REPORT BY THE

AUDITOR GENERAL

OF CALIFORNIA

A REVIEW OF PUBLIC BUS OPERATIONS IN CALIFORNIA

REPORT BY THE OFFICE OF THE AUDITOR GENERAL

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A REVIEW OF PUBLIC BUS OPERATIONS IN CALIFORNIA

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STATE OF CALIFORNIA

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P-777.1

Honorable Elihu M. Harris, Chairman Members, Joint Legislative Audit Committee State Capitol, Room 2148 Sacramento, California 95814

Dear Mr. Chairman and Members:

The Office of the Auditor General presents its report concerning trends in fiscal operations and performance for public bus operators statewide. The report also discusses maintenance trends, procurement practices, the extent of privatization, and hiring and training practices of a selected number of public bus operators.

Respectfully submitted

KURT-R. SJOBFRG

Acting Auditor General

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INTRODUCTION

We have divided this report into two volumes. Volume 1 contains information on fiscal and operational trends among public transit operators statewide. We also provide information on these trends for operators statewide classified according to the number of passengers they carried in fiscal year 1987-88. In addition, Volume 1 contains information on maintenance trends for eight operators we reviewed in more depth. Moreover, it contains information on private sector participation in the provision of public transit services; bus driver training practices, wages and benefits, and hiring and preventable accident rates; and procurement practices for certain Volume 2 (this volume) presents more detailed information operators. on the eight individual operators that we reviewed in more depth.

For each of the eight operators, this volume provides a description of the operator's fiscal condition and operational and maintenance performance over time. This volume also provides information on private sector participation for two operators and information on bus driver hiring and training practices and preventable accidents for some of the operators. Moreover, in this volume, we list information for the four larger operators first. Because Volume 2 includes technical terms related to public transit, we have provided a glossary of terms as an appendix.

In selecting the sample of eight operators for review, we chose four from Northern California--the Alameda-Contra Costa Transit District (AC Transit), the San Mateo County Transit District (SamTrans), the Stockton Metropolitan Transit District (SMART), and the City of Vallejo (Vallejo)--and four from Southern California--the Southern California Rapid Transit District (SCRTD), the San Diego Transit Corporation (SDTC), Omnitrans (located in San Bernardino County), and the Torrance Transit System (Torrance). Table i-1 shows the eight operators we reviewed, the number of passengers they served, and their operating costs for fiscal year 1987-88.

TABLE i-1

NUMBER OF PASSENGERS AND OPERATING COSTS
FOR EIGHT PUBLIC TRANSIT OPERATORS
FISCAL YEAR 1987-88

Transit Operator	Number of <u>Passengers</u>	Operating Costs
Southern California Rapid Transit District	416,634,000	\$508,342,000
Alameda-Contra Costa Transit District	57,224,000	122,310,000
San Diego Transit Corporation	26,434,000	40,615,000
San Mateo County Transit District	18,048,000	34,544,000
Omnitrans, located in San Bernardino County	3,865,000	10,954,000
Torrance Transit System	2,797,000	5,789,000
Stockton Metropolitan Transit District	2,565,000	5,719,000
City of Vallejo	1,323,000	2,072,000
Total	528,890,000	\$730,345,000

Sources: Section 15 reports of the Urban Mass Transportation Administration and the annual report of financial transactions of transit operators to the State Controller's Office for fiscal year 1987-88.

Of the various forms of public transit, bus service is the most widely used. Of California's 241 public transit operators in fiscal year 1987-88, 109 operated bus service. In fiscal year 1987-88, bus service for the 109 operators carried 842 million passengers, 75.9 percent of the 1.11 billion passengers carried by public transit statewide. The eight operators we reviewed carried nearly 529 million

bus service passengers, or 62.8 percent of the 842 million passengers carried by bus service in fiscal year 1987-88. The SCRTD, the largest operator in the State, accounted for nearly 417 million of these passengers.

In choosing the eight operators for review, we selected operators that had differences in annual passengers carried, their location within the State, and the extent to which they contracted with for the provision of bus private contractors service and demand-response bus service. Because of these differing characteristics and the differences in other characteristics, such as the size of the area that each operator served, we did not compare the fiscal condition and operational and maintenance performance of one transit operator with the fiscal condition and performance of another. Instead, we analyzed changes in individual operators' performance over time, generally from fiscal year 1983-84 through fiscal year 1987-88, using transit operators' audited financial statements and annual reports to the State Controller's Office and the federal Urban Mass Transportation Administration. We did not, however, audit the data presented in this report. For two operators, we used fiscal year 1984-85 as the first year. For one of these operators, reliable data for fiscal year 1983-84 were not available; for the other operator, employee work stoppages resulted in unusual statistics for that year. The percent changes and unit changes that we present are calculated using the first and last years of our review period.

To analyze financial and operational performance trends, we compared changes in transit costs and cost-related indicators with changes in the consumer price index (CPI), which is used as a measurement of inflation. Although there may be limitations inherent in this comparison, it provides an indication of an operator's performance compared with the effect of inflation during our review period. In addition, we observed that transit operators themselves use changes in the CPI as a basis for comparing changes in transit costs. We obtained both statewide and area-specific CPI data from the U.S. Department of Labor, Bureau of Labor Statistics.

We compared the trends for each of the eight operators with the trends of operators statewide. To calculate data for statewide operations, we combined the data we collected for the eight operators with statistics reported to the State Controller's Office by other bus service operators in the State. Further, for all operators, except the SCRTD and AC Transit, we compared the operator's statistics and trends with statewide data including the SCRTD and with statistics and trends of other operators of a comparable size. For AC Transit, we compared the operator's statistics and trends with statewide data including the SCRTD. Finally, the SCRTD served approximately 50 percent of all the bus service passengers in the State; consequently, we compared SCRTD statistics and trends with statewide data both including and excluding the SCRTD.

ANALYSIS

Ι

TRENDS AND PRACTICES OF THE SOUTHERN CALIFORNIA RAPID TRANSIT DISTRICT¹

The Legislature created the Southern California Rapid Transit District (SCRTD) in 1964 to provide a comprehensive transit system for Los Angeles County. The SCRTD also serves parts of Riverside, San Bernardino, and Orange counties. The SCRTD is the largest bus service operator in the State. The SCRTD's service area covers more square miles and serves a population of more than than 1,400 7.1 million. In fiscal year 1987-88, the SCRTD operated more than 2,500 buses that provided transit services to approximately 416.6 million passengers.

The SCRTD's regional transportation planning agency (RTPA) and metropolitan planning organization (MPO) is the Southern California Association of Governments (SCAG). SCAG, in conjunction with the Los Angeles County Transportation Commission (LACTC), allocates to area transit operators federal subsidies, state subsidies, and the local Transportation Development Act (TDA) subsidies. The LACTC also allocates money from an additional one-half cent county sales tax approved by local voters (Proposition A).

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 $^{^{}m l}$ See the Appendix for definitions of technical terms used.

An 11-member board of directors appointed by locally elected officials governs the SCRTD. The Los Angeles County Board of Supervisors appoints five directors; the Mayor of Los Angeles appoints two with the concurrence of the City Council; and a committee representing the other 83 cities in the district selects four members. The SCRTD board is responsible for establishing SCRTD policies and appointing a general manager who oversees the daily operations of the SCRTD.

In fiscal year 1988-89, the general manager submitted to the board for its approval a proposed budget of \$502.8 million for bus service operations and an additional \$438.2 million for capital funds. The capital funding budget includes \$305.6 million for construction of a new rail system.

The SCRTD's operating costs increased faster than operating revenues and subsidies from fiscal year 1983-84 through fiscal year 1987-88. Costs increased 18.6 percent while operating revenues and subsidies increased only 15.6 percent. To contain costs, the SCRTD reduced bus service from fiscal year 1983-84 through fiscal year 1987-88 while increasing passenger fares. These factors contributed to a 10.5 percent decrease in the number of passengers from fiscal year 1983-84 through fiscal year 1987-88 and a 32.6 percent increase in operating costs per passenger. Because of the need to contain costs,

the SCRTD has not been able to increase bus service to meet the increasing need for transit services as the region grows and congestion and air quality worsen.

FINANCIAL TRENDS

For three of the five years we reviewed, the SCRTD's operating costs exceeded the operating revenues and subsidies it received, resulting in operating deficits. As shown in Table I-1, from fiscal year 1983-84 through fiscal year 1987-88, costs increased 18.6 percent (\$79.7 million) while operating revenues and subsidies increased only 15.6 percent (\$66.8 million). For example, in fiscal year 1987-88, the SCRTD received \$494.9 million in operating revenues and subsidies and had operating costs of \$508.3 million, which resulted in an operating deficit of \$13.4 million.

TABLE I-1

OPERATING REVENUES, SUBSIDIES, AND COSTS
FOR BUS SERVICES OPERATED BY THE
SOUTHERN CALIFORNIA RAPID TRANSIT DISTRICT
FISCAL YEAR 1983-84 THROUGH FISCAL YEAR 1987-88
(UNAUDITED)
(IN THOUSANDS)

Increase (Decrease)	Percent	57.0%	66.2 (18.2) (99.5) (2.3)	15.6	24.7 1.0 50.8		18.6	2365.7		22.7
Increas	Dollar	\$ 66,852 (8,937)	53,026 (25,786) (17,164) (1,170)	66,821	79,723 629 5,433	(1,469) (4,60 <u>2</u>)	79,714	(12,893) (8,868)	13,669	\$ (8,092
	1987-88 ^a	\$184,229 12,527	133,178 115,668 78 49,224	494,904	402,031 63,360 16,127 0	8,298 18,526	508,342	(13,438) (43,914)	13,669	\$(43,683)
	1986-87	\$189,335 11,544	115,300 117,521 1,860 54,516	490,076	379,864 51,277 17,274 0	10,283	490,076	0 (42,313)		\$(42,313)
	1985-86	\$196,142 19,966	138,041 86,448 7,391 51,429	499,417	374,807 60,138 15,856 0	13,499	495,764	3,653 (39,833)		<u>\$(36,180)</u>
	1984-85	\$126,104 21,221	108,251 144,471 15,275 49,083	464,405	350,777 59,834 16,472 0	6,067	465,672	(1,267) (55,140)		\$(56,407)
	1983-84	\$117,377 21,464	80,152 141,454 17,242 50,394	428,083	322,308 62,731 10,694 0	9,767	428,628	(545) (35,046)		\$(35,591)
		Operating Revenues and Subsidies Passenger fare revenue Other revenue	Development Act subsidies Other local subsidies State subsidies Federal subsidies	Total Operating Revenues and Subsidies	Operating Costs Wages and benefits Materials and supplies Services Purchased transportation	Interest Other	Total Operating Costs	Operating Surplus (Deficit) Depreciation Expense One-Time Inventory	Adjustment	Surplus (Deficit) With Depreciation

Sources: Section 15 reports of the Urban Mass Transportation Administration, the operator's 1988-89 budget, and auditors' calculations.

^a Data for fiscal year 1987-88 cover 53 weeks rather than the normal 52 weeks. Therefore, to compare figures for this 53-week fiscal year with figures for fiscal year 1983-84 through fiscal year 1986-87, which are 52-week fiscal years, we reduced the 1987-88 figures reported in the Section 15 reports of the Urban Mass Transportation Administration to 52/53rds.

The major reason for the increase in the SCRTD's costs was a 24.7 percent increase in wages and benefits from \$322.3 million in fiscal year 1983-84 to \$402 million in fiscal year 1987-88. During the same period, the consumer price index (CPI) for the area in which the SCRTD operates increased 18.0 percent. While employee wages increased 18.6 percent, only slightly more than the CPI from fiscal year 1983-84 through fiscal year 1987-88, benefits increased 37.8 percent during the same period.

The major factors contributing to the increase in benefit costs were payments for workers' compensation and medical insurance. Specifically, the cost of workers' compensation increased 117.0 percent (\$16.8 million) from fiscal year 1983-84 through fiscal year 1987-88 while the cost of medical insurance increased 60.3 percent (\$13.1 million).

Further, absenteeism contributed to the cost of wages and benefits. In 1986, a consultant for the SCRTD estimated that SCRTD full-time equivalent (FTE) employees were absent an average of 32 days per FTE employee per year. According to the consultant, this absenteeism cost the SCRTD an estimated \$18.6 million annually. However, the SCRTD's current focus on controlling absenteeism has improved attendance. Specifically, in 1988, FTE employees were absent an average of 24.2 days per FTE employee per year, a 24.4 percent decrease from the 1986 rate. The SCRTD estimates that improved attendance will save approximately \$7.7 million in annual costs.

Table I-2 shows the components of the SCRTD's operating costs for fiscal years 1983-84 and 1987-88.

TABLE I-2

PROPORTIONS OF THE VARIOUS COMPONENTS OF OPERATING COSTS FOR BUS SERVICES OPERATED BY THE SOUTHERN CALIFORNIA RAPID TRANSIT DISTRICT FISCAL YEARS 1983-84 AND 1987-88 (UNAUDITED)

	<u>1983-84</u>	<u> 1987-88</u>
Operating Costs		
Wages and benefits	75.2%	79.1%
Materials and supplies	14.6	12.5
Services	2.5	3.2
Purchased transportation	0.0	0.0
Interest	2.3	1.6
Other	<u>5.4</u>	3.6
Total Operating Costs	<u>100.0</u> %	100.0%

Source: Calculated from operating cost figures on Table I-1.

In contrast to the increase of 18.6 percent in the SCRTD's operating costs from fiscal year 1983-84 through fiscal year 1987-88, the SCRTD's operating revenues and subsidies increased only 15.6 percent. A significant part of the increase in revenues and subsidies came from increases in the SCRTD's local funding. These

increases include a 57.0 percent increase in passenger fare revenue from \$117.4 million to \$184.2 million and a 66.2 percent increase in local TDA subsidies from \$80.2 million to \$133.2 million. In contrast, state subsidies decreased 99.5 percent from \$17.2 million to only \$78,000, and federal subsidies decreased 2.3 percent from \$50.4 million to \$49.2 million.

Subsidies from other local sources, including the local one-half cent sales tax (Proposition A), also decreased 18.2 percent from \$141.5 million to \$115.7 million. Proposition A, which voters approved in 1980, required the SCRTD to lower the base passenger fare to \$0.50. In return, the SCRTD received Proposition A funds to make up for the loss of passenger fare revenue. The lowered fare contributed to an increase in the number of passengers to a peak of 497.2 million in fiscal year 1984-85. However, in 1985-86, Proposition A funds allocated to the SCRTD decreased 40.2 percent. Specifically, the SCRTD received more than \$143.0 million in Proposition A funds in 1984-85 and only \$85.5 million in 1985-86.

To make up for lost subsidies, the SCRTD reduced service and increased its base passenger fare in July 1985 to \$0.85. The higher fare contributed to a temporary increase in passenger fare revenue to \$196.1 million in fiscal year 1985-86. However, the fare increase also contributed to a 16.2 percent decrease in the number of passengers from a high of 497.2 million in fiscal year 1984-85, before the fare increase, to a low of 416.6 million in fiscal year 1987-88. As a

result of the decrease in the number of passengers, passenger fare revenue decreased 6.1 percent to \$184.2 million from fiscal year 1985-86 through fiscal year 1987-88. On July 1, 1988, to provide a balanced budget for fiscal year 1988-89 without major service reductions, the SCRTD raised the base passenger fare to \$1.10. As a result of this new fare increase, the SCRTD expects a steady decline in ridership over the next 12 to 24 months. Table I-3 illustrates the proportions of the SCRTD's sources of operating revenues and subsidies from fiscal year 1983-84 through fiscal year 1987-88.

TABLE I-3

PROPORTIONS OF THE VARIOUS COMPONENTS OF OPERATING REVENUES AND SUBSIDIES FOR BUS SERVICES OPERATED BY THE SOUTHERN CALIFORNIA RAPID TRANSIT DISTRICT FISCAL YEARS 1983-84 AND 1987-88 (UNAUDITED)

	<u> 1983-84</u>	<u> 1987-88</u>
Operating Revenues and Subsidies		
Passenger fare revenue	27.4%	37.2%
Other revenue	5.0	2.5
Local Transportation Development Act subsidies	18.7	26.9
Other local subsidies	33.1	23.4
State subsidies	4.0	0.0
Federal subsidies	11.8	10.0
Total Operating Revenues and Subsidies	<u>100.0</u> %	100.0%

Source: Calculated from operating revenues and subsidies figures on Table I-1.

Passenger fare revenue accounted for 37.2 percent of the SCRTD's operating revenues and subsidies in fiscal year 1987-88. In contrast, for transit operators statewide, including the SCRTD, passenger fare revenue accounted for 32.4 percent of revenues and

subsidies in fiscal year 1987-88.² Passenger fare revenue for the transit operators, excluding the SCRTD, accounted for only 25.7 percent of total operating revenues and subsidies in fiscal year 1987-88.

In addition to funds for operations, the SCRTD received from federal, state, and local sources for fiscal year 1987-88 over \$176.1 million in capital funds for light rail construction, facility construction, and the purchase of buses. The SCRTD owned more capital assets in fiscal year 1987-88 than it did in fiscal year 1983-84. For example, since December 1985, the SCRTD has spent over \$49.1 million constructing a maintenance facility. These additional capital assets contributed to a 25.3 percent increase in depreciation expense from fiscal year 1983-84 through fiscal year 1987-88. If the SCRTD includes depreciation expense with other costs, the SCRTD shows a net operating deficit each year.

PERFORMANCE TRENDS

The SCRTD's performance, as measured by the indicators on Table I-4, generally declined from fiscal year 1983-84 through fiscal year 1987-88. Table I-4 illustrates changes in the SCRTD's performance as measured by five categories of performance statistics and eight performance indicators calculated from these statistics. The SCRTD

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²Our figures for transit operators statewide include from 60 to 97 of the 109 transit operators providing bus service in California, depending upon availability of data.

reduced service from fiscal year 1983-84 through fiscal year 1987-88, and the 2.0 percent decrease in vehicle revenue miles shown in Table I-4 reflects this reduction. In contrast, for transit operators statewide, including the SCRTD, vehicle revenue miles increased slightly (1.4 percent). Vehicle revenue miles for the transit operators statewide, excluding the SCRTD, increased 3.4 percent. Further, according to the SCRTD, the 2.5 percent increase in vehicle revenue hours is primarily a result of increased traffic congestion. Specifically, during the last five years, the average speed of the SCRTD's buses decreased 4.5 percent from 13.2 revenue miles per revenue hour in fiscal year 1983-84 to 12.6 revenue miles per revenue hour in fiscal year 1987-88. The average speed of buses decreased 3.6 percent statewide, including the SCRTD.

TABLE I-4

PERFORMANCE STATISTICS AND INDICATORS FOR BUS SERVICES OPERATED BY THE SOUTHERN CALIFORNIA RAPID TRANSIT DISTRICT FISCAL YEAR 1983-84 THROUGH FISCAL YEAR 1987-88

Percent 18.6% (10.5)(8.0)(10.2)(2.0)(12.6)2.5 14.1 32.6 15.8 20.8 Increase (Decrease) (0.4)(8.3)(81.1)(1,830,305)(49,003,823)\$0.30 \$9.56 \$0.96 1,254 \$79,714,000 173,851 Unit 57.6 \$70.25 4.6 713.4 91,200,859 10,143 \$1.22 \$5.57 \$508,342,000 7,236,436 416,633,909 1987-88^a 715.9 \$67.53 92,662,000 436,506,846 60.2 4.7 \$5.29 \$490,076,000 7,256,910 10,137 1986-87 \$70.16 4.9 690.5 \$495,764,000 \$1.10 63.7 \$5.42 10,233 7,066,099 91,395,264 450,378,397 1985-86 UNAUDITED \$66.13 70.6 771.9 \$5.06 \$0.94 5.4 \$465,672,000 91,959,736 7,041,642 497,158,321 1984-85 5.0 62.9 794.5 \$0.92 \$428,628,000 7,062,585 93,031,164 465,637,732 8,889 \$60.69 \$4.61 1983-84 Operating costs per vehicle revenue mile Operating costs per vehicle revenue hour Vehicle revenue hours per FTE employee Non-TDA Related Performance Indicators: Transportation Full-time equivalent (FTE) employees Passengers per vehicle revenue mile Passengers per vehicle revenue hour Operating costs per passenger Development Act (TDA) Related Vehicle revenue miles Performance Indicators: Vehicle revenue hours Performance Statistics Operating costs Passengers

Section 15 reports of the Urban Mass Transportation Administration, annual reports of financial transactions of transit operators to the State Controller's Office, and auditors' calculations. Sources:

(14.1)

(1,474.4)

8,991.5

9,141.0

8,391.4

10,080.0

10,465.9

(0.6)

12.6

12.8

12.9

13.1

13.2

Vehicle revenue miles per vehicle revenue hour

Vehicle revenue miles per FTE employee

^a Data for fiscal year 1987-88 cover 53 weeks rather than the normal 52 weeks. Therefore, to compare figures for this 53-week fiscal year with figures for fiscal year 1983-84 through fiscal year 1986-87, which are 52-week fiscal years, we reduced the 1987-88 figures reported in the Section 15 reports of the Urban Mass Transportation Administration to 52/53rds.

The combination of increasing operating costs and the decrease in the number of passengers from fiscal year 1983-84 through fiscal year 1987-88 resulted in a 32.6 percent increase in operating costs per passenger from \$0.92 in fiscal year 1983-84 to \$1.22 in fiscal year 1987-88. However, for transit operators statewide, including the SCRTD, operating costs per passenger were \$1.38 in fiscal year 1987-88. Operating costs per passenger were \$1.71 for operators statewide, excluding the SCRTD.

Operating costs per vehicle revenue hour increased only 15.8 percent from fiscal year 1983-84 through fiscal year 1987-88, that is, at a rate lower than the 18.0 percent increase in the area CPI. However, in fiscal year 1987-88, the operating costs per vehicle revenue hour of \$70.25 were higher than the costs per vehicle revenue hour of \$61.22 for transit operators statewide, including the SCRTD, and \$51.60 excluding the SCRTD.

The decline in the number of passengers also contributed to the 12.6 percent decline in passengers per vehicle revenue hour from fiscal year 1983-84 through fiscal year 1987-88. However, according to the SCRTD, the reduction to 57.6 passengers per vehicle revenue hour in fiscal year 1987-88 actually reflects an increase in the quality of bus service from the overcrowded 70.6 passengers per vehicle revenue hour in fiscal year 1984-85. In fact, overcrowded buses can result in a reduction in the number of passengers if patrons prefer not to ride standing or are left waiting at bus stops when full buses bypass them.

In fiscal year 1987-88, transit operators statewide, including the SCRTD, carried 42.7 passengers per vehicle revenue hour and, excluding the SCRTD, carried 33.6 passengers per vehicle revenue hour.

Passengers per vehicle revenue mile decreased 8.0 percent from 5.0 in fiscal year 1983-84 to 4.6 in fiscal year 1987-88. In fiscal year 1987-88, for transit operators statewide, including the SCRTD, passengers per vehicle revenue mile decreased 11.1 percent to 3.2 passengers per vehicle revenue mile. In the same year, passengers per vehicle revenue mile decreased 10.7 percent to 2.5 passengers per vehicle revenue mile for operators statewide, excluding the SCRTD.

MAINTENANCE TRENDS

As measured by vehicle maintenance costs per bus, the SCRTD's maintenance efficiency declined. However, as measured by vehicle vehicle mile, its maintenance efficiency maintenance costs per Moreover, as measured by vehicle miles between road calls improved. due to mechanical failure, its effectiveness improved. In addition, as Table I-5 illustrates, from fiscal year 1983-84 through fiscal year 1987-88, vehicle maintenance costs increased only 0.6 percent from \$109,594,483 \$110,276,140 while the area CPI increased to According to the SCRTD, one of the reasons vehicle 18.0 percent. maintenance costs have not increased as rapidly as the area CPI is the SCRTD's more efficient management of bus maintenance made possible by its new maintenance facility. The SCRTD believes it has increased

efficiency at the new maintenance facility through the use of a computerized inventory system. In addition, employee safety features incorporated in the new facility design have decreased the cost of workers' compensation claims filed by vehicle maintenance employees.

TABLE I-5

MAINTENANCE STATISTICS AND INDICATORS
FOR BUS SERVICES OPERATED BY THE
SOUTHERN CALIFORNIA RAPID TRANSIT DISTRICT
FISCAL YEAR 1983-84 THROUGH FISCAL YEAR 1987-88
(UNAUDITED)

						Increase (Decrease)	rease)
	1983-84	1984-85	1985-86	1986-87	1987-88 ^a	Unit	Percent
Vehicle maintenance costs	\$109,594,483	\$114,815,180	\$114,816,174	\$111,051,879	\$110,276,140	\$ 681,657	%9.0
Wages and benefits for vehicle maintenance full-time equivalent (FTE) employees	q	q	\$ 88,771,024	\$ 88,158,631	\$ 93,643,996	\$ 4,872,972 ^b	5.5 ^b
Vehicle maintenance costs as a percentage of total operating costs	25.6%	24.7%	23.2%	22.7%	27.1%		
Vehicle maintenance costs per bus	\$32,329	\$38,894	\$39,133	\$42,225	\$42,726	\$10,397	32.2
Vehicle maintenance costs per vehicle mile	\$1.03	\$1.08	\$1.09	\$1.03	\$1.04	\$0.01	1.0
Number of buses: total fleet	3,390	2,952	2,934	2,630	2,581	(808)	(23.9)
Number of buses: peak fleet	1,992	2,009	1,945	1,965	1,904	(88)	(4.4)
Average age: total fleet (in years)	8.0	8.0	9.0	8.0	8.0	0	0
Average age: peak fleet (in years) ^C	3.0	4.0	5.0	6.0	7.0	4.0	133.3
Vehicle miles	106,163,110	105,820,963	105,550,928	107,780,000	106,173,624	10,514	0
Road calls due to mechanical failure	39,795	36,361	31,152	27,040	26,366	(13,429)	(33.7)
Vehicle miles between road calls due to mechanical failure	2,668	2,910	3,388	3,986	4,027	1,359	50.9
Vehicle miles per bus	31,317	35,847	35,975	40,981	41,137	9,820	31.4
Vehicle maintenance FTE employees	٩ ₋ -	٩	2,185.0	2,547.0	2,704.0	519 ^b	23.8 ^b

Sources: Section 15 reports of the Urban Mass Transportation Administration and auditors' calculations.

^a Data for fiscal year 1987-88 cover 53 weeks rather than the normal 52 weeks. Therefore, to compare figures for this 53-week fiscal year with figures for fiscal years 1983-84 through 1986-87, which are 52-week fiscal years, we reduced the 1987-88 figures reported in the Section 15 reports of the Urban Mass Transportation Administration to 52/53rds.

^b The Section 15 reporting format for vehicle maintenance FTE employees changed beginning with fiscal year 1985-86. Therefore, data between the first two years of our review period and subsequent years may not be comparable. Unit and percent changes are for three years only.

 $^{^{} extsf{C}}$ The age of the peak fleet was computed using the newest buses.

The SCRTD expects vehicle maintenance costs to rise significantly in the future. One major reason for the increase is that graffiti and vandalism to SCRTD buses has recently increased. The SCRTD now pays up to \$800,000 a month to repair this damage. Another factor contributing to the expected increase in vehicle maintenance costs is the new clean air standards for diesel bus exhaust required by the federal Environmental Protection Agency (EPA). These standards become effective in 1991 and require buses purchased after that date to meet the standards. To comply with the standards, the SCRTD is purchasing buses using cleaner fuels such as methanol and compressed natural gas. However, according to the SCRTD, the use of methanol may double the cost of fuel. In addition, alternative fuel buses may cost more to maintain than diesel buses.

Moreover, although the SCRTD's vehicle maintenance costs have increased at a rate slower than the 18.0 percent increase in the area CPI, vehicle maintenance costs per bus increased 32.2 percent from fiscal year 1983-84 through fiscal year 1987-88. This increase is primarily because of a 23.9 percent reduction in the SCRTD's total bus fleet from 3,390 buses in fiscal year 1983-84 to 2,581 buses in fiscal year 1987-88. According to the SCRTD, during fiscal year 1982-83, it purchased 1,662 buses, which resulted in a fleet expansion to 3,390 buses. The SCRTD increased the fleet to accommodate the increased number of passengers due to its fare reduction in 1982. In addition, the SCRTD needed buses to accommodate the demand from the Summer Olympics in 1984. After the Olympics, the SCRTD began disposing of its

older buses. This reduction in fleet size contributed to a 31.4 percent increase in the average number of vehicle miles driven per bus from 31,317 in fiscal year 1983-84 to 41,137 in fiscal year 1987-88, which increased vehicle maintenance costs for each bus.

