system to a large number of persons who previously had not ridden BART, but took advantage of the free day.

BART Express Buses, which were idled by the strike, also operated free for one month as an "apology" for the inconvenience. These Express Buses are operated for BART by AC Transit and patronage was adversely affected by the bus strike. A total of 989,026 trips were taken on the express routes in the 1977/78 fiscal year as compared to 1,141,230 the year previous.

The University of California at Berkeley continued to monitor traffic in the congested transbay corridor between Oakland and San Francisco, one of the busiest and most congested in the world. Latest figures show that BART carried 28 percent of the persons using the corridor in the commute direction during the morning peak period, as compared to 23 percent on buses and 49 percent by automobile.

A new record was set on May 24, 1978, when, for the first time, more than 400 train cars were available for revenue passenger operation. This compares to an average of 245 cars two years ago. With 403 cars available — 93 percent of the fleet of 432 operable cars — BART provided more service by increasing the length of trains to expand the passenger-carrying capacity of the system. In addition, having more cars ready for service made it easier to react to breakdowns and malfunc-

tions, reducing the impact to the rider on a typical day.

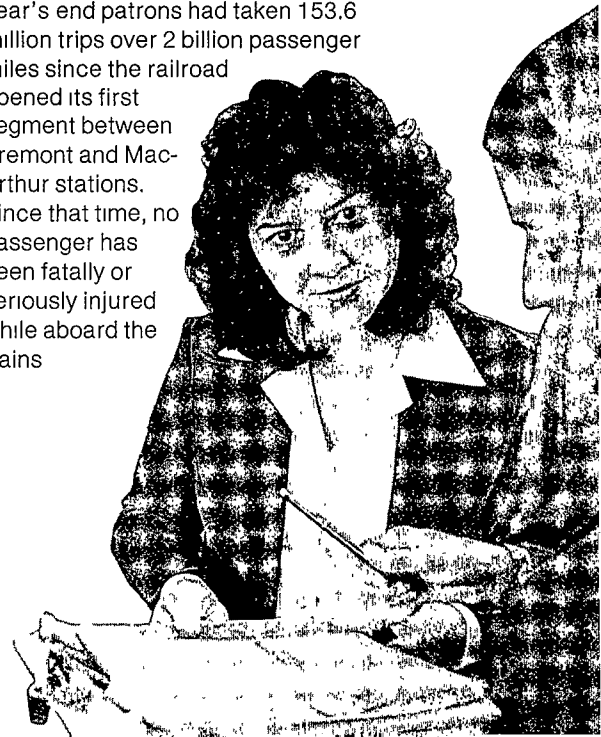
Two years before, more than 30 cars were sidetracked for lack of spare parts. During the past year, it was typical to have no more than five out of service awaiting parts.

As an example of increased capacity, in the summer of 1977, 40 cars were added to midday trains on the two East Bay routes to San Francisco and Daly City, because of an upsurge in offpeak patronage.

Goals set early in the year by the District to make train service more reliable were met. Fewer trains were removed from service before completing their runs. This meant fewer passengers had to get off a train and wait for a following one because of a malfunction. There were certainly too many periods when service was rated as being poor. However, the general trend was one of improvement as the year ended.

The first of two telephone devices that deaf persons can use to obtain scheduling and fare data was installed and another was being acquired. Additional parking was provided at Daly City where completion of a new garage at this overcrowded terminal added 832 spaces and raised the total there to 1,620. Work continued on expansion of the Fremont lot to 1,096 spaces by the addition of 361.

On September 11, 1977, BART celebrated 5 years of operation, and by year's end patrons had taken 153.6 million trips over 2 billion passenger miles since the railroad opened its first segment between Fremont and MacArthur stations. Since that time, no passenger has been fatally or seriously injured while aboard the trains.



Extensive marketing efforts were made to acquaint the public with service improvements. For the first time, television commercials were used, successfully creating a high public awareness of the new Saturday service

BART also saw its potential market expanded with completion on October 28, 1977, of a new National Railroad Passenger Corporation (Amtrak) station adjacent to the BART station at Richmond. Built jointly by BART, Amtrak and the California Department of Transportation, the station provides easy access between rapid transit and long-distance trains. The depot is expected to assume greater importance when Amtrak and the State inaugurate "corridor" service between the East Bay and Sacramento, the State capital. At year's-end about 900 riders were boarding or alighting from Amtrak trains each month.

## improvements

Although the basic railroad with all of its structures has been completed for several years, construction continued during the fiscal year on the streetcar subway BART was obligated by the 1962 bond election to complete for the Municipal Railway of San Francisco. A major item was the \$6.3 million streetcar station at West Portal in San Francisco scheduled to be completed in the 1978/79 fiscal year.

To provide more rail cars, BART shop forces successfully rebuilt a Type A, or car with a cab, previously damaged by fire, into a Type B car, without cab. This work was done at the Hayward Shop after studies showed BART employees could do the work more economically than outside firms. The quality of the work is considered excellent. There is considerable pride among shop employees about the project. A second car was being converted as the fiscal year ended. A total of 14 will be rebuilt, providing more cars for patrons. Studies have shown that present schedules require fewer cars with control cabs, but more mid-train cars without cabs.

Upgrading the 1,000 volt direct current power supply to the electric third rail was essentially completed during the

