



ment of the City Selection Committee September 30, 1973. \*\* Director Murdock succeeded the late Director Joseph S. Silva by appointment of the Contra Costa County Board of Supervisors October 22, 1973.

construct, and operate a new high-speed rail rapid transit system under the direction of a representative Board of Directors from the counties of Alameda, Contra Costa, and San Francisco.

ONE MARITIME PLAZA SAN FRANCISCO CAL.FORN.A 94111

December 16, 1974

changes in financial position for the years then ended. Our examination was 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 neces-

As explained in Note A, certain pre-full revenue operating costs amounting to \$15,000,000, which were incurred after achieving substantial revenue operations, were capitalized in the year ended June 30, 1974. Under generally accepted accounting principles, these costs should not be capitalized. As a result, facilities, property and equipment and accumulated net revenues at June 30, 1974

In our opinion, except as discussed above, the aforemen-tioned financial statements present fairly the financial position of the San Francisco Bay Area Rapid Transit District at June 30, 1974 and 1973, and the results of its operations, revenues, expenses and fund balances of debt service funds, and changes in its financial position for the years then ended, in conformity with generally ac-

Souche Kon,

Certified Public Accountants

## NOTES TO FINANCIAL STATEMENTS CONTINUED

The State Board of Equalization has estimated that the revenue from the Transactions and Use Tax for the period April 1 to June 30, 1974 will be approximately \$7,800,000, of which the trustee had received \$1,950,000 at June 30, 1974.

# NOTE F-U. S. Government Grants

The U. S. Government, under grant contracts with the District. provides financial assistance for research, beautification, certain construction projects and transit vehicle and other procurement. Additionally, the District is administering federal grants to the City and County of San Francisco (CA-03-0004) for construction of three Market Street Station mezzanines, two street plazas and street extensions, and a grant to the City of Berkeley (CA-03-0009) in connection with the construction of subway extensions within Berkeley The following grants were in force as of June 30, 1974:

•		
	Maximum	Funds
Project-Purpose	Grant	Received
Beautification Grants:		
ĒAĹIF-BĎ-1	\$ 447,953	\$ 360,000
CALIF-B-160	323,000	239,000
ČALIF-B-163	521,000	367,000
OS-CA-09-39-1074	838,565	749,470
	2,130,518	1,715,470
Demonstration Grants.		
CAL-MTD-2 (Transit Design)	6,157,256	6,157,256*
CA-06-0023 (Fare Collection)	1,133,333	925,291
CAL-MTD-7 (Transit Hardware)	761,568	761,568*
CA-06-0032 (Prototype Vehicles)	<u> </u>	_4,500,000
	13,052,157	12,344,115
Constal Constants 1		
Capital Grants—Construction and		
Procurement.		
CA-03-0006	12,867,862	12,867,862*
CAL-UTG-11	13,103,910	13,103,910*
CA-03-0015	25,939,945	25,939,945*
CA-03-0019	88,000,000	73,446,575
CA-03-0047	1,000,000	454,000
CA-03-0052	38,136,666	20,444,000
CA=03-0058	1,700,000	1,388,000
CA-03-0059	61,845,066	12,224,000
CA-03-0069	21,681,333	2,908,000
CA-03-0083	1,172,000	<u> </u>
	265,446,782	162,776,292
CA-03-0004 (San Francisco)	19,902,430	16,072,600
CA-03-0009 (Berkeley)	4,733,000	4,733,000*
	290,082,212	183,581,892
	\$305,264,887	<u>\$197,641,477</u>

### \*Protect completed

## NOTE G-State of California Grant

12

Pursuant to 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. Under Section 30778 of the Code, further modified by an agreement with the State Department of Public Works, the District will reimburse the State for costs of the tube approaches At June 30, 1974, the District had received \$172,513,000 of which \$55,610,538 is repayable to the State of California for the tube approaches. Reimbursement will be fulfilled by application of a \$16,500,000 credit to the District arising from highway betterments constructed with District funds on State Route No. 24 and by payment of \$1,000,000 on December 31, 1977, and \$2,500,000 annually beginning December 31, 1978.

# NOTE H-Reserve for Self-Insurance

The reserve for self-insurance is presently limited, by resolution of the Board of Directors of the District, to a maximum of \$6 million (1973, \$15 million) to provide for uninsured general liability and property damage and workmen's compensation exposure at June 30, 1974.

## NOTE I-Construction in Progress

During the years, construction in progress decreased as follows:

	Year Ended June 30		
	1974	1973	
Balance at beginning of year Add	\$562,279,087	\$1,141,867,278	
Construction	82,120,740	118,829,635	
Real ĕstate acquired	606,616	3,263,925	
Utility relocation	(46,732)	1,049,744	
Pre-full revenue operating expenses	21,874,681	13,482,330	
Other	837,125	584,882	
	105,392,430	137,210,516	
Less			
Rental income and proceeds from			
sales of real estate	174,230	463,717	
Insurance premiums refunded	21,562	35,823	
Transfers to facilities, property			
and equipment 🔷	607,726,380	715,151,524	
Transfers to materials and supplies	705,261	732,730	
Other transfers	(83,898)	414,913	
	608,543,535	716,798,707	
	503,151,105	579,588,191	
Balance at end of year	\$ 59,127,982	\$ 562,279,087	
Datatice at end of year	<u>⊅ 59,127,982</u>	\$ 562,279,087	

An analysis of project costs, based upon information available at June 30, 1974, was developed to determine the estimated cost of the rapid transit system at completion. This estimate amounts to \$1,606,691,000 (including \$179,878,000 for the trans-bay tube being financed by the State of California and \$160,919,000 for transit vehicles being financed by Federal grant funds and other District sources). Presently, the final cost of the system cannot be determined, as future economic conditions, resolution of pending contractors' claims (Note J) and delay in start of full revenue operations may have a significant effect on the final cost of the system Initial operation of the system began in September 1972. All 71 miles of rapid transit line were in regular passenger service on September 16, 1974.