As measured by vehicle miles between road calls due to mechanical failure, the effectiveness of the SCRTD's maintenance program improved. As Table I-5 illustrates, vehicle miles between road calls due to mechanical failure at the SCRTD increased 50.9 percent from 2,668 vehicle miles between road calls in fiscal year 1983-84 to 4,027 vehicle miles in fiscal year 1987-88. This increase occurred as a result of a 33.7 percent decrease in the number of road calls due to mechanical failure from 39,795 in fiscal year 1983-84 to 26,366 in fiscal year 1987-88.

Although the SCRTD's maintenance efficiency has improved over the last five years, the average age of the SCRTD's peak fleet increased from three years to seven years (133.3 percent). Because of a lack of capital funds to replace buses, the SCRTD may deal with the aging peak fleet by rebuilding some buses. However, according to the SCRTD, although it can rebuild three buses for the same cost as purchasing a new one, this rebuilding is only postponing the problem of an aging fleet of buses. The aging fleet will cause an increase in future maintenance costs.

BUS DRIVER HIRING, TRAINING, AND OTHER DATA

The SCRTD required bus driver applicants to meet the basic requirements discussed in Volume 1 of this report. These requirements included the following: being at least 21 years of age; having a California driver's license; passing a physical examination; providing the operator with a driving history prepared by the Department of Motor Vehicles; passing a criminal history check; and passing a written test.

Like the other operators we reviewed, the SCRTD reviewed applicants' driving and criminal histories. The SCRTD disqualified applicants if they failed to report a felony or misdemeanor conviction or if they had more than three moving violations in the previous five years. The SCRTD also disqualified applicants if, in the previous five years, they had been convicted of reckless driving, vehicular manslaughter, hit and run, or driving under the influence of drugs or alcohol. However, the SCRTD screened applicants with any other felony convictions on a case-by-case basis, depending on the type of felony.

The SCRTD administered a written test to applicants that measured observational skills. Further, the SCRTD tested applicants' physical ability to operate bus equipment, gave applicants a psychological evaluation, and required applicants to have previous work experience involving public contact or bus driving.

As discussed in Volume 1 of this report, the SCRTD had a bus driver training program that is similar to those of the other operators we reviewed. The training program lasted for 227 hours and consisted of 54 hours of classroom instruction and 173 hours on buses. Of the hours spent on buses, drivers spent approximately 73 hours observing trainers and approximately 100 hours driving. After the applicants completed the driver training program and the SCRTD hired them, the SCRTD evaluated each driver's overall performance once a year. In addition, the SCRTD required remedial training when bus drivers returned from long absences, had preventable or serious accidents, or whenever management believed a driver required more training.

The number of preventable accidents involving SCRTD drivers decreased 8.0 percent from 839 preventable accidents in fiscal year 1985-86 to 772 in fiscal year 1987-88. (Table I-6 shows preventable accident statistics and indicators from fiscal year 1985-86 through fiscal year 1987-88.) In addition, the number of actual miles between preventable accidents for the SCRTD increased from 125,806 in fiscal year 1985-86 to 140,175 in fiscal year 1987-88. Finally, in fiscal year 1987-88, preventable accidents accounted for only 16.7 percent of the SCRTD's total accidents. Volume 1 of this report provides an overall discussion of preventable accidents.

TABLE I-6

PREVENTABLE ACCIDENT STATISTICS AND INDICATORS FOR BUSES OPERATED BY THE SOUTHERN CALIFORNIA RAPID TRANSIT DISTRICT FISCAL YEAR 1985-86 THROUGH FISCAL YEAR 1987-88 (UNAUDITED)

	1985-86	1986-87	<u>1987-88^a</u>
Vehicle miles	105,550,928	107,780,000	108,215,424
Preventable accidents	839	822	772
Vehicle miles between preventable accidents	125,806	131,119	140,175
Number of drivers involved in preventable accidents	743	752	690
Average number of preventable accidents per driver with preventable accidents	1.13	1.09	1.12
Numbers of accidents	4,517	6,064	4,620
Preventable accidents as a percentage of total accidents	18.6%	13.6%	16.7%

Sources: Section 15 reports of the Urban Mass Transportation Administration, operator data, and auditors' calculations.

^a Data for fiscal year 1987-88 cover 53 weeks.

TRENDS AND PRACTICES OF THE ALAMEDA-CONTRA COSTA TRANSIT DISTRICT 1

The Alameda-Contra Costa Transit District (AC Transit) is organized under the California Public Utilities Code. In fiscal year 1987-88, AC Transit operated over 800 buses and provided transit services to approximately 57 million passengers in Alameda and Contra Costa counties, and, to a lesser extent, to passengers in San Mateo and San Francisco counties. AC Transit's regional transportation planning agency and metropolitan planning organization is the Metropolitan Transportation Commission (MTC), which allocates federal and Transportation Development Act (TDA) subsidies to transit operators in the Bay Area. In addition, the MTC also allocates to AC Transit a portion of a state-legislated local sales tax (Assembly Bill 1107) to provide transit service. In addition, the MTC approves AC Transit's regional transportation improvement program, based upon which AC Transit applies for federal funds.

AC Transit is governed by a board of seven directors, who are elected by the voters of Alameda and Contra Costa counties. The board of directors is responsible for administering AC Transit's affairs and approving its operating budget, which had total operating revenues and

 $^{^{1}\}mathrm{See}$ the Appendix for definitions of technical terms used.

subsidies of \$122,995,000 and total operating costs of \$122,310,000 for fiscal year 1987-88. The board of directors appoints a general manager who is responsible for the operations of AC Transit. In fiscal year 1987-88, the general manager oversaw the activities of approximately 2,000 full-time equivalent (FTE) employees, of whom approximately 1,400 were bus drivers.

During the five-year period of our review, from fiscal year 1983-84 through fiscal year 1987-88, AC Transit experienced significant financial, performance, and maintenance difficulties. As cited in the following sections, the number of passengers decreased substantially from fiscal year 1983-84 through fiscal year 1987-88, and AC Transit reduced its total number of vehicle revenue miles. However, despite the reduction in service, the cost of AC Transit's bus operations during the same period increased at a rate significantly greater than the area's consumer price index (CPI). Decreased revenues from passenger fares and escalating operating costs contributed to annual operating costs exceeding annual operating revenues and subsidies for two of the five fiscal years we reviewed. When such deficits occurred, Transit used its existing cash and investments to fund the AC difference. In March 1988, the Office of the Auditor General issued a report entitled "The Alameda-Contra Costa Transit District's Financial and Administrative Controls Need Improvement," Report P-767, which concluded that AC Transit had insufficient control over its financial operations. Weaknesses in AC Transit's budgeting process contributed

to its financial difficulties. AC Transit is taking action to correct its budgeting deficiencies and improve its financial and administrative controls.

FINANCIAL_TRENDS

While ridership declined 23.8 percent from fiscal year 1983-84 through fiscal year 1987-88, AC Transit's operating costs increased 26.8 percent, a rate of increase that was substantially higher than the 15.8 percent increase in the area's CPI. As Table II-1 shows, AC Transit's operating costs increased from \$96,455,000 in fiscal year 1983-84 to \$122,310,000 in fiscal year 1987-88.

Several factors contributed to AC Transit's increased operating costs. The most significant factor was its inability to control wages and benefits, the single largest expense item. Wages and benefits comprised approximately three-fourths of the total increase in operating costs from fiscal year 1983-84 through fiscal year 1987-88. increased 25.4 percent from \$75,308,000 to benefits Wages and \$94,447,000. This cost increase was due in part to AC Transit's deficiencies in scheduling bus drivers' work assignments. October 1988 study, consultants to AC Transit reported that AC Transit did not reduce the number of drivers in excess of those required to conduct its bus service during fiscal years 1986-87 and 1987-88. The consultants reported that, during these two years, AC Transit continued to increase the size of its work force when scheduled service remained

constant or was reduced. The consultants also noted that, at times, AC Transit employed 100 to 200 more drivers than required to conduct service. In our March 1988 report, we noted that the total number of AC Transit bus drivers exceeded the budgeted number of drivers for the first six months of fiscal year 1987-88. The number of excess drivers ranged from 123 in July 1987 to 34 in December 1987. However, in fiscal year 1987-88, AC Transit began implementing an early retirement plan, which resulted in numerous drivers retiring during fiscal years 1987-88 and 1988-89.

TABLE II-1

OPERATING REVENUES, SUBSIDIES, AND COSTS
FOR BUS SERVICES OPERATED BY THE
ALAMEDA-CONTRA COSTA TRANSIT DISTRICT
FISCAL YEAR 1983-84 THROUGH FISCAL YEAR 1987-88
(UNAUDITED)
(IN THOUSANDS)

Increase (Decrease)

Percent	(3.5)% 61.8	58.5 52.6 (82.7) (10.8)	23.7	25.4 (2.9) 75.2 (100.0) 1,254.6	26.8	(77.0) 128.4	514.4
Dollar	\$ (1,097) 6,131	9,297 14,842 (4,766) (848)	23,559	19,139 (353) 2,715 (50) 1,631 2,773	25,855	(2,296) (8,447) (7,766)	\$(18,509)
1987-88	\$ 30,676 16,053	25,180 43,077 994 7,015	122,995	94,447 11,844 6,323 0 1,761 7,935	122,310	685 (15,026) (7,76 <u>6</u>)	\$(22,107)
1986-87	\$ 32,216 14,871	24,505 34,567 434 7,715	114,308	92,778 12,462 5,399 76 73 8,314	119,102	(4,794)	\$(19,254)
1985-86	\$ 30,537 15,081	28,043 27,162 2,260 8,250	111,333	84,523 13,961 4,578 68 3	111,112	221 (16,976)	\$(16,755)
1984-85	\$ 30,691 13,599	20,199 26,026 3,093 8,112	101,720	78,925 12,876 4,957 0 78 7,939	104,775	(3,055)	\$(19,641)
1983-84	\$31,773 9,922	15,883 28,235 5,760 7,863	99,436	75,308 12,197 3,608 50 130 5,162	96,455	2,981 (6,579)	\$(3,598)
	Operating Revenues and Subsidies Passenger fare revenue Other revenue	Local Iransportation Development Act subsidies Other local subsidies State subsidies Federal subsidies	Total Operating Revenues and Subsidies	Operating Costs Wages and benefits Materials and supplies Services Purchased transportation Interest Other	Total Operating Costs	Operating Surplus (Deficit) Depreciation Expense Nonrecurring Expense	Surplus (Deficit) With Depreciation and Nonrecurring Expense

Sources: Section 15 reports of the Urban Mass Transportation Administration, annual reports of financial transactions of transit operators to the State Controller's Office, audited financial statements, and auditors' calculations.

The cost of high employee absenteeism also contributed to the 25.4 percent increase in wages and benefits. The consultants to AC Transit noted a 12.5 percent increase in bus driver absenteeism between fiscal years 1986-87 and 1987-88. In its budget for fiscal 1988-89, AC Transit estimated that absenteeism costs over year \$9,000,000 annually in overtime and "extraboard" drivers. When drivers do not work their scheduled shifts, an operator must use replacement drivers to maintain service. The operator either calls extraboard drivers (who are extra full-time drivers paid for coming in to work to cover for drivers that do not work their scheduled shifts) or pays its regular drivers overtime wages at one and one-half times their regular rates to work the extra shifts. According to AC Transit, during the first five months of 1988, AC Transit's bus drivers were absent an average of three days a month, which equates to almost two months per year per employee.

Despite overall reductions in the number of FTE employees and vehicle revenue miles during the five-year period of our review, overtime wages rose 15.4 percent from \$3,294,000 in fiscal year 1983-84 to \$3,802,900 in fiscal year 1987-88. From fiscal year 1983-84 through fiscal year 1987-88, overtime wages rose from 9.8 percent to 10.2 percent of the total wages AC Transit paid to its drivers. These overtime percentages were the highest of all the overtime percentages for transit operators in our in-depth review of eight transit operators. In April 1988, AC Transit implemented a program to encourage employee attendance through absenteeism counseling.

In addition to absenteeism, other factors contributed to the 25.4 percent increase in wages and benefits. From fiscal year 1983-84 through fiscal year 1987-88, the basic hourly wage rate of AC Transit's bus drivers increased from \$12.21 per hour to \$14.27 per hour, an increase of 16.9 percent. AC Transit also hired additional maintenance staff for a new maintenance facility and realized increases in the costs of pension and medical plans and workers' compensation offered as fringe benefits. Overall, fringe benefits increased 41.0 percent during the review period.

An increase in the costs of services, which rose 75.2 percent from \$3,608,000 in fiscal year 1983-84 to \$6,323,000 in fiscal year 1987-88, also contributed to operating cost increases. According to AC Transit, these services included the following: consultant services to address AC Transit's operating and financial problems, consultant services to install new automated information systems, and legal services for special projects such as the loss of the Bay Area Rapid Transit District (BART) express contract. Also, the operator stated insurance premiums increased over that casualty and liability 400 percent from fiscal year 1983-84 through fiscal year 1987-88 because of increases in insured property values, increases in workers' compensation claims, and general inflation. The increase in premiums, in part, increased AC Transit's total casualty and liability expenses more than 105 percent during the five-year review period. Finally, according to AC Transit, other factors that contributed to operating cost increases were increased interest expenses related to the purchase

of a general office building, cost increases associated with the general office building, and the opening of a new maintenance facility and four operating divisions, which AC Transit states led to increases in the purchase of materials and supplies and in costs for utilities.

Table II-2 shows the components of AC Transit's operating costs for fiscal years 1983-84 and 1987-88.

TABLE II-2

PROPORTIONS OF THE VARIOUS COMPONENTS OF OPERATING COSTS FOR BUS SERVICES OPERATED BY THE ALAMEDA-CONTRA COSTA TRANSIT DISTRICT FISCAL YEARS 1983-84 AND 1987-88 (UNAUDITED)

	<u>1983-84</u>	<u>1987-88</u>
Operating Costs		
Wages and benefits	78.1%	77.2%
Materials and supplies	12.7	9.7
Services	3.7	5.2
Purchased transportation	0.0	0.0
Interest	0.1	1.4
Other	<u>5.4</u>	6.5
Total Operating Costs	100.0%	100.0%

Source: Calculated from operating cost figures on Table II-1.

As shown in Table II-1, AC Transit's total operating costs increased slightly more than its operating revenues and subsidies. In fiscal year 1987-88, AC Transit received a total of \$122,995,000 in operating revenues and subsidies, 23.7 percent more than the \$99,436,000 it received in fiscal year 1983-84. However, AC Transit's total operating costs increased 26.8 percent from \$96,455,000 in fiscal year 1983-84 to \$122,310,000 in fiscal year 1987-88, creating operating deficits for two of the five fiscal years.

Moreover, as Table II-3 shows, AC Transit shifted from a reliance on federal and state subsidies and passenger fares to a reliance on local subsidies. During the review period, federal subsidies decreased 10.8 percent, which, according to AC Transit, is because of the recent federal government policy to decrease federal assistance to public transit operators. State operating assistance to AC Transit decreased 82.7 percent during the same period.

TABLE II-3

PROPORTIONS OF THE VARIOUS COMPONENTS OF OPERATING REVENUES AND SUBSIDIES FOR BUS SERVICES OPERATED BY THE ALAMEDA-CONTRA COSTA TRANSIT DISTRICT FISCAL YEARS 1983-84 AND 1987-88 (UNAUDITED)

	<u> 1983-84</u>	<u> 1987-88</u>
Operating Revenues and Subsidies		
Passenger fare revenue	31.9%	24.9%
Other revenue	10.0	13.1
Local Transportation Development Act subsidies	16.0	20.5
Other local subsidies	28.4	35.0
State subsidies	5.8	0.8
Federal subsidies	<u>7.9</u>	<u>5.7</u>
Total Operating Revenues and Subsidies	100.0%	100.0%

Source: Calculated from operating revenues and subsidies figures on Table II-1.

From fiscal year 1983-84 through fiscal year 1987-88, AC Transit's passenger fare revenue decreased 3.5 percent. Although AC Transit stated that it increased its base adult fare by 25.0 percent from \$0.60 to \$0.75 and its base adult transbay fare by 20.0 percent from \$1.25 to \$1.50 during the period of our review, the number of passengers decreased 23.8 percent from 75,085,801 in fiscal year 1983-84 to 57,224,091 in fiscal year 1987-88. In addition, AC Transit stated that it reduced transbay service to San Francisco and increased

local feeder service, which delivers passengers from various locations to BART terminals, to encourage passengers to ride BART. Although AC Transit received increased payments from BART for passenger transfers, these payments were not included as passenger fare revenue on the Section 15 reports of the Urban Mass Transportation Administration. However, we have included these payments in the category of other revenue in Table II-1.

Passenger fare revenue accounted for 24.9 percent of AC Transit's operating revenues and subsidies for fiscal year 1987-88. In contrast, for transit operators statewide, passenger fare revenue accounted for 32.4 percent of operating revenues and subsidies for fiscal year 1987-88.²

AC Transit receives a variety of local subsidies. These local subsidies include local TDA subsidies, local sales taxes based on voter-approved county measures, and local property taxes. AC Transit's local TDA subsidies increased 58.5 percent from \$15,883,000 to \$25,180,000 from fiscal year 1983-84 through fiscal year 1987-88. In addition, AC Transit's other local subsidies, including local sales taxes based on a voter-approved county measure (Measure B), Assembly Bill 1107, and property taxes, increased 52.6 percent from

²Our figures for transit operators statewide include from 60 to 97 of the 109 transit operators providing bus service in California, depending on the availability of data.

\$28,235,000 to \$43,077,000 during the period of our review. AC Transit received a 7.1 percent decrease in funding for Assembly Bill 1107 sales taxes from fiscal year 1983-84 through fiscal year 1987-88, but in fiscal year 1987-88, it received an additional \$5,950,000 as the result of the recently voter-approved Alameda County Measure B, which authorized the Alameda County Transportation Authority to impose a one-half cent local sales tax for highway and public transportation improvements.

AC Transit projects that it will receive only \$100,000 in state subsidies during fiscal year 1988-89, 89.9 percent less than it received in fiscal year 1987-88. Further, from fiscal year 1983-84 through fiscal year 1987-88, AC Transit's federal subsidies decreased \$848,000 from \$7,863,000 to \$7,015,000. AC Transit also stated that MTC projects local TDA subsidies to increase 5.0 to 7.0 percent annually during the next several years. Additionally, AC Transit projects property tax revenues to increase about 7 percent annually during the next several years. However, according to AC Transit, the passage of Proposition 13 resulted in an annual loss of approximately \$30,000,000 in property tax revenues.

AC Transit's other revenue increased 61.8 percent or \$6,131,000 from fiscal year 1983-84 through fiscal year 1987-88. This other revenue consists of reimbursements from BART for the cost of AC Transit providing local feeder service to the BART stations, in addition to contract service and advertising revenue, interest, and

other income. According to AC Transit, the most significant components of the increase in other revenue were a 443 percent increase in BART transfer revenues and a 30 percent increase in the BART express contract. AC Transit anticipates that BART transfer revenues will continue to increase if the MTC and BART agree with AC Transit's rationale and methodology for determining these payments. However, AC Transit stated that the BART express contract was terminated as of January 1989. According to AC Transit, the loss of this contract will result in a revenue reduction of \$7,500,000 starting in fiscal year 1988-89.

funds for operations, as displayed in Ιn addition to Table II-1, in fiscal year 1987-88, AC Transit received \$16,135,623 in revenues for capital expenditures from local, state, and federal sources to construct facilities and purchase buses. The revenues for capital expenditures decreased from \$22,085,670 in fiscal year 1983-84 and \$36,405,453 in fiscal year 1984-85 to \$16,135,632 in fiscal year During this time, AC Transit constructed a new general office building and two new facilities at Hayward and Oakland, as well as reconstructing three facilities at Richmond, Emeryville, and East Oakland. AC Transit projects that this major construction program will complete by the end of fiscal year 1988-89. be Additionally, AC Transit has an ongoing bus replacement program funded through capital expenditures that provides for the replacement of 56 buses each vear. Because of AC Transit's expenditure of capital funds on facilities and buses, AC Transit's depreciation expense increased 128.4 percent over this five-year period. If depreciation expense is added to AC Transit's other costs, AC Transit shows deficits during the last five years that range from \$3,598,000 to \$22,107,000.

PERFORMANCE TRENDS

AC Transit's performance, as measured by most of the indicators on Table II-4, declined from fiscal year 1983-84 through fiscal year 1987-88. Table II-4 illustrates the trends in five performance statistics and eight performance indicators calculated from those statistics. As cited previously, AC Transit's operating costs increased 26.8 percent from fiscal year 1983-84 through fiscal year 1987-88, and it served 23.8 percent fewer passengers. In addition, AC Transit's buses drove 6.4 percent fewer vehicle revenue miles. However, AC Transit drove 14.3 percent more vehicle revenue hours, indicating that it took more time for AC Transit drivers to complete the reduced miles of service.

TABLE II-4

PERFORMANCE STATISTICS AND INDICATORS
FOR BUS SERVICES OPERATED BY THE
ALAMEDA-CONTRA COSTA TRANSIT DISTRICT
FISCAL YEAR 1983-84 THROUGH FISCAL YEAR 1987-88
(UNAUDITED)

						Increase (Decrease)	crease)
	1983-84	1984-85	1985-86	1986-87	1987-88	Unit	Percent
Performance Statistics							
Operating costs	\$96,455,000	\$104,775,000	\$111,112,000	\$119,102,000	\$122,310,000	\$25,855,000	26.8%
Vehicle revenue hours	1,651,241	1,678,282	1,947,675	1,887,204	1,887,346	236,105	14.3
Vehicle revenue miles	27,364,512	26,900,309	26,296,822	26,791,225	25,604,503	(1,760,009)	(6.4)
Passengers	75,085,801	72,818,305	67,257,207	60,277,411	57,224,091	(17,861,710)	(23.8)
Full-time equivalent (FTE) employees	2,163	2,171	2,201	2,128	1,956	(207)	(9.6)
Performance Indicators: Transportation Development Act (TDA) Related							
Operating costs per passenger	\$1.28	\$1.44	\$1.65	\$1.98	\$2.14	\$0.86	67.2
Operating costs per vehicle revenue hour	\$58.41	\$62.43	\$57.05	\$63.11	\$64.81	\$6.40	11.0
Passengers per vehicle revenue hour	45.5	43.4	34.5	31.9	30.3	(15.2)	(33.4)
Passengers per vehicle revenue mile	2.7	2.7	2.6	2.2	2.2	(0.5)	(18.5)
Vehicle revenue hours per FTE employee	763.4	773.0	884.9	886.8	964.9	201.5	26.4
Performance Indicators: Non-TDA Related							
Operating costs per vehicle revenue mile	\$3.52	\$3.89	\$4.23	\$4.45	\$4.78	\$1.26	35.8
Vehicle revenue miles per FTE employee	12,651.2	12,390.7	11,947.7	12,589.9	13,090.2	439.0	3.5
Vehicle revenue miles per vehicle revenue hour	16.6	16.0	13.5	14.2	13.6	(3.0)	(18.1)

Sources: Section 15 reports of the Urban Mass Transportation Administration, annual reports of financial transactions of transit operators to the State Controller's Office, and auditors' calculations.

From fiscal year 1983-84 through fiscal year 1987-88, the number of AC Transit's passengers decreased 23.8 percent. However, the number of bus passengers for transit operators statewide decreased an average of 11.6 percent during this period. AC Transit stated that the number of passengers decreased in fiscal year 1986-87 and fiscal year 1987-88 because of fare increases during the period, service reductions of approximately 7.0 percent starting in fiscal year 1987-88, and decreases in service quality caused by increased financial difficulties. AC Transit also cited lower gasoline prices, a shift of riders to BART, and increased carpooling to San Francisco as additional causes of the drop in ridership.

Also, the amount of service, as measured in vehicle revenue miles, decreased by 6.4 percent from fiscal year 1983-84 through fiscal year 1987-88. In contrast, for transit operators statewide, vehicle revenue miles increased 1.4 percent during the same period. According to AC Transit, vehicle revenue miles decreased partly because of a 7.0 percent bus service reduction in fiscal years 1986-87 and 1987-88. However, from fiscal year 1983-84 through fiscal year 1987-88, AC Transit's vehicle revenue hours increased by 14.3 percent. A cause for this increase was AC Transit's shift from high-speed express routes

³According to AC Transit, it erred in the methodology it was required to use when estimating its number of passengers for the Section 15 report of the Urban Mass Transportation Administration in fiscal year 1987-88. AC Transit stated that the number of passengers it served in fiscal year 1987-88 was 61,808,000, a decrease of 18.3 percent from fiscal year 1983-84 through fiscal year 1987-88.

to slower, more congested feeder service. During the same period, vehicle revenue hours for transit operators statewide increased 5.8 percent.

As a result of higher costs and fewer passengers, AC Transit's operating costs per passenger increased 67.2 percent, going from \$1.28 per passenger in fiscal year 1983-84 to \$2.14 per passenger in fiscal year 1987-88. In contrast, in fiscal year 1987-88, it cost transit operators statewide \$1.38 per passenger to provide bus service, 35.5 percent less than it cost AC Transit.

An increase in operating costs and a decrease in service, as measured by vehicle revenue miles, contributed to an increase in AC Transit's operating costs per vehicle revenue mile. AC Transit's operating costs per vehicle revenue mile increased 35.8 percent from \$3.52 per vehicle revenue mile during fiscal year 1983-84 to \$4.78 per vehicle revenue mile during fiscal year 1987-88. In addition, Transit's operating costs per vehicle revenue hour increased 11.0 percent from \$58.41 per vehicle revenue hour to \$64.81 per vehicle revenue hour during the same period. This increase is less than the 15.8 percent increase in the area CPI because AC Transit's buses operated for more vehicle revenue hours because of the shift from the faster express service to slower BART feeder service. In fiscal year 1987-88, it cost transit operators statewide \$61.22 per vehicle revenue hour to provide bus service, 5.5 percent less than it cost AC Transit.

The number of passengers per vehicle revenue hour at AC Transit decreased 33.4 percent over the five-year review period, going from 45.5 passengers per vehicle revenue hour in fiscal year 1983-84 to 30.3 passengers per vehicle revenue hour in fiscal year 1987-88. In contrast, for transit operators statewide, passengers per vehicle revenue hour decreased 15.1 percent.

Also, the number of AC Transit passengers per vehicle revenue mile decreased 18.5 percent from 2.7 in fiscal year 1983-84 to 2.2 in fiscal year 1987-88. This decrease results from the 23.8 percent decrease in the number of passengers and the 6.4 percent decrease in vehicle revenue miles. During the same period for transit operators statewide, passengers per vehicle revenue mile decreased 11.1 percent.

The number of vehicle revenue hours per FTE employee for AC Transit increased 26.4 percent during the review period. In fiscal year 1983-84, AC Transit provided 763.4 vehicle revenue hours per FTE employee. However, in fiscal year 1987-88, this number increased to 964.9 vehicle revenue hours per FTE employee. This indicator is somewhat misleading in that the increase in vehicle revenue hours per FTE employee for this operator did not result from greater efficiencies or service growth. AC Transit stated that it reduced service by 7.0 percent. This reduction in service is reflected in the 6.4 percent decrease in vehicle revenue miles and the 9.6 percent decrease in FTE employees. AC Transit also stated that it shifted from high-speed express to slower feeder service, which equates to more time to cover

the same service area. These factors, rather than increased service or greater efficiency, increased the vehicle revenue hours per FTE employee. However, AC Transit further stated that route assignment revisions, through which an operator modifies routes for economy and efficiency, also contributed to the increase in the number of vehicle revenue hours per FTE employee.

Further, AC Transit's vehicle revenue miles per FTE employee increased 3.5 percent from fiscal year 1983-84 through fiscal year 1987-88 while, for transit operators statewide, vehicle revenue miles per FTE employee decreased 4.7 percent.

In addition, AC Transit's vehicle revenue miles per vehicle revenue hour decreased 18.1 percent from 16.6 vehicle revenue miles per vehicle revenue hour during fiscal year 1983-84 to 13.6 vehicle revenue miles per vehicle revenue hour during fiscal year 1987-88. In contrast, for transit operators statewide, vehicle revenue miles per vehicle revenue hour decreased 3.6 percent for the same period.