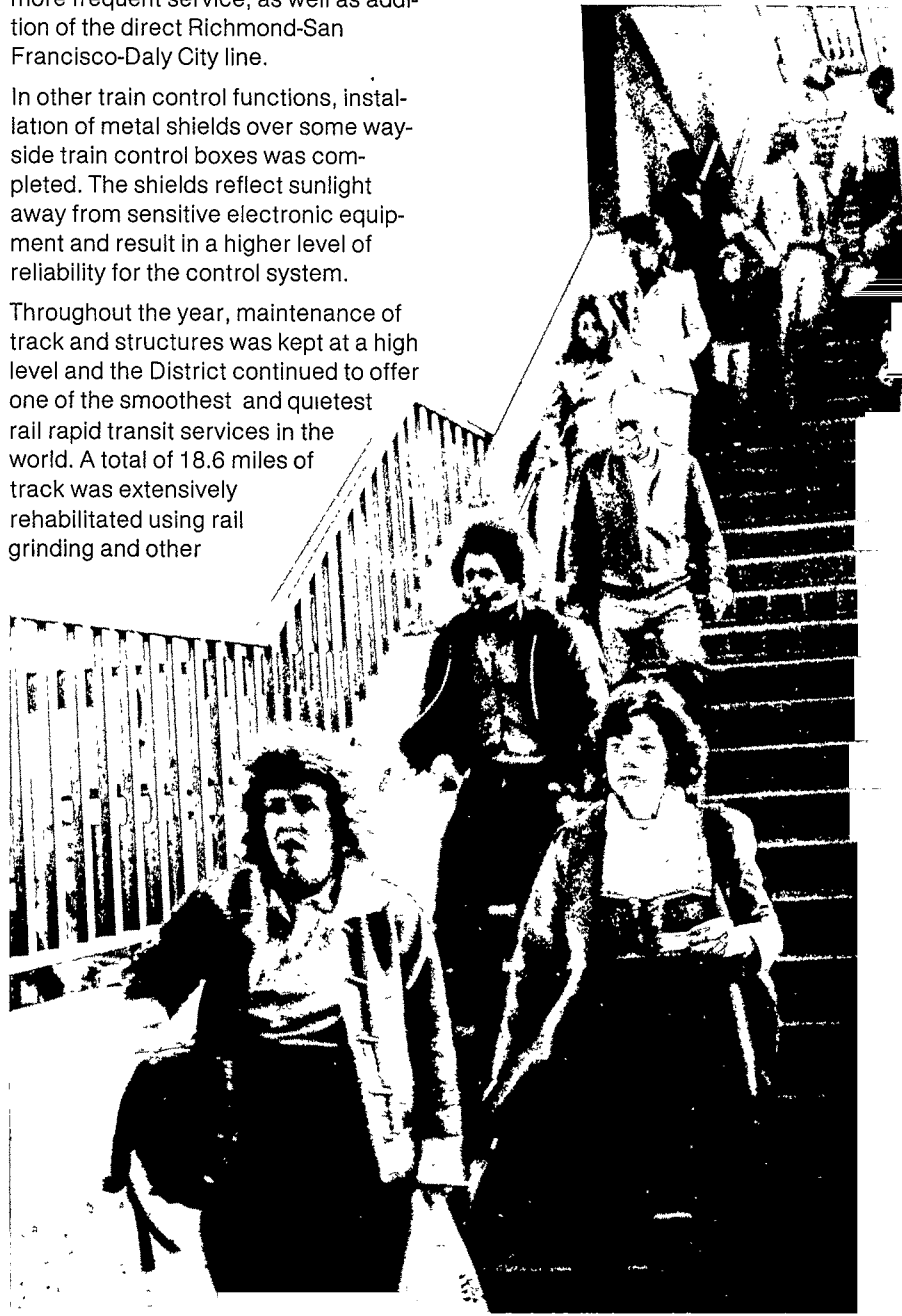
fiscal year. This will allow operation of 10-car trains at frequent intervals. The district also completed most of the "resignaling" to clear the way for close headway operation. This work involved changing the speed commands at various locations along the tracks, to allow longer braking distances between trains for a higher safety margin during wet weather when wheel-to-rail adhesion might decrease. The work was required as part of the California Public Utilities Commission's consideration of allowing BART to operate trains at more frequent intervals using the primary train control system installed some years ago, along with a back-up system. A decision is expected during the 1978/79 fiscal year and this will permit more frequent service, as well as addition of the direct Richmond-San Francisco-Daly City line.

In other train control functions, installation of metal shields over some way-side train control boxes was completed. The shields reflect sunlight away from sensitive electronic equipment and result in a higher level of reliability for the control system.

Throughout the year, maintenance of track and structures was kept at a high level and the District continued to offer one of the smoothest and quietest rail rapid transit services in the world. A total of 18.6 miles of track was extensively rehabilitated using rail grinding and other

equipment during the fiscal year.

Preliminary engineering work continued on the so-called "KE track" through downtown Oakland. Subway tunnels were completed in the 1960's for this track between Fifth Street and 23rd Street in the Broadway subway. Only relatively minor work is required to modify the 19th Street and 12th Street-Oakland City Center subway stations to accommodate the third track. The track will permit trains to be stored in the congested center of the system and provide greater capacity in the Oakland Wye, one of the busiest railway junctions in North America. Engineering costs of the project have been approved for 80 percent funding by the federal Urban Mass Transportation Administration (UMTA).



Other projects completed include acquisition of \$281,706 worth of pre-stressed concrete ties for inventory and to replace wooden ties on a portion of the Diablo Test Track right-of-way built in the early 1960's and incorporated into the Concord line in 1972, installation of \$23,360 in earthquake sensing devices in train control relay rooms, \$395,744 in safety improvements, generally new ladders and handrails required by the Federal Government, a \$1.3 million material and rail handling yard at Hayward and \$112,984 in modifications to safety doors in tunnels, subways and the transbay tube.

At year-end, work in progress included \$231,890 in bus access improvements at San Leandro station and a \$1.7 million expansion of yard storage tracks



## administration

For the first time in its history, BART has a permanent source of funds to cover operating deficits. With the signing into law of Assembly Bill 1107 by Governor Edmund G. Brown, Jr., the half-cent sales tax previously levied by the District was made permanent. Under the new arrangement in the legislation drafted by Assembly Speaker Leo McCarthy, BART receives 75 percent of the revenues, with the remaining 25 percent to be allocated by the Metropolitan Transportation Commission to the Municipal Railway of San Francisco, the Alameda-Contra Costa Transit District and BART upon application.

Agreement was reached to settle litigation pending between the District and major designers and suppliers. The settlement, reached in principle in July, 1977, and since approved by the litigants, resulted in BART receiving a net value of \$28,700,000 from the defendants, \$15 million in cash, and the release of claims by the defendants, which the District lawyers had valued at \$13.7 million. In addition, a separate \$15 million claim against BART relating to the rail cars was settled for \$6.2 million. The settlement allowed BART to free up \$18 million

held in reserve for possible claims against the District and for potential outside attorney fees for future litigation. Added to the settlement, this gave BART \$33 million with which to improve the reliability and service levels of the trains and related hardware. In addition to the cash settlement, BART was granted access to vital information about the design of the system, including access to patent licenses

Also during the year, efforts continued toward more efficient management. Working with both the Board and staff, Booz, Allen & Hamilton, an outside consultant firm, completed its survey of the management structure and recommended the District begin shifting toward an organization mainly involved with railway operations rather than a problem-solving structure. These recommendations were under consideration at year's end.

The District successfully met budgetary targets and in most cases results were better than projections. For example, revenues were \$84.9 million, \$377,000 higher than the budget forecasts and the surplus was \$4.6 million as compared to the estimate of \$90,000, after deducting \$2.1 million for capital improvements.

On July 8, 1977, most trains were idled as a result of a one-day work stoppage by train operators because of a disagreement over the number of persons

in Central Control. Service on that day was restricted to a shuttle that operated for several hours between Daly City and MacArthur stations.