# NOTE J-Litigation and Other Disputes with Contractors

The District has filed suit against its consulting engineer, PB-T-B, two of its primary contractors, Rohr and Westinghouse, a subcontractor, Bulova, and the primary contractors' respective sureties, seeking in damages \$86.8 million from PB-T-B, approximately \$41 million from Rohr, \$55 million from Westinghouse, \$4.5 million from Westinghouse and Bulova jointly, and in addition, \$50 million for loss of revenue from Rohr, Westinghouse, and PB-T-B. Special Trial Counsel is unable to comment on the District's ultimate recovery under this action. Some of the defendants may enter cross-claims against the District The ultimate liability, if any, with respect to such cross-claims is unknown

In addition, contractor claims amounting to approximately \$28 million have been submitted to the District. It is anticipated that additional such claims will be submitted in the future. Special Trial Counsel is unable to comment on the District's ultimate liability, if any, for these claims since they involve substantial factual and legal disputes which have not yet been fully analyzed

A taxpayers' class action suit has also been filed against certain of the District's contractors, including PB-T-B, to recover public funds alleged to have been illegally expended. (The District, certain of its directors and its former general manager are also defendants.) However, since this action was commenced on behalf of taxpayers, Legal Counsel is of the opinion that any recovery, less attorneys' fees to plaintiff's counsel, should go to the District.

# **President's** Message

Challenge and change would best describe the tenor of the 1973/74 fiscal vear for BART, and I take pride in milestones reached during that period which will have a marked effect upon the District for decades to come.

The 1973/74 report period, which saw a more than 200 percent increase in patronage, and service extended into San Francisco, reflects credit on the BART people who carried out the responsibilities of revenue service. This same period presented complex problems in operations, engineering, fleet maintenance, finance, administration, and contractor performance, imposing extraordinary demands on both the staff and the District Board of Directors. Despite serious differences of opinion as to the cause and resolution of these problems, the Board was able to close ranks on major accomplishments during the fiscal year.

The Cover: Engineering blueprints combine

with views of the BART system-maintenance

shop, operator's cab, Train Control Center-

to depict a year of problems and progress

amid the new U.S. era of rapid transit tech-

nology cradled in the Bay Area

At the beginning of the period, the Directors were active in negotiations which resolved a month-long strike of 1,100 District employees and led to initial three-year contracts with our collective bargaining units.

Highest priority during the year was given to extensive engineering work during the period. A tight schedule must be met if we are to achieve the target date of September 16, 1974, for start-up of transbay service. In this effort, which is moving forward on schedule, the valuable contributions of the University of California's Lawrence Berkeley Laboratory should be acknowledged.

Decisive action by the Board in obtaining a temporary extension of BART half-cent sales tax revenues from the California Legislature as an operating subsidy narrowly averted a shutdown of the entire system. Although the sales tax is not favored by many, it was the only avenue permitted us during our period of utmost need. BART's



financial crisis reflected a hard economic fact of life facing all U.S. mass transit systems: some form of federal or state subsidy is essential to keep fares at a reasonable level for the people they were built to serve.

After prolonged deliberations, the Board acted to retain special trial counsel and prepare for litigation against the District's project engineering and contract management consultants and its suppliers of transit cars and automatic train control equipment. This suit was filed after the close of the report period.

The Board's adoption of routes and station locations for future BART extensions to the Pittsburg-Antioch and Livermore-Pleasanton areas was particularly gratifying to me. I would hope that these and other planned extensions within the District continue to receive priority attention until we can make them a reality. Also significant was the awarding of a construction contract for a two-mile test track at Hayward, which will expedite testing and modification work on the fleet.

The 1973/74 report period concluded on the day the Governor of California signed into law the legislation providing for the popular election of a nine-man Board. Thus, the current Board members are the last of a distinguished line appointed to office since 1957 by mayors and county supervisors.

I want particularly to salute my fellow appointed directors, whose term of office will end with the seating of the elective Board. They are men of distinction who did their duty as they saw it. I know the elected Directors, whoever they may be, will do the same. I wish them well.

Nello J Serneo Nello J. Bianco President



# Management **Overview**

The fiscal year opened with a systemwide strike involving 1,100 employees of the United Public Employees Local 390 (clerical, maintenance personnel), and the Amalgamated Transit Union Local 1555 (transportation personnel). The July 1-31 strike developed around the issue of wage parity among employees of similar classifications.

(Note: The 13(c) provision of the U.S. Urban Mass Transportation Act of 1964, obliged the District to pay employees hired under the provision the same rates received on their prior jobs with other transit lines. In some cases these rates exceeded the regular District rates paid other employees.)