MAINTENANCE TRENDS

As measured by vehicle maintenance costs per bus and vehicle maintenance costs per vehicle mile, AC Transit's maintenance efficiency declined significantly. Moreover, as measured by vehicle miles between road calls due to mechanical failure, its effectiveness declined. Further, as Table II-5 illustrates, from fiscal year 1983-84 through

fiscal year 1987-88, vehicle maintenance costs increased 44.1 percent from \$13,707,641 to \$19,752,247 while the area CPI increased 15.8 percent. Most of the increase in AC Transit's vehicle maintenance costs occurred from fiscal year 1983-84 through fiscal year 1985-86. Several factors contributed to this increase. According to AC Transit, one factor was the cost associated with the completion of its new central maintenance facility in May 1985. This cost included major purchases of equipment and supplies and hiring approximately 40 new vehicle maintenance staff.

TABLE II-5

MAINTENANCE STATISTICS AND INDICATORS
FOR BUS SERVICES OPERATED BY THE
ALAMEDA-CONTRA COSTA TRANSIT DISTRICT
FISCAL YEAR 1983-84 THROUGH FISCAL YEAR 1987-88
(UNAUDITED)

						Increase (Dec	(Decrease)
	1983-84	1984-85	1985-86	1986-87	1987-88	Unit	Percent
Vehicle maintenance costs	\$13,707,641	\$16,314,192	\$19,495,959	\$20,864,737	\$19,752,247	\$6,044,606	44.1%
Wages and benefits for vehicle maintenance full-time equivalent (FTE) employees	ю !	\$11,459,848	\$12,950,543	\$16,222,356	\$14,458,530	\$2,998,682ª	26.2ª
Vehicle maintenance costs as a percentage of total operating costs	14.2%	15.6%	17.5%	17.5%	16.1%		
Vehicle maintenance costs per bus	\$16,127	\$18,882	\$22,617	\$24,460	\$23,265	\$7,138	44.3
Vehicle maintenance costs per vehicle mile	\$0.43	\$0.53	\$0.63	\$0.67	\$0.67	\$0.24	56.0
Number of buses: total fleet	850	864	862	853	849	(1.0)	(0.1)
Number of buses: peak fleet	714	703	706	869	638	(16)	(10.6)
Average age: total fleet (in years)	8.0	7.0	8.0	0.6	0.6	1.0	12.5
Average age: peak fleet (in years) ^b	0.9	5.0	6.0	7.0	0.9	0.0	0.0
Vehicle miles	31,556,638	30,919,895	31,140,683	31,309,763	29,423,855	(2,132,783)	(8.8)
Road calls due to mechanical failure	8,159 ^C	14,034	16,728	16,700	16,247	8,088	99.1
Vehicle miles between road calls due to mechanical failure	3,868	2,203	1,862	1,875	1,811	(2,057)	(53.2)
Vehicle miles per bus	37,125	35,787	36,126	36,705	34,657	(2,468)	(6.6)
Vehicle maintenance FTE employees	Г	328.0	369.0	367.0	318.0	(10.0) ^a	(3.0) ^a

Section 15 reports of the Urban Mass Transportation Administration, annual reports of financial transactions of transit operators to the State Controller's Office, and auditors' calculations. Sources:

^a The Section 15 reporting format for vehicle maintenance FTE employees changed beginning with fiscal year 1984-85. Therefore, data between fiscal year 1983-84 and subsequent years may not be comparable. Unit and percent changes are for four years only.

 $^{^{\}mathsf{b}}$ The age of the peak fleet was computed using the newest buses.

Since it did not provide a figure for the number of In addition, road calls involving warranty problems ^C AC Transit only had a figure for the total number of road calls during fiscal year 1983-84. road calls due to mechanical failure, we used the figure for the total number of road calls. were not reported as road calls during this fiscal year.

In addition to increases in vehicle maintenance costs because of the new maintenance facility, AC Transit stated that warranty coverage on over 500 buses expired during the period from fiscal year 1983-84 through fiscal year 1985-86. As a result, after fiscal year 1985-86, AC Transit incurred repair costs that the warranties previously covered. In addition, AC Transit indicated that more complex buses required additional maintenance on components such as air conditioning and wheelchair lifts, which previous bus models did not require.

Furthermore, from fiscal year 1984-85 through fiscal year 1987-88, union contracts provided for frequent increases in costs. These increases contributed to a 26.2 percent increase in total costs for wages and benefits for vehicle maintenance FTE employees from \$11,459,848 to \$14,458,530. During the same period, the area CPI increased only 10.8 percent. During this time, the average annual amount of wages and benefits incurred for each vehicle maintenance FTE employee increased 30.4 percent from \$34,900 to \$45,500. From fiscal year 1986-87 through fiscal year 1987-88, AC Transit reduced the cost for vehicle maintenance employees of benefits its wages and 10.9 percent from \$16,222,356 to \$14,458,530. According to AC Transit, in cost was due to layoffs, which resulted in this reduction approximately 50 fewer vehicle maintenance FTE employees. Because wages and benefits for vehicle maintenance FTE employees amount to more than 70 percent of AC Transit's total vehicle maintenance costs, these reductions in wages and benefits allowed AC Transit to stabilize its total vehicle maintenance costs during fiscal years 1986-87 and 1987-88. In addition, although vehicle maintenance costs increased 44.1 percent over the period of our review, vehicle maintenance costs as a percentage of total operating costs varied only slightly.

As a result of AC Transit's increased vehicle maintenance costs and because the size of its total fleet remained almost the same in fiscal years 1983-84 and 1987-88, its vehicle maintenance costs per bus increased 44.3 percent, going from \$16,127 to \$23,265 per bus over the five-year period. Similarly, vehicle maintenance costs per vehicle mile increased 56.0 percent from \$0.43 to \$0.67 during this period while the area CPI increased only 15.8 percent. A 6.8 percent decrease in total vehicle miles from fiscal year 1983-84 through fiscal year 1987-88 contributed to the increase in vehicle maintenance costs per vehicle mile. From fiscal year 1986-87 through fiscal year 1987-88, vehicle miles decreased from 31,309,763 to 29,423,855. This decrease occurred as a result of AC Transit's general service reductions, which took place during fiscal year 1987-88. AC Transit also indicated that continued increases in wages and benefits and the decreased capabilities of the vehicle maintenance staff to maintain increasingly more complex buses during the period that AC Transit was reducing service contributed to the increase in vehicle maintenance costs.

As measured by vehicle miles between road calls due to mechanical failure, the effectiveness of AC Transit's maintenance program declined. As Table II-5 illustrates, vehicle miles between

road calls due to mechanical failure at AC Transit decreased 53.2 percent from 3,868 vehicle miles in fiscal year 1983-84 to 1,811 vehicle miles in fiscal year 1987-88. This change occurred as a result of the combined effect of a 99.1 percent increase in the number of road calls due to mechanical failure (from 8,159 in fiscal year 1983-84 to 16,247 in fiscal year 1987-88) and a 6.8 percent decrease in total vehicle miles traveled by AC Transit buses during the same period.

According to AC Transit, there were several reasons for the large increase in the number of road calls. One reason was that a change occurred in the method of recording road calls. Before fiscal year 1984-85, AC Transit did not record road calls involving warranty However, beginning in fiscal year 1984-85, AC Transit problems. counted any interruption in service lasting more than five minutes as a road call, including road calls involving warranty problems. This change resulted in AC Transit recording many more service interruptions as road calls than it previously recorded. Other reasons for the large increase in the number of road calls include the increased complexity of AC Transit's buses with more parts that could malfunction; the lack of maintenance employee training on repairs and maintenance of the more complex buses in AC Transit's total fleet; and the overall technical ability of AC Transit's mechanics, which has not kept up with the complexity of the new buses.

During the period of our review, the size of AC Transit's total bus fleet reached a high of 864 buses in fiscal year 1984-85 and has decreased since that year. AC Transit stated that it has continued to reduce its total bus fleet size and, at the end of March 1989, which is after the period of our review, the total number of buses was 825. The size of AC Transit's peak bus fleet also decreased by 10.6 percent from 714 buses in fiscal year 1983-84 to 638 buses in fiscal year 1987-88. AC Transit stated that the reduction in the size of its total bus fleet put it in compliance with the Urban Mass Transportation Administration's limitation on the number of buses an operator can maintain in excess of its peak bus service requirement. AC Transit's peak bus fleet size decreased as a result of general bus service reductions.

The average age of AC Transit's total fleet increased from eight to nine years from fiscal year 1983-84 through fiscal year 1987-88. However, the average age of AC Transit's peak fleet, although varying slightly during the period of the review, was six years in both fiscal year 1983-84 and fiscal year 1987-88.

The number of AC Transit's vehicle maintenance FTE employees decreased 3.0 percent from fiscal year 1984-85 through fiscal year 1987-88. However, between fiscal year 1984-85 and fiscal year 1985-86, AC Transit increased vehicle maintenance FTE employees by 12.5 percent or by 41 FTE employees to provide staff for its new central maintenance facility. Subsequently, because of financial difficulties and the

resulting general bus service reductions, AC Transit decreased the number of vehicle maintenance FTE employees by 13.4 percent or by 49 FTE employees between fiscal year 1986-87 and fiscal year 1987-88.

BUS DRIVER HIRING, TRAINING, AND OTHER DATA

AC Transit required bus driver applicants to meet the basic requirements discussed in Volume 1 of this report. These requirements include the following: being at least 21 years of age; possessing a California driver's license; passing a physical examination; providing the operator with a driving history prepared by the Department of Motor Vehicles; passing a criminal history check; and passing a written test. However, because of insurance costs, AC Transit required applicants to be at least 25 years old rather than 21 years old.

Like the other three operators we reviewed in more depth, AC Transit reviewed applicants' driving and criminal histories. AC Transit differed from the other operators in some However, For example, AC Transit disqualified applicants if they had respects. more than three moving violations in the previous two years. AC Transit also disqualified applicants if they had been convicted in the previous three years of driving under the influence of drugs or alcohol or of reckless driving. Moreover, AC Transit could disqualify applicants who had been convicted of felonies.

Further, AC Transit had additional hiring requirements. It administered a written test of applicants' math skills and ability to tell the time, read maps, and read and write English. Further, it tested applicants' physical ability to operate bus equipment. However, the operator did not subject its applicants to a psychological evaluation or require its applicants to have previous work experience involving public contact or bus driving.

As discussed in Volume 1, during fiscal year 1987-88, Transit had a bus driver training program that was similar to those the other operators we reviewed. The training program lasted 200 hours and consisted of 41 hours of classroom instruction and 159 hours on buses. Although AC Transit required bus driver applicants to successfully complete a bus driver training program and obtain a Class II license as discussed in Volume I, it did not provide periodic additional training to its drivers. However, it did require remedial and refresher training when bus drivers returned from long absences, after drivers had one serious preventable accident or more than two minor or moderate preventable accidents, as a result of disciplinary actions, and when, through occasional road checks, it observed drivers with deficient driving skills.

The number of preventable accidents involving AC Transit drivers decreased 16.4 percent from 586 preventable accidents in fiscal year 1985-86 to 490 preventable accidents in fiscal year 1987-88. Table II-6 presents statistics and indicators about preventable

accidents at AC Transit from fiscal year 1985-86 through fiscal year 1987-88. The average number of preventable accidents per AC Transit driver for those drivers who had such accidents decreased from 1.31 in fiscal year 1985-86 to 1.24 in fiscal year 1987-88. In addition, the number of vehicle miles between preventable accidents increased from 53,141 in fiscal year 1985-86 to 60,048 in fiscal year 1987-88. Finally, the number of preventable accidents as a percentage of total accidents involving AC Transit drivers decreased only slightly from 42.2 percent in fiscal year 1985-86 to 39.7 percent in fiscal year 1987-88. Volume I of this report provides an overall discussion of preventable accidents.

TABLE II-6

PREVENTABLE ACCIDENT STATISTICS AND INDICATORS FOR BUSES OPERATED BY THE ALAMEDA-CONTRA COSTA TRANSIT DISTRICT FISCAL YEAR 1985-86 THROUGH FISCAL YEAR 1987-88 (UNAUDITED)

	1985-86	1986-87	1987-88
Vehicle miles	31,140,683	31,309,763	29,423,855
Preventable accidents	586	545	490
Vehicle miles between preventable accidents	53,141	57,449	60,049
Number of drivers involved in preventable accidents	449	426	396
Average number of preventable accidents per driver with			
preventable accidents	1.31	1.28	1.24
Number of accidents	1,388	1,611	1,234
Preventable accidents as a percentage	42 20/	22 00	20. 7%
of total accidents	42.2%	33.8%	39.7%

Sources: Section 15 reports of the Urban Mass Transportation Administration, operator data, and auditors' calculations.

III

TRENDS AND PRACTICES OF THE SAN DIEGO TRANSIT CORPORATION $^{\rm 1}$

The San Diego Transit Corporation (SDTC) is a nonprofit corporation wholly owned by the Metropolitan Transit Development Board In fiscal year 1987-88, the SDTC operated approximately 280 (MTDB). buses that provided bus services to over 26 million passengers in San Diego, El Cajon, La Mesa, other cities, and portions of San Diego County's unincorporated area. The SDTC's regional transportation planning agency is the San Diego Association of Governments (SANDAG). is also the SDTC's metropolitan planning The SANDAG. which organization, approves the San Diego regional transportation improvement program, which the SDTC uses as support for its application for federal funds.

A seven-member board, including four citizen representatives from San Diego and three from the suburban cities and the county, governs the SDTC. The MTDB appoints the members of the board and is responsible for approving the SDTC's budget, which projected both operating revenues and expenditures to be approximately \$45.7 million for fiscal year 1989-90. The SDTC's general manager and president, who reports directly to the board of directors, oversaw the activities of approximately 790 full-time equivalent (FTE) employees in fiscal year

 $^{^{}m 1}$ See the Appendix for definitions of technical terms used.

1987-88. The SDTC's operating revenues and subsidies have not kept pace with the increased cost of providing more service. Consequently, from fiscal year 1985-86 through fiscal year 1987-88, the SDTC operated at a deficit.

FINANCIAL TRENDS

Although the CPI for the area that includes San Diego increased 17.8 percent from fiscal year 1983-84 through fiscal year 1987-88, the SDTC's operating revenues and subsidies increased only 17.2 However, the SDTC's operating costs increased percent. 22.6 percent during the same period, and costs exceeded operating revenues and subsidies from fiscal year 1985-86 through fiscal year 1987-88, resulting in operating deficits. For example, in fiscal year 1987-88, the SDTC's operating costs were \$40,615,000 while its operating revenues and subsidies were \$40,291,000, resulting in a deficit of \$324,000. Table III-1 shows the operating revenues, subsidies, and costs for bus services operated by the SDTC.

TABLE III-1

OPERATING REVENUES, SUBSIDIES, AND COSTS FOR BUS SERVICES OPERATED BY THE SAN DIEGO TRANSIT CORPORATION FISCAL YEAR 1983-84 THROUGH FISCAL YEAR 1987-88 (UNAUDITED) (IN THOUSANDS) Increase (Decrease)

Percent	25.9% 49.4	38.3 (88.4) 0.0 (29.8)	17.2	17.0 16.6 49.5 0.0 0.0	22.6	(126.2) 18.2	142.0
Dollar	\$ 3,313 333	4,869 (228) 0 (2,364)	5,923	4,536 774 405 0 0 1,768	7,483	(1,560) (488)	\$(2,048)
1987-88	\$16,105 1,007	17,575 30 0 5,574	40,291	31,192 5,443 1,224 0 0	40,615	(324) (3,166)	\$(3,490)
1986-87	\$14,542 862	16,252 32 0 6,360	38,048	29, 028 4,285 1,220 0 3,545	38,078	(30) (3,114)	\$(3,144)
1985-86	\$13,741 831	13,603 382 238 6,001	34,796	28,926 4,885 931 0 2 2	37,211	(2,415) (2,958)	\$(5,373)
1984-85	\$13,372 1,148	13,487 324 1,260 6,182	35,773	27,336 4,750 801 0 1	34,265	1,508	\$(1,549)
1983-84	\$12,792 674	12,706 258 0 7,938	34,368	26,656 4,669 819 0	33,132	1,236 (2,678)	\$(1,442)
	Operating Revenues and Subsidies Passenger fare revenue Other revenue	Act subsidies Other local subsidies State subsidies Federal subsidies	Total Operating Revenues and Subsidies	Operating Costs Wages and benefits Materials and supplies Services Purchased transportation Interest Other	Total Operating Costs	Operating Surplus (Deficit) Depreciation Expense	Surplus (Deficit) with Depreciation

Sources: Section 15 reports of the Urban Mass Transportation Administration and auditors' calculations.

benefits nor materials and supplies Neither wages and increased as much as the area CPI. However, the cost of services increased 49.5 percent. According to the SDTC, it entered into new contracts for security service, office maintenance service, professional services, and additional computer maintenance service over the period, which accounted for \$262,500 of the \$405,000 increase in the cost of services. In addition, the SDTC's casualty and liability costs, which are included in the SDTC's "other" operating costs, increased over 500 percent from fiscal year 1983-84 through fiscal year 1987-88 and contributed to a 178.9 percent increase in other operating Table III-2 shows the components of the SDTC's operating costs costs. for fiscal years 1983-84 and 1987-88.

TABLE III-2

PROPORTIONS OF THE VARIOUS COMPONENTS OF OPERATING COSTS FOR BUS SERVICES OPERATED BY THE SAN DIEGO TRANSIT CORPORATION FISCAL YEARS 1983-84 AND 1987-88 (UNAUDITED)

	<u>1983-84</u>	<u> 1987-88</u>
Operating Costs		
Wages and benefits	80.4%	76.8%
Materials and supplies	14.1	13.4
Services	2.5	3.0
Purchased transportation	0.0	0.0
Interest	0.0	0.0
Other	3.0	6.8
Total Operating Costs	<u>100.0</u> %	<u>100.0</u> %

Source: Calculated from operating cost figures on Table III-1.

As shown in Table III-1, during fiscal year 1987-88, the SDTC received a total of \$40,291,000 in operating revenues and subsidies, 17.2 percent more than the \$34,368,000 it received in fiscal year 1983-84. The SDTC was unable to rely on federal subsidies in fiscal year 1987-88 as much as it had in fiscal year 1983-84 and a larger portion of the SDTC's operating funds came from local subsidies and passenger fare revenue. Table III-3 illustrates this shift in sources for operating revenues and subsidies over the five-year period.

TABLE III-3

PROPORTIONS OF THE VARIOUS COMPONENTS OF OPERATING REVENUES AND SUBSIDIES FOR BUS SERVICES OPERATED BY THE SAN DIEGO TRANSIT CORPORATION FISCAL YEARS 1983-84 AND 1987-88 (UNAUDITED)

	<u>1983-84</u>	<u> 1987-88</u>
Operating Revenues and Subsidies		
Passenger fare revenue	37.2%	40.0%
Other revenue	2.0	2.5
Local Transportation Development Act (TDA) subsidies	37.0	43.6
Other local subsidies	0.7	0.1
State subsidies	0.0	0.0
Federal subsidies	23.1	_13.8
Total Operating Revenues and Subsidies	<u>100.0</u> %	<u>100.0</u> %

Source: Calculated from operating revenues and subsidies figures on Table III-1.

The SDTC did not receive any state subsidies in fiscal years 1983-84 or 1987-88. The MTDB controls these funds and distributes them to the many operators under its jurisdiction. As a result, the SDTC must compete with other operators in San Diego County, including the San Diego Trolley, for these funds.

The MTDB also directs the distribution of the local Transportation Development Act (TDA) subsidies to operators under its jurisdiction, and the local TDA subsidies that the SDTC received increased 38.3 percent from fiscal year 1983-84 through fiscal year 1987-88. According to the SDTC, this subsidy increased as a result of inflation and a 14.0 percent increase in San Diego's population, both of which contributed to increases in the sales tax collected in San Diego County. As discussed in Volume 1 of this report, sales taxes are the source of local TDA subsidies.

In addition, the SDTC's revenue from passenger fares increased 25.9 percent over the period of our review. According to the SDTC, it raised fares 25.0 percent from fiscal year 1983-84 through fiscal year 1987-88, raising fares for local routes from \$0.80 to \$1.00 and fares for express routes from \$1.00 to \$1.25. In addition, although the SDTC contends that its number of passengers actually increased by 10.0 percent from fiscal year 1983-84 through fiscal year 1987-88, the Section 15 reports that the SDTC submitted to the Urban Mass Transportation Administration (UMTA) indicate that the number of passengers that the SDTC served decreased by 0.8 percent during the

period.² In contrast, for transit operators statewide, the number of passengers decreased 10.3 percent during this period.³

PERFORMANCE TRENDS

San Diego's performance, as measured by the indicators on Table III-4, varied from fiscal year 1983-84 through fiscal year 1987-88. While some indicators reflected a decline in performance, other indicators reflected an improvement in performance. For example, passengers per vehicle revenue mile and passengers per vehicle revenue hour both decreased. Further, three cost indicators increased. However, only one of the cost indicators increased more than the 17.8 percent increase in the CPI for the area that includes San Diego. Table III-4 illustrates the trends in five performance statistics and eight performance indicators calculated from those statistics.

²According to the SDTC, the ridership data provided in UMTA Section 15 reports is based on SANDAG sampling methods. However, based on the SDTC's internal ridership data, which represent passenger counts that are not externally reported, the SDTC's number of passengers served increased from 23,538,734 passengers in fiscal year 1983-84 to 25,898,553 passengers in fiscal year 1987-88. Since the UMTA Section 15 data are externally reported, we use this data in the report.

³Our figures for transit operators statewide include from 60 to 97 of the 109 transit operators providing bus service in California, depending upon the availability of data.

TABLE III-4

PERFORMANCE STATISTICS AND INDICATORS
FOR BUS SERVICES OPERATED BY THE
SAN DIEGO TRANSIT CORPORATION
FISCAL YEAR 1983-84 THROUGH FISCAL YEAR 1987-88
(UNAUDITED)

						Increase (Decrease)	ecrease)
	1983-84	1984-85	1985-86	1986-87	1987-88	Unit	Percent
Performance Statistics							
Operating costs	\$33,132,000	\$34,265,000	\$37,211,000	\$38,078,000	\$40,615,000	\$7,483,000	22.6%
Vehicle revenue hours	758,159	766,466	789,621	813,853	816,927	58,768	7.8
Vehicle revenue miles	9,597,857	9,675,997	10,058,187	10,404,173	10,782,693	1,184,836	12.3
Passengers	26,648,107	27,737,049	28,389,365	26,205,819	26,434,188	(213,919)	(0.8)
Full-time equivalent (FTE) employees	741	737	748	762	794	53	7.2
Performance Indicators: Transportation Development Act (TDA) Related							
Operating costs per passenger	\$1.24	\$1.24	\$1.31	\$1.45	\$1.54	\$0.30	24.2
Operating costs per vehicle revenue hour	\$43.70	\$44.71	\$47.13	\$46.79	\$49.72	\$6.02	13.8
Passengers per vehicle revenue hour	35.1	36.2	36.0	32.2	32.4	(2.7)	(7.7)
Passengers per vehicle revenue mile	2.8	2.9	2.8	2.5	2.5	(0.3)	(10.7)
Vehicle revenue hours per FTE employee	1,023.2	1,040.0	1,055.6	1068.0	1,028.9	5.7	9.0
Performance Indicators: Non-TDA Related							
Operating costs per vehicle revenue mile	\$3.45	\$3.54	\$3.70	\$3.66	\$3.77	\$0.32	9.3
Vehicle revenue miles per FTE employee	12,952.6	13,128.9	13,446.8	13,653.8	13,580.2	627.6	4.9
Vehicle revenue miles per vehicle revenue hour	12.7	12.6	12.7	12.8	13.2	0.5	3.9

Section 15 reports of the Urban Mass Transportation Administration, annual reports of financial transactions of transit operators to the State Controller's Office, and auditors' calculations. Sources:

As displayed on Table III-4, the SDTC's amount of service, as measured in vehicle revenue hours, increased 7.8 percent from fiscal year 1983-84 through fiscal year 1987-88. In contrast, for transit operators statewide, vehicle revenue hours increased 5.8 percent during the same period. Also, from fiscal year 1983-84 through fiscal year 1987-88, the SDTC's vehicle revenue miles increased by 12.3 percent. During this period, vehicle revenue miles for transit operators statewide increased 1.4 percent.

As a result of increased vehicle revenue hours and no growth in the numbers of passengers served, the SDTC's passengers per vehicle revenue hour decreased 7.7 percent from 35.1 in fiscal year 1983-84 to 32.4 in fiscal year 1987-88. The number of passengers served per vehicle revenue hour for transit operators statewide was 42.7 in fiscal year 1987-88. For transit operators of comparable size to the SDTC (serving 10 to 50 million passengers), the passengers per vehicle revenue hour were 32.2 in fiscal year 1987-88.

In addition, as a result of increased vehicle revenue miles and no growth in the number of passengers served, the SDTC's passengers per vehicle revenue mile decreased 10.7 percent from 2.8 per vehicle revenue mile in fiscal year 1983-84 to 2.5 per vehicle revenue mile in fiscal year 1987-88. For transit operators statewide, the number of passengers per vehicle revenue mile was 3.2 in fiscal year 1987-88. For transit operators of comparable size to the SDTC, the number of passengers per vehicle revenue mile was 4.0 per vehicle revenue mile.

Using the number of passengers the SDTC reported on its UMTA Section 15 reports, the SDTC's operating costs per passenger increased 24.2 percent from \$1.24 per passenger in fiscal year 1983-84 to \$1.54 per passenger in fiscal year 1987-88. In contrast, the area CPI increased 17.8 percent during the period. In addition, it cost the transit operators statewide \$1.38 per passenger to provide bus service in fiscal year 1987-88, and it cost transit operators of comparable size to the SDTC \$1.32 per passenger in fiscal year 1987-88.

Further, the SDTC's operating costs per vehicle revenue hour increased 13.8 percent from \$43.70 in fiscal year 1983-84 to \$49.72 in fiscal year 1987-88. This increase is less than the 17.8 percent increase in the area CPI. In fiscal year 1987-88, it cost transit operators statewide \$61.22 per vehicle revenue hour to provide bus service, approximately 23.1 percent more than it cost the SDTC. However, for transit operators of comparable size to the SDTC, the operating costs were \$50.26 per vehicle revenue hour, 1.1 percent more than it cost the SDTC in fiscal year 1987-88.

Finally, the SDTC's operating costs per vehicle revenue mile increased 9.3 percent from \$3.45 in fiscal year 1983-84 to \$3.77 in fiscal year 1987-88. This increase is less than the 17.8 percent increase in the CPI for the area that includes San Diego. The SDTC's operating costs per vehicle revenue mile in fiscal year 1987-88 were less than the \$4.64 per vehicle revenue mile for transit operators

statewide and less than the \$4.00 per vehicle revenue mile for transit operators of comparable size to the SDTC.

MAINTENANCE TRENDS

As measured by vehicle maintenance costs per bus, the SDTC's maintenance efficiency declined. However, as measured by vehicle maintenance costs per vehicle mile, vehicle maintenance efficiency Moreover, as measured by vehicle miles between road calls improved. due to mechanical failure, the SDTC's effectiveness improved. The SDTC's vehicle maintenance costs per bus increased 38.2 percent over the period while the CPI for the area that includes San Diego increased only 17.8 percent. This increase occurred as a result of the combined effect of a 24.0 percent increase in vehicle maintenance costs and a 10.3 percent decrease in the size of the SDTC's total fleet. According to the SDTC, it reduced the size of its fleet to meet the UMTA's limitation on the number of buses federal fund recipients can have in excess of the peak fleet. In addition, although vehicle maintenance costs per vehicle mile increased 11.9 percent, this increase is less than the 17.8 percent increase for the area CPI.

As Table III-5 illustrates, from fiscal year 1983-84 through year 1987-88, vehicle maintenance costs increased 24.0 percent from \$7,268,366 to \$9,013,156 while the area CPI increased 17.8 percent. The SDTC attributes most of the increase in vehicle maintenance costs to the increased number of miles it drove its buses and a 50.0 percent

increase in the age of its buses. However, the SDTC was able to limit the increase in its vehicle maintenance costs because of economies in wages and benefits paid to its vehicle maintenance employees. We were unable to obtain wages and benefits data for the SDTC's vehicle maintenance employees for fiscal year 1983-84, so we were unable to determine how much wages and benefits increased over the five-year period. However, this component of maintenance costs increased only 10.0 percent from fiscal year 1984-85 through fiscal year 1987-88 while the area CPI increased 11.6 percent.