The District issued 3,561 identification cards to the elderly and handicapped entitling them to reduced fares not only on BART, but on other transit systems in the region as well. More than 12,500 of these cards have been issued by the District. A total of 1,345 identification badges allowing a person to bring a bicycle aboard a train were issued during the year. More than 4,300 riders have BART bicycle permits.

The District's overall property tax rate was reduced by the Board of Directors during the fiscal year. In Alameda County, the 42.2 cents per \$100 assessed property valuation rate of 1976-77 went up slightly, to 43.1 cents due to assessment ratios. It dropped substantially in the other counties. The Contra Costa County rate was reduced from 47.8 cents to 42.8 cents and the City and County of San Francisco levy was reduced from 47.1 cents to 43.6 cents. Berkeley city residents pay an additional levy for subway mileage added after voters approved the 1962 construction package. That rate dropped from 17.8 cents in 1976-77 to 16.3 cents in 1977-78. Excluding the special Berkeley tax, the District-wide rate averaged 45.7 cents in 1976-77 and 43.13 cents in 1977-78.

The District made significant gains toward achieving the goal of its affirmative action program. A total of 968 employees, representing 43.4 percent of the District's 2,231 workers were minorities, compared to 30.4 percent\* of the population in the three counties BART serves. The number of female employees was 462 or 20.71 percent. Of the total number of persons hired during the fiscal year, 69.5 percent were minorities and women.

General Manager Frank C. Herringer announced his resignation on June 29, 1978, effective December 31, 1978. The Board has begun an international search for a successor. Mr. Herringer came to BART on July 1, 1975. He had been administrator of the Federal Urban Mass Transportation Administration.

\*1970 Census data

## the future

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At the start of the 1978-79 fiscal year, the District was responding to financial restrictions imposed by the passage of the Jarvis/Gann property tax initiative. While this was resulting in some reductions in the numbers of employees, it did not require a reduction in train service. The District began its initial phase of a program to remotely staff some stations looking to ultimate



cost reductions. With all major work completed on the modifications to the automatic train control system, the District was demonstrating to the California Public Utilities Commission that the equipment does meet margins of safety necessary for more frequent service and addition of direct Richmond-San Francisco-Daly City service. The planned opening of the Municipal Railway of San Francisco streetcar subway under Market Street in mid-1979 is expected to funnel additional riders into the BART system.

The San Francisco Bay Area is unusual for being one of the few urbanized areas of the United States with a number of individual transit systems and agencies rather than a unified network under one management.

However, BART and the other agencies work closely together in many tasks and purposes with the nine-county Metropolitan Transportation Commission (MTC). BART has joined with the other transit agencies to form the Regional Transit Association to further coordinate its efforts. This promises an even better regional transit network in the future for the people of the nine San Francisco Bay Area Counties.



# district board of directors



**Barc Simpson**

District 1  
Term began November 26, 1976 as Board President in 1977, chairperson, Public Information and Legislation Committee, vice chairperson, Engineering and Operations Committee, member, Special Salary and Wage Review Committee, Walnut Creek resident, San Leandro businessman



**Nello J. Bianco**  
Vice President

District 2  
Term began October 22, 1969, as appointee of Contra Costa County supervisors, was President in 1974 and Vice President twice before, elected November 5, 1974, as Vice President serves as ex-officio member of all committees, Richmond resident and businessman



**Arthur J. Shartsis**

District 3  
Term began November 26, 1976, chairperson, Special Salary and Wage Review Committee; member, Administration Committee, Oakland resident and San Francisco attorney



**Harvey W. Glasser, M.D.**  
President

District 4  
Term began November 29, 1974, ex-officio member of all board committees, Alameda resident and physician-business consultant.



**Robert S. Allen**

District 5  
Term began November 29, 1974, vice chairperson Administration Committee, member, Special Salary and Wage Review Committee, railroad cost analyst, Livermore resident



**John Glenn**

District 6  
Term began November 29, 1974, chairperson Administration Committee, member, Public Information and Legislation Committee, Special Salary and Wage Review Committee, Fremont resident, Oakland executive.



**Roslyn L. Baltimore**

District 7  
Term began February 21, 1978; vice chairperson, Public Information and Legislation Committee, member, Special Salary and Wage Review Committee, San Francisco resident and consultant, appointed by board to serve out remaining term of Ella Hill Hutch, who resigned on January 1, 1978, after being elected to the City and County of San Francisco Board of Supervisors



**Eugene Garfinkle**

District 8  
Term began March 10, 1977, vice chairperson, Special Salary and Wage Review Committee, member, Engineering and Operations Committee, San Francisco resident and attorney



**John H. Kirkwood**

District 9  
Term began November 29, 1974, chairperson, Engineering and Operations Committee, member, Special Salary and Wage Review Committee, San Francisco resident and businessman



# performance highlights

	FY 1977/78	FY 1976/77
<b>RAIL RIDERSHIP</b>		
Annual passenger trips	38,665,206	34,599,088
Average weekday trips	146,780	133,453
Average trip length	12.7 miles	12.8 miles
Annual passenger miles	492,901,000	444,401,162
System utilization factor (ratio of passenger miles to available seat miles)	.285	.270
End-of-period ratios		
Peak patronage	50%	51%
Off-peak patronage	50%	49%
BART's estimated share of peak period transbay trips — cars, trains and buses	28%	26%
Passengers with automobile available (as alternative to BART)	57%	61%
<b>OPERATIONS</b>		
Annual revenue car miles	24,046,898	22,862,970
Unscheduled train removals — average per revenue day	10.1	11.7
Transit car availability to revenue car fleet	87%	76%
Passenger miles per equivalent gallon of gasoline	59	51
Passenger accidents reported per million passenger trips	22.63	19.71
Crimes reported per million passenger trips	117.4	122.4
<b>FINANCIAL</b>		
Net passenger revenues	\$28,219,000	\$24,692,000
Other operating revenues	1,679,000	1,466,000
Total operating revenues	29,898,000	26,158,000
Net operating expenses	78,204,000(1)	66,814,000(2)
Operating ratio (total operating revenues to net operating expenses) (3)	38.23%	39.15%
Rail passenger revenue per passenger mile	5.7c	5.5c
Rail operating cost per passenger mile (4)	15.5c	14.6c
Average passenger fare	75.4c	74.0c

## NOTES

General note Data represent annual averages, unless otherwise noted.

(1) After inventory adjustment of \$1,300,000.