The strike ended with the negotiation of three-year contracts, seen as a stabilizing factor for the District. However, labor costs were projected to increase \$19.6 million over the life of the contracts, primarily because they provided for first-year wage increases of 9½-12% and second-year increases of 6-12%, plus cost-of-living increments and expanded fringe benefits.

Staffing The total District staff increased during the period from 1,400 to 1,696, reflecting the build-up of the transportation and maintenance workforce to support expanding local service in San Francisco and large-scale preparations for transbay service. Consequently, training programs for transportation and technical personnel were expanded.

Despite the net gain in the general workforce, considerable streamlining was accomplished at upper management levels, with department heads cut back from a peak of 19 to 10 by the period's end. With the help of outside consultant Arthur D. Little, Inc., an overall manning target of 2,119 was set, but with an actual 2,084 budgeted for the 1974-75 fiscal year.

1. Affirmative Action Officer Charlene Daigre conducts seminars on management objectives for minority employees. 2 Blind employee Harry Cordellos uses optical scanning device to "read" service data in Telephone Information Center

NOTES TO FINANCIAL STATEMENTS Year ended June 30, 1974

# NOTE A—Summary of Significant Accounting Policies

The San Francisco Bay Area Rapid Transit District is a political subdivision of the State of California created by the Legislature 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 the State of California and the United States Government.

The General Fund receives an allocation of property tax revenues for purposes of providing for general and administrative expenses not involving construction in progress.

Securities are carried at cost which approximates market

The cost of acquisition and construction of rapid transit facilities is recorded in construction in progress and represents amounts paid or owing to contractors including amounts provided by State and Federal grants for construction purposes As facilities are completed and become operative, the District transfers them to facilities, property and equipment accounts

Depreciation on facilities, property and equipment is computed using the straight-line method over the estimated useful lives of the assets The amount of depreciation of assets acquired with the District's own funds is distinguished from the amount of depreciation of assets acquired with contributions by others, and the latter amount is shown on the balance sheet with the related contributions. This format follows the recommendations for public transportation systems in the Industry Audit Guide "Audits of State and Local Governmental Units" prepared by the Committee on Governmental Accounting and Auditing and issued by the AICPA in September 1973.

Materials and supplies are stated at average cost.

Accounting policies for general obligation bonds (Note D), sales tax revenue bonds (Note E), government grants (Notes F and G), reserve for self-insurance (Note H) and construction in progress (Note I) are described in separate footnotes

Since 1966, the District consistently has capitalized, as part of pre-full revenue operating expenses, certain start-up costs.

The amount so capitalized for the year ended June 30, 1974 is \$15 million. The District intends to continue the capitalization of these costs until the California Public Utilities Commission approves the full train control system scheduled for completion in the second half of the year ended June 30, 1975. Accordingly, it is anticipated that additional start-up costs projected at \$13 million will be capitalized

Certain reclassifications have been made in 1973 financial statements to conform to the classifications used in 1974.

# NOTE B-Significant Events

The District's rapid transit operations were shut down by a monthlong strike in July 1973 Three-year agreements were negotiated with the three organizations representing most of the District's employees.

The District resumed operations on August 6, 1973 between Richmond and Fremont and between Concord and the MacArthur transfer station in Oakland San Francisco local service between Daly City and Montgomery Street began November 5, 1973. Through transbay service between Daly City and Concord and between Daly City and Fremont began September 16, 1974.

After the close of the fiscal year ended June 30, 1974, the State Legislature extended the one-half per cent Transactions and Use Tax until December 31, 1977, or until the District has received \$82.2 million over and above the amount required to pay principal and interest on the outstanding Sales Tax Revenue Bonds, whichever is sooner. The additional revenues are to be used for operational purposes including the liquidation of operating deficits. The District is authorized to issue negotiable bonds secured by such revenues in amounts not to exceed \$16 million in fiscal 1974/75 and \$8 million in fiscal 1975/76

# NOTE C—Facilities, Property and Equipment

Facilities, property and equipment (stated at cost), asset lives, and accumulated depreciation and amortization at June 30, 1974 are summarized below

				Accumulated
				Depreciation
			Lives	and
		<u>Cost</u>	(Years)	Amortization
Land	\$	103,299,602	Non-	depreciable
Improvements		985,929,864	80	\$12,324,123
Systemwide operation and				
control		79,571,877	20	3,978,594
Revenue transit vehicles		74,035,403	30	2,465,379
Service and miscellaneous				
equipment		7,255,129	10	725,623
Pre-full revenue operating				
expenses		72,135,393	30	2,402,109
Repairable property items		3,926,447	30	130,750
	\$1	,326,153,715		\$22,026,578
	~			

# NOTE D-General Obligation Bonds

In 1962 voters of the member counties of the District authorized a bonded indebtedness totaling \$792,000,000 of General Obligation Bonds Bonds amounting to \$764,650,000 were outstanding at June 30, 1974, with principal maturities from 1975 to 1999. 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 \$20,500,000 of General Obligation Bonds for construction of subway extensions within that city. Special Service District No. 1 Bonds amounting to \$10,800,000 were outstanding at June 30, 1974, with principal maturities from 1975 to 1998 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 Principal amounts of \$12,200,000 of General Obligation Bonds and \$270,000 of Special Service District No. 1 Bonds mature on June 15, 1975. Annual maturities in succeeding years are in greater amounts. Interest of \$16,637,765 on General Obligation Bonds and \$245,283 on Special Service District No. 1 Bonds is payable on December 15, 1974 The composite interest rate on bonds currently outstanding is 4.13%