TABLE III-5

MAINTENANCE STATISTICS AND INDICATORS
FOR BUS SERVICES OPERATED BY THE
SAN DIEGO TRANSIT CORPORATION
FISCAL YEAR 1983-84 THROUGH FISCAL YEAR 1987-88
(UNAUDITED)

Increase (Decrease)

	1983-84	1984-85	1985-86	1986-87	1987-88	Unit	Percent
Vehicle maintenance costs	\$7,268,366	\$7,618,327	\$7,958,856	\$8,279,492	\$9,013,156	\$1,744,790	24.0%
Wages and benefits for vehicle maintenance full-time equivalent (FIE) employees	q	\$5,434,450	\$5,820,840	\$5,950,887	\$5,979,217	\$544,767 ^b	10.0 ^b
Vehicle maintenance costs as a percentage of operating costs	21.9%	22.2%	21.4%	21.7%	22.2%		
Vehicle maintenance costs per bus	\$23,296	\$25,651	\$28,424	\$29,570	\$32,190	\$8,894	38.2
Vehicle maintenance costs per vehicle mile	\$0.67	\$0.70	\$0.71	\$0.69	\$0.75	\$0.08	11.9
Number of buses: total fleet	312	297	280	280	280	(32)	(10.3)
Number of buses: peak fleet	195	198	205	212	214	19	9.7
Average age: total fleet (in years)	8.0	0.6	10.0	11.0	12.0	4.0	50.0
Average age: peak fleet (in years) ^a	5.0	0.9	7.0	8.0	0.6	4.0	80.0
Vehicle miles	10,820,565	10,949,663	11,286,947	11,970,634	12,054,178	1,233,613	11.4
Road calls due to mechanical failure	2,881	2,812	2,732	2,575	3,176	295	10.2
Vehicle miles between road calls due to mechanical failure	3,756	3,894	4,131	4,649	3,795	39	1.0
Vehicle miles per bus	34,681	36,868	40,311	42,752	43,051	8,370	24.1
Vehicle maintenance FTE employees	٩ !	137.6	139.4	143.1	138.6	1.0 ^b	0.7 ^b

Sources: Section 15 reports of the Urban Mass Transportation Administration and auditors' calculations.

^a The age of the peak fleet was computed using the newest buses.

^b The Section 15 reporting format for vehicle maintenance FTE employees changed beginning with fiscal year 1984-85. Therefore, data between fiscal year 1983-84 and subsequent fiscal years may not be comparable. Unit and percent changes are for four years only.

As measured by vehicle miles between road calls for mechanical failure, the SDTC's effectiveness improved slightly. Vehicle miles between road calls due to mechanical failure at the SDTC increased 1.0 percent from 3,756 vehicle miles between road calls in fiscal year 1983-84 to 3,795 vehicle miles between road calls in fiscal year 1987-88. Moreover, the SDTC's road calls due to mechanical failure increased 10.2 percent from fiscal year 1983-84 through fiscal year 1987-88 even though, as buses age, they frequently require more maintenance, especially if they are driven more miles, as the SDTC's buses were.

BUS DRIVER HIRING, TRAINING, AND OTHER DATA

The SDTC required bus driver applicants to meet the basic requirements discussed in Volume 1 of this report. These requirements included possessing a valid California driver's license, passing a physical examination, and being at least 21 years of age. Like the other operators we reviewed, the SDTC reviewed applicants' driving and However, the operator differed from some other criminal histories. For example, the SDTC disqualified operators in certain respects. applicants if they had more than three moving violations within the The SDTC also disqualified applicants if they previous three years. had been convicted of driving under the influence of drugs or alcohol or of reckless driving. Further, the SDTC disqualified applicants if their driving histories indicated that they failed to appear in court when summoned or if their license had been suspended. Although the

SDTC reviewed applicants' criminal histories for statewide felony convictions within the previous seven years, such convictions may or may not have disqualified the applicants. The SDTC reviewed applicants' criminal histories on a case-by-case basis.

When compared with other operators, the SDTC had some differences in its hiring practices. It administered a video test to applicants entitled "Working with the Public." This test evaluated the applicants' interpersonal skills. However, unlike some other operators, before hiring, the SDTC did not administer a psychological evaluation or test an applicant's physical ability to operate bus equipment.

As discussed in Volume 1 of this report, the SDTC required its bus driver applicants, like other operators, to complete successfully a bus driver training program. The SDTC's training program included 53 hours of classroom training and 243 hours of training on buses. When bus drivers completed their driver training, the SDTC hired them as part-time drivers. According to the SDTC, new drivers may work part time from 4 to 18 months before full-time positions become available.

After the SDTC hired drivers, it required them to complete a seminar covering public relations, accidents, completing reports, and fare schedules. Upon recommendations from the SDTC's transportation department, the SDTC also required drivers who had been absent for long periods to take a refresher course. However, unlike the other

operators we reviewed, the SDTC did not always require drivers who had been in a preventable accident to take a remedial course. Instead, the SDTC reviewed each preventable accident to determine whether the cause of the accident was an identifiable deficiency that warranted remedial The SDTC could provide only 18 months of preventable training. accident data. As a result, we could not determine whether the SDTC's regard to preventable accidents has improved, with performance worsened, or remained stable over time. Furthermore, the SDTC's records of preventable accidents did not include all the preventable accidents that occurred during the 18 months.

Unlike some of the other operators, the SDTC did not always annually evaluate each of its bus drivers' performance behind the wheel. However, the SDTC evaluated its drivers' performance in two ways. First, the SDTC contracted with a private company to conduct ride checks three times a year to monitor driver performance. The SDTC stated that the contractor reviewed approximately 25 percent of the SDTC's drivers each time. Second, the SDTC relied on customer and road supervisor complaints to monitor performance.

<u>IV</u>

TRENDS AND PRACTICES OF THE SAN MATEO COUNTY TRANSIT DISTRICT 1

The San Mateo County Transit District (SamTrans) is a special district organized under the California Public Utilities Code. In fiscal year 1987-88, SamTrans operated 299 buses that provided transit services to approximately 18 million passengers in San Mateo County and, to a lesser extent, San Francisco and Santa Clara counties. SamTrans contracts with a private contractor for a portion of its bus service. The private contractor uses SamTrans' buses and is responsible for routine bus maintenance. In fiscal year 1987-88, the private contractor provided 31.0 percent of SamTrans' total vehicle revenue miles. Both the performance and maintenance tables in this analysis include the private contractor's service.

SamTrans' regional transportation planning agency metropolitan planning organization is the Metropolitan Transportation Commission (MTC), which allocates federal and Transportation Development Act (TDA) subsidies to transit operators in the San Francisco Bay Area. The MTC also approves SamTrans' regional transportation improvement program, based upon which SamTrans applies for federal funds.

 $^{^{1}}$ See the Appendix for definitions of technical terms used.

SamTrans is governed by a board of nine directors. The board of directors is responsible for administering SamTrans' affairs and approving its operating budget, which projected operating costs of approximately \$41,782,100 for fiscal year 1988-89. In addition, the board is responsible for deciding how SamTrans spends the one-half cent San Mateo County sales tax that it receives. The board of directors appoints a general manager who is responsible for the operations of the district.

For the analysis of SamTrans' financial, performance, and maintenance trends, we chose a four-year review period with fiscal year 1984-85 as the base year. In fiscal year 1983-84, two strikes affected SamTrans' financial, performance, and maintenance statistics. As a result, we concurred with SamTrans' contention that trends using fiscal year 1983-84 as a base year do not accurately represent the operator's performance.

Although SamTrans' operating costs increased each year from fiscal year 1984-85 through fiscal year 1987-88, its operating revenues and subsidies equaled its operating costs each year except fiscal year 1985-86 because SamTrans used subsidies from its local sales tax fund to offset its annual shortfall. In fiscal year 1985-86, SamTrans reported a small surplus. While costs increased faster than the consumer price index (CPI) for the area from fiscal year 1984-85

through fiscal year 1987-88, the number of passengers decreased 9.2 percent and the level of service, as measured by vehicle revenue miles, decreased 3.2 percent.

FINANCIAL TRENDS

SamTrans' operating costs increased 21.5 percent from \$28,442,000 in fiscal year 1984-85 to \$34,544,000 in fiscal year During the same period, the area CPI increased 10.8 percent. 1987-88. As shown in Table IV-1, an increase in wages and benefits was the most factor contributing to SamTrans' increased operating significant Although wages and benefits increased 22.9 percent from costs. \$14,428,000 in fiscal year 1984-85 to \$17,725,000 in fiscal year 1987-88, SamTrans' employee benefits increased only 9.5 percent, slightly less than the increase in the area CPI from fiscal year fiscal year 1987-88. However, wages increased 1984-85 through 28.2 percent (\$2,899,666) during the same period. SamTrans claimed that the major factors contributing to the increase in wages were increases in the hourly wages paid to bus drivers and to mechanics. Specifically, bus drivers' top hourly wages increased 21.3 percent from \$11.09 an hour in fiscal year 1984-85 to \$13.45 an hour in fiscal year addition, mechanics' top hourly wages increased 1987-88. In 23.1 percent from \$13.22 an hour in fiscal year 1984-85 to \$16.27 an SamTrans stated that it negotiated hour in fiscal year 1987-88. increases in drivers' and mechanics' wages to gain control over absenteeism and to make SamTrans' hourly wages competitive with the

wages of other Bay Area bus drivers and mechanics. SamTrans believes its wages are now competitive with other Bay Area operators and future increases in hourly wages should not exceed increases in the area CPI.

TABLE IV-1

OPERATING REVENUES, SUBSIDIES, AND COSTS
FOR BUS SERVICES OPERATED BY THE
SAN MATEO COUNTY TRANSIT DISTRICT
FISCAL YEAR 1984-85 THROUGH FISCAL YEAR 1987-88
(UNAUDITED)
(IN THOUSANDS)

Increase (Decrease)

						10000
	1984-85	1985-86	1986-87	1987-88	Dollar	Percent
Operating Revenues and Subsidies Passenger fare revenue Other revenue	\$ 7,123 918	\$ 7,728 865	\$ 7,861 783	\$ 7,797 667	\$ 674 (251)	9.5% (27.3)
Development Act subsidies Other local subsidies State subsidies Federal subsidies	10,998 7,377 261 1,765	16,230 3,924 542 1,763	12,074 10,278 189 1,698	11,432 13,080 8 1,560	434 5,703 (253) (205)	3.9 77.3 (96.9) (11.6)
Total Operating Revenues and Subsidies	28,442	31,052	32,883	34,544	6,102	21.5
Operating Costs Wages and benefits Materials and supplies Services Purchased transportation Interest Other	14,428 3,597 8,689 0 0 1,728	15,669 3,856 8,507 0 0 3,017	17,006 3,550 8,042 0 1 4,284	17,725 3,783 8,091 0 0 1 4,944	3,297 186 (598) 0 0 1 3,216	22.9 5.2 (6.9) 0.0 186.1
Total Operating Costs	28,442	31,049	32,883	34,544	6,102	21.5
Operating Surplus (Deficit) Depreciation Expense	0 (4,33 <u>6</u>)	3 (5,02 <u>6</u>)	0 (5,59 <u>8</u>)	0 0 (<u>908'9)</u>	0 (1,970)	0.0
Surplus (Deficit) With Depreciation	\$(4,336)	\$(5,023)	\$(5,598)	\$(6,306)	\$(1,970)	45.4

Sources: Annual reports of financial transactions of transit operators to the State Controller's Office, audited financial statements, and auditors' calculations.

the private contractor for the San Mateo County Transit District is þ ^a The cost of transportation services provided included in services.

A 186.1 percent increase in the category of "other" operating costs also contributed to the increase in SamTrans' total operating costs. The most significant factor contributing to the 186.1 percent increase in the other cost category was a 408 percent increase in casualty and liability insurance costs from \$824,054 in fiscal year 1984-85 to \$4,187,306 in fiscal year 1987-88. According to SamTrans, this increase was due to increases in insurance company premiums and not to changes in SamTrans' service or its safety record. Table IV-2 shows the components of SamTrans' operating costs for fiscal years 1984-85 and 1987-88. Both wages and benefits and other costs increased in proportion to total operating costs. The rest of the cost categories decreased in proportion to total operating costs.

TABLE IV-2

PROPORTIONS OF THE VARIOUS COMPONENTS OF OPERATING COSTS FOR BUS SERVICES OPERATED BY THE SAN MATEO COUNTY TRANSIT DISTRICT FISCAL YEARS 1984-85 AND 1987-88 (UNAUDITED)

	<u>1984-85</u>	1987-88
Operating Costs		
Wages and benefits	50.7%	51.3%
Materials and supplies	12.7	11.0
Services	30.5	23.4
Purchased transportation	0.0	0.0
Interest	0.0	0.0
Other	6.1	14.3
Total Operating Costs	<u>100.0</u> %	<u>100.0</u> %

Source: Calculated from operating cost figures on Table IV-1.

Consistent with the trend for transit operators statewide, SamTrans' sources of operating revenues and subsidies shifted away from state and federal subsidies to local sources. In fiscal year 1984-85, state and federal subsidies accounted for 7.1 percent of SamTrans' total revenues and subsidies. In contrast, in fiscal year 1987-88 state and federal subsidies accounted for 4.5 percent of total revenues and subsidies. Local sources of operating funds include passenger fare revenue, local TDA subsidies, and the San Mateo County one-half cent sales tax. Passenger fare revenue increased 9.4 percent from

\$7.123.000 in fiscal year 1984-85 to \$7,797,000 in fiscal year 1987-88. SamTrans stated that the increase in passenger fare revenue was the result of an increase in the base adult fare from \$0.35 to \$0.50 in fiscal year 1985-86. However, the fare increase may have contributed to the 9.2 percent decrease in passengers from 19,870,627 in fiscal year 1984-85 to 18,048,106 in fiscal year 1987-88. Passenger fares in fiscal year 1987-88 accounted for 22.6 percent of SamTrans' operating revenues and subsidies. In contrast, for transit operators statewide, passenger fare revenue accounted for 32.4 percent of total revenues and subsidies in fiscal year 1987-88.² operating transit operators of comparable size to SamTrans (serving 10 million to passengers), passenger fare revenue accounted for 50 million 32.2 percent of total operating revenues and subsidies in fiscal year 1987-88.

Local TDA subsidies increased 3.9 percent from \$10,998,000 in fiscal year 1984-85 to \$11,432,000 in fiscal year 1987-88. However, the most significant increase in funding was a 77.3 percent increase in other local subsidies that included the San Mateo County one-half cent sales tax. SamTrans uses proceeds from this county sales tax to offset its annual shortfall. In addition, SamTrans plans to use the sales tax proceeds for transit projects such as an extension of the Bay Area

²Our figures for transit operators statewide include

²Our figures for transit operators statewide include from 60 to 97 of the 109 transit operators providing bus service in California, depending on the availability of data.

Rapid Transit system into San Mateo County. At the end of fiscal year 1987-88, SamTrans had a fund balance of \$87,349,976 in the local sales tax fund. Table IV-3 shows the proportion of SamTrans' operating revenues and subsidies provided by each source in fiscal years 1984-85 and 1987-88.

TABLE IV-3

PROPORTIONS OF THE VARIOUS COMPONENTS OF OPERATING REVENUES AND SUBSIDIES FOR BUS SERVICES OPERATED BY THE SAN MATEO COUNTY TRANSIT DISTRICT FISCAL YEARS 1984-85 AND 1987-88 (UNAUDITED)

	<u> 1984-85</u>	<u>1987-88</u>
Operating Revenues and Subsidies		
Passenger fare revenue	25.0%	22.6%
Other revenue	3.2	1.9
Local Transportation Development Act (TDA) subsidies	38.7	33.1
Other local subsidies	26.0	37.9
State subsidies	0.9	0.0
Federal subsidies	6.2	4.5
Total Operating Revenues and Subsidies	<u>100.0</u> %	<u>100.0</u> %

Source: Calculated from operating revenues and subsidies figures on Table IV-1.

addition to funds for operations, SamTrans receives In subsidies from federal, state, and local sources for the construction of facilities and the purchase of buses and other equipment. For in fiscal year 1987-88, SamTrans received \$4,794,858 in capital assistance funds. In January 1988, SamTrans completed construction of a \$14,000,000 maintenance and operations facility. The addition of the facility, among other purchases, contributed to a 45.4 percent increase in depreciation expense from fiscal year 1984-85 through fiscal year 1987-88. As shown in Table IV-1, if we include SamTrans' depreciation expense with operating costs, SamTrans would show a deficit each year.

PERFORMANCE TRENDS

performance, as measured by the indicators on SamTrans' Table IV-4, declined from fiscal year 1984-85 through fiscal year 1987-88. Table IV-4 illustrates the trends in five performance statistics and eight performance indicators calculated from those The number of passengers riding SamTrans' buses decreased statistics. 9.2 percent from 19,870,627 in fiscal year 1984-85 to 18,048,106 in fiscal year 1987-88. However, the number of passengers riding buses for transit operators statewide decreased 11.6 percent during the same SamTrans attributes the decline in ridership to a fare period. increase in fiscal year 1985-86, as well as to competition from privately owned vehicles because of lower gasoline costs, favorable auto financing, and a strong economy.

TABLE IV-4

PERFORMANCE STATISTICS AND INDICATORS
FOR BUS SERVICES OPERATED BY THE
SAN MATEO COUNTY TRANSIT DISTRICT
FISCAL YEAR 1984-85 THROUGH FISCAL YEAR 1987-88
(UNAUDITED)

					Increase (Decrease)	ecrease)
	1984-85	1985-86	1986-87	1987-88	Unit	Percent
<u>Performance Statistics</u>						
Operating costs	\$28,442,000	\$31,049,000	\$32,883,000	\$34,544,000	\$6,102,000	21.5%
Vehicle revenue hours	611,858	614,790	597,714	599,748	(12,110)	(2.0)
Vehicle revenue miles	7,727,680	7,740,301	7,374,801	7,480,708	(246,972)	(3.2)
Passengers	19,870,627	19,113,950	18,292,148	18,048,106	(1,822,521)	(9.2)
Full-time equivalent (FTE) employees	569	268	583	9/9	7	1.2
Performance Indicators: Transportation <u>Development Act (TDA) Related</u>						
Operating costs per passenger	\$1.43	\$1.62	\$1.80	\$1.91	\$0.48	33.6
Operating costs per vehicle revenue hour	\$46.48	\$50.50	\$55.01	\$57.60	\$11.12	23.9
Passengers per vehicle revenue hour	32.5	31.1	30.6	30.1	(2.4)	(7.4)
Passengers per vehicle revenue mile	2.6	2.5	2.5	2.4	(0.2)	(7.7)
Vehicle revenue hours per FTE employee	1,075.3	1,082.4	1,025.2	1,041.2	(34.1)	(3.2)
Performance Indicators: Non-TDA Related						
Operating costs per vehicle revenue mile	\$3.68	\$4.01	\$4.46	\$4.62	\$0.94	25.5
Vehicle revenue miles per FTE employee	13,581.2	13,627.3	12,649.7	12,987.3	(593.9)	(4.4)
Vehicle revenue miles per vehicle revenue hour	12.6	12.6	12.3	12.5	(0.1)	(0.8)

Section 15 reports of the Urban Mass Transportation Administration, the operator's 1988-89 budget, annual reports of financial transactions of transit operators to the State Controller's Office, and auditors' calculations. Sources:

SamTrans contracts with a private contractor for part of its bus service. The private contractor's data are included in all indicators. Note:

SamTrans' vehicle revenue miles decreased 3.2 percent from 7,727,680 miles in fiscal year 1984-85 to 7,480,708 miles in fiscal year 1987-88. In contrast, for transit operators statewide, vehicle revenue miles increased 0.5 percent. According to SamTrans, SamTrans reduced its vehicle revenue miles slightly by redirecting inefficient service to more productive areas.

SamTrans' vehicle revenue hours decreased 2.0 percent from 611,858 in fiscal year 1984-85 to 599,748 in fiscal year 1987-88. In contrast, vehicle revenue hours for transit operators statewide increased 5.1 percent. The decrease in vehicle revenue hours was less than the decrease in vehicle revenue miles and resulted in a slight decrease (0.8 percent) in the average speed of SamTrans' buses, as measured by vehicle revenue miles per vehicle revenue hour. The average speed of SamTrans' buses was 12.5 revenue miles per revenue hour in fiscal year 1987-88. For the transit operators statewide, as well as operators of comparable size, the average speed was 13.3 revenue miles per revenue hour in fiscal year 1987-88.

The combination of the 9.2 percent decrease in the number of SamTrans' passengers and a 2.0 percent decrease in vehicle revenue hours resulted in a 7.4 percent decrease in passengers per vehicle revenue hour. Passengers per vehicle revenue hour decreased from 32.5 in fiscal year 1984-85 to 30.1 in fiscal year 1987-88. Although the number of SamTrans' passengers per vehicle revenue hour decreased less than that of transit operators statewide (the statewide decrease was

15.8 percent), the operators statewide carried more passengers per hour, an average of 42.2 per hour in fiscal year 1987-88. For transit operators of comparable size to SamTrans, the number of passengers carried per vehicle revenue hour was 32.2 in fiscal year 1987-88. Also. SamTrans' passengers per vehicle revenue mile decreased 7.7 percent, going from 2.6 in fiscal year 1984-85 to 2.4 in fiscal While passengers per vehicle revenue mile for transit year 1987-88. operators statewide decreased 11.1 percent, the 3.2 passengers per vehicle revenue mile carried statewide in fiscal year 1987-88 still exceeded SamTrans' performance. For transit operators of comparable size to SamTrans, the number of passengers carried per vehicle revenue mile was 2.4 in fiscal year 1987-88.

The combination of increased operating costs and a slight decrease in the number of vehicle revenue hours from fiscal year 1984-85 through fiscal year 1987-88 led to a 23.9 percent increase in SamTrans' operating costs per vehicle revenue hour. SamTrans' operating costs per vehicle revenue hour increased from \$46.48 in fiscal year 1984-85 to \$57.60 in fiscal year 1987-88. For transit operators statewide in fiscal year 1987-88, operating costs per vehicle revenue hour were \$61.22. For transit operators of comparable size to SamTrans, operating costs per vehicle revenue hour were \$50.26 in fiscal year 1987-88.

The combination of increasing operating costs and a decreasing number of passengers from fiscal year 1984-85 through fiscal year 1987-88 resulted in a 33.6 percent increase in SamTrans' operating costs per passenger. SamTrans' operating costs per passenger increased from \$1.43 in fiscal year 1984-85 to \$1.91 in fiscal year 1987-88. In contrast, for the transit operators statewide operating costs per passenger were \$1.38 in fiscal year 1987-88. For transit operators of comparable size to SamTrans, operating costs per passenger were \$1.32 in fiscal year 1987-88.

MAINTENANCE TRENDS

As measured by vehicle maintenance costs per bus and vehicle maintenance costs per vehicle mile, SamTrans' maintenance efficiency declined. However, as measured by vehicle miles between road calls due to mechanical failure, its effectiveness improved. As Table IV-5 illustrates, from fiscal year 1984-85 through fiscal year 1987-88, vehicle maintenance costs increased 22.5 percent from \$5,324,782 to \$6,521,147 while the area CPI increased 10.8 percent.

TABLE IV-5

MAINTENANCE STATISTICS AND INDICATORS
FOR BUS SERVICES OPERATED BY THE
SAN MATEO COUNTY TRANSIT DISTRICT
FISCAL YEAR 1984-85 THROUGH FISCAL YEAR 1987-88
(UNAUDITED)

					Increase (Decrease)	ecrease)
	1984-85	1985-86	1986-87	1987-88	Unit	Percent
Vehicle maintenance costs	\$5,324,782	\$6,157,496	\$6,644,284	\$6,521,147	\$1,196,365	22.5%
Wages and benefits for vehicle maintenance full-time equivalent (FTE) employees	\$2,931,376	\$3,321,531	\$3,426,165	\$3,568,750	\$637,374	21.7
Vehicle maintenance costs as a percentage of total operating costs	18.7%	19.8%	20.2%	18.9%		
Vehicle maintenance costs per bus	\$17,121	\$20,594	\$22,222	\$21,810	\$4,689	27.4
Vehicle maintenance costs per vehicle mile	\$0.57	\$0.66	\$0.72	\$0.70	\$0.13	22.8
Number of buses: total fleet	311	599	599	299	(12)	(3.9)
Number of buses: peak fleet	245	246	241	241	(4)	(1.6)
Average age: total fleet (in years)	7.0	5.0	0.9	7.0	0	0.0
Average age: peak fleet (in years) ^a	4.0	5.0	5.0	7.0	3.0	75.0
Vehicle miles	9,283,989	9,335,788	9,290,554	9,364,938	80,949	6.0
Road calls due to mechanical failure	2,447	2,551	1,982	2,066	(381)	(15.6)
Vehicle miles between road calls due to mechanical failure	3,794	3,660	4,687	4,533	739	19.5
Vehicle miles per bus	29,852	31,223	31,072	31,321	1,469	4.9
Vehicle maintenance FTE employees	96.4	109.0	107.6	104.8	8.4	8.7

Section 15 reports of the Urban Mass Transportation Administration, annual reports of financial transactions of transit operators to the State Controller's Office, and auditors' calculations. Sources:

SamTrans contracts with a private contractor for part of its bus service. Data regarding the private contractor are included in all indicators except wages and benefits. In addition, data for fiscal year 1983-84 were affected by two labor strikes and, therefore, are not presented. Unit and percent changes are for four years only. Note:

^a The age of the peak fleet was computed using the newest buses.

As discussed in the section in this chapter on financial indicators, part of the increase in vehicle maintenance costs is due to a 23.1 percent increase in mechanics' top hourly wages. To make its mechanics' pay competitive with the wages of other mechanics from the Bay Area, SamTrans increased mechanics' top hourly wages from \$13.22 an hour in fiscal year 1984-85 to \$16.27 an hour in fiscal year 1987-88. In addition, SamTrans increased the number of vehicle maintenance FTE employees by 8.7 percent. According to SamTrans, increases in both vehicle maintenance employees and costs are the result of a bus maintenance improvement program implemented in 1983. The program emphasized, among other things, preventive maintenance, fleet appearance, employee training, and the implementation of standard Each of these elements increased vehicle maintenance procedures. costs.

From fiscal year 1984-85 through fiscal year 1987-88, there was a 3.9 percent reduction in the size of SamTrans' total bus fleet. According to SamTrans, this reduction was due to SamTrans' selling off a total of 12 buses in fiscal year 1985-86. These 12 buses consisted of 10 buses that were classified as emergency contingency vehicles and two other buses. The combination of a 22.5 percent increase in vehicle maintenance costs and a 3.9 percent reduction in the size of SamTrans' total fleet resulted in vehicle maintenance costs per bus increasing 27.4 percent from \$17,121 per bus in fiscal year 1984-85 to \$21,810 per bus in fiscal year 1987-88. Also, during this period, the 22.5 percent increase in vehicle maintenance costs combined with only a 0.9 percent

increase in vehicle miles, resulted in a 22.8 percent increase in vehicle maintenance costs per vehicle mile from \$0.57 in fiscal year 1984-85 to \$0.70 in fiscal year 1987-88.

As measured by vehicle miles between road calls due to mechanical failure, the effectiveness of SamTrans' maintenance program increased. As Table IV-5 illustrates, vehicle miles between road calls due to mechanical failure at SamTrans increased 19.5 percent from 3,794 vehicle miles between road calls in fiscal year 1984-85 to 4,533 vehicle miles between road calls in fiscal year 1987-88. This increase occurred as a result of a 15.6 percent decrease in the number of road calls due to mechanical failure from 2,447 in fiscal year 1984-85 to 2,066 in fiscal year 1987-88. SamTrans was able to increase the number of vehicle miles between road calls even though the average age of its peak fleet increased 75.0 percent from four years in fiscal year 1984-85 to seven years in fiscal year 1987-88.

BUS DRIVER HIRING, TRAINING, AND OTHER DATA

SamTrans required bus driver applicants to meet the basic requirements discussed in Volume 1 of this report. These requirements included the following: being at least 21 years of age, having a California driver's license, passing a physical examination, providing SamTrans with a driving history prepared by the Department of Motor Vehicles (DMV), passing a criminal history check, and passing a written test. Like the other operators we reviewed, SamTrans reviewed

applicants' driving and criminal histories. SamTrans disqualified applicants if they had more than three moving violations in the previous three years. SamTrans also disqualified applicants if they had been convicted of driving under the influence of drugs or alcohol. Furthermore, SamTrans disqualified applicants who failed to report felony or misdemeanor convictions.