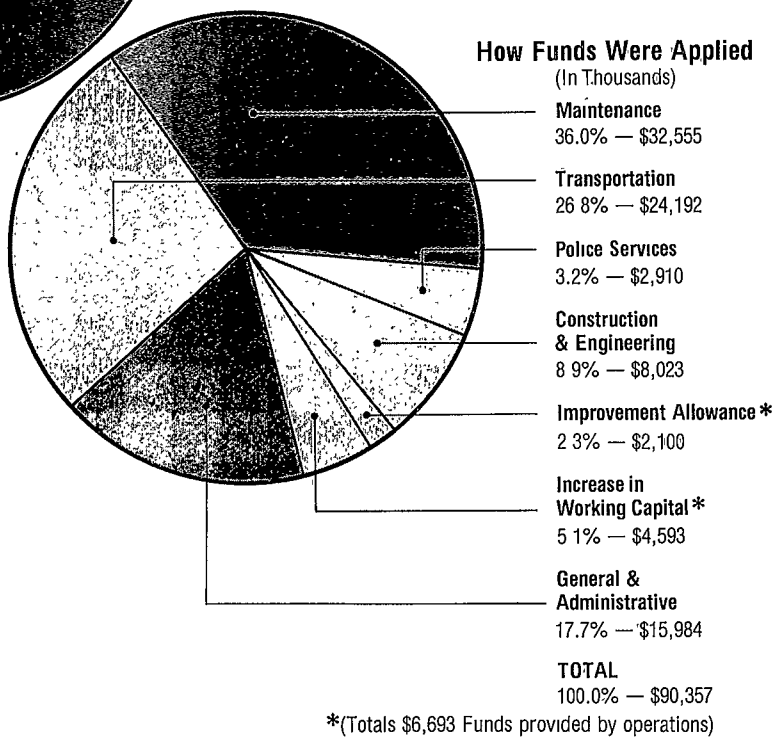
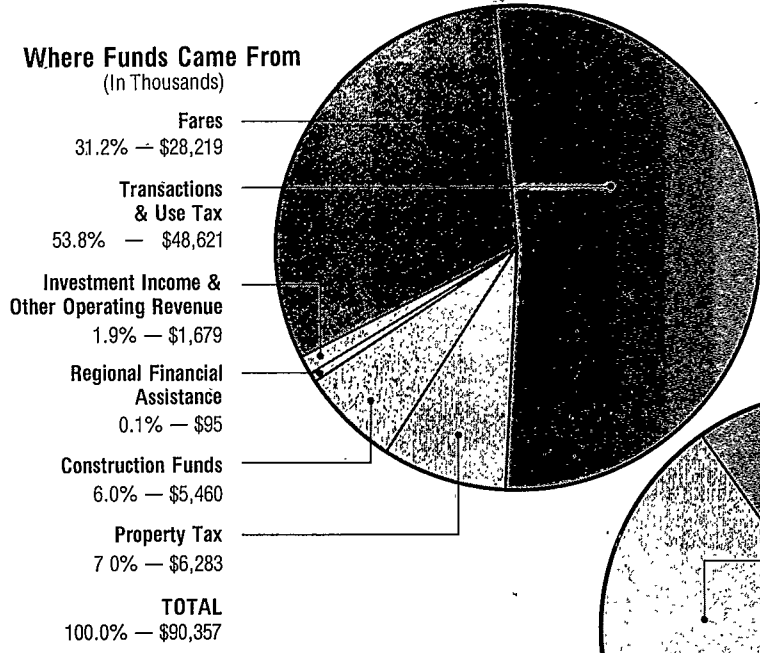
(2) Before cumulative effect, on years prior to June 30, 1977, of change in method of recording self-insured costs for liability and worker's compensation claims in the amount of \$1,033,000

(3) FY 1976/77 and FY 1977/78 reflect inclusion of abnormal electric power expense due to drought; excluding such extraordinary expense, normal operating ratio was 40.42% in FY 1977/78, and 40.09% in FY 1976/77

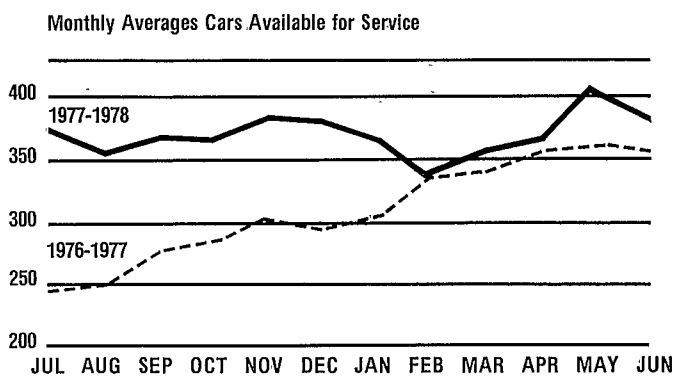
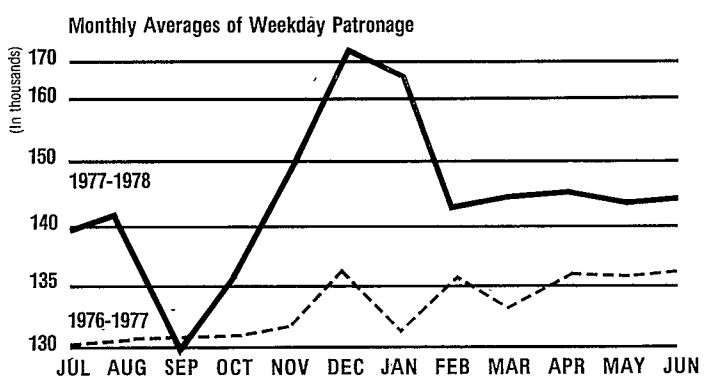
(4) Includes extraordinary power expense; excluding such expense, normal rail cost per passenger mile in FY 1977/78 was 14.6c, and in FY 1976/77 14.2c.

# 1977 - 1978 operating funds

\$90,357,000 (Including Capitalized Costs)



## system operations



Special notes for patronage chart (1977-1978 line only).  
 SEP — BART Police strike; limited service provided  
 DEC — AC Transit strike, in Dec-Jan

# financial statements

To the Board of Directors  
San Francisco Bay Area Rapid Transit District

We have examined the balance sheets of the San Francisco Bay Area Rapid Transit District as of June 30, 1978 and 1977 and the related statements of operations, changes in net capital investment, changes in financial position, and revenues, expenditures and fund balances of debt service funds for the years then ended. Our examinations were made in accordance with generally accepted auditing standards and, accordingly, included such tests of the accounting records and such other auditing procedures as we considered necessary in the circumstances.

In our opinion, the financial statements identified above present fairly the financial position of the San Francisco Bay Area Rapid Transit District as of June 30, 1978 and 1977 and the results of its operations and the changes in its financial position for the years then ended, in conformity with generally accepted accounting principles consistently applied during the period subsequent to the change made as of July 1, 1977, with which we concur, in the method of accounting for self-insurance described in Note 2 to the financial statements.