## NOTE E-Sales Tax Revenue Bonds

The 1969 Legislature of the State of California authorized the District to issue revenue bonds totaling \$150,000,000 Bonds amounting to \$101,350,000 were outstanding at June 30, 1974 with principal maturities from 1975 to 1981 The Sales Tax Revenue Bonds are secured by a pledge of the proceeds of the Transactions and Use Tax authorized by the 1969 Legislature and from moneys received by the District from other sources, in lieu of Transactions and Use Tax proceeds, if legally made available The bonds maturing on or after January 1, 1976 are redeemable prior to maturity at the option of the District on various dates at prices ranging from 104% to 100% of the face amount. The collection and administration of the tax, which became effective April 1, 1970, is performed exclusively by the State Board of Equalization and all taxes are transmitted directly to the appointed trustee for the purpose of paying bond interest semi-annually on July 1 and January 1 and principal annually on January 1 Principal of \$15,300,000 matures on January 1, 1975 and interest of \$2,778,718 is payable on July 1, 1974 The composite interest rate on bonds currently outstanding is 5.54%. On July 1, 1974, bonds in the amount of \$8,840,000 were called prior to maturity

# San Francisco Bay Area Rapid Transit District

# FINANCIAL STATEMENTS CONTINUED

Statement of Revenues, Expenses, and Fund Balances of Debt Service Funds	Year	Ended June 30, 19	974	
	General Obligation Bonds	Sales Tax Revenue Bonds	Combined	Year Ended June 30, 1973 Combined
Revenues:				
Property taxes	\$43,794,213		\$43,794,213	\$44,153,452
Transactions and use taxes received	-0-	\$35,326,319	35,326,319	31,054,621
Interest	1,977,317	3,568,656	5,545,973	3,262,476
	45,771,530	38,894,975	84,666,505	78,470,549
Less:				
Matured interest	34,374,171	7,211,125	41,585,296	42,898,971
Matured or retired principal	10,860,000	26,550,000	37,410,000	22,950,000
Bond service expense	0	64,221	64,221	12,024
Bond premium	-0	404,953	404,953	<u> </u>
	45,234,171	34,230,299	79,464,470	65,860,995
	537,359	4,664,676	5,202,035	12,609,554
Balance at beginning of year	18,911,687	46,264,461	65,176,148	52,566,594
Balance at end of year	\$19,449,046	\$50,929,137	\$70,378,183	\$65,176,148

ent of Changes in Financial Position	Year Ended June 30	
	1974	1973
Financial Resources Were Used for:		
Operations:		
Net operating loss	\$ 30,265,489	\$ 6,390,58
Noncash expense—depreciation and amortization	(16,475,880)	-0
FUNDS USED IN OPERATIONS	13,789,609	6,390,58
Additions to construction in progress and facilities,		
property and equipment	82,149,014	121,263,46
Bond interest	41,585,296	42,898,97
Bond principal	37,410,000	22,950,00
Increase on debt service funds	5,202,035	12,609,53
Bond premium	404,953	—0—
Other	792,336	757,68
	\$181,333,243	\$206,870,22
Financial Resources Were Provided by:		
Property taxes	\$ 43,794,213	\$ 44,153,48
Grants from U.S. Government	41,484,005	42,247,49
Decrease in cash and securities	39,641,355	54,759,8
Transactions and use taxes	35,326,319	31,054,62
Decrease in miscellaneous receivables and deposits		
and notes receivable	8,395,268	1,340,6
Interest on investments	5,703,872	3,584,6
Increase in construction contracts and other liabilities	4,150,402	24,709,2
Contributions from others	2,478,809	1,233,20
Grants from State of California	359,000	3,787,0
	\$181,333,243	\$206,870,22

See notes to financial statements.

10

Finances Of major importance was the ongoing development and refinement of capital and operating fund requirements as projected through the five-year period-fiscal 1973-74 to 1977-78. First presented to the District Board in April 1973 (in the context of the 73-74 budget), the five-year projection was revised in September 1973 to reflect such factors as the July 31 labor contract settlement, the upcoming local San Francisco service, and decreased revenue resulting from the delay of transbay service from September 1973 into 1974.

In January the Board, by formal resolution, advised the State Legislature and Governor, the Metropolitan Transportation Commission, and the U.S. Department of Transportation "of its findings and urgent needs relative to operating financial assistance." The Board asked for "early action ... to permit BART to operate and improve its service at moderate fares.'

In February the five-year financial report was further revised in light of new revenue and labor cost projections, as well as the costly impact of high, unscheduled maintenance on the car fleet and continuing inflation. The revised report signaled large annual unfunded operating deficits from a total of \$13 million in fiscal 1974-75 to \$28 million in fiscal 1977-78 (approximately 40 percent of that period's projected operating budget).

Meanwhile, the District was taking all possible measures to communicate the increasing seriousness of BART's financial problems to federal, state, and local officials. Detailed testimony was delivered before the State Assembly Committee on Transportation in October, and before the State Senate Public Utilities and Corporations Committee in February and April. Two major points were emphasized: (1) a tax subsidy was the only alternative to meet the widening cost-revenue gap without unacceptably high fares and lowered service levels; and (2) BART's rising deficits were similar to what the whole transit industry was experiencing. In May the Director of Finance

estimated the District would face an unfunded deficit condition by late November 1974. He warned the system might have to shut down in August or September to conserve remaining funds for caretaker expenses.