The private contractor with which SamTrans contracts for a portion of its bus service also required its bus driver applicants to Like SamTrans, the private contractor meet basic requirements. required an applicant to meet the following requirements: to be at least 21 years of age, to have a California driver's license, to pass a physical examination, to provide the private contractor with a driving history prepared by the DMV, and to pass a criminal history check. Further. the private contractor reviewed applicants' previous The contractor disqualified applicants if they employment references. had more than two moving violations or accidents in the previous three years or four moving violations or accidents in the previous five The contractor also disqualified applicants if they had a license suspension or revocation in the previous three years or more than one license suspension or revocation in the previous five years.

SamTrans also administered a written test that assessed applicants' ability to use math, write, tell time, and read maps and traffic signs. Additionally, SamTrans tested applicants' physical

ability to operate bus equipment and applicants' human relations skills. Further, SamTrans did not require applicants to have any previous bus driving experience.

Unlike SamTrans, the private contractor did not test applicants' basic abilities through a written test, nor did it test applicants' physical ability to operate bus equipment. Also, like SamTrans, the contractor did not require its applicants to have previous bus driving experience.

As discussed in Volume 1, SamTrans and the private contractor required bus driver applicants to successfully complete a bus driver training program. SamTrans' training program lasted for 235 hours and consisted of 129 hours of classroom instruction and 106 hours of training on buses. The private contractor's training program lasted for 220 hours and consisted of 68 hours of classroom instruction and 152 hours of training on a bus.

In addition, SamTrans required its bus drivers to complete a course with an emphasis on sensitivity toward the disabled and senior citizens. SamTrans required its drivers to take promotional training to obtain a promotion from part-time driver to full-time driver. The

April 1988.

³Before April 1988, the contractor employed a training program that was not as extensive as that described below. In this section, we describe the training program the contractor implemented after

training course included a review of defensive driving promotional regulations, techniques, current rules and standard operating procedures, and employee responsibilities. Furthermore, SamTrans required remedial training when bus drivers returned from absences of more than 30 days or after drivers had a preventable accident. The private contractor required remedial training when bus drivers returned from absences of more than 120 days, after a preventable accident, if deficiencies had been identified in driving skills, or after receiving a complaint against the driver. Further, SamTrans evaluated drivers' overall performance once every two years. Moreover, according to SamTrans, it schedules all drivers for advanced training every two In addition, SamTrans stated that drivers are evaluated in years. various ways, including using the monitoring of on-time performance and regular supervisors' observations. The private contractor evaluated its drivers' performance three or four times a year through ride checks.

The number of preventable accidents involving SamTrans' drivers decreased 18.5 percent, going from 65 in fiscal year 1985-86 to 53 in fiscal year 1987-88. (Table IV-6 shows preventable accident statistics and indicators from fiscal year 1985-86 through fiscal year 1987-88.) In addition, the number of vehicle miles between preventable accidents increased, going from 102,320 vehicle miles in fiscal year 1985-86 to 125,391 vehicle miles in fiscal year 1987-88. Finally, in fiscal year 1987-88, preventable accidents accounted for only

15.7 percent of SamTrans' total accidents. Volume 1 of this report provides an overall discussion of preventable accidents.

TABLE IV-6

PREVENTABLE ACCIDENT STATISTICS AND INDICATORS
FOR BUSES OPERATED BY THE
SAN MATEO COUNTY TRANSIT DISTRICT
FISCAL YEAR 1985-86 THROUGH FISCAL YEAR 1987-88
(UNAUDITED)

	1985-86	1986-87	1987-88
Vehicle miles	6,650,818	6,618,864	6,645,732
Preventable accidents	65	69	53
Vehicle miles between preventable accidents	102,320	95,926	125,391
Number of drivers involved in preventable accidents	50	58	48
Average number of preventable accidents per driver with	1 20	1.19	1 10
preventable accidents	1.30	1.19	1.10
Number of accidents	285	251	338
Preventable accidents as a percentage of total accidents	22.8%	27.5%	15.7%

Sources: Section 15 reports of the Urban Mass Transportation Administration, operator data, and auditors' calculations.

Note: This table does not include data for the private contractor.

TRENDS AND PRACTICES OF OMNITRANS, LOCATED IN SAN BERNARDINO COUNTY

Omnitrans is a joint powers agency formed in 1976 by the County of San Bernardino and ten cities for the purpose of serving the public transit needs of the cities and unincorporated areas of the San Bernardino and Yucaipa Valleys. Three additional cities later entered the joint powers agreement. During fiscal year 1987-88, Omnitrans operated 75 buses that carried approximately 3.9 million passengers at an operating cost of \$8,985,000. Omnitrans contracts with private contractors to provide demand-response service and with a public operator to provide bus service. Total operating costs, inclusive of the public operator contract, were \$10,954,000 during fiscal year 1987-88.

Elected officials from each of the local governments make up Omnitrans' board of directors. The board of directors is responsible for establishing all policies, rules, and regulations under which Omnitrans operates. The general manager is responsible for carrying out the policy and directives of the board of directors and oversaw the activities of 199 full-time equivalent (FTE) employees as of fiscal year 1987-88.

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 $^{^{}m 1}$ See the Appendix for definitions of technical terms used.

Omnitrans' regional transportation planning agency is the Southern California Association of Governments (SCAG). SCAG is also the metropolitan planning organization that annually develops the regional transportation improvement program. Additionally, SCAG administers all federal assistance and local Transportation Development Act (TDA) subsidies to Omnitrans and other operators located within six counties including San Bernardino.

Omnitrans' operating revenues and subsidies exceeded its operating cost each year from fiscal year 1983-84 through fiscal year 1987-88, resulting in operating surpluses. In addition, the number of passengers Omnitrans served increased while its vehicle revenue hours and vehicle revenue miles decreased from fiscal year 1983-84 through fiscal year 1987-88. According to Omnitrans, the increase in number of passengers is a result of several factors including rapid population growth, on-time buses, bus safety and reliability, low fares, marketing, and bus driver courtesy while the decrease in hours and miles of service is a result of eliminating inefficient routes and substituting some bus service with demand-response service.

FINANCIAL TRENDS

As shown in Table V-1, Omnitrans' operating revenues and subsidies exceeded operating costs each year from fiscal year 1983-84 through fiscal year 1987-88, resulting in operating surpluses that ranged from a low of \$1,745,000 to a high of \$2,949,000. From fiscal

year 1983-84 through fiscal year 1987-88, Omnitrans' number of bus passengers increased 9.0 percent while the number of bus passengers statewide.² 10.3 percent Additionally, as shown in decreased Table V-1, Omnitrans' total operating costs increased 12.5 percent from \$9,735,000 during fiscal year 1983-84 to \$10,954,000 during fiscal year Similarly, Omnitrans' operating costs, exclusive of the 1987-88. public operator contract, increased 10.8 percent from \$8,111,000 during fiscal year 1983-84 to \$8,985,000 during fiscal year 1987-88. Further, Omnitrans' increase in total operating costs is less than the 18.0 percent increase in the area consumer price index (CPI) for the same five-year period.

 $^{^2}$ Our figures for transit operations statewide include from 60 to 97 of the 109 transit operators providing bus service in California, depending on the availability of data.

TABLE V-1

OPERATING REVENUES, SUBSIDIES, AND COSTS FOR BUS SERVICES OPERATED BY OMNITRANS, LOCATED IN SAN BERNARDINO COUNTY FISCAL YEAR 1983-84 THROUGH FISCAL YEAR 1987-88 (UNAUDITED) (IN THOUSANDS) Increase (Decrease)

	1983-84	1984-85	1985-86	1986-87	1987-88	Dollar	Percent
Operating Revenues and Subsidies Passenger fare revenue Other revenue	\$ 1,883 132	\$ 1,899 629	\$ 2,016 328	\$ 2,057	\$ 2,213	\$ 330	17.5% 203.0
Local Iransportation Development Act subsidies	4,107	5,032	6,270	7,890	8,507	4,400	107.1
other local subsidies State subsidies Federal subsidies	1,610 3,748	1,885 3,142	1,445 3,112	731 2,987	0 0 2,742	(1,610) (1,006)	0.0 (100.0) (26.8)
Total Operating Revenues and Subsidies	11,480	12,587	13,171	14,025	13,862	2,382	20.7
Operating Costs ^a Wages and benefits Materials and supplies	5,166	5,110	5,210 1,484	5,667	5,333	167 (118)	3.2 (7.3)
Services Purchased transportation	635	668 1,701	654 1,831	866 1,758	917	282 345	44.4
Interest Other	111 581	445 866	71	96 1,274	38 1,197	(73) 616	(65.8) 106.0
Total Operating Costs	9,735	10,374	10,350	11,076	10,954	1,219	12.5
Operating Surplus (Deficit) Depreciation Expense	1,745 (1,015)	2,213 (870)	2,821 (884)	2,949 (1,110)	2,908 (1,198)	1,163 (183)	66.6 18.0
Surplus (Deficit) With Depreciation	\$ 730	\$ 1,343	\$ 1,937	\$ 1,839	\$ 1,710	\$ 980	134.2

Section 15 reports of the Urban Mass Transportation Administration, annual reports of financial transactions of transit operators to the State Controller's Office, and auditors' calculations. Sources:

^a Operating costs on this table include the cost of contract services from the Southern California Rapid Transit District.

Omnitrans attributes its cost containment to several factors, including route changes and the installation of computer equipment and which, according to Omnitrans, resulted in improved software, productivity and efficiency. In addition, according to Omnitrans, it has been able to contain wage and benefit costs through the use of part-time employees, increased scheduling efficiencies, and contract negotiations with labor unions. Table V-2 shows that wage and benefit costs represent approximately one-half of Omnitrans' total operating Furthermore, Table V-2 shows that the proportion of wage and costs. benefit costs to total costs has decreased from 53.1 percent in fiscal year 1983-84 to 48.7 percent in fiscal year 1987-88.

TABLE V-2

PROPORTIONS OF THE VARIOUS COMPONENTS OF OPERATING COSTS FOR BUS SERVICES OPERATED BY OMNITRANS, LOCATED IN SAN BERNARDINO COUNTY FISCAL YEARS 1983-84 AND 1987-88 (UNAUDITED)

	<u>1983-84</u>	<u> 1987-88</u>
Operating Costs		
Wages and benefits	53.1%	48.7%
Materials and supplies	16.6	13.7
Services	6.5	8.4
Purchased transportation	16.7	18.0
Interest	1.1	0.3
Other	6.0	10.9
Total Operating Costs	100.0%	<u>100.0</u> %

Source: Calculated from operating cost figures on Table V-1.

As Table V-1 illustrates, two cost categories (materials and supplies and interest) decreased from fiscal year 1983-84 through fiscal year 1987-88. Omnitrans stated that a 16.3 percent decrease in the cost of fuel from fiscal year 1983-84 through fiscal year 1987-88 was the major contributor to the overall decrease in the costs of materials and supplies. Omnitrans' cost of materials and supplies decreased 7.3 percent during the review period. In addition, Omnitrans attributes the 65.8 percent decline in interest expense from fiscal

year 1983-84 through fiscal year 1987-88 to a reduction of its debt and the more timely receipt of federal assistance, which reduced Omnitrans' need for short-term loans.

Three of Omnitrans' cost categories (services, purchased transportation, and "other") increased in excess of the 18.0 percent area CPI increase for fiscal year 1983-84 through fiscal year 1987-88. First, according to Omnitrans, the cost of services increased over the five-year period as a result of increases in maintenance services, custodial services, and employee medical examinations. Omnitrans' cost of services increased 44.4 percent during the review period. Second, increased 21.2 percent as a result of purchased transportation increases in Omnitrans' public operator contract with the Southern California Rapid Transit District (SCRTD), which operates portions of Omnitrans' bus service. Third, the "other" cost category increased 106 percent from \$581,000 in fiscal year 1983-84 to \$1,197,000 in fiscal year 1987-88 primarily because of a 242.8 percent increase in casualty and liability costs. According to Omnitrans, casualty and liability costs increased from \$163,324 in fiscal year 1983-84 to \$559.892 in fiscal year 1987-88 because of an increase in the number of claims and changes in insurance market conditions. Additionally, Omnitrans stated that components of the "other" cost category have also increased such as advertising, utilities, taxes, safety training, and printing costs.

Although Omnitrans' total operating costs increased 12.5 percent from fiscal year 1983-84 through fiscal year 1987-88, its operating revenues and subsidies increased 20.7 percent. However, during this period, Omnitrans shifted from reliance on federal and state subsidies to reliance on local subsidies. Table V-3 shows a substantial decrease in the proportions of both federal and state subsidies to total operating revenues and subsidies for Omnitrans from year 1983-84 to fiscal year 1987-88. Federal subsidies decreased 26.8 percent from \$3,748,000 during fiscal year 1983-84 to \$2,742,000 during fiscal year 1987-88. Further, although state subsidies accounted for 14.0 percent of Omnitrans' total operating revenues and subsidies in fiscal year 1983-84, it received no state subsidies in fiscal year 1987-88. Instead, Omnitrans has relied more heavily on local TDA subsidies, which in fiscal year 1987-88 accounted for 61.4 percent of Omnitrans' total operating revenues and subsidies.

TABLE V-3

PROPORTIONS OF THE VARIOUS COMPONENTS OF OPERATING REVENUES AND SUBSIDIES FOR BUS SERVICES OPERATED BY OMNITRANS, LOCATED IN SAN BERNARDINO COUNTY FISCAL YEARS 1983-84 AND 1987-88 (UNAUDITED)

	<u>1983-84</u>	<u> 1987-88</u>
Operating Revenues and Subsidies		
Passenger fare revenue	16.4%	15.9%
Other revenue	1.2	2.9
Local Transportation Development Act subsidies	35.8	61.4
Other local subsidies	0.0	0.0
State subsidies	14.0	0.0
Federal subsidies	32.6	19.8
Total Operating Revenues and Subsidies	<u>100.0</u> %	<u>100.0</u> %

Source: Calculated from operating revenues and subsidies figures on Table V-1.

Table V-1 indicates that Omnitrans' passenger fare revenue increased 17.5 percent from \$1,883,000 in fiscal year 1983-84 to \$2,213,000 in fiscal year 1987-88. However, as shown in Table V-3, the proportion of passenger fare revenue to Omnitrans' total operating revenues and subsidies remained stable at approximately 16 percent. In contrast, for transit operators statewide, passenger fare revenue accounted for 32.4 percent of total operating revenues and subsidies in fiscal year 1987-88. Passenger fare revenue accounted for 21.2 percent

of total operating revenues and subsidies in fiscal year 1987-88 for operators of comparable size to Omnitrans (one million to 10 million passengers). As of July 5, 1989, Omnitrans had not raised fares since July 1986 when it increased the base adult fare 9.1 percent from \$0.55 to \$0.60.

Also, during the five-year period, the number of passengers Omnitrans served increased 9.0 percent. In contrast, for transit operators statewide the number of passengers served decreased 10.3 percent. Omnitrans attributes its increase in passengers to increasing population, on-time buses, bus safety and reliability, low fares, marketing, and bus driver courtesy to passengers.

PERFORMANCE TRENDS

Omnitrans' performance, as measured by the indicators on Table V-4, was varied from fiscal year 1983-84 through fiscal year 1987-88. While some indicators reflected a decline in performance, other indicators reflected an improvement in performance. For example, passengers per vehicle revenue mile and passengers per vehicle revenue hour both increased. Further, three cost indicators increased. However, only one of the cost indicators increased more than the 18.0 percent increase in the area CPI. Table V-4 illustrates the trends in five performance statistics and eight performance indicators calculated from these statistics. The performance statistics do not include statistics from the contract services of the SCRTD.

As stated earlier, Omnitrans' operating costs, exclusive of public operator contract, increased 10.8 percent during the the five-year review period. However, in fiscal year 1987-88, Omnitrans' operating costs actually decreased from the previous year. While Omnitrans achieved this decrease in costs, it increased the number of passengers it carried and its service, as measured by vehicle revenue Consequently, the three performance indicators hours and miles. pertaining to operating costs (operating costs per passenger, per vehicle revenue hour, and per vehicle revenue mile) showed improvement in the last of the five years we reviewed. As shown in Table V-4, Omnitrans' operating costs per passenger declined from \$2.58 during fiscal year 1986-87 to \$2.32 during fiscal year 1987-88. This improvement occurred after Omnitrans' operating costs per passenger increased 12.7 percent from \$2.29 during fiscal year 1983-84 to \$2.58 during fiscal year 1986-87. Over the five-year period, Omnitrans' costs per passenger increased only 1.3 percent. Similarly, Omnitrans' vehicle revenue hour recently improved by operating costs per decreasing from \$52.99 during fiscal year 1986-87 to \$50.07 during fiscal year 1987-88. Again, this improvement occurred after Omnitrans' operating costs per vehicle revenue hour increased 17.6 percent from during fiscal year 1983-84 to \$52.99 during fiscal year \$45.06 Over the five-year period, Omnitrans' operating costs per 1986-87. vehicle revenue hour increased 11.1 percent. The percentage increases in operating costs per vehicle revenue hour and operating costs per passenger were less than the 18.0 percent increase in the area CPI.

TABLE V-4

PERFORMANCE STATISTICS AND INDICATORS
FOR BUS SERVICES OPERATED BY
OMNITRANS, LOCATED IN SAN BERNARDINO COUNTY
FISCAL YEAR 1983-84 THROUGH FISCAL YEAR 1987-88
(UNAUDITED)

						Increase (Decrease)	Decrease)
	1983-84	1984-85	1985-86	1986-87	1987-88	Unit	Percent
<u>Performance Statistics</u> ^a							
Operating costs ^b	\$8,111,000	\$8,673,000	\$8,519,000	\$9,318,000	\$8,985,000	\$874,000	10.8%
Vehicle revenue hours	180,000	183,642	175,462	175,830	179,441	(223)	(0.3)
Vehicle revenue miles	2,711,369	2,646,909	3,151,012	2,526,412	2,533,768	(177,601)	(9.9)
Passengers	3,547,000	3,593,024	3,644,562	3,611,568	3,864,753	317,753	0.6
Full-time equivalent (FTE) employees	208	193	201	199	199	(6)	(4.3)
Performance Indicators: Transportation <u>Development Act (TDA) Related</u>							
Operating costs per passenger	\$2.29	\$2.41	\$2.34	\$2.58	\$2.32	\$0.03	1.3
Operating costs per vehicle revenue hour	\$45.06	\$47.23	\$48.55	\$52.99	\$50.07	\$5.01	11.1
Passengers per vehicle revenue hour	19.7	19.6	20.8	20.5	21.5	1.8	9.1
Passengers per vehicle revenue mile	1.3	1.4	1.2	1.4	1.5	0.2	15.4
Vehicle revenue hours per FTE employee	865.4	951.5	873.0	883.6	901.7	36.3	4.2
Performance Indicators: Non-TDA Related							
Operating costs per vehicle revenue mile	\$2.99	\$3.28	\$2.70	\$3.69	\$3.55	\$0.56	18.7
Vehicle revenue miles per FTE employee	13,035.4	13,714.6	15,676.7	12,695.5	12,732.5	(302.9)	(2.3)
Vehicle revenue miles per vehicle revenue hour	15.1	14.4	18.0	14.4	14.1	(1.0)	(9.9)

Sources: Section 15 reports of the Urban Mass Transportation Administration, annual reports of financial transactions of transit operators to the State Controller's Office, and auditors' calculations.

^a Performance statistics do not include statistics from the contract services of the Southern California Rapid Transit District.

^b Operating costs on this table do not equal the operating costs as shown on Table V-1 because the operating costs on this table do not include the cost of contract services from the Southern California Rapid Transit District.

As stated earlier, the number of passengers Omnitrans served increased 9.0 percent while service as measured by vehicle revenue hours and vehicle revenue miles decreased from fiscal year 1983-84 through fiscal year 1987-88. Omnitrans' vehicle revenue hours decreased 0.3 percent from 180,000 hours during fiscal year 1983-84 to 179,441 hours during fiscal year 1987-88. In contrast, for transit operators statewide, vehicle revenue hours increased 5.8 percent during Furthermore, Omnitrans' vehicle revenue miles decreased the period. percent from 2,711,369 miles during fiscal year 1983-84 to 6.6 2,533,768 during fiscal year 1987-88 while for transit operators statewide vehicle revenue miles increased 1.4 percent. According to Omnitrans, it reduced service by eliminating inefficient routes from fiscal year 1981-82 through fiscal year 1986-87 and by substituting some bus service with demand-response service during fiscal year 1985-86.

The figures for two other performance indicators for Omnitrans increased while the figures for the same indicators for statewide operators decreased. Table V-4 shows that passengers per vehicle revenue hour increased 9.1 percent from 19.7 passengers per vehicle revenue hour during fiscal year 1983-84 to 21.5 passengers per vehicle revenue hour during fiscal year 1987-88 compared with a 15.1 percent decrease for transit operators statewide. Similarly, Omnitrans' passengers per vehicle revenue mile increased 15.4 percent

from 1.3 to 1.5 over the same period. In contrast, for transit operators statewide, passengers per vehicle revenue mile decreased 11.1 percent.

Passengers per vehicle revenue hour did not proportionally increase as much as passengers per vehicle revenue mile primarily because of traffic congestion. The San Bernardino Valley has experienced increasing traffic congestion, resulting in a lower average speed. Omnitrans' vehicle revenue miles per vehicle revenue hour decreased 6.6 percent from 15.1 vehicle revenue miles per vehicle revenue hour during fiscal year 1983-84 to 14.1 vehicle revenue miles per vehicle revenue hour during fiscal year 1987-88. Consequently, vehicle revenue hours did not significantly change over the five-year period in spite of service reductions that decreased vehicle revenue miles.

Also, in comparison with the number of passengers per vehicle revenue hour and vehicle revenue mile for transit operators statewide, the number of Omnitrans' passengers per vehicle revenue hour and vehicle revenue mile suggests that Omnitrans has capacity for passenger growth. For example, for transit operators statewide, passengers per vehicle revenue hour were 42.2 for fiscal year 1987-88 while Omnitrans had only 21.5 passengers per vehicle revenue hour. For transit operators of comparable size to Omnitrans, the number of passengers per vehicle revenue hour was 26.4 for fiscal year 1987-88. Similarly, for transit operators statewide, there were 3.2 passengers per vehicle

revenue mile in fiscal year 1987-88 while Omnitrans had 1.5 passengers per vehicle revenue mile. For transit operators of comparable size to Omnitrans, the number of passengers per vehicle revenue mile was 1.7 for fiscal year 1987-88. Fewer passengers per vehicle revenue hour and per vehicle revenue mile help to explain why Omnitrans' operating costs per passenger were substantially higher than operating costs per passenger for transit operators of comparable size. Table V-4 indicates that Omnitrans had operating costs per passenger of \$2.32 during fiscal year 1987-88 while transit operators statewide had costs of \$1.38 per passenger. For transit operators of comparable size to Omnitrans, operating costs per passenger were \$1.76 during fiscal year 1987-88.

Omnitrans' number of vehicle revenue hours per FTE employee increased 4.2 percent during the review period. Omnitrans provided 865.4 vehicle revenue hours per FTE employee in fiscal year 1983-84 and 901.7 vehicle revenue hours per FTE employee in fiscal year 1987-88. The 4.2 percent increase is not significant because there was no significant change in either vehicle revenue hours or FTE employees. The number of Omnitrans' FTE employees decreased 4.3 percent from 208 FTE employees during fiscal year 1983-84 to 199 FTE employees during fiscal year 1987-88 while vehicle revenue hours decreased only 0.3 percent. However, because there was a 6.6 percent decrease in Omnitrans' vehicle revenue miles from fiscal year 1983-84 through fiscal year 1987-88, Omnitrans' vehicle revenue miles per FTE employee decreased 2.3 percent during the review period.

MAINTENANCE TRENDS

As measured by vehicle maintenance costs per bus, Omnitrans' maintenance efficiency declined. However, as measured by vehicle maintenance costs per vehicle mile, its maintenance efficiency improved. Moreover, as measured by vehicle miles between road calls due to mechanical failure, Omnitrans' effectiveness improved. As Table V-5 illustrates, between fiscal year 1983-84 and fiscal year 1987-88, vehicle maintenance costs increased 12.2 percent from \$2,190,900 to \$2,457,933 while the area CPI increased 18.0 percent.

TABLE V-5

MAINTENANCE STATISTICS AND INDICATORS
FOR BUS SERVICES OPERATED BY
OMNITRANS, LOCATED IN SAN BERNARDINO COUNTY
FISCAL YEAR 1983-84 THROUGH FISCAL YEAR 1987-88
(UNAUDITED)

						Increase (Decrease)	ecrease)
	1983-84	1984-85	1985-86	1986-87	1987-88	Unit	Percent
Vehicle maintenance costs	\$2,190,900	\$2,173,381	\$2,219,356	\$2,558,815	\$2,457,933	\$267,033	12.2%
Wages and benefits for vehicle maintenance full-time equivalent (FTE) employees	ю !	\$1,251,618	\$1,330,547	\$1,378,455	\$1,323,648	\$72,030 ^a	5.8 ^a
Vehicle maintenance costs as a percentage of operating costs	22.5%	21.0%	21.4%	23.1%	22.4%		
Vehicle maintenance costs per bus	\$26,718	\$26,505	\$27,065	\$34,118	\$32,772	\$6,054	22.7
Vehicle maintenance costs per vehicle mile	\$0.76	\$0.77	\$0.67	\$0.95	\$0.87	\$0.11	14.5
Number of buses: total fleet	82	82	82	75	75	(7)	(8.5)
Number of buses: peak fleet	48	49	51	51	52	4	8.3
Average age: total fleet (in years)	6.0	7.0	8.0	9.0	10.0	4.0	66.7
Average age: peak fleet (in years) ^b	4.0	5.0	6.0	7.0	8.0	4.0	100.0
Vehicle miles	2,879,259	2,817,841	3,296,705	2,681,948	2,820,882	(58,377)	(2.0)
Road calls due to mechanical failure	250	117	127	117	66	(151)	(60.4)
Vehicle miles between road calls due to mechanical failure	11,517	24,084	25,958	22,923	28,494	16,977	147.4
Vehicle miles per bus	35,113	34,364	40,204	35,759	37,612	2,499	7.1
Vehicle maintenance FTE employees	ю ¦	40.5	42.5	42.5	39.5	(1.0) ^a	(2.5) ^a

Sources: Section 15 reports of the Urban Mass Transportation Administration, annual reports of financial transactions of transit operators to the State Controller's Office, and auditors' calculations.

^a The Section 15 reporting format for vehicle maintenance FTE employees changed beginning with fiscal year 1984-85. Therefore, data between fiscal year 1983-84 and subsequent years may not be comparable. Unit and percent changes are for four years only.

 $^{^{\}mathrm{b}}$ The age of the peak fleet was computed using the newest buses.

In spite of the 12.2 percent increase in vehicle maintenance costs over the five-year period of review, vehicle maintenance costs as operating costs remained relatively constant. percentage of Omnitrans attributes its increase in vehicle maintenance costs to the implementation of a new preventive maintenance program and increased costs associated with an aging fleet. The average age of Omnitrans' total bus fleet increased 66.7 percent from six years to ten years over the five-year period. At the same time, the average age of Omnitrans' peak fleet increased 100 percent from four years to eight years. Further, on average, Omnitrans drove its buses 7.1 percent more vehicle miles from 35,113 vehicle miles per bus during fiscal year 1983-84 to 37,612 vehicle miles per bus during fiscal year 1987-88. Also, the average vehicle maintenance costs per bus increased 22.7 percent, going from \$26,718 per bus to \$32,772 per bus, while the area CPI increased 18.0 percent.

As measured by vehicle maintenance costs per vehicle mile, Omnitrans' maintenance efficiency improved. Vehicle maintenance costs per vehicle mile increased 14.5 percent from \$0.76 in fiscal year 1983-84 to \$0.87 in fiscal year 1987-88. However, this increase was less than the 18.0 percent increase in the area CPI.

Omnitrans' vehicle maintenance costs did not increase at a higher rate largely because the cost of wages and benefits for its vehicle maintenance employees increased only 5.8 percent from \$1,251,618 during fiscal year 1984-85 to \$1,323,648 during fiscal year

1987-88. Further, wages and benefits for vehicle maintenance employees decreased 4.0 percent from fiscal year 1986-87 through fiscal year 1987-88 partly because of a 7.1 percent decrease in the number of vehicle maintenance FTE employees.

During the period of our review, the size of Omnitrans' total bus fleet decreased 8.5 percent, going from 82 buses in fiscal year 1983-84 to 75 buses in fiscal year 1987-88. However, the size of Omnitrans' peak bus fleet increased 8.3 percent, going from 48 buses in fiscal year 1983-84 to 52 buses in fiscal year 1987-88. According to Omnitrans, the decrease in its total bus fleet was necessary because of the UMTA's spare bus limitation. The UMTA requirement restricts an operator from having more than a defined percentage of buses than is necessary to meet its maximum service requirements.