*Henderson & Cronstoun*

Certified Public Accountants

San Francisco, California  
September 15, 1978

## **BALANCE SHEETS** June 30, 1978 and 1977 (In Thousands)

	<u>1978</u>	<u>1977</u>
<b>ASSETS</b>		
Cash (including time deposits: 1978, \$1,970; 1977, \$5,060)	\$ 3,259	\$ 7,406
Securities — at cost	36,510	40,681
Securities representing reserves — at cost	35,906	6,000
Deposits, notes, and miscellaneous receivables	3,668	9,364
Construction in progress	34,778	34,602
Facilities, property, and equipment — at cost (less accumulated depreciation and amortization: 1978, \$123,892; 1977, \$99,477)	1,365,356	1,381,263
Materials and supplies — at average cost	7,821	6,018
Funds to be provided by transactions and use tax	—	16,000
Debt service funds, net assets	17,200	30,016
	<u>\$1,504,498</u>	<u>\$1,531,350</u>
<b>LIABILITIES AND CAPITALIZATION</b>		
Contract and other liabilities	\$ 15,667	\$ 23,549
Unearned passenger revenue	1,105	1,631
Sales Tax Revenue Bonds	—	16,000
Debt service funds	17,200	30,016
	<u>33,972</u>	<u>71,196</u>
Capitalization:		
Reserves	35,906	6,000
Payable to State of California	—	39,111
General Obligation Bonds	714,985	732,735
Net capital investment	719,635	682,308
	<u>1,470,526</u>	<u>1,460,154</u>
	<u>\$1,504,498</u>	<u>\$1,531,350</u>

The accompanying notes are an integral part of the financial statements

**STATEMENTS OF OPERATIONS** Years Ended June 30, 1978 and 1977 (In Thousands)

	<u>1978</u>	<u>1977</u>
Operating revenues.		
Fares	\$30,666	\$26,974
Less discounts and other deductions	<u>2,447</u>	<u>2,282</u>
	28,219	24,692
Other	535	520
Investment income	<u>1,144</u>	<u>946</u>
Total operating revenues	<u>29,898</u>	<u>26,158</u>
Operating expenses:		
Transportation	24,192	17,982
Maintenance	32,555	32,888
Police services	2,910	2,114
Construction and engineering	8,023	5,434
General and administrative	<u>15,984</u>	<u>11,850</u>
	83,664	70,268
Less capitalized costs	<u>5,460</u>	<u>3,454</u>
Net operating expenses	<u>78,204</u>	<u>66,814</u>
Operating loss before depreciation expense	48,306	40,656
Depreciation (unfunded):		
Of assets acquired with own funds	12,191	18,370
Of assets acquired with grants and contributions by others	<u>12,508</u>	<u>7,841</u>
Total depreciation	<u>24,699</u>	<u>26,211</u>
Operating loss	73,005	66,867
Financial assistance:		
Transactions and use tax	48,621	31,526
Property tax	6,283	5,521
Transportation Development Act of 1971	83	349
State	12	35
Federal	—	3,400
Total financial assistance	<u>54,999</u>	<u>40,831</u>
Loss before cumulative effect of change in accounting method	<u>18,006</u>	<u>26,036</u>
Cumulative effect, on years prior to June 30, 1977, of change in method of recording self-insurance costs:		
Liability and worker's compensation claims	—	1,033
Major property damage:		
On assets acquired with own funds	—	981
On assets acquired with grants and contributions by others	—	968
Net loss	<u>18,006</u>	<u>29,018</u>
Depreciation and major property damage of assets acquired with grants and contributions by others	<u>12,508</u>	<u>8,809</u>
Net loss transferred to accumulated deficit	<u>\$ 5,498</u>	<u>\$20,209</u>
Reconciliation to net funded revenue:		
Operating loss before depreciation expense	\$48,306	\$40,656
Add cumulative effect of change in method of recording self-insured costs of liability and worker's compensation claims	—	1,033
Deduct financial assistance	<u>54,999</u>	<u>40,831</u>
Funded excess of revenues over expenses (expenses over revenues)	<u>\$ 6,693</u>	<u>(\$ 858)</u>

The accompanying notes are an integral part of the financial statements

## STATEMENTS OF CHANGES IN NET CAPITAL INVESTMENT

Years Ended June 30, 1978 and 1977 (In Thousands)

	Property Tax	Transactions and Use Tax
Balance, July 1, 1976	\$55,325	\$137,425
Net loss for the year	—	—
Proceeds from grants and contributions	—	—
Depreciation and major property damage of assets acquired with grants and contributions by others	—	—
Interest on capital	—	—
Bond principal	15,940	12,575
Balance, June 30, 1977	<u>71,265</u>	<u>150,000</u>
Net loss for the year	—	—
Proceeds from grants and contributions	—	—
Depreciation of assets acquired with grants and contributions by others	—	—
Interest on capital	—	—
Bond principal	17,750	—
Establishment of basic system completion reserve	—	—
Establishment of system improvement reserve	—	—
Increase in reserve for self-insurance	—	—
Balance, June 30, 1978	<u>\$89,015</u>	<u>\$150,000</u>

## STATEMENTS OF CHANGES IN FINANCIAL POSITION

Years Ended June 30, 1978 and 1977 (In Thousands)

	1978	1977
CASH AND SECURITIES PROVIDED BY:		
Operations:		
Net loss transferred to accumulated deficit	\$ 5,498	\$20,209
Deduct expenses not requiring cash:		
Depreciation of assets acquired with own funds	12,191	18,370
Cumulative effect of change in method of recording self-insured major property damage of assets acquired with own funds	—	981
CASH AND SECURITIES PROVIDED (USED) BY OPERATIONS	<u>6,693</u>	<u>(858)</u>
Contributions from U S Government grants and others	25,244	12,720
Decrease (increase) in deposits, notes, and miscellaneous receivables	5,696	(540)
Interest on capital	3,134	2,298
Total cash and securities provided	<u>40,767</u>	<u>13,620</u>
CASH AND SECURITIES APPLIED TO:		
Additions to construction in progress	176	15,572
Additions to facilities, property, and equipment	8,792	6,125
Additions to materials and supplies	1,803	1,108
Decrease (increase) in construction contracts payable and other liabilities	7,882	(4,412)
Decrease (increase) in unearned passenger revenue	526	(36)
Total cash and securities applied	<u>19,179</u>	<u>18,357</u>
Increase (decrease) in cash and securities	<u>\$21,588</u>	<u>(\$ 4,737)</u>

The accompanying notes are an integral part of the financial statements.