General Manager B. R. Stokes and other officials called for a temporary extension of the <sup>1</sup>/<sub>2</sub>-cent sales tax (levied since 1970 in District counties to complete construction of the system, and expected to expire in 1975). The tax extension was seen as a temporary means of meeting the approaching unfunded condition until other possible sources of an operating subsidy could be studied by the State Legislature. On

April 2, Senator James Mills (D., San Diego) introduced a bill (SB1966) into the Senate which would extend the sales tax for two years and authorize its use as an operating subsidy. (NOTE: SB1966 was subsequently passed by the Legislature in September 1974.)

**Operating Expenses/Revenues** Actual operating expenses for fiscal 1973-74 were \$33.9 million, against an operating budget of \$37.4 million. Under-budget spending resulted from a slowdown in hiring and other savings related to deferral of transbay service into the next fiscal year. The budget was set at \$53.8 million for fiscal 1974-75, reflecting increased labor and maintenance costs, as well as expanded service costs. Passenger revenues rose to \$6 million: from \$2.1 million in fiscal 1972-73, with off-site cash sales (of highvalue regular, and 75 percent discount, tickets) amounting to \$643,000. Passenger revenues-whose potential is significantly higher than this fiscal period figure-will increase with the advent of transbay service and extended operating hours.

Income from District property rentals, leases and sales was \$270,000. Revenues from system concessionsincluding newsstands, vending machines, parcel lockers and public telephones-totaled \$27,000. Revenues from display advertising in cars and stations totaled \$157,540. Other revenues were received from Transportation Development Act funds, interest on invested funds, and District tax receipts.

District Property Tax For funding of administrative expenses and debt service on BART construction bonds, rates were set by the Board as follows:

# Admin Expense Alameda

Contra Costa 4 San Francisco 5

NOTE: Property tax rates 1s per \$100 assessed property value. Different tax rates reflect equal-ization of varying assessment ratios among counties.

Federal capital grants approved for BART included \$34 million to increase the fleet from 350 to 450 cars, and \$1.2 million for construction of a major new entrance to the Oakland City Center-12th Street Station. Local state sales tax receipts of \$6.1 million were allocated for the period to BART for capital improvements and operating expenses under the Transportation Development

ι, –	974-75 Debt ervice		1973-74 Total Rate
5.0	49.0	54.0	53.6
1.8	46.4	51.2	58.7
5.2	50.9	56.1	60.9

Act. The Oakland Redevelopment Agency and the National Endowment for the Arts allocated a total of \$60,000 for artwork in the City Center Station.

Still pending approval were three federal grants: \$2.5 million for a Daly City Station parking structure; \$2.5 million to purchase 32 buses for five BART feeder lines into Contra Costa and Alameda Counties; and \$1.6 million to construct a parking lot for feeder bus patrons in the Dublin area.

Other Significant Areas A 37 percent ethnic minority representation on the staff, as reported for the last period. was maintained. (Note: 37 percent exceeds the minority population ratio within the District by five percent.) Programs for advancing more minority employees into supervisory positions received emphasis, and the Board appointed a full-time Affirmative Action Officer in October. The first of an ongoing series of seminars was held in May to inform key management personnel as to the District's responsibilities and affirmative action policies.

The period saw joint committees of management, union and Safety Office personnel formed to monitor safety practices in all maintenance areas. Employee accident claims totaled \$32,-346 with 49 lost time injuries out of 204 accidents reported-a safety record that continued to be considerably better than the industry average.

A substantial dividend from the Workmen's Compensation Insurance carrier, of \$157,899, was received as a continuing benefit from the coordinated insurance program that was in effect during the construction period. Dividends for the system construction project now total \$4,661,995.

Crimes reported on the system by BART Police decreased from 250 per million passenger trips in the previous fiscal year to 149 in this report period. Despite the 60 percent decrease in reported crime relative to patronage, there was a substantial increase in the number of reported offenses. Major categories were petty theft, vandalism, fare evasion, auto burglary and auto theft (from station parking lots) in that order.

On June 30 Assembly Bill 3043, calling for popular election of a nineman District Board of Directors on November 5, 1974, was signed into law by the Governor. Nine voting districts were established on the basis of equal population, community of interests, and geographical cohesiveness.

Also on June 30 the resignation of General Manager B. R. Stokes became effective. Acting General Manager Lawrence D. Dahms succeeded Mr. Stokes. pending the permanent appointment of a new General Manager by the incoming elected Board.



# **OPERATING STATISTICS**

August 6, 1973, through June 30, 1974)	
Total Car Miles (revenue service only)	10,758,626
Total Passenger Trips (patronage)	13,960,680
Passenger Miles (estimated)	166,033,664
Ridership Ratio (for June 1974)	
Peak	58%
Off-Peak	42%
Net Passenger Revenues (less fare dis-	
counts & BART subsidy to AC riders)	6,055,969
Average Passenger Fare (with dis-	
count fares considered at full value)	47.7 cents
Average Trip Length (based on estimat	ed
passenger miles versus revenue)	11.9 miles
,	

# Operations & Services

The previous fiscal year ended with BART operational in the East Bay Counties of Alameda and Contra Costa. Operations covered 56 miles of the 71mile system and 24 of the 34 BART stations. Eighteen trains of three and four-car consists, were operating on 10minute headways, 12 trains on the Richmond-Fremont lines, and six on the Concord-Oakland (MacArthur Station) line. The three train yards and maintenance and repair shops at Hayward, Richmond and Concord were activated.