As measured by vehicle miles between road calls due to mechanical failure, the effectiveness of Omnitrans' maintenance program improved. As Table V-5 illustrates, vehicle miles between road calls due to mechanical failure at Omnitrans increased 147.4 percent from 11,517 vehicle miles between road calls in fiscal year 1983-84 to 28,494 in fiscal year 1987-88. This increase occurred as a result of the combined effect of a 60.4 percent decrease in the number of road calls due to mechanical failure from 250 in fiscal year 1983-84 to 99 in fiscal year 1987-88 and a 2.0 percent decrease in vehicle miles traveled by Omnitrans' buses during the same period. Omnitrans

attributes the decline in road calls to new maintenance procedures, including a scheduled replacement of parts and other preventive maintenance techniques.

TRENDS AND PRACTICES OF THE TORRANCE TRANSIT SYSTEM¹

The Torrance Transit System (Torrance) is the responsibility of the Transit Division, one of three divisions within the City of Torrance's Transportation Department. Torrance operates 39 buses that, in fiscal year 1987-88, provided transit services to approximately 2.8 million passengers in Torrance and other south Los Angeles County Torrance had operating costs of \$5,789,000 and total communities. operating revenues and subsidies of \$5,763,000 for fiscal year 1987-88. The transportation administrator (transit manager) is responsible to the director of transportation, who, in turn, reports directly to the city manager and the City Council. The transit manager oversaw the activities of approximately 80 budgeted full-time equivalent (FTE) employees in fiscal year 1987-88.

Torrance's regional transportation planning agency is the Southern California Association of Governments (SCAG). SCAG is responsible for regional transportation planning in Imperial, Los Angeles, Orange, Riverside, San Bernardino, and Ventura counties. SCAG. in conjunction with the Los Angeles County Transportation Commission (LACTC), allocates to area transit operators federal state subsidies, and the local one-quarter cent sales tax subsidies,

 $^{^{}m 1}$ See the Appendix for definitions of technical terms used.

collected under the Transportation Development Act (TDA). The LACTC also allocates money collected from an additional one-half cent Los Angeles County sales tax approved by local voters (Proposition A).

From fiscal year 1983-84 through fiscal year 1987-88, Torrance had small operating deficits annually, and its operating revenues, subsidies, and costs increased at approximately the same rate. This rate of increase was nearly double that of the local consumer price index (CPI) for the area that includes Torrance. During the same period, Torrance's ridership decreased 10.1 percent. Even though Torrance increased its vehicle revenue miles by 9.4 percent in fiscal year 1987-88, its ridership declined 8.4 percent in that year. Vehicle maintenance costs increased 56.2 percent from fiscal year 1983-84 through fiscal year 1987-88.

FINANCIAL TRENDS

From fiscal year 1983-84 through fiscal year 1987-88, Torrance's operating costs exceeded the operating revenues and subsidies it received, resulting in small operating deficits. For example, in fiscal year 1987-88, Torrance received \$5,763,000 in operating revenues and subsidies and had \$5,789,000 in operating costs, which resulted in an operating deficit of \$26,000. From fiscal year 1983-84 through fiscal year 1987-88, Torrance's costs increased 33.8 percent, a rate of increase that was higher than the 18.0 percent

increase in the area CPI. Table VI-1 summarizes Torrance's operating revenues, subsidies, and costs for fiscal year 1983-84 through fiscal year 1987-88.

TABLE VI-1

OPERATING REVENUES, SUBSIDIES, AND COSTS
FOR BUS SERVICES OPERATED BY
TORRANCE TRANSIT SYSTEM
FISCAL YEAR 1983-84 THROUGH FISCAL YEAR 1987-88
(UNAUDITED)
(IN THOUSANDS)

						Increase	Increase (Decrease)
	1983-84	1984-85	1985-86	1986-87	1987-88	<u>Dollar</u>	Percent
Operating Revenues and Subsidies Passenger fare revenue Other revenue	\$ 822 92	\$ 885 109	\$1,014 60	\$1,215 99	\$1,192 88	\$ 370 (4)	45.0% (4.3)
Local Transportation Development Act subsidies Other local subsidies State subsidies Federal subsidies	1,036 1,686 150 494	1,098 1,920 163 506	1,240 1,901 170 475	1,772 1,845 0	2,521 1,962 0	1,485 276 (150) (494)	143.3 16.4 (100.0) (100.0)
Total Operating Revenues and Subsidies	4,280	4,681	4,860	4,931	5,763	1,483	34.6
Operating Costs Wages and benefits Materials and supplies Services Purchased transportation Interest Other	2,643 492 511 0 0	2,811 427 674 674 0 0 781	2,833 458 786 0 0	2,756 365 771 0 0	3.199 432 1,069 0 0	556 (60) 558 0 0 409	21.0 (12.2) 109.2 0.0 0.0 60.1
Total Operating Costs	4,326	4,693	4,887	4,936	5,789	1,463	33.8
Operating Surplus (Deficit) Depreciation Expense	(46) (314)	(12) (43 <u>4</u>)	(27) (4 <u>85</u>)	(5) (605)	(26) (702)	(20) 388	(43.5) 123.6
Surplus (Deficit) With Depreciation	\$ (3 <u>60</u>)	<u>\$ (446</u>)	\$ (51 <u>2</u>)	\$ (61 <u>0</u>)	<u>\$ (728)</u>	\$ (368)	102.2

Sources: Annual reports of financial transactions of transit operators to the State Controller's Office and auditors' calculations.

Increases in wages and benefits, services, and casualty and liability insurance costs, which are included in "other" costs, contributed most significantly to Torrance's \$1,463,000 increase in operating costs. Wages and benefits increased approximately 21.0 percent (\$556,000) from fiscal year 1983-84 through fiscal year One reason for the increase was that the hourly wages of bus 1987-88. drivers increased as a result of negotiated union contracts. The maximum hourly rate increased from \$10.03 in fiscal year 1983-84 to \$12.05 in fiscal year 1987-88. Service costs also increased 109.2 percent (\$558,000) over the five-year period. Nearly 74 percent of service costs in fiscal year 1987-88 were for contracted bus Finally, casualty and liability insurance costs increased maintenance. 48.0 percent (\$56,352) from fiscal year 1983-84 through fiscal year 1987-88. According to Torrance, casualty and liability insurance costs increased because of the higher cost of premiums.

Table VI-2 shows the components of Torrance's operating costs for fiscal years 1983-84 and 1987-88.

TABLE VI-2

PROPORTIONS OF THE VARIOUS COMPONENTS OF OPERATING COSTS FOR BUS SERVICES OPERATED BY TORRANCE TRANSIT SYSTEM FISCAL YEARS 1983-84 AND 1987-88 (UNAUDITED)

	<u>1983-84</u>	<u>1987-88</u>
Operating Costs		
Wages and benefits	61.1%	55.2%
Materials and supplies	11.4	7.5
Services	11.8	18.5
Purchased transportation	0.0	0.0
Interest	0.0	0.0
Other	<u>15.7</u>	<u>18.8</u>
Total Operating Costs	<u>100.0</u> %	<u>100.0</u> %

Source: Calculated from operating cost figures on Table VI-1.

Torrance's operating revenues and subsidies have increased at approximately the same rate as its costs. During fiscal year 1987-88, Torrance received a total of \$5,763,000 in operating revenues and subsidies, 34.6 percent more than the \$4,280,000 it received in fiscal year 1983-84. As stated previously, Torrance's costs increased 33.8 percent during the same period. Table VI-3 shows Torrance's sources of operating revenues and subsidies in fiscal years 1983-84 and 1987-88. As the table illustrates, Torrance's federal and state

subsidies decreased while passenger fare revenue and local TDA subsidies increased. This generally followed the statewide trend in funding sources.²

Torrance received no federal or state subsidies in fiscal years 1986-87 and 1987-88. In contrast, Torrance's local TDA subsidies increased 143.3 percent from \$1,036,000 to \$2,521,000 from fiscal year 1983-84 through fiscal year 1987-88, and these subsidies account for 43.7 percent of the total operating revenues and subsidies received in fiscal year 1987-88. In addition, Torrance's other local subsidies, including Proposition A funds, increased 16.4 percent from \$1,686,000 to \$1,962,000 during the period of our review.

 $^{^2}$ Our figures for transit operators statewide include from 60 to 97 of the 109 transit operators in California, depending on the availability of data.

TABLE VI-3

PROPORTIONS OF THE VARIOUS COMPONENTS OF OPERATING REVENUES AND SUBSIDIES FOR BUS SERVICES OPERATED BY TORRANCE TRANSIT SYSTEM FISCAL YEARS 1983-84 AND 1987-88 (UNAUDITED)

	<u>1983-84</u>	<u> 1987-88</u>
Operating Revenues and Subsidies		
Passenger fare revenue	19.2%	20.7%
Other revenue	2.2	1.5
Local Transportation Development Act subsidies	24.2	43.7
Other local subsidies	39.4	34.1
State subsidies	3.5	0.0
Federal subsidies	11.5	0.0
Total Operating Revenues and Subsidies	<u>100.0</u> %	<u>100.0</u> %

Source: Calculated from operating revenues and subsidies figures on Table VI-1.

Passenger fare revenue also increased 45 percent from fiscal year 1983-84 through fiscal year 1987-88. Torrance increased its regular fare 43 percent in July 1986 from \$0.35 to \$0.50. Even so, passenger fare revenue accounted for only 20.7 percent of Torrance's operating revenues and subsidies while for transit operators statewide passenger fare revenue accounted for 32.5 percent of total operating revenues and subsidies. For transit operators of comparable size to

Torrance (serving one million to 10 million passengers), passenger fare revenue accounted for 21.2 percent of total operating revenues and subsidies.

to funds for operations, Torrance received subsidies for the purchase of buses and facility construction from federal and local sources. From fiscal year 1983-84 through fiscal year 1987-88, Torrance received \$6,909,253 for capital expenditures. Torrance received \$2,903,074 in fiscal year 1984-85 and \$3,035,375 in During that period, a new transit facility was fiscal year 1985-86. constructed and became operational in July 1986. The facility now administration, operation, and maintenance functions. houses the Torrance also purchased 11 buses from fiscal year 1983-84 through fiscal year 1987-88. Because of the operator's expenditure of capital funds facilities and buses, Torrance's depreciation expenses increased 123.6 percent over this five-year period. As shown on Table VI-1, adding the depreciation expense to Torrance's operating costs increased the deficit from \$360,000 in fiscal year 1983-84 to \$728,000 in fiscal year 1987-88.

PERFORMANCE TRENDS

Torrance's performance, as measured by the indicators on Table VI-4, declined from fiscal year 1983-84 through fiscal year 1987-88. Table VI-4 illustrates the trends in four performance statistics and six performance indicators calculated from those

statistics. As shown in Table VI-4, from fiscal year 1983-84 through fiscal year 1987-88, the number of Torrance's passengers decreased For transit operators statewide, the number of 10.1 percent. passengers decreased 10.3 percent during this period. Torrance's fiscal year 1983-84 through fiscal year 1984-85 increased and, then, subsequently decreased. Torrance stated that the decrease in passengers was due to both the fare increase of 43 percent in fiscal year 1986-87 and lower gasoline prices. From fiscal year 1983-84 through fiscal year 1987-88, vehicle revenue miles increased by 8.6 percent, and vehicle revenue hours increased by 10.0 percent. These increases were due, in part, to a service increase that occurred in fiscal year 1987-88. By comparison, for transit operators statewide, vehicle revenue miles increased only 1.4 percent, and vehicle revenue hours increased 5.8 percent.

Because the number of passengers carried did not increase with the increase in vehicle revenue miles and vehicle revenue hours, Torrance's efficiency, as measured by the number of passengers per vehicle revenue mile and vehicle revenue hour, declined significantly. The number of passengers per vehicle revenue hour at Torrance decreased 18.2 percent, going from 30.3 passengers per vehicle revenue hour in fiscal year 1983-84 to 24.8 in fiscal year 1987-88. During this period, for transit operators statewide, the number of passengers per vehicle revenue hour decreased 15.1 percent to 42.7 passengers. For transit operators of comparable size to Torrance, the number of passengers per vehicle revenue hour was 26.4 in fiscal year 1987-88.

Torrance had the most service utilization in fiscal year 1984-85 when it served 37.0 passengers per vehicle revenue hour and 2.7 passengers per vehicle revenue mile. According to Torrance, as of December 1988, it had an increase in the number of passengers carried as compared with the number carried in December 1987.

TABLE VI-4

PERFORMANCE STATISTICS AND INDICATORS
FOR BUS SERVICES OPERATED BY
TORRANCE TRANSIT SYSTEM
FISCAL YEAR 1983-84 THROUGH FISCAL YEAR 1987-88
(UNAUDITED)

						Increase (Decrease)	crease)
	1983-84	1984-85	1985-86	1986-87	1987-88	Unit	Percent
Performance Statistics							
Operating costs	\$4,326,000	\$4,693,000	\$4,887,000	\$4,936,000	\$5,789,000	\$1,463,000	33.8%
Vehicle revenue hours	102,570	101,911	102,145	101,815	112,783	10,213	10.0
Vehicle revenue miles	1,385,707	1,376,707	1,379,911	1,375,320	1,504,618	118,911	8.6
Passengers	3,109,913	3,772,020	3,570,263	3,052,807	2,796,765	(313,148)	(10.1)
Full-time equivalent (FTE) employees	1	1	;	1	1	;	1
Performance Indicators: Transportation <u>Development Act (TDA) Related</u>							
Operating costs per passenger	\$1.39	\$1.24	\$1.37	\$1.62	\$2.07	\$0.68	48.9
Operating costs per vehicle revenue hour	\$42.18	\$46.05	\$47.84	\$48.48	\$51.33	\$9.15	21.7
Passengers per vehicle revenue hour	30.3	37.0	35.0	30.0	24.8	(5.5)	(18.2)
Passengers per vehicle revenue mile	2.2	2.7	2.6	2.2	1.9	(0.3)	(13.6)
Vehicle revenue hours per FTE employee ^a	!	!	1	;	;	ŧ ŧ	;
Performance Indicators: Non-TDA Related							
Operating costs per vehicle revenue miles	\$3.12	\$3.41	\$3.54	\$3.59	\$3.85	\$0.73	23.4
Vehicle revenue miles per FTE employee ^a	:	1	1	ł	1	1	1
Vehicle revenue miles per vehicle revenue hour	13.5	13.5	13.5	13.5	13.3	(0.2)	(1.5)

Sources: Section 15 reports of the Urban Mass Transportation Administration, annual reports of financial transactions of transit operators to the State Controller's Office, and auditors' calculations.

 $^{^{\}rm a}$ Data for the actual number of FTE employees were not available.

As a result of higher costs and fewer passengers, Torrance's operating costs per passenger increased 48.9 percent, going from \$1.39 per passenger in fiscal year 1983-84 to \$2.07 per passenger in fiscal year 1987-88. In contrast, for transit operators statewide, operating costs per passenger in 1987-88 were \$1.38. For transit operators of comparable size to Torrance, the operating costs per passenger were \$1.76 in fiscal year 1987-88.

Because data for the actual number of FTE employees were not available, we did not perform any analysis of employee productivity as measured by vehicle revenue hours per FTE employee and vehicle revenue miles per FTE employee.

MAINTENANCE TRENDS

As measured by vehicle maintenance costs per bus and vehicle maintenance costs per vehicle mile, Torrance's maintenance efficiency declined significantly. However, as measured by vehicle miles between road calls due to mechanical failure, its effectiveness significantly improved. As Table VI-5 illustrates, from fiscal year 1983-84 through fiscal year 1987-88, vehicle maintenance costs increased 56.2 percent from \$675,309 to \$1,055,128 while the area CPI increased 18.0 percent.

TABLE VI-5

MAINTENANCE STATISTICS AND INDICATORS
FOR BUS SERVICES OPERATED BY
TORRANCE TRANSIT SYSTEM
FISCAL YEAR 1983-84 THROUGH FISCAL YEAR 1987-88

						Increase ((Decrease)
	1983-84	1984-85	1985-86	1986-87	1987-88	Unit	Percent
Vehicle maintenance costs	\$ 675,309	\$ 886,628	\$1,075,090	\$ 944,751	\$1,055,128	\$379,819	56.2%
Wages and benefits for vehicle maintenance full-time equivalent (FTE) employees	٩	\$182,305	\$185,576	\$197,404	\$193,165	\$10,860 ^b	6.0 ^b
Vehicle maintenance costs as a percentage of total operating costs	15.6%	18.9%	22.0%	19.1%	18.2%		
Vehicle maintenance costs per bus	\$16,471	\$18,864	\$26,877	\$23,619	\$27,055	\$10,584	64.3
Vehicle maintenance costs per vehicle mile	\$0.47	\$0.62	\$0.75	\$0.66	\$0.68	\$0.21	44.7
Number of buses: total fleet	41	47	40	40	39	(2)	(4.9)
Number of buses: peak fleet	25	25	25	25	28	က	12.0
Average age: total fleet (in years)	0.6	0.6	8.0	0.6	10.0	1	11.1
Average age: peak fleet (in years) ^C	4.0	3.0	3.0	4.0	5.0	ч	25.0
Vehicle miles	1,437,105	1,427,699	1,431,011	1,426,257	1,556,548	119,443	8.3
Road calls due to mechanical failure	559	069	760	236	207	(352)	(63.0)
Vehicle miles between road calls due to mechanical failure	2,571	2,069	1,883	6,043	7,520	4,949	192.5
Vehicle miles per bus	35,051	30,377	35,775	35,656	39,911	4,860	13.9
Vehicle maintenance FTE employees	1	1	1	1	}	1	;

Sources: Section 15 reports of the Urban Mass Transportation Administration, annual reports of financial transactions of transit operators to the State Controller's Office, and auditors' calculations.

^a Torrance Transit System contracts with the City of Torrance Garage Department for maintenance of its buses. Data for the Garage Department are included in all indicators except wages and benefits.

^b The Section 15 reporting format for vehicle maintenance FTE employees changed beginning with fiscal year 1984-85. Therefore, data between fiscal year 1983-84 and subsequent years may not be comparable. Unit and percent changes are for four years only.

 $^{^{} extsf{C}}$ The age of the peak fleet was computed using the newest buses.

 $^{^{\}mathsf{d}}$ Data for the actual number of vehicle maintenance FTE employees were not available.

The increase in the cost of vehicle maintenance service accounts for more than three-fourths of the increase in total vehicle maintenance costs, going from \$490,401 in fiscal year 1983-84 to \$787,383 in fiscal year 1987-88. According to Torrance, the increase was due to the cost of contractual services provided by the City of Torrance Garage Department. During this time, the highest union negotiated hourly wage rate between the City of Torrance and its equipment mechanics increased 14.4 percent from \$11.53 per hour in fiscal year 1983-84 to \$13.19 per hour in fiscal year 1987-88. In addition, Torrance stated that the number of budgeted contracted vehicle maintenance FTE employees increased from 4.0 in fiscal year 1983-84 to 8.6 in fiscal year 1987-88, a 115 percent increase. More vehicle maintenance FTE employees were needed because of new facility and service expansions.

As a result of the increase in Torrance's total vehicle maintenance costs and a 4.9 percent decrease in the total number of buses from 41 in fiscal year 1983-84 to 39 in fiscal year 1987-88, the vehicle maintenance costs per bus increased 64.3 percent, going from \$16,471 to \$27,055 per bus from fiscal year 1983-84 through fiscal year 1987-88. Similarly, the vehicle maintenance costs per vehicle mile increased 44.7 percent, going from \$0.47 to \$0.68 during this period while the area CPI increased only 18.0 percent. An 8.3 percent increase in vehicle miles from 1,437,105 in fiscal year 1983-84 to 1,556,548 in fiscal year 1987-88 contributed to the increase in the

vehicle maintenance costs per vehicle mile. According to Torrance, because each bus was driven more miles, each bus required more maintenance.

As measured by vehicle miles between road calls due to mechanical failure, the effectiveness of Torrance's maintenance program significantly improved. As Table VI-5 illustrates, vehicle miles between road calls due to mechanical failure at Torrance increased 192.5 percent from 2,571 vehicle miles between road calls in fiscal year 1983-84 to 7,520 vehicle miles in fiscal year 1987-88. This increase occurred as a result of the combined effect of a 63.0 percent decrease in the number of road calls due to mechanical failure from 559 road calls in fiscal year 1983-84 to 207 road calls in fiscal year 1987-88 and an 8.3 percent increase in vehicle miles traveled by Torrance buses during the same period.

According to Torrance, there were two reasons for the large increase in vehicle miles between road calls. Jammed fareboxes, which took three to four hours to repair and, therefore, interrupted service, caused a number of road calls before Torrance purchased new fareboxes in November 1986. With the new fareboxes, it takes only two or three minutes to repair a jammed farebox and does not cause a service interruption; thus, Torrance does not record road calls in these instances. In addition, the new maintenance facility completed in July 1986 improved bus maintenance; whereas the old facility had two bus bays, the new facility has six bus bays and more staffing.

During the period of our review, the size of Torrance's total bus fleet decreased 4.9 percent from 41 buses in fiscal year 1983-84 to 39 buses in fiscal year 1987-88. The size of Torrance's peak bus fleet increased 12 percent from 25 buses in fiscal year 1983-84 to 28 buses in fiscal year 1987-88.

VII

TRENDS AND PRACTICES OF THE STOCKTON METROPOLITAN TRANSIT DISTRICT 1

Stockton Metropolitan Transit District (SMART) is a district organized under the California Public Utilities Code. SMART operates 69 buses that, in fiscal year 1987-88, provided transit services to approximately 2.6 million passengers in the greater Stockton area in San Joaquin County. SMART's regional transportation planning agency is the San Joaquin County Council of Governments. The San Joaquin County Council of Governments allocates local Transportation Development Act (TDA) subsidies to SMART. In fiscal year 1987-88, SMART accounted for more than 95 percent of the bus passengers in San Joaquin County, and it received most of the local TDA subsidies as well as most of the federal subsidies allocated to San Joaquin County.

A board of five directors, who are appointed by locally elected officials, governs SMART. The board of directors is responsible for administering SMART's affairs and approving its operating budget, which projected total expenditures for operations of \$7,420,934 for fiscal year 1988-89. The board of directors appoints a general manager who is responsible for the operations of SMART. The general manager oversaw the activities of SMART's 109 full-time equivalent (FTE) employees in fiscal year 1987-88.

 $^{^{1}}$ See the Appendix for definitions of technical terms used.

From fiscal year 1983-84 through fiscal year 1987-88, SMART's operating revenues and subsidies exceeded its operating costs, resulting in surpluses annually. Although its operating costs increased 42.8 percent, SMART's subsidies increased 50.8 percent, as compared with an increase of 17.4 percent in passenger fare revenue. Total operating revenues and subsidies increased 47.2 percent. During the same period, SMART increased its vehicle revenue miles 24.0 percent and its ridership 17.6 percent. Also, during the same period, SMART's vehicle maintenance costs increased 44.3 percent.

FINANCIAL TRENDS

From fiscal year 1983-84 through fiscal year 1987-88, SMART's operating revenues and subsidies exceeded its operating costs, resulting in operating surpluses each year. For example, in fiscal year 1987-88, SMART received \$7,066,000 in operating revenue and subsidies and had \$5,719,000 in operating costs, which resulted in an operating surplus of \$1,347,000. Table VII-1 summarizes SMART's operating revenues, subsidies, and costs from fiscal year 1983-84 through fiscal year 1987-88.

TABLE VII-1

OPERATING REVENUES, SUBSIDIES, AND COSTS
FOR BUS SERVICES OPERATED BY THE
STOCKTON METROPOLITAN TRANSIT DISTRICT
FISCAL YEAR 1983-84 THROUGH FISCAL YEAR 1987-88
(UNAUDITED)
(IN THOUSANDS)

						Increase (Decrease)	Decrease)
	1983-84	1984-85	1985-86	1986-87	1987-88	Dollar	Percent
Operating Revenues and Subsidies Passenger fare revenue Local Dransportation	\$ 804 75	\$ 822 173	\$ 886 119	\$ 875 94	\$ 944 209	\$ 140 134	17.4% 178.7
bevelopment Act subsidies Other local subsidies State subsidies Federal subsidies	2,134 909 111 767	2,645 687 52 1,099	3,541 427 19 756	4,039 454 1,101	4,303 508 1,084	2,169 (401) (93) 317	101.6 (44.1) (83.8) 41.3
Total Operating Revenues and Subsidies	4,800	5,478	5,748	6,581	7,066	2,266	47.2
Operating Costs Wages and benefits Materials and supplies Parvices	2,747 691 280	3,089 745 294	3,307 803 315	3,860 731 359	4,019 310 358	1,272 219 78	46.3 31.7 27.9
Interest Other	0 0 288	357	13 0 488	53 0 523	34 0 398	34 0 110	0.0 38.2
Total Operating Costs	4,006	4,485	4,926	5,506	5,719	1,713	42.8
Operating Surplus (Deficit) Depreciation Expense	794 (503)	993 (544)	822 (54 <u>2</u>)	1,075 (61 <u>9</u>)	1,347 (79 <u>6</u>)	553 (2 <u>93</u>)	69.6 58.3
Surplus (Deficit) With Depreciation	\$ 291	\$ 449	\$ 280	\$ 456	\$ 551	\$ 260	89.3

Sources: Annual reports of financial transactions of transit operators to the State Controller's Office and auditors' calculations.

During the five-year period, SMART's operating costs increased 42.8 percent or \$1,713,000. A 46.3 percent increase in the cost of wages and benefits together with increases in the cost of materials and supplies, services, and other costs, which include casualty and liability insurance, contributed to SMART's \$1,713,000 increase in operating costs. Table VII-2 shows the components of SMART's operating costs for fiscal years 1983-84 and 1987-88.

TABLE VII-2

PROPORTIONS OF THE VARIOUS COMPONENTS OF OPERATING COSTS FOR BUS SERVICES OPERATED BY THE STOCKTON METROPOLITAN TRANSIT DISTRICT FISCAL YEARS 1983-84 AND 1987-88 (UNAUDITED)

	<u>1983-84</u>	<u> 1987-88</u>
Operating Costs		
Wages and benefits	68.6%	70.3%
Materials and supplies	17.2	15.9
Services	7.0	6.3
Purchased transportation	0.0	0.6
Interest	0.0	0.0
Other	<u>7.2</u>	6.9
Total Operating Costs	<u>100.0</u> %	<u>100.0</u> %

Source: Calculated from operating cost figures on Table VII-1.

Wages and benefits increased 46.3 percent or \$1,272,000 from fiscal year 1983-84 through fiscal year 1987-88. This increase was due, in part, to increases in hourly rates for bus drivers resulting from negotiated union contracts; the highest hourly rate increased from \$11.01 at the beginning of fiscal year 1983-84 to \$12.94 at the beginning of fiscal year 1987-88, an increase of 17.5 percent. As discussed in the following section on maintenance trends, the hourly rate for the vehicle maintenance employees also increased 17.5 percent during the period of our review. In addition, the cost of SMART's health benefits increased 110.8 percent from \$212,314 in fiscal year 1983-84 to \$447,563 in fiscal year 1987-88. During this same period, the consumer price index (CPI) for the area that includes Stockton increased 13.0 percent.

Also, SMART stated that inefficient labor practices allowed through prior union contracts resulted in a costly absenteeism problem that contributed to the increase in the cost of wages and benefits. These inefficient labor practices included no incentives to reduce high absenteeism. High absenteeism resulted in benefits paid for sick leave increasing from \$65,825 in fiscal year 1983-84 to \$115,622 in fiscal year 1987-88. SMART further stated that inefficient labor practices allowed some bus drivers to work excessive overtime at one and one-half times their regular rates of pay. To reduce wage and benefit costs in the future, SMART stated that it had implemented new work rules that allow it to take more action against employees with high absenteeism rates. In addition, SMART stated that its new union contract (effective

May 1989) includes employee financial incentives to reduce absenteeism. Bus drivers can be paid an incentive of up to \$1,500 a year if their absenteeism is below a certain level.

Costs for materials and supplies also increased 31.7 percent or \$219,000 over the five-year period. SMART stated that SMART used greater quantities of materials and supplies because of the increased demands of its service expansion. Finally, casualty and liability insurance premium costs, which are included in "other" costs in Table VII-1, increased 42.2 percent or \$54,418 from fiscal year 1983-84 through fiscal year 1987-88. SMART attributed the increases in casualty and liability insurance costs to its service expansion and a general increase in insurance rates in the State.