US Government Grants	State of California Grants	Contributions from Others	Depreciation and Retirements of Assets Acquired With Grants and Contributions by Others	Accumulated Deficit	Interest on Capital	Reserves	Net Capital Investment
\$282,223	\$116,902	\$23,043	(\$21,440)	(\$39,452)	\$119,767	(\$ 6,000)	\$667,793
—	—	—	—	(20,209)	—	—	(20,209)
6,376	—	6,344	—	—	—	—	12,720
—	—	—	(8,809)	—	—	—	(8,809)
—	—	—	—	—	2,298	—	2,298
—	—	—	—	—	—	—	28,515
288,599	116,902	29,387	(30,249)	(59,661)	122,065	(6,000)	682,308
—	—	—	—	(5,498)	—	—	(5,498)
9,641	39,111	15,603	—	—	—	—	64,355
—	—	—	(12,508)	—	—	—	(12,508)
—	—	—	—	—	3,134	—	3,134
—	—	—	—	—	—	—	17,750
—	—	—	—	—	—	(13,000)	(13,000)
—	—	—	—	—	—	(13,906)	(13,906)
—	—	—	—	—	—	(3,000)	(3,000)
<u>\$298,240</u>	<u>\$156,013</u>	<u>\$44,990</u>	<u>(\$42,757)</u>	<u>(\$65,159)</u>	<u>\$125,199</u>	<u>(\$35,906)</u>	<u>\$719,635</u>

**DEBT SERVICE FUNDS STATEMENTS OF REVENUES, EXPENDITURES, AND FUND BALANCES**  
Years Ended June 30, 1978 and 1977 (In Thousands)

	General Obligation Bonds	1978 Sales Tax Revenue Bonds	Combined	1977 Combined
Revenues:				
Property tax	\$48,741	\$ —	\$48,741	\$ 45,301
Transactions and use tax received	—	26,882	26,882	47,368
Interest	1,597	739	2,336	1,982
	<u>50,338</u>	<u>27,621</u>	<u>77,959</u>	<u>94,651</u>
Expenditures:				
Interest	31,397	808	32,205	34,172
Principal	17,750	16,000	33,750	36,515
Bond service expense	—	9	9	27
Funds transmitted to the District	—	24,811	24,811	31,526
	<u>49,147</u>	<u>41,628</u>	<u>90,775</u>	<u>102,240</u>
	1,191	(14,007)	(12,816)	(7,589)
Balance, beginning of year	16,009	14,007	30,016	37,605
Balance, end of year	<u>\$17,200</u>	<u>\$ -0-</u>	<u>\$17,200</u>	<u>\$ 30,016</u>
Represented by:				
Cash (including time deposits: 1978, \$14,750; 1977, \$7,913)	\$14,867	—	\$14,867	\$ 8,317
Securities — at cost	845	—	845	6,321
Taxes and interest receivable	1,488	—	1,488	1,371
Assets with fiscal agent	—	—	—	14,007
	<u>\$17,200</u>	<u>—</u>	<u>\$17,200</u>	<u>\$ 30,016</u>

The accompanying notes are an integral part of the financial statements.

# notes to financial statements

NOTES TO FINANCIAL STATEMENTS JUNE 30, 1978 and 1977

## NOTE 1 — Summary of Significant Accounting Methods

### Description of the District

The San Francisco Bay Area Rapid Transit District is a public agency created by the legislature of the State of California in 1957 and regulated by the San Francisco Bay Area Rapid Transit District Act, as amended. The District does not have stockholders or equity holders and is not subject to income tax. The disbursement of all funds received by the District is controlled by statutes and by provisions of various grant contracts entered into with Federal and State agencies.

### Securities

Securities are carried at cost which approximates market.

### Facilities, Property, and Equipment

Facilities, property, and equipment are carried at cost. Depreciation is calculated using the straight-line method over the estimated useful lives of the assets. The amount of depreciation of assets acquired with District funds is distinguished from depreciation of assets acquired with grants and contributions by others. The latter amount is shown on the statement of changes in net capital investment with the related grants and contributions.

### Federal and State Grants

The District receives amounts from both Federal and State governments to assist in operations and for capital or other projects. Grants for capital and other projects are recorded as additions to net capital investment on receipt. Grants for operating expenditures are included as financial assistance in the statement of operations.

### Sales Tax Revenue

The one-half percent transactions and use tax, imposed by the District within the counties it serves, is collected and administered by the State Board of Equalization. Prior to January 1, 1978, all tax proceeds were transmitted directly to a trustee and recorded as revenue in the debt service funds on receipt. The trustee retained funds necessary for debt service require-

ments and transmitted the excess, if any, to the District. On January 1, 1978, the final Sales Tax Revenue Bonds were retired and tax proceeds are now transmitted directly to the District. The District records funds not required for debt service and the proceeds of Sales Tax Revenue Bonds (issued for operational purposes) as financial assistance when received. The State Board of Equalization estimates that transactions and use tax revenues for the period April 1, 1978 to June 30, 1978 will be approximately \$8,625,000. Of this amount, \$2,156,000 had been received and recorded by the District. Comparable figures for 1977 were \$10,200,000 and \$2,550,000, respectively.

### Property Tax Revenue

The District receives property tax revenues to service the debt requirements of the General Obligation Bonds and records these revenues in the debt service funds. It also receives an allocation of property tax revenues to provide for general and administrative expenses not involving construction, although such revenues may be used for construction if needed. The District records this property tax allocation as financial assistance.

### Interest Earned on Capital Sources

The District accounts for interest earned on capital sources as an increase in net capital investment to recognize that this interest should be directly associated with the capital which gives rise to the interest and which is not available for current operations.

### Self-Insurance

The District is largely self-insured for worker's compensation and general liability claims and major property damage. The District records the costs of self-insured claims and major property damage when they are incurred.

### Reclassifications

Certain reclassifications have been made in the 1977 financial statements to conform to 1978 presentation.

## NOTE 2 — Change in Method of Accounting During 1977

### Self-Insurance

The District insures itself for most worker's compensation, general liability, and major property damage. During 1977, the District changed its method of recording the costs of self-insured claims and major property damage to when they are incurred instead of when they are paid.

The effect of this change was to increase the 1977 net loss by \$3,141,000 including \$2,982,000 of costs from prior years. The \$2,982,000 represents \$1,033,000 in worker's compensation and liability claims and \$1,949,000 in major transit vehicle

property damage. The pro forma amounts shown below reflect retroactive application of the change as if the method had been in effect in years prior to 1977.