Three views of the Powell Street Station's beautiful Hallidie Plaza, which guickly became a hub of downtown activity when the San Francisco line opened November 5. At left, connecting Powell Street cable car provides striking contrast in old and new transportation within this city of contrasts.



# **Statement of Operations**

Ś

Revenues: Operating revenues: Fares Less discounts, transfers, other deducti

Financial assistance—Transportation Development Act of 1971 Other

Taxes Interest and other

Expenses: Transportation Maintenance and quality control Police services Construction and engineering General and administrative

FUNDED EXCESS OF EXPENSES O

Unfunded costs: Depreciation and amortization of all assets Less depreciation and amortization of ass with contributions by others (Note A) NET O

# **Statement of Accumulated Net Revenues**

Accumulated net revenues at beginning of year Less net operating loss

Add:

Start-up costs and construction overhead capitalized (Note A) Reduction in reserve for self-insurance Accumulated net revenues at end of year

# San Francisco Bay Area Rapid Transit District

	Year Ended June 30				
	192	74	1973		
tions		\$  6,655,808 599,839	\$  2,434,466 330,845		
		6,055,969	2,103,621		
		807,000	1,370,000		
		187,942	120,394		
		7,050,911 4,051,726	3,594,015 3,784,184		
		9,010,468	8,844,270		
		20,113,105	16,222,469		
		7,646,011	3,845,883		
		15,833,084	11,013,079		
		1,910,689	1,303,677		
		2,393,925	1,086,866		
		6,119,005	5,363,545		
		33,902,714	22,613,050		
OVER REVENUES		13,789,609	6,390,581		
s sets acquired	\$22,026,578				
	5,550,698	16,475,880	-0		
OPERATING LOSS		\$30,265,489	\$ 6,390,581		

\$94,492,405	\$86,258,755
(30,265,489)	(6,390,581)
64,226,916	79,868,174
22,401,581	14,302,043
9,157,899	322,188
\$95,786,396	\$94,492,405

# **FINANCIAL STATEMENTS**

Balance S	Sheet
-----------	-------

		June 30	
A	1	974	1973
Assets Cash (including time deposits of \$24,728,000 and \$63,500,000) U.S. Treasury securities (Note A) Federal Agency securities (Note A) Miscellaneous receivables Deposits and notes receivable Construction in progress (Note I) Facilities, property, and equipment (Notes A and C) Accumulated depreciation and amortization (Notes A and C) Materials and supplies (Note A) Debt service funds, net assets (including time deposits of \$54,482,900 and U.S. Treasury and Federal Agency securities of \$13,290,686 in 1974 and \$44,606,500 and \$19,070,445 in 1973) (Notes D and E)		<ul> <li>\$ 25,963,349</li> <li>14,635,000</li> <li>33,386,182</li> <li>2,252,533</li> <li>15,736,213</li> <li>59,127,982</li> <li>1,326,153,715</li> <li>(22,026,578)</li> <li>1,880,154</li> </ul>	$\begin{array}{c} \$ & 65,452,463 \\ 10,511,768 \\ 37,661,655 \\ 2,457,391 \\ 23,926,623 \\ 562,279,087 \\ 718,452,015 \\ -0- \\ 1,152,039 \\ \end{array}$
\$13,070,343 III 1373) (NOLES D'AIIU E)		70,378,183 \$1,527,486,733	65,176,148 \$1,487,069,189
		<u> </u>	<u> </u>
<b>Liabilities, Reserve and Capitalization</b> Construction contracts and others Unearned fare revenue Payable to State of California (Note G) Debt service funds (Notes D and E) Reserve for self-insurance (Note H)		\$ 45,491,205 587,135 39,110,538 70,378,183 6,000,000 161,567,061	$\begin{array}{c} \$ & 41,630,684\\ & 297,254\\ & 39,110,538\\ & 65,176,148\\ & 15,000,000\\ \hline & 161,214,624 \end{array}$
Capitalization: Géneral Obligation Bonds (\$812,500,000 authorized) (Note D): Bonds outstanding Bonds matured and retired	\$775,450,000 28,550,000	804,000,000	786,310,000 
Sales Tax Revenue Bonds (\$150,000,000 authorized) (Note É): Bonds outstanding Bonds matured and retired	101,350,000 48,650,000	150,000,000	127,900,000 22,100,000 150,000,000
U.S. Government Grants (Note F) State of California Grant (Note G)	197,641,477 116,902,462	130,000,000	156,157,472 116,543,462
Contributions from others Depreciation and amortization of assets acquired with contributions by others (Note A)	7,140,035 (5,550,698)		4,661,226
Accumulated net revenues before depreciation and amortization Depreciation and amortization of assets acquired with	112,262,276	316,133,276	277,362,160 94,492,40
own funds	_(16,475,880)	95,786,396	0 

Revenue trains were operating in the automatic mode, with fail-safe separation electronically maintained by the automatic train control system. As an extra safety factor, through a manual supervisor-controlled block system, a minimum two-station separation was maintained between all trains by holding them at platforms, if necessary, to maintain the distance.