SMART's operating revenues and subsidies increased at a faster rate than its operating costs. Although its operating costs increased 42.8 percent, SMART's subsidies increased 50.8 percent. Meanwhile, passenger fare revenue increased 17.4 percent. Total operating revenues and subsidies increased 47.2 percent or 4.4 percentage points more than the percentage increase in operating costs. As shown on Table VII-1, SMART received a total of \$7,066,000 in operating revenues and subsidies during fiscal year 1987-88 as opposed to the \$4,800,000 it received in fiscal year 1983-84. During this period, SMART's subsidies increased from 81.7 percent of total operating revenues and subsidies to 83.7 percent of total operating revenues and subsidies.

state and other local subsidies decreased while SMART's passenger fare revenue, other revenue, local TDA subsidies, and federal subsidies increased to varying degrees. This trend does not parallel the trend for operating revenues and subsidies for transit operators At the statewide level, local subsidies other than TDA subsidies increased and federal subsidies decreased while the opposite Table VII-3 shows the shift in SMART's trend occurred at SMART. sources of funds from fiscal year 1983-84 through fiscal year 1987-88. From fiscal year 1983-84 through fiscal year 1987-88, SMART's federal subsidies increased 41.3 percent while its state subsidies decreased However, during the same period, SMART's local TDA 83.8 percent. subsidies increased 101.6 percent from \$2,134,000 to \$4,303,000 and for 60.9 percent of the total operating revenues and subsidies received in fiscal year 1987-88. Also, the increase in SMART's local TDA subsidies accounted for 95.7 percent of SMART's total increase in operating revenues and subsidies from fiscal year 1983-84 through fiscal year 1987-88. In contrast, the other local subsidies, which, according to SMART, include property tax funds, decreased 44.1 percent from \$909,000 to \$508,000.

²Our figures for transit operators statewide include from 60 to 97 of the 109 transit operators in California, depending upon availability of data.

TABLE VII-3

PROPORTIONS OF THE VARIOUS COMPONENTS OF OPERATING REVENUES AND SUBSIDIES FOR BUS SERVICES OPERATED BY THE STOCKTON METROPOLITAN TRANSIT DISTRICT FISCAL YEARS 1983-84 AND 1987-88 (UNAUDITED)

	<u>1983-84</u>	<u> 1987-88</u>
Operating Revenues and Subsidies		
Passenger fare revenue	16.7%	13.4%
Other revenue	1.6	3.0
Local Transportation Development Act subsidies	44.5	60.9
Other local subsidies	18.9	7.2
State subsidies	2.3	0.2
Federal subsidies	<u>16.0</u>	<u>15.3</u>
Total Operating Revenues and Subsidies	100.0%	<u>100.0</u> %

Source: Calculated from operating revenues and subsidies figures on Table VII-1.

Passenger fare revenue increased 17.4 percent from fiscal year 1983-84 through fiscal year 1987-88. However, as a percentage of total operating revenues and subsidies, this revenue decreased from 16.7 percent to 13.4 percent during the review period. SMART stated that the 17.4 percent increase in passenger fare revenue was due to the increase in the number of passengers since SMART has not had a fare increase since September 1, 1981. Currently, SMART's base adult fare

is \$0.50 and its maximum commuter express service fare is \$0.55. Further, passenger fares accounted for 13.4 percent of SMART's operating revenues and subsidies in fiscal year 1987-88 while for transit operators statewide passenger fare revenue accounted for 32.4 percent of total operating revenues and subsidies. For transit operators of comparable size to SMART (serving one million to 10 million passengers), passenger fare revenue accounted for 21.2 percent of total operating revenues and subsidies.

In addition to funds for operations, SMART stated that it received capital funds from federal and state sources for the purchase of 16 buses. From fiscal year 1983-84 through fiscal year 1987-88, SMART received \$5,202,177 for capital expenditures. According to SMART, its expenditure of capital funds on buses and its adoption of an accelerated bus depreciation schedule that fully depreciates buses over fewer years, resulted in SMART's depreciation expense increasing 58.3 percent over this five-year period. After adding the depreciation expense to SMART's total operating costs, SMART still had surpluses for each fiscal year. These surpluses ranged from a low of \$280,000 in fiscal year 1985-86 to a high of \$551,000 in fiscal year 1987-88.

PERFORMANCE TRENDS

SMART's performance, as measured by most of the indicators on Table VII-4, declined from fiscal year 1983-84 through fiscal year 1987-88. Table VII-4 illustrates the trends in five performance

statistics and eight performance indicators calculated from those From fiscal year 1983-84 through fiscal year 1987-88, the statistics. number of SMART's passengers increased 17.6 percent. For transit operators statewide, passengers decreased 10.3 percent during this SMART stated that the number of passengers increased because period. it expanded service to meet the needs of a growing population. of passengers increased 17.6 percent, Although the number SMART's vehicle revenue hours and miles increased at a higher rate. SMART's vehicle revenue miles increased 24.0 percent, and its revenue hours increased 20.2 percent over the five-year vehicle By comparison, for transit operators statewide, vehicle period. increased 1.4 percent, and vehicle revenue hours miles revenue increased 5.8 percent during the same period. SMART stated that vehicle revenue hours and miles increased at greater rates than passenger increases because it experimented with different routes to attract and retain passengers.

TABLE VII-4

PERFORMANCE STATISTICS AND INDICATORS
FOR BUS SERVICES OPERATED BY THE
STOCKTON METROPOLITAN TRANSIT DISTRICT
EISCAL YEAR 1983-84 THROUGH FISCAL YEAR 1987-88
(UNAUDITED)

rease)	Percent		42.8%	20.2	24.0	17.6	14.7		21.2	18.8	(1.9)	(2.9)	4.7		14.8	8.1	3.2
Increase (Decrease)	Unit		\$1,713,000	21,231	317,158	384,539	14		\$0.39	\$7.16	(0.4)	(0.1)	52.5		\$0.45	1,126.0	0.4
	1987-88		\$5,719,000	126,503	1,636,510	2,565,402	109		\$2.23	\$45.21	20.3	1.6	1,160.6		\$3.49	15,013.9	12.9
	1986-87		\$5,506,000	122,021	1,601,686	2,370,410	112		\$2.32	\$45.12	19.4	1.5	1,089.5		\$3.44	14,300.8	13.1
	1985-86		\$4,926,000	116,326	1,512,354	2,454,656	86		\$2.01	\$42.35	21.1	1.6	1,187.0		\$3.26	15,432.2	13.0
	1984-85		\$4,485,000	111,147	1,641,342	2,326,806	102		\$1.93	\$40.35	20.9	1.4	1,089.7		\$2.73	16,091.6	14.8
	1983-84		\$4,006,000	105,272	1,319,352	2,180,863	95		\$1.84	\$38.05	20.7	1.7	1,108.1		\$3.04	13,887.9	12.5
		Performance Statistics	Operating costs	Vehicle revenue hours	Vehicle revenue miles	Passengers	Full-time equivalent (FTE) employees	Performance Indicators: Transportation <u>Development Act (TDA) Related</u>	Operating costs per passenger	Operating costs per vehicle revenue hour	Passengers per vehicle revenue hour	Passengers per vehicle revenue mile	Vehicle revenue hours per FTE employee	Performance Indicators: Non-TDA Related	Operating costs per vehicle revenue mile	Vehicle revenue miles per FTE employee	Vehicle revenue miles per vehicle revenue hour

Sources: Section 15 reports of the Urban Mass Transportation Administration, annual reports of financial transactions of transit operators to the State Controller's Office, and auditors' calculations.

Because SMART's number of passengers did not increase at the same rate as vehicle revenue hours and miles, SMART's performance declined as measured by passengers per vehicle revenue hour and mile. For example, from fiscal year 1983-84 through fiscal year 1987-88, SMART's number of passengers per vehicle revenue mile dropped from 1.7 to 1.6, a decrease of 5.9 percent. During the same period, the number of passengers per vehicle revenue mile for transit operators statewide dropped from 3.6 to 3.2, a decrease of 11.1 percent. For transit operators of comparable size to SMART, the number of passengers per vehicle revenue mile averaged 1.0 in fiscal year 1987-88.

However, the number of passengers per vehicle revenue hour decreased at a rate that was substantially lower than the statewide decrease. Passengers per vehicle revenue hour at SMART decreased 1.9 percent, going from 20.7 passengers per vehicle revenue hour in fiscal year 1983-84 to 20.3 in fiscal year 1987-88. For transit operators statewide during this period, passengers per vehicle revenue hour decreased 15.1 percent to 42.7 passengers in fiscal year 1987-88. Nevertheless, the 42.7 passengers per vehicle revenue hour carried by the transit operators statewide was still higher than SMART's 20.3 figure for the same year. Transit operators of comparable size to SMART carried 26.4 passengers per vehicle revenue hour in fiscal year 1987-88.

Further, as a result of operating costs increasing at a rate significantly greater than the number of passengers increased, SMART's operating costs per passenger increased 21.2 percent, going from \$1.84 per passenger in fiscal year 1983-84 to \$2.23 per passenger in fiscal year 1987-88. By comparison, for transit operators statewide, operating costs per passenger were \$1.38 in fiscal year 1987-88. In addition, for transit operators of comparable size to SMART, operating costs per passenger were \$1.76 in fiscal year 1987-88. However, while the operating costs per vehicle revenue hour at SMART increased 18.8 percent from \$38.05 in fiscal year 1983-84 to \$45.21 in fiscal year 1987-88, for transit operators statewide, operating costs per vehicle revenue hour were \$61.22 in fiscal year 1987-88. For transit operators of comparable size to SMART, operating costs per vehicle revenue hour were \$45.10.

The number of vehicle revenue hours per FTE employee increased 4.7 percent during the review period. In fiscal year 1983-84, SMART provided 1,108.1 vehicle revenue hours per FTE employee. However, in fiscal year 1987-88, SMART provided 1,160.6 vehicle revenue hours per FTE employee. This increase is in part due to a 20.2 percent increase in vehicle revenue hours. SMART stated that vehicle revenue hours increased over the period as a result of the service expansion.

MAINTENANCE TRENDS

As measured by vehicle maintenance costs per bus, SMART's maintenance efficiency declined. However, as measured by vehicle maintenance costs per vehicle mile, its maintenance efficiency improved. Moreover, as measured by vehicle miles between road calls due to mechanical failure, SMART's effectiveness improved. As Table VII-5 illustrates, from fiscal year 1983-84 through fiscal year 1987-88, vehicle maintenance costs increased 44.3 percent from \$463,468 to \$668,829 while the area CPI increased 13.0 percent.

TABLE VII-5

MAINTENANCE STATISTICS AND INDICATORS
FOR BUS SERVICES OPERATED BY THE
STOCKTON METROPOLITAN TRANSIT DISTRICT
FISCAL YEAR 1983-84 THROUGH FISCAL YEAR 1987-88
(UNAUDITED)

						Increase (Decrease)	ecrease)
	1983-84	1984-85	1985-86	1986-87	1987-88	Unit	Percent
Vehicle maintenance costs	\$463,468	\$516,826	\$519,824	\$699,643	\$668,829	\$205,361	44.3%
Wages and benefits for vehicle maintenance full-time equivalent (FTE) employees	a	\$493,284	\$503,722	\$619,138	\$595,509	\$102,225ª	20.7 ^a
Vehicle maintenance costs as a percentage of operating costs	11.6%	11.5%	10.6%	12.7%	11.7%		
Vehicle maintenance costs per bus	\$7,242	\$8,075	\$8,122	\$8,638	\$69'6\$	\$2,451	33.8
Vehicle maintenance costs per vehicle mile	\$0.34	\$0.30	\$0.33	\$0.41	\$0.38	\$0.04	11.8
Number of buses: total fleet	64	64	64	81	69	2	7.8
Number of buses: peak fleet	37	40	41	43	48	11	29.7
Average age: total fleet (in years)	8.0	9.0	10.0	0.6	8.0	0	0.0
Average age: peak fleet (in years) ^b	4.0	5.0	0.9	3.0	5.0	1.0	25.0
Vehicle miles	1,372,975	1,713,088	1,574,297	1,701,825	1,761,969	388,994	28.3
Road calls due to mechanical failure	187	193	184	172	162	(22)	(13.4)
Vehicle miles between road calls due to mechanical failure	7,342	8,876	8,556	9,894	10,876	3,534	48.1
Vehicle miles per bus	21,453	26,767	24,598	21,010	25,536	4,083	19.0
Vehicle maintenance FTE employees	ರ ! !	13.4	13.4	16.1	16.0	2.6 ^a	19.4 ^a

Sources: Section 15 reports of the Urban Mass Transportation Administration, annual reports of financial transactions of transit operators to the State Controller's Office, and auditors' calculations.

^a The Section 15 reporting format for vehicle maintenance FTE employees changed beginning with fiscal year 1984-85. Therefore, data between fiscal year 1983-84 and subsequent years may not be comparable. Unit and percent changes are for four years only.

 $^{^{\}mathrm{b}}$ The age of the peak fleet was computed using the newest buses.

A 20.7 percent increase in SMART's wages and benefits for vehicle maintenance employees accounts for 49.8 percent of the increase in vehicle maintenance costs. The highest hourly rate for mechanics increased 17.5 percent from \$12.08 at the beginning of fiscal year 1983-84 to \$14.20 at the beginning of fiscal year 1987-88 while the CPI for the area increased 13.0 percent. Also, from fiscal year 1984-85 through fiscal year 1987-88, SMART increased the number of vehicle maintenance FTE employees by 19.4 percent or by 2.6 FTE employees.

In addition to increased wages and benefits for vehicle maintenance employees, the costs of bus parts also increased. For example, SMART stated that the bus parts vendor from which it obtained parts to repair 12 buses (approximately 15 percent of the fleet) ceased operations in fiscal year 1987-88. SMART then had to order parts from an overseas company that charged higher prices than SMART paid its domestic supplier.

As a result of SMART's increased vehicle maintenance costs and because the size of its total bus fleet increased only 7.8 percent during the period of our review, SMART's vehicle maintenance costs per bus increased 33.8 percent, going from \$7,242 in fiscal year 1983-84 to \$9,693 in fiscal year 1987-88. However, because of the 28.3 percent increase in the number of total vehicle miles driven, the vehicle maintenance costs per vehicle mile increased 11.8 percent, going from \$0.34 to \$0.38 during this period. This increase was less than the 13.0 percent increase in the area CPI. SMART stated that its increase in vehicle miles resulted, in part, from the increase in service.

As measured by vehicle miles between road calls due to mechanical failure, the effectiveness of SMART's maintenance program improved. As Table VII-5 illustrates, vehicle miles between road calls due to mechanical failure at SMART increased 48.1 percent from 7,342 vehicle miles between road calls in fiscal year 1983-84 to 10,876 in fiscal year 1987-88.

This increase occurred as a result of the combined effect of a 13.4 percent decrease in the number of road calls due to mechanical failure from 187 in fiscal year 1983-84 to 162 in fiscal year 1987-88 and a 28.3 percent increase in vehicle miles traveled by SMART buses during the same period.

According to SMART, there are a number of reasons for the reduction in the number of road calls due to mechanical failure: the operator purchased 16 new buses in fiscal year 1986-87; it improved its preventive maintenance program by decreasing the miles and time between bus service intervals; it installed a computerized maintenance tracking system; and it hired approximately 2.5 more vehicle maintenance FTE employees to work in the preventive maintenance program.

The size of SMART's total bus fleet increased 7.8 percent from 64 buses in fiscal year 1983-84 to 69 buses in fiscal year 1987-88. The size of SMART's peak bus fleet increased 29.7 percent from 37 buses in fiscal year 1983-84 to 48 buses in fiscal year 1987-88. SMART

stated that its peak fleet increased as a result of the expanded service. However, to meet the equipment demands of increased service, SMART stated that it activated older buses into peak service in addition to purchasing new buses. As a result, the average age of SMART's peak fleet increased from 3.0 years in fiscal year 1986-87 to 5.0 years in fiscal year 1987-88. The average age of SMART's total fleet was 8.0 years in fiscal year 1983-84 and 10.0 years in fiscal year 1985-86. However, SMART decreased its total fleet's average age to 8.0 years in fiscal year 1987-88 as a result of its purchase of the 16 new buses.

VIII

TRENDS AND PRACTICES OF THE CITY OF VALLEJO'S TRANSIT OPERATIONS 1

The City of Vallejo (Vallejo) is a municipal operator of bus service primarily in Solano County. In fiscal year 1987-88, Vallejo operated 27 buses and provided bus service to approximately 1.3 million passengers at operating costs of \$2,072,000. Vallejo contracts with a private contractor to provide all of Vallejo's bus service. Vallejo's regional transportation planning agency and metropolitan planning organization is the Metropolitan Transportation Commission (MTC), which allocates federal and Transportation Development Act (TDA) subsidies to transit operators in the Bay Area. The MTC also approves Vallejo's regional transportation improvement program, based upon which Vallejo applies for federal funds.

Vallejo owns all transit vehicles, facilities, and equipment used to operate its transit system but contracts with the private contractor to provide Vallejo's daily operations and maintenance services. Under the terms of the contract, Vallejo subsidizes the private contractor for all costs and expenses incurred in providing Vallejo's transit service. The private contractor collects the revenue from passengers and deposits it in a city bank account. Vallejo then pays the passenger fare revenue along with the operating subsidies to

¹See the Appendix for definitions of technical terms used.

the private contractor. In its financial records, Vallejo records the amount it pays to the private contractor as purchased transportation.

The City of Vallejo regulates or carries out all policy matters, including the determination of routes, schedules, fares, and capital purchases. According to Vallejo, the private contractor employed 46 full-time equivalent (FTE) employees for its transit operations during fiscal year 1987-88. Vallejo also stated that it employed two FTE employees to assist the private contractor in its transit operations during the same period.

Vallejo was unable to provide data related to its transit operations for fiscal year 1983-84. However, from fiscal year 1984-85 through fiscal year 1987-88, Vallejo experienced significant changes in its financial, performance, and maintenance operations. These changes were largely the result of a substantial expansion in Vallejo's services during the four-year review period. Vallejo's operating costs increased 44.5 percent, and the number of passengers it served increased 13.7 percent while its vehicle revenue miles increased by 34.5 percent.

FINANCIAL TRENDS

While the number of passengers Vallejo served increased 13.7 percent from fiscal year 1984-85 through fiscal year 1987-88, operating costs increased 44.5 percent from \$1,434,000 to \$2,072,000, a

rate of increase that was higher than the 39.5 percent increase in Vallejo's operating revenues and subsidies. Table VIII-1 shows Vallejo's operating revenues, subsidies, and costs for fiscal year 1984-85 through fiscal year 1987-88.

TABLE VIII-1

OPERATING REVENUES, SUBSIDIES, AND COSTS
FOR BUS SERVICES OPERATED BY THE
CITY OF VALLEJO
FISCAL YEAR 1984-85 THROUGH FISCAL YEAR 1987-88
(UNAUDITED)
(IN THOUSANDS)

crease)	Percent	74.1% 300.0	73.8 0.0 (100.0) (42.5)	39.5	(31.0) 0.0 285.0 35.7 0.0 1066.7 44.5
Increase (Decrease)	Dollar	\$209 111	517 0 (91) (159)	287	(22) 0 57 475 0 128 638
	1987-88	\$ 491 148	1,218 0 0 215	2,072	49 0 1,806 140 2,072
	1986-87	\$ 475 5	1,306 0 0 240	2,026	57 1,524 0 443 2,025
	1985-86	\$ 308 48	989 0 139 222	1,706	51 1 0 1,226 0 49 1,327 \$ 379
	1984-85	\$ 282	701 0 91 374	1,485	71 0 20 1,331 12 12 1,434 \$\frac{\$\$51\$}{\$}\$
		Operating Revenues and Subsidies Passenger fare revenue Other revenue	Development Act (TDA) subsidies Other local subsidies State subsidies Federal subsidies	Total Operating Revenues and Subsidies	Operating Costs Mages and benefits Materials and supplies Services Purchased transportation Interest Other Total Operating Costs

Sources: Section 15 reports of the Urban Mass Transportation Administration and auditors' calculations.

Note:

Information for fiscal year 1983-84 was not available; therefore, unit and percent changes are for four years only. In addition, Vallejo does not report bus depreciation expense in its operating statement.

A substantial expansion in Vallejo's transit services contributed to Vallejo's increased operating costs. For example, according to Vallejo, in fiscal year 1987-88, it began operating express service from Vallejo to the Bay Area Rapid Transit District (BART) station at El Cerrito Del Norte, which contributed to the 35.7 percent increase in the cost of the transportation services it purchased from the private contractor. In addition, in June 1986, Vallejo began to operate bus service from the Vallejo ferry dock to an amusement park. Although this new service increased Vallejo's operating costs, the amusement park, according to Vallejo, fully reimburses Vallejo for the cost of operating the service.

From fiscal year 1984-85 through fiscal year 1987-88, Vallejo's "other" costs increased 1,066.7 percent. However, this increase is misleading because the costs for casualty and liability insurance, which contributed to the increase, were actually recorded in another cost category in the first two years of our four-year review period. When these costs were recorded in the "other" cost category in the last two years of our review period, they caused an apparently significant increase in this cost category. If Vallejo had not begun to report the casualty and liability insurance costs as an "other" cost, the increase in "other" costs would have been 25.0 percent.

Moreover, although Vallejo's operating costs increased 44.5 percent from fiscal year 1984-85 through fiscal year 1987-88, according to Vallejo, it contained the amount of increase by assuming

the casualty and liability insurance on the operations of its transit service. From fiscal year 1984-85 through fiscal year 1986-87, the private contractor purchased this insurance, and according to Vallejo, it reimbursed the contractor for these costs. In fiscal year 1986-87, the cost of the casualty and liability insurance was \$348,740. However, in fiscal year 1987-88, Vallejo acquired the casualty and liability insurance through a group insurance pool for small to medium sized transit operators. In fiscal year 1987-88, Vallejo had a total casualty and liability insurance cost of only \$124,688 for its transit operations, a decrease of \$224,052 (64.2 percent) from what it paid the private contractor for this insurance in the previous year. This reduction in insurance costs decreased Vallejo's total operating costs by approximately 11.0 percent in fiscal year 1987-88.

During the four-year period, Vallejo's operating costs increased by 44.5 percent or \$638,000. A 35.7 percent increase in purchased transportation, together with increases in services and "other" costs, which include casualty and liability insurance, contributed to Vallejo's \$638,000 increase in operating costs. Table VIII-2 shows the components of Vallejo's operating costs for fiscal years 1984-85 and 1987-88.

TABLE VIII-2

PROPORTIONS OF THE VARIOUS COMPONENTS OF OPERATING COSTS FOR BUS SERVICES OPERATED BY THE CITY OF VALLEJO FISCAL YEARS 1984-85 AND 1987-88 (UNAUDITED)

	<u>1984-85</u>	<u> 1987-88</u>
Operating Costs		
Wages and benefits	5.0%	2.3%
Materials and supplies	0.0	0.0
Services	1.4	3.7
Purchased transportation	92.8	87.2
Interest	0.0	0.0
Other	0.8	6.8
Total Operating Cost	100.0%	100.0%

Source: Calculated from operating cost figures on Table VIII-1.

During fiscal year 1987-88, Vallejo received a total of \$2,072,000 in operating revenues and subsidies, 39.5 percent more than the \$1,485,000 it received in fiscal year 1984-85. This increase in operating revenues and subsidies accompanied Vallejo's expansion of service and was marked by a shift from Vallejo's reliance on federal and state subsidies to more reliance on local TDA subsidies and passenger fares. Table VIII-3 illustrates the shift in Vallejo's funding sources.

TABLE VIII-3

PROPORTIONS OF THE VARIOUS COMPONENTS OF OPERATING REVENUES AND SUBSIDIES FOR BUS SERVICES OPERATED BY THE CITY OF VALLEJO FISCAL YEARS 1984-85 AND 1987-88 (UNAUDITED)

	<u>1984-85</u>	<u> 1987-88</u>
Operating Revenues and Subsidies		
Passenger fare revenue	19.0%	23.7%
Other revenue	2.5	7.1
Local Transportation Development Act subsidies	47.2	58.8
Other local subsidies	0.0	0.0
State subsidies	6.1	0.0
Federal subsidies	<u>25.2</u>	10.4
Total Operating Revenues and Subsidies	<u>100.0</u> %	<u>100.0</u> %

Source: Calculated from operating revenues and subsidies figures on Table VIII-1.

From fiscal year 1984-85 through fiscal year 1987-88, Vallejo's federal subsidies decreased 42.5 percent, and state subsidies decreased 100 percent. However, during the same period, Vallejo's passenger fare revenue increased 74.1 percent. In addition to the new fully reimbursed bus service and the BART bus feeder service already mentioned, Vallejo implemented fare increases in July 1986. Vallejo increased the adult fare by 20.0 percent from \$0.50 to \$0.60, the youth

fare by 40.0 percent from \$0.25 to \$0.35, and the senior fare by 66.7 percent from \$0.15 to \$0.25. According to Vallejo, the fare increase contributed to a 3.6 percent decrease in Vallejo's number of passengers for fiscal year 1986-87. Vallejo's passenger fare revenue accounted for only 23.7 percent of its total operating revenues and fiscal year 1987-88 compared with an average of subsidies in 32.4 percent of total operating revenues and subsidies for transit operators statewide.² For transit operators of comparable size to Vallejo (serving one million to 10 million passengers), passenger fare revenue accounted for an average of 21.2 percent of total operating revenues and subsidies.

Vallejo's largest increase in funding came from the local TDA subsidies. These local subsidies increased \$517,000 (73.8 percent) from \$701,000 to \$1,218,000 from fiscal year 1984-85 through fiscal year 1987-88. Vallejo stated that its increased reliance on local TDA subsidies was due to the steady decline of federal funds for transit during the past few years. Federal funds decreased \$159,000 from fiscal year 1984-85 through fiscal year 1987-88.

In addition to funds for operations, Vallejo received subsidies from federal, state, and local sources for the purchase of

²Our figures for transit operators statewide include from 60 to 97 of the 109 transit operators providing bus service in California, depending on the availability of data.

buses and facility construction. From fiscal year 1984-85 through fiscal year 1987-88, Vallejo received \$4,277,889 for capital expenditures. During that period, Vallejo used these funds for items such as a maintenance facility and new buses.

PERFORMANCE TRENDS

Vallejo's performance, as measured by the indicators on Table VIII-4, varied from fiscal year 1984-85 through fiscal year 1987-88. While some indicators reflected a decline in performance, other indicators reflected an improvement in performance. For example, passengers per vehicle revenue mile and passengers per vehicle revenue hour decreased. Further, three cost indicators increased. However, one of the cost indicators increased less than the 10.8 percent increase in the local consumer price index (CPI) for the area that includes Vallejo. Table VIII-4 illustrates the changes in Vallejo's performance as measured by five categories of performance statistics and eight performance indicators calculated from these statistics.

TABLE VIII-4

PERFORMANCE STATISTICS AND INDICATORS
FOR BUS SERVICES OPERATED BY THE
CITY OF VALLEJO
EISCAL YEAR 1984-85 THROUGH FISCAL YEAR 1987-88
(UNAUDITED)

					Increase (Decrease)	ecrease)
	1984-85	1985-86	1986-87	1987-88	Unit	Percent
Performance Statistics						
Operating costs	\$1,434,000	\$1,327,000	\$2,025,000	\$2,072,000	\$638,000	44.5%
Vehicle revenue hours	45,067	46,850	48,100	58,636	13,569	30.1
Vehicle revenue miles	654,738	688,230	718,490	880,450	225,712	34.5
Passengers	1,164,294	1,315,253	1,267,773	1,323,318	159,024	13.7
Full-time equivalent (FTE) employees	42	44	44	48	ဖ	14.3
Performance Indicators: Transportation Development Act (TDA) Related						
Operating costs per passenger	\$1.23	\$1.01	\$1.60	\$1.57	\$0.34	27.6
Operating costs per vehicle revenue hour	\$31.82	\$28.32	\$42.10	\$35.34	\$3.52	11.1
Passengers per vehicle revenue hour	25.8	28.1	26.4	22.6	(3.2)	(12.4)
Passengers per vehicle revenue mile	1.8	1.9	1.8	1.5	(0.3)	(16.7)
Vehicle revenue hours per FTE employee	1,073.0	1,064.8	1,093.2	1,221.6	148.6	13.8
Performance Indicators: Non-TDA Related						
Operating costs per vehicle revenue mile	\$2.19	\$1.93	\$2.82	\$2.35	\$0.16	7.3
Vehicle revenue miles per FTE employee	15,589.0	15,641.6	16,329.3	18,342.7	2,753.7	17.7
Vehicle revenue miles per vehicle revenue hour	14.5	14.7	.14.9	15.0	0.5	3.4

Sources: Section 15 reports of the Urban Mass Transportation Administration, annual reports of financial transactions of transit operators to the State Controller's Office, and auditors' calculations.

Information for fiscal year 1983-84 was not available; therefore, unit and percent changes are for four years only. Note:

Trends in these performance indicators are affected largely by changes in the operator's number of passengers, operating costs, and level of service, as measured by vehicle revenue hours and miles. Vallejo's operating costs increased 44.5 percent from fiscal year 1984-85 through fiscal year 1987-88, and it served only 13.7 percent more passengers. Because Vallejo's operating costs increased at a rate significantly greater than the increase in the number of passengers, Vallejo's operating costs per passenger increased 27.6 percent, going from \$1.23 per passenger in fiscal year 1984-85 to \$1.57 per passenger During the same period, the local CPI in fiscal year 1987-88. increased 10.8 percent. In addition, in fiscal year 1987-88, it cost transit operators statewide an average of \$1.38 per passenger to For transit operators of comparable size to provide bus service. Vallejo, the average operating costs per passenger were \$1.76 in fiscal year 1987-88.

Vallejo's vehicle revenue miles and hours increased more rapidly than the average vehicle revenue miles and hours for transit operators statewide. These transit operators drove their buses only 1.5 percent more vehicle revenue miles and only 5.8 percent more vehicle revenue hours in fiscal year 1987-88 than they did in fiscal year 1984-85. However, in the same period, Vallejo drove 34.5 percent more vehicle revenue miles and drove 30.1 percent more vehicle revenue hours. The rate of increase in Vallejo's vehicle revenue miles was greater than the rate of increase in its vehicle revenue hours. According to Vallejo, its new routes were longer in distance, entailing

travel on freeways. The greater increase in vehicle revenue miles resulted in a net increase of 3.4 percent in the average speed of buses, as measured by vehicle revenue miles per vehicle revenue hour.

Moreover, although Vallejo's operating costs increased 44.5 percent from fiscal year 1984-85 through fiscal year 1987-88, Vallejo's operating costs per vehicle revenue hour increased only 11.1 percent from \$31.82 to \$35.34 during the four-year period. The 11.1 percent increase is only slightly higher than the 10.8 percent change in the area CPI. Also, it cost transit operators statewide an average of \$61.22 per vehicle revenue hour to provide bus service in fiscal year 1987-88. For transit operators of comparable size to Vallejo, the average operating costs per vehicle revenue hour were \$45.10 in fiscal year 1987-88.

Vallejo's 13.7 percent increase in the number of bus passengers carried from fiscal year 1984-85 through fiscal year 1987-88 compares favorably with the number of passengers carried statewide. For transit operators statewide, there was a 13.1 percent decrease in passengers. In addition, although Vallejo's number of passengers per vehicle revenue hour decreased 12.4 percent from 25.8 passengers per vehicle revenue hour in fiscal year 1984-85 to 22.6 in fiscal year 1987-88, this decrease was less than the average decrease for transit operators statewide. Statewide during this period, passengers per vehicle revenue hour decreased an average of 15.8 percent. However, in fiscal year 1987-88, Vallejo served only 22.6 passengers per vehicle

revenue hour while transit operators statewide served an average of 42.2 passengers per vehicle revenue hour. For transit operators of comparable size to Vallejo, the average number of passengers per vehicle revenue hour was 26.4 in fiscal year 1987-88. In addition, Vallejo's number of passengers per vehicle revenue mile dropped from 1.8 in fiscal year 1984-85 to 1.5 in fiscal year 1987-88, a decrease of 16.7 percent. For transit operators statewide, passengers per vehicle revenue mile decreased an average of 11.1 percent. Furthermore, while Vallejo served 1.5 passengers per vehicle revenue mile in fiscal year statewide served an average of 3.2 1987-88, transit operators passengers per vehicle revenue mile. For transit operators of comparable size to Vallejo, the average number of passengers per vehicle revenue hour was 1.7 in fiscal year 1987-88.

Vallejo's number of vehicle revenue hours per FTE employee increased 13.8 percent during the review period. In fiscal year 1984-85, Vallejo provided 1,073.0 vehicle revenue hours per FTE employee while, in fiscal year 1987-88, Vallejo provided 1,221.6 vehicle revenue hours per FTE employee.

MAINTENANCE TRENDS

As measured by vehicle maintenance costs per bus, Vallejo's maintenance efficiency declined. However, as measured by vehicle maintenance costs per vehicle mile, its maintenance efficiency improved. Moreover, as measured by vehicle miles between road calls

due to mechanical failure, its effectiveness improved. As Table VIII-5 illustrates, from fiscal year 1984-85 through fiscal year 1987-88, vehicle maintenance costs increased 28.6 percent from \$289,815 to \$372,796 while the area CPI increased 10.8 percent.

TABLE VIII-5

MAINTENANCE STATISTICS AND INDICATORS
FOR BUS SERVICES OPERATED BY THE
CITY OF VALLEJO
FISCAL YEAR 1984-85 THROUGH FISCAL YEAR 1987-88
(UNAUDITED)

					Increase (Decrease)	Decrease)
	1984-85	1985-86	1986-87	1987-88	Unit	Percent
Vehicle maintenance costs	\$289,815	\$279,043	\$327,453	\$372,796	\$ 82,981	28.6%
Wages and benefits for vehicle maintenance full-time equivalent (FTE) employees	\$203,485	\$201,493	В	е -	o ,	Ø .
Vehicle maintenance costs as a percentage of operating costs	20.2%	21.0%	16.2%	18.0%		
Vehicle maintenance costs per bus	\$12,076	\$11,627	\$11,695	\$13,807	\$1,731	14.3
Vehicle maintenance costs per vehicle mile	\$0.42	\$0.39	\$0.43	\$0.41	\$(0.01)	(2.4)
Number of buses: total fleet	24	24	28	27	က	12.5
Number of buses: peak fleet	18	19	19	23	5	27.8
Average age: total fleet (in years)	11.0	12.0	14.0	13.0	2	18.2
Average age: peak fleet (in years) ^b	8.0	0.6	10.0	10.0	2	25.0
Vehicle miles	685,365	719,847	762,304	914,000	228,635	33.4
Road calls due to mechanical failure	304	eg I	172	255	(49)	(16.1)
Vehicle miles between road calls due to mechanical failure	2,254	т !	4,432	3,584	1,330	59.0
Vehicle miles per bus	28,557	29,994	27,225	33,852	5,295	18.5
Vehicle maintenance FTE employees	7.5	හ <u>.</u> .	സ് !	ල 	ख । ।	ന ! !

Section 15 reports of the Urban Mass Transportation Administration, annual reports of financial transactions of transit operators to the State Controller's Office, and auditors' calculations. Sources:

Information for fiscal year 1983-84 was not available; therefore, unit and percent changes are for four years only. Note:

^a Data was not available.

 $^{^{\}mbox{\scriptsize b}}$ The age of the peak fleet was computed using the newest buses.

All of the increase in Vallejo's vehicle maintenance costs occurred during fiscal years 1986-87 and 1987-88. According to Vallejo, this vehicle maintenance cost increase was largely a result of Vallejo's expanded service. Vallejo added buses to its fleet and increased the size of its peak fleet by 27.8 percent. Also, from fiscal year 1984-85 through fiscal year 1987-88, the total vehicle miles driven per bus increased by 18.5 percent, and the average age of the peak fleet increased two years.

From fiscal year 1984-85 through fiscal year 1987-88, Vallejo's vehicle maintenance costs per bus increased from \$12,076 to \$13,807 per bus, an increase of 14.3 percent. The area CPI increased 10.8 percent during the same period. However, Vallejo's vehicle maintenance costs per vehicle mile decreased 2.4 percent from \$0.42 to \$0.41 during the four-year period. According to Vallejo, this decrease is due, in part, to the nature of the newly added routes discussed previously, most of which were for longer distances on freeways.

As measured by vehicle miles between road calls due to mechanical failure, the effectiveness of Vallejo's maintenance program improved. As Table VIII-5 illustrates, vehicle miles between road calls due to mechanical failure increased 59.0 percent from 2,254 vehicle miles between road calls in fiscal year 1984-85 to 3,584 vehicle miles between road calls in fiscal year 1987-88.

This change occurred as a result of the combined effect of a 16.1 percent decrease in the number of road calls due to mechanical failure (from 304 road calls in fiscal year 1984-85 to 255 road calls in fiscal year 1987-88) and a 33.4 percent increase in vehicle miles traveled by Vallejo buses during the same period. Vallejo cited two reasons for the increase in the number of vehicle miles between road calls. First, the operator replaced fareboxes that required service interruptions when jammed with fareboxes that could be repaired without a service interruption. In addition, the operator opened a new, larger maintenance facility with more adequate staffing.

We conducted this review under the authority vested in the auditor general by Section 10500 et seq. of the California Government Code and according to generally accepted governmental auditing standards. We limited our review to those areas specified in the audit scope section of this report.

Respectfully submitted,

KURT R. SJOBERG

Acting Auditor Gereral

Date: September 11, 1989

Staff: Samuel D. Cochran, Audit Manager

Steven M. Hendrickson Wendy T. Rodriguez, CPA

John Paul Albers Ann K. Campbell Sandhya Bhate Russell W. Hayden

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GLOSSARY OF TERMS

<u>Term</u>	Definition
Amortization	The allocation of the cost of an intangible asset, such as a patent or goodwill, over the life of an asset.
Bus Service	Bus services provided according to regular schedules over prescribed routes.
CPI	See "Consumer price index."
Consumer price index (CPI)	A measurement of changes in the retail prices of a constant selection of goods and services. We use as measures of inflation changes in the consumer price indexes of the U.S. Department of Labor, Bureau of Labor Statistics.
Demand-response service	A transit service that provides trips generated by calls to the transit operator from passengers or their agents. The operator then dispatches vehicles to pick up and transport the passengers to their destinations.
Depreciation	The reduction in the value of a tangible asset, such as a building or bus, because of wear and tear or obsolescence. Such wear and tear is accounted for by the allocation of the cost of the tangible asset over the life of the asset.
Effectiveness	The degree to which the goals of an organization are met.
Efficiency	An organization is said to be efficient when it uses resources to provide an intended level of service with minimal waste.

Term	Definition						
FTE Employee	See "Full-time equivalent (FTE) employee."						
Federal subsidies	Federal cash grants and reimbursements.						
Feeder	A branch line of a transport system.						
Full-time equivalent (FTE) employee	Two thousand hours of work in one year equates to one FTE employee.						
LACTC	See "Los Angeles County Transportation Commission."						
Layover	Bus driver rest period.						
Local Transportation Development Act (TDA) subsidies	See "Local Transportation Fund."						
Local Transportation Fund	A statutorily authorized fund established by a county under the Government Code, Section 29530, that provides a source of Transportation Development Act (TDA) funding for transportation purposes. Funds are derived from one-quarter cent of the 6-cent-per-dollar statewide sales tax and are allocated to each county according to the amount of tax collected in that county.						
Los Angeles County Transportation Commission (LACTC)	A county transportation commission for Los Angeles County responsible for the allocation of Proposition A funds in Los Angeles County, approval of all Local Transportation Funds made by the Southern California Association of Governments (SCAG), and allocation of funds provided by the State Transit Assistance (STA) Fund in Los Angeles County.						
MPO	See "Metropolitan planning organization."						
MTC	See "Metropolitan Transportation Commission."						
MTDB	See "Metropolitan Transit Development Board."						

<u>Term</u>

Mechanical failure

Failure resulting from a mechanical problem, such as engine or axle failure, that takes a bus out of service.

Metropolitan planning organization (MPO)

Organizations responsible for coordinating transportation planning in urban areas.

Metropolitan Transit Development Board (MTDB) A board created to plan, construct, and operate public transit and to perform short-range transit planning in the San Diego area. The MTDB provides bus and rail service through the San Diego Transit Corporation and the San Diego Trolley.

Metropolitan
Transportation
Commission (MTC)

A commission that provides comprehensive regional transportation planning and programming for the nine-county San Francisco Bay Area.

Nonmechanical failure

Bus failure caused by problems such as vandalism or road hazards.

Operating costs

All operating expenses excluding depreciation and amortization.

Operating costs per passenger

Operating costs divided by total passengers.

Operating costs: services

Costs for labor and other work provided by outside organizations. Includes advertising fees, temporary help, custodial services, and security services.

Operating expenses

All expenses related to vehicle operations, vehicle maintenance, nonvehicle maintenance, and general administration. Includes depreciation and amortization.

Operator

Any entity responsible for providing public transit services.

Other local subsidies

Funds from taxes levied directly by the transit system, local cash grants and reimbursements (excluding the Local Transportation Fund), local special fare assistance, and subsidies from other nontransit operations.

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Other operating costs

Term

Costs including utility costs, casualty and liability insurance costs, taxes, miscellaneous expenses (for example, for dues, subscriptions, travel, and meetings), and lease and rental costs.

Other revenue

Revenue other than passenger fare revenue, consisting of special transit fares (for example, revenues earned for rides given regular transit service but paid for organization by some other than the school-bus service revenues, freight tariffs, charter service revenues. auxiliary transportation revenues (for example. advertising revenues), nontransportation revenues (for example, investment income).

Passenger fare revenue

Revenue earned from carrying passengers along regularly scheduled routes. Includes parking revenues.

Passenger miles

Total number of miles traveled by passengers on transit vehicles.

Passengers

The total number of passengers who board public buses, including passengers paying cash fares upon boarding, passengers showing passes, and passengers boarding with transfers. Passengers are counted each time they board a bus even though more than one bus may be used for a single journey from the starting place to the final destination.

Peak fleet

Number of buses needed to meet transit service demand during the busiest periods.

Peak period service

The level of service needed to meet transit service demand during the busiest periods.

Performance indicator

A ratio measuring transit performance, such as operating costs per passenger.

Performance statistics

Data used in calculating performance indicators.

Vol. 2 APX-4

Definition

Preventable accident

Term

Any accident in which the driver failed to do everything reasonable to prevent or avoid the accident.

Proposition A (Los Angeles County)

A proposition, approved in 1980, that allows the Los Angeles County Transportation Commission (LACTC) to impose a one-half cent sales tax in the County of Los Angeles for public transit purposes.

Proposition 13

A constitutional initiative, approved in 1978, that includes a limitation on the amount of property taxes that can be collected by local governments.

Public transit

Bus transportation services provided to the general public.

Purchased transportation

Transportation service purchased by an operator from a public or private transportation provider.

RTPA

See "Regional transportation planning agency."

Regional transportation plan

The transportation plan of a regional transportation planning agency (RTPA).

Regional transportation planning agency (RTPA)

Section 29532 of the California Government Code created these organizations, which are responsible for the regional coordination of transportation and the administration of performance audits required by the Transportation Development Act. This section also allows for the designation of councils of government or local transportation commissions as RTPAs.

Revenue passengers

Passengers from whom a fare is collected. Excludes free transfers of passengers.

Revenue service

A bus is in revenue service when the bus is available to the public with a reasonable expectation of carrying passengers.

Term Definition

Revenue vehicle

A bus available to operate in revenue service.

Ridership

See "Passengers."

Road call

When a bus, while in service, experiences a mechanical or nonmechanical failure that requires attention from someone other than the driver to restore the bus to an operating condition.

SANDAG

See "San Diego Association of Governments."

SCAG

See "Southern California Association of Governments."

STA

See "State Transit Assistance."

San Diego Association of Governments (SANDAG)

An association that functions as the San Diego regional transportation planning agency (RTPA) and metropolitan planning organization. Develops long-range plans and provides technical support to operators and agencies.

Scheduled bus service

See "Bus service."

Southern California Association of Governments (SCAG) The metropolitan planning organization and the regional transportation planning agency for Imperial, Los Angeles, Orange, Riverside, San Bernardino, and Ventura counties.

State subsidies

State cash grants and reimbursements and state special fare assistance.

State Transit Assistance (STA)

A fund, the creation of which is required 99313.6(a) of the Public Section Utilities Code, which provides a source of Development Transportation funding for transit operations, streets, and roads. Funds are derived from the statewide sales tax and are allocated population according to density operator revenues for the prior fiscal year.

Term	Definition
TDA	See "Transportation Development Act."
Total fleet	Total buses in the fiscal year-end fleet consisting of revenue-producing buses and buses temporarily out of service for routine maintenance and minor repairs.
Transportation Development Act (TDA)	This act, the Public Utilities Code, Section 99200 et seq., is titled the Mills-Alquist-Deddeh Act. The act provides two major sources for the funding of public transportation; the county Local Transportation Fund (local TDA subsidies) and the regional State Transit Assistance (STA) Fund.
UMTA	See "Urban Mass Transportation Administration."
Urban Mass Transportation Administration (UMTA)	An agency established by the federal government under the Urban Mass Transportation Act of 1964 to provide financial assistance to transit operators for operating expenses, the construction or leasing of facilities, and the acquisition of equipment.
Vehicle maintenance cost	Expenses related to the maintenance and repair of vehicles, including revenue, service, maintenance, and administration vehicles.
Vehicle maintenance costs per bus	Vehicle maintenance costs divided by the number of buses in a total fleet.
Vehicle miles	Total distance traveled by buses, including miles traveled to or from revenue service.
Vehicle miles per bus	Total vehicle miles divided by the number of buses in a total fleet.

Term	Definition
Vehicle revenue hours	Total number of hours that each bus is in revenue service, including layover time but excluding time traveling to and from revenue service.
Vehicle revenue miles	Total number of miles that each bus is in revenue service, excluding miles traveling to and from revenue service.

RESPONSES TO VOLUME 2 OF THE OFFICE OF THE AUDITOR GENERAL'S REPORT

The following are the responses from the eight public transit operators we reviewed in depth to Volume 2 of the Office of the Auditor General's report.

We have provided footnotes to the responses of the Southern California Rapid Transit District (SCRTD) and the San Mateo County Transit District (SamTrans) to provide clarification or additional explanation. The footnotes immediately follow the responses of these two operators.



Alan F. Pegg General Manager

August 25, 1989

Kurt R. Sjoberg Acting Auditor General State of California 600 J. Street, Suite 300 Sacramento, CA 95814

Dear Mr. Sjoberg:

Following are our responses to the report entitled "A Review of Public Bus Operations in California" Volume I.

The report, A Review of Public Bus Operations in California (2 volumes), provides an accurate representation of SCRTD performance for the period from FY84 through FY88. Because of its size, serving nearly one-half of all passengers carried by public bus operators in California by FY88, the District has a significant impact on statewide statistical data. Among the observations made in the report, it is noted that the District serves 7.3 times as many passengers as the next largest operator (Vol.I, pg.i-10) in an urban area that is more congested than most (chart II-1,pg.II-11). Yet it provides this level of service at a lower cost per passenger than most operators (chart II-2, pg.II-14) and at a higher level of equipment utilization as characterized by passengers carried per revenue hour (Vol.I, pg.II-20).

Funding constraints limit the proportion of the District's operating costs which can be supported by available subsidies (Table I-8, pg.I-25) forcing the District to rely more heavily on passenger fares as a means of financing its operation (Table I-7, pg.I-24). This adds to the difficulty of attracting a higher level of transit usage in Los Angeles County. Page I-27 of Volume I describes the lesser rate of increase in TDA subsidies, and the decline in local subsidies, experienced by larger operators such as the District when compared with funding available from these sources to smaller operators. The report offers no explanation for this finding citing a review

of local funding allocation procedures as being beyond the scope of the study effort. A partial explanation for this finding is provided in Volume II, pg.I-7, which explains to a limited extent the decline in Proposition A sales tax revenue available for operations of the District. It should be noted that this decline was an express element of the implementation of Proposition A which established, beginning in FY86, a set-aside of 35% of Proposition A revenues for rail construction programs, and a corresponding elimination of operating subsidies expressly for the purpose of maintaining the \$.50 fare imposed during the first three years of Proposition A implementation. The lesser rate of growth of TDA subsidies available to the District is a direct result of two local funding allocation decisions. First, the District receives all federal Section 9 operating subsidies available to Los Angeles County as a means of lessening the administrative reporting requirements of municipal operators within the County. The District contributes a portion of its locally allocated TDA revenues to these municipal operators as an offset for the federal funds which they otherwise would be entitled to receive under local funding allocation procedures. Secondly, during FY87 and FY88 the District was required to allocate a larger than normal share of its allocated TDA funding to capital programs in order to finance local matching requirements for federal grants for which local funds had been under-reserved in prior years.

Additional comments:

- (1) The table on page I-25 should be made into a chart and placed next to Chart II-4 on page II-19. This would present a more balanced picture than having the two sets of data separated in the report.
- (2) A "trial run" of the recommended changes to the TDA performance indicators on page II-26 should be made to determine the State-wide impact on funds distribution. We may not have any objection to the recommendation, but it would be better to have the data showing the impact before making a judgment.
- (3) A reference to graffiti and vandalism as a significant "cost driver" in the section beginning on page III-4 would be appropriate.
- (4) The recommendation on page IV-13 does not acknowledge the procedures modifications already made by the RTD as referenced on page IV-7.

 Addition of a line to the recommendation which

acknowledges that we have already taken steps to implement the recommendation would be appropriate.

- (5) Despite the footnote disclaimer on Table VI-2 on page VI-13, the comparative data on Health Benefits presented on this chart is inappropriate. Either (a) the RTD and the private contractor data should be expressed in the same terms as the three other public operators, (b) the RTD and the private contractor data should be converted to the same base as the other public operators, or (c) the comparison should be removed from the table and a sentence included in the narrative on page VI-12 which states that comparison of benefits is not possible (much like the statement regarding correlation between training and preventable accidents contained on page VI-3).
- (6) Volume 2, pg. I-6
 The report correctly states that the major factor contributing to the growth in labor costs are the increase in payments for workers' compensation. This is an area which merits further study by the State as costs are driven by State requirements.
- (7) Volume 2, pg. I-13
 We would like the report to clearly indicate
 areas in which the District's performance was higher
 than that of the other operators. Specifically, our
 costs per passenger were almost one-third less than
 the State-wide average and our boardings per hour
 were Seventy percent higher than the State-wide
 average. (1) *

Sincerely,

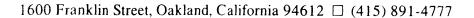
Alan F. Pegg

General Manager

^{*}The Office of the Auditor General's comment on this specific point begins after the response from the Southern California Rapid Transit District.

THE OFFICE OF THE AUDITOR GENERAL'S COMMENTS ON THE RESPONSE TO VOLUME 2 FROM THE SOUTHERN CALIFORNIA RAPID TRANSIT DISTRICT

On page i-4 of the Introduction to Volume 2 we state that we did not compare the performance of one operator with that of another because of differing characteristics among operators.





ALICE H. CREASON PRESIDENT

RUTH GANONG VICE-PRESIDENT

DIRECTORS

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RUTH GANONG WARD II

ALICE H. CREASON WARD III

WILLIAM J. BETTENCOURT WARD IV

LINDA SHEPARD WARD V

ROY NAKADEGAWA

JOHN WOODBURY
DIRECTOR AT LARGE

August 25, 1989

Mr. Kurt R. Sjoberg Acting Auditor General State of California 660 J Street, Suite 300 Sacramento, CA 95814

Dear Mr. Sjoberg:

SUBJECT: Response to "Review of Public Bus Operations"

On behalf of Board President Creason I want to express our thanks to your staff for providing us with the opportunity to respond to your "Review of Public Bus Operations."

The District, Board of Directors, and staff have been working together diligently and steadfastly to improve the financial position of our agency. We welcome the comparisons with other transit districts and the presentation of the insights into our financial operations that were provided by your staff.

The Board of Directors and our staff are very serious about improving our finances and running an efficient operation. Again, we wish to express our thanks to the Office of the Auditor General in providing this analysis. It will be helpful to us in attaining our newly-adopted District mission "to meet people's transportation needs with cost-effective, quality service."

Sincerely,

BOARD OF DIRECTORS

Keeth Danong

Ruth Ganong Vice President

RHG: bw



JAMES L. O'SULLIVAN General Manager

August 25, 1989

Mr. Kurt Sjoberg Acting Auditor General of California 660 J Street, Suite 300 Sacramento, California 95814

Dear Mr. Sjoberg:

Re: "A Review of Public Bus Operations in California - Volume II"

The AC Transit staff has thoroughly reviewed your draft report entitled "A Review of Public Bus Operations in California - Volume II," and wish to commend the Auditor General for the extensive review and compilation of data on public bus operations in the state and for providing historical financial, operational, and maintenance trends.

Although AC Transit has experienced financial, performance, and maintenance difficulties, we are pleased to note that the Auditor General has recognized that AC Transit has taken action to improve its situation. Moreover, since the review period, the District has continued to make additional improvements.

Maintenance Issues

- o The Maintenance Department has made strides in turning the maintenance decline around. Miles between mechanical roadcalls have increased to the 2,000 range in June and July, 1989.
- o On-time inspections, steam cleaning, and outlates and cancellations are all moving in a positive direction. Absenteeism is slowly improving, but has a long way to go to be acceptable. In addition, deferred maintenance is being drastically reduced.
- Finally, we are negotiating an apprenticeship program with our Union which will be the model for the industry. This program will address the training deficiency stated in the audit report.

Kurt Sjoberg <u>Volume II</u> August 25, 1989 Page 2

Worker's Compensation

o In those areas where AC Transit has some ability to control the costs, such as Worker's Compensation claims and absenteeism, AC has taken steps to implement measures to reduce these costs. We have awarded a contract to a Third Party Administrator to oversee the Worker's Compensation Claims Management and anticipate some savings in this area. Additionally, Management has implemented light-duty programs and more stringent claims' review and management procedures aimed at reducing the cost of Worker's Compensation claims and reduction of the number of occurrences.

Absenteeism

- The District has not achieved a significant reduction in absenteeism as yet. However, the District has taken several actions to reduce absenteeism. The District has implemented a positive performance counseling program as an incentive and deterrent to reduce absenteeism. In addition, the District has established an inter-departmental committee to address this problem, and to suggest ways to further reduce absenteeism. Currently, the district is in the process of issuing a Request for Proposal for the development of an innovative incentive program which will reward good attendance.
- o The District is currently negotiating with the Union and has identified major opportunities for savings in the area of absenteeism, work rules and the use of part-time drivers that could be implemented with the cooperation of the Union. The District sought to implement a stringent policy with the Union to reduce absenteeism. This policy became part of a tentative agreement and was supported by the Union leadership. However, this agreement was turned down by the Union membership by a 2 to 1 ratio. One of the major reasons for the rejection was the strength of the policy on absenteeism. Because of this, it is anticipated that the absenteeism issue will go before a state mediator next week.

The District will continue to strive to improve service to the public. In March, 1990, the District will implement Phase I of our Comprehensive Service Plan which will correct scheduling inefficiencies and improve on-time performance. Over the years, our streets and highways have become more congested with the increased use of the private automobile. The CSP has identified regular and habitual congestion and bottleneck points and has made

Alameda-Contra Costa Transit District

Kurt Sjoberg
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August 25, 1989
Page 3

provisions which will relieve problem areas which reduce the average speed of buses and affect on-time and safe performance. These actions should produce more cost efficient service and increase ridership.

The professional support and assistance that your office has provided in this effort is valued and appreciated.

Sincerely,

James L. O'Sullivan General Manager

PYG:NH:nlc



100 16th Street P.O. Box 2511 San Diego, CA 92112 (619) 238-0100 FAX (619) 696-8159

August 22, 1989

Mr. Kurt R. Sjoberg Acting Auditor General 660 "J" Street, Suite 300 Sacramento, California 95814

Dear Mr. Sjoberg:

San Diego Transit Corporation has received both volumes 1 and 2 of your draft report entitled "A Review of Public Bus Operations in California". We have reviewed both documents and find no exceptions to the report as it relates to San Diego Transit or state-wide trends.

As per our phone conversation this morning, the report can be finalized without any further response from San Diego Transit Corporation.

Very truly yours,

Ronald H. Yagura

V.P. Finance Administration

RHY / dw



BOARD OF DIRECTORS

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GERALD T. HAUGH General Manager

August 23, 1989

Mr. Kurt R. Sjorberg Acting Auditor General State of California 660 J Street, Suite 300 Sacramento, CA 95814

Dear Mr. Sjoberg:

On behalf of Chairman Tom Nolan, I take this opportunity to respond