	(In Thousands)
	<u>1977</u>
Net loss as reported	\$29,018
Cumulative effect of change in method of accounting applicable to years prior to 1977	(2,982)
	<u>\$26,036</u>

### NOTE 3 — Securities Representing Reserves

Securities are separately classified on the balance sheet to reflect designation by the Board of Directors of a portion of the District's capitalization as reserves for the following purposes:

	--- (In Thousands) ---	
	1978	1977
Basic System Completion	\$13,000	\$ —
System Improvement	13,906	—
Self-Insurance	9,000	6,000
	<u>\$35,906</u>	<u>\$6,000</u>

### NOTE 4 — Facilities, Property, and Equipment

Facilities, property, and equipment, asset lives, and accumulated depreciation and amortization at June 30, 1978 and 1977 are summarized as follows.

	Lives (Years)	----- (In Thousands) -----			
		----- 1978 -----		----- 1977 -----	
		Cost	Accumulated Depreciation and Amortization	Cost	Accumulated Depreciation and Amortization
Land	—	\$ 106,552	\$ —	\$ 106,544	\$ —
Improvements	80	1,042,561	63,361	1,031,406	50,164
System-wide operation and control	20	86,846	18,887	87,095	17,136
Revenue transit vehicles	30	149,200	21,493	144,075	16,481
Service and miscellaneous equipment	3 to 20	10,613	3,954	9,719	3,099
Capitalized construction and start-up costs	30	86,278	15,322	95,175	11,944
Repairable property items	30	7,198	875	6,726	653
		<u>\$1,489,248</u>	<u>\$123,892</u>	<u>\$1,480,740</u>	<u>\$99,477</u>

### NOTE 5 — Payable to the State of California

Under Sections 30770-30782 of the California Streets and Highways Code, the Department of Public Works of the State of California authorized the District to construct the San Francisco-Oakland rapid transit tube and its approaches with State funds. These Code Sections provide that the District will reimburse the State for the costs of the tube approaches. At June 30, 1978, the District had received \$172,513,000 of which \$55,611,000 was repayable to the State. Reimbursement of

\$16,500,000 was fulfilled by application of a credit due the District arising from highway betterments constructed with District funds on State Route No. 24. During 1978, the Governor signed legislation which cancels the District's obligation to pay such costs. This was recorded as an addition to State of California Grants on the statement of changes in net capital investment.

### NOTE 6 — General Obligation and Sales Tax Revenue Bonds

	Composite Interest Rate	Year Last Series Matures	----- (In Thousands) -----					
			Original Amount		----- 1978 -----		----- 1977 -----	
			Authorized	Issued	Due in 1 Year	Total	Due in 1 Year	Total
<b>General Obligation Bonds</b>								
1962 District Bonds	4.08%	1999	\$792,000	\$792,000	\$19,400	\$705,325	\$17,450	\$722,775
1966 Special Service District Bonds	4.40%	1998	20,500	12,000	310	9,660	300	9,960
			<u>\$812,500</u>	<u>\$804,000</u>	<u>\$19,710</u>	<u>\$714,985</u>	<u>\$17,750</u>	<u>\$732,735</u>
<b>Sales Tax Revenue Bonds</b>								
1969 Sales Tax Revenue Bonds		1977	<u>\$150,000</u>	<u>\$150,000</u>	<u>\$ -0-</u>	<u>\$ -0-</u>	<u>\$ -0-</u>	<u>\$ -0-</u>
1975 Sales Tax Revenue Bonds		1978	<u>\$ 24,000</u>	<u>\$ 24,000</u>	<u>\$ -0-</u>	<u>\$ -0-</u>	<u>\$16,000</u>	<u>\$ 16,000</u>

(con't.)



Note 6 - General Obligation and Sales Tax Revenue Bonds (con't)

In 1962, voters of the member counties of the District authorized a bonded indebtedness totaling \$792 million of General Obligation Bonds. Payment of both principal and interest is provided by the levy of District wide property taxes. During 1966, City of Berkeley voters formed Special Service District No. 1 and authorized the issuance of \$20.5 million of General Obligation Bonds for construction of subway extensions within that city. Payment of both principal and interest is provided by taxes levied upon property within the Special Service District. Bond principal is payable annually on June 15 and interest is payable semiannually on June 15 and December 15 from debt service funds. Interest of \$15,009,000 on General Obligation Bonds and \$214,000 on Special Service District No. 1 Bonds is payable on December 15, 1978.

The 1969 Legislature of the State of California authorized the District to impose a 1/2% Transactions and Use Tax within the

District and issue Sales Tax Revenue Bonds totaling \$150 million. The State Legislature later extended the tax to June 30, 1978 and authorized the District to issue bonds totaling \$24 million. Payment of all Sales Tax Revenue Bonds was completed by June 30, 1978.

On September 30, 1977, the Governor signed legislation which extended the Transactions and Use Tax indefinitely. Under the legislation, revenues from the tax imposed on or after January 1, 1978, and revenues from the tax imposed prior to January 1, 1978, but available after March 31, 1978, will, subject to certain restrictions, be allocated 75% to the District and 25% by the Metropolitan Transportation Commission to the District, the City and County of San Francisco, and the Alameda-Contra Costa Transit District for improvements in the level of transit service.

**NOTE 7 — U S Government Grants**

The U S Government, under grant contracts with the District, provides financial assistance for capital projects. Additionally, the District is administering Federal grants to the City and County of San Francisco and to the City of Berkeley. Grants for capital projects are recorded as additions to net capital investment when received. A summary of Federal grants in force at June 30, 1978 is as follows;

Type of Grant	---- (In Thousands) ----	
	Maximum Grant	Funds Received
Beautification	\$ 1,961	\$ 1,961
Demonstration	12,842	12,842
Capital	304,928	283,437
	<u>\$319,731</u>	<u>\$298,240</u>

**NOTE 8 — Litigation and Disputes with Contractors and Others**

In November 1974, the District filed suit against its consulting engineer, Parsons Brinckerhoff-Tudor-Bechtel (PB-T-B), two of its primary contractors, Rohr Industries, Inc and Westinghouse Electric Corporation, a subcontractor, Bulova Watch Company, and the primary contractors' respective sureties, seeking damages of approximately \$160 million from Westinghouse, Rohr and PB-T-B, and in addition, \$2 million from Westinghouse, PB-T-B and Bulova.

During 1978, the District and the defendants signed an agreement settling this litigation. In general, the settlement provided for payment to the District of \$15 million (\$1.3 million of which had already been received) and a release of claims by all parties. In addition, Rohr agreed to accept a payment of \$6.2 million from the District in settlement of a separate claim involving \$15 million in disputed billings under the Transit Vehicle Contract. The District submitted a requisition for 80% of this payment to the Urban Mass Transportation Administra-

tion (UMTA). The overall settlement was contingent on UMTA approval of the District's requisition. This approval was granted. Payment of the monies involved in the settlement occurred in March 1978.

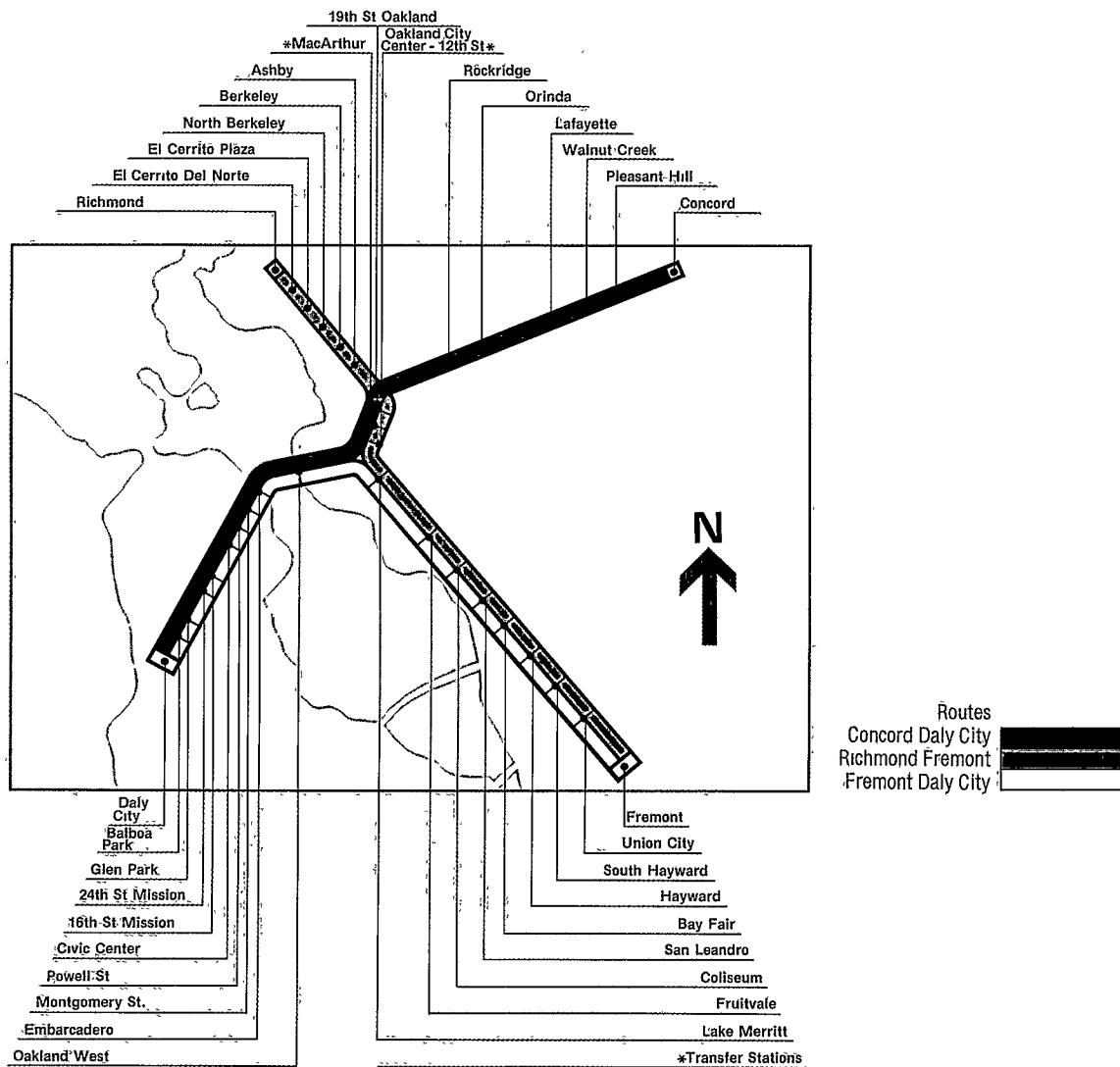
Proceeds from the settlement of \$13.7 million have been recorded as a reduction of property costs. These proceeds and the capitalized litigation expenses of \$4.9 million will be amortized over 30 years. The \$13.7 million settlement proceeds have been designated by the terms of the settlement and by action of the District's Board of Directors for improvements in capital equipment and construction.

In addition, the District is involved in various lawsuits, claims, and disputes, which for the most part, are normal to the District's operation. In the opinion of management, the amount of costs that might be incurred, if any, would not materially affect the District's financial position or operations.

**NOTE 9 — Public Employees Retirement System**

The District contributes to the Public Employees Retirement System. The System is a contributory pension plan providing retirement, disability, and death benefits to employees of certain State and local governmental units. Substantially all full-

time employees of the District are covered by the System. Pension costs of the System are determined actuarially and required contributions are expensed currently. Pension expense was \$4,119,000 and \$3,441,000 in 1978 and 1977, respectively.



## SAN FRANCISCO BAY AREA RAPID TRANSIT DISTRICT

Established in 1957 by the California State Legislature.  
Authorized to plan, finance and construct a rapid transit system.

Governed by a Board of Directors elected for four-year terms by voters of nine election districts within the counties of Alameda, Contra Costa and San Francisco.

### ADMINISTRATIVE HEADQUARTERS

800 Madison Street, Oakland, California 94607 415-465-4100

Frank C. Herringer\* General Manager  
Robert D. Gallaway Assistant General Manager

### DEPARTMENT DIRECTORS

Malcolm M. Barrett* General Counsel	William F. Goelz* Finance	Phillip O. Ormsbee Special Services	Lawrence A. Williams Employee Relations
C. Keith Bernard Planning, Budgeting & Research	Krishna V. Hari System Development	Fred L. Peil Technical Services	Ralph S. Weule Safety
William B. Fleisher Field Services	Ernest G. Howard Affirmative Action & Training	Gordon H. Ringenberg Program Management	Note: Phillip O. Ormsbee was appointed District Secretary by the Board of Directors on September 14, 1978, following the death of Richard J. Shephard in July 1978.
Richard P. Demko Rolling Stock & Shops	Diane D. Levine Marketing & Communications	Richard J. Shephard* District Secretary	
	Vincent P. Mahon Power & Way Maintenance		
	Melvin H. Murphy Engineering		

\*Denotes statutory officers appointed by Board of Directors

This Annual Report is published by the District Pursuant to Section 28770, Public Utilities Code of the State of California

COVER It required 4.04 kilowatt hours of electricity to transport each of these passengers on BART trains during the 1977-78 fiscal year, 0.86 less per passenger than in the previous 12-month period

SAN FRANCISCO  
BAY AREA  
RAPID TRANSIT  
DISTRICT

800 Madison Street  
Oakland, California 94607  
(415) 465-4100