Revenue service continued on the limited 6 a.m. to 8 p.m. schedule, five days a week. Nevertheless, the average daily patronage of 36,655 for June 1973 was 95 percent of the forecast based on 20-hour, seven-day service. Peak-hour (commuter) patronage was 19,549, or 138 percent of forecast and close to 50 percent of total daily patronage.

The 1973-74 fiscal year began on the first day of a systemwide strike, which shut down virtually all District operations, except those in managerial, engineering, housekeeping, and security areas. The employees returned to work on August 1, and revenue service was resumed on August 6.

**Patronage** The five-week interruption in service saw August commuter patronage off 22 percent from the June level and total patronage off eight percent. The first quarter ended with a dâily average ridership of 32,762, or 95 percent of forecast. (Note: forecast revised as of August to reflect limited service hours.)

Start-up of service on November 5 between Daly City and Montgomery Street Station in downtown San Francisco added eight system miles, eight stations and four trains to BART opera-



tions. Although the 7.5-mile transbay line remained closed for revenue service, empty trains from the Richmond Yard moved through the tube daily to support West Bay service.

Second quarter ridership averaged 56,240 daily, but November and December averages reflect the immediate impact of West Bay service with 68,013 and 69,796 respectively, and very close to forecast. Peak-hour patronage ranged from 15 to 26 percent over forecast for these months.

The San Francisco line was shut down March 11 to 15 due to picketing of striking municipal city workers. Despite this, the third fiscal quarter was up 28 percent over the previous quarter with 71,794 average daily patronage. A severe gasoline shortage, plus burgeoning West Bay service, were factors in this increase.

The fourth quarter ended with 68,802 daily trips, down 4.2 percent from the previous quarter and 95 percent of forecast. Total year's patronage was 13,960,680, or 98 percent of total system forecast, and 120 percent of peak-hour forecast.

Peak-hour ridership (6-8 a.m. and 4-6 p.m.) rose from 53 percent of total ridership in the previous fiscal year to 58 percent. Average passenger fare decreased from 53 cents to 47.7 cents, and average trip length from 12 miles to 11.9 miles, reflecting West Bay ridership.

ship. Actual daily round trips averaged by trains during the fiscal year were within eight percent of the system's optimum performance target. Nonscheduled train removals increased from a first quarter average of 8.4 per day (out of 18 trains operating before West Bay service) to a four-quarter average of 10.4 trains per day (out of 22 trains operating). Train consists increased from three-four-and-five-cars to seven-car maximums on the San Francisco line and six-car maximums on the Concord line.

The highest one-day patronage was 110,104 on the day after Thanksgiving. Other holidays, including a second year of World Series and playoff games at the Oakland Coliseum, resulted in an excellent record of large crowd control on the system by transportation personnel.

**System Safety** The period passed with no accidents in mainline train operation. A total of \$15,283 was paid in passenger accident claims, 41 occurring on trains and 101 occurring in stations. Among system safety improvements

See notes to financial statements.

8

during the period were installation of non-skid stripping on station stairways and start-up of a program to equip all BART cars with overhead handrails by the end of the 1976/77 fiscal year.

One major accident occurred when, on January 30, the brakes failed on a heavily-loaded up escalator, causing it to slide backward and injure several passengers. All escalators on the system were immediately rechecked for braking factors under maximum load conditions.

**Passenger Services** A task force was established to identify and eliminate special problems encountered by elderly, blind, and other handicapped patrons in using the system. Other programs were developed to meet special needs of other patron groups, such as shoppers, tourists, and school children. An experimental program was developed with a limited number of bicycle enthusiasts to determine the feasibility of allowing bicycles on transit cars during off-peak hours. This program will be implemented during the next fiscal year.

Ongoing improvements were made in system facilities for patrons. Sign improvement work continued in stations and parking lots, certain platform courtesy telephones were relocated, newsstands were opened in the large downtown San Francisco and Oakland stations, and bicycle rack and locker facilities were improved at various stations.

Additional fare gates were installed at the Daly City station; and 22 stations are scheduled to receive additional fare equipment during the next period.

Patron use of station parking lots increased from 44 to 62 percent on a systemwide basis, with lots at Daly City, Fremont, and at several Concord line stations filled to capacity-plus. Preliminary approval was obtained for a multi-level parking structure at Daly City (92 percent financed by the Federal Highway Administration, eight percent by Daly City), and design work was started.

Encouraged by the temporary gasoline shortage in early 1974, a number of BART-bus shuttle services were started around the system, including the University of California's sizable "Humphrey Go-BART" operation. A considerable amount of staff work aimed at expanding parking lots and improving feeder bus service on the Fremont and Concord lines—was carried on with other agencies and on-line communities.



# System Support

The period saw exceptionally heavy workloads in the engineering and maintenance areas-often on a seven-day. around-the-clock basis-involving the full spectrum of technical support within the staff and its large consortium of contractors.

The target date for commencing revenue service through the transbay tube and on the San Francisco-Daly City line was directly linked to implementation of recommendations contained in a report, issued February 5, 1973, by the State Senate Public Utilities and Corporations Committee. As developed by the

1. Track inspection is nightly routine for Foreman Ben Delgado. 2. Train control hardware is closely analyzed by Engineers (I to r) Frank Harshbarger, Jim Marlais, Bob Townley, and Ron Percey 3 & 4. Technicians Charles Wolosz and Minna Green test car circuitry in the Hayward Shop.



Committee's special three-man panel of electronic experts. 21 recommendations were aimed at increasing system safety and operating reliability for the start-up of transbay service. When the report period opened, this implementation work was well underway and being monitored by a special BART task force. The work centered around improvements to vehicle braking and propulsion systems, cab controls, and door operation, plus train detection capability of the automatic train control system (ATC).

Preparing for Transbay Installation of wheel "scrubbers" or cleaners to fleet vehicles (to improve wheel-to-track contact) did not produce the hoped-for improvement in train detection reliability. Thus, the District had to set back its target for transbay service from September 1973 to the spring of 1974 (and subsequently to September 1974). At the request of San Francisco officials. however, work continued for 1973 opening of the San Francisco line without transbay service. Checkout and testing of the line was completed by mid-October, and the line opened smoothly on its November 5 target date.

۶

\$

Meanwhile, the decision was made to install an additional means of assuring safe train separation as a back-up to the primary ATC train detection system. A "software" (computer logic) system was selected, known as Sequential Occupancy Release (SOR). In December, a \$1.3 million change order was issued to the Westinghouse Corporation to begin immediate installation of the back-up system.

To facilitate start-up of transbay service prior to SOR activation, the staff began rapid implementation of an interim method of assuring extra train protection: use of the central train control computer to hold trains at stations. if necessary, in order that extra-generous separation distances be maintained between all trains at all times. Twostation train separation had been maintained, per CPUC requirement, since initial start of revenue service by means of station-to-station telephone communication.

By May 1974, computerized control of two-station separation was approved by the CPUC and used systemwide. By late June, a shorter onestation separation (necessary for efficient transbay operation) was approved for the Richmond-Fremont line. (The following month would see one-station train separation activated systemwide, and CPUC approval for September start-up of transbay service on that basis.)

Assisting BART's technical staff in the transbay effort was the University of California's Lawrence Berkeley Laboratory.

Other Technical Work In February, modification work had commenced which would keep mainline switches under ATC system control should trains be operated in the manual mode.

In April, the first prototype installation for the SOR back-up detection system was successfully demonstrated at Oakland West Station. and installation began on the San Francisco line.

A security radio net was activated systemwide for Police Services at a cost of \$350,000; and significant savings were realized through arrangements for joint use of radio antennas with other organizations. Design and test work on third-rail power feed equipment was carried out to prepare for improvements to available traction power and grounding systems in the next fiscal period.

A comprehensive master plan was completed for coordination of local fire and police departments, and other agencies, in event of system fires, earthquakes, or other disasters. Elements of this master plan will be tested during the next period with simulation of disaster situations. Four 12-ton emergency vehicles were acquired to substantially increase the means of transporting fire fighters and equipment to any point on the system via highway or rail.

Maintenance Ongoing work during the period was directed at improvements to stations, right-of-way, and increasing the reliability of wayside train controls and revenue cars. Extensive modification work was accomplished on the train controls and revenue cars. Training programs were expanded to upgrade skills and phase 209 new personnel into a wide array of technical skills.

A major milestone was implemen-Although fleet maintenance con-

tation in January of the Maintenance Planning System, a computer information network to optimize preventive maintenance and cost controls and monitor vehicle component reliability. tinued to load the manpower and space available at the Hayward, Richmond, and Concord shops, progress was made in a number of problem areas with vehicle components. Modification work, plus parts shortages, however, significantly decreased car availability during

the period. A problem with lateral wheel-on-axle movement, which arose in May, also affected car availability until fixes were accomplished during the summer of 1974.

In June 1973, 52 percent of A-cars and 70 percent of B-cars were available for revenue service. In June 1974, average availability was 45 percent for A-cars and 65 percent for B-cars. The fleet totaled 144 A-cars and 147 B-cars at neriod's end.

Subways received extensive recaulking to eliminate water seepage, and Fremont line track was realigned. Trackage not under regular traffic at crossovers and terminals was surfaced with stainless steel beading to improve train detection reliability. All third rail was ground for good collector shoe contact on the San Francisco line prior to its opening, as with previous lines. Significant work in the stations included installation of no-slip stripping on stairwavs.

**Construction** Status of the entire BART project at period's end was 227 construction contracts completed at a cost of \$714 million. Construction in progress was valued at \$59 million, including eight contracts valued at \$7.2 million awarded during the period. Overall value of the project was estimated at \$1.607 billion.

Status of remaining station construction: Embarcadero 50%; Civic Center (Entrance No. 3) 63%; Church Street (Muni only) 70%; Castro Street (Muni only) 66%. Design of the West Portal Station (Muni only) was 75% complete.

Major construction contracts centered around the Outer-Market line for Muni streetcars, whose trackwork is 75 percent complete. Besides completion of the stations, the major work item remaining was electrification of the Muni subway level (under Market Street) and the Outer Market line.

Special construction projects included the two-mile Havward Test Track, 30% complete; and the Coliseum Station walkway (to Oakland Coliseum), 80% complete; and completed switch control towers at Daly City and MacArthur. Besides the West Portal Station, major design projects completed or underway. included the special 12th Street-Oakland City Center Station entrance, windscreens for all aerial stations, and bus stop shelters for all stations. Design work was also done on the Berkeley Maintenance Facility. additional yard storage tracks, and the Daly City parking lot structure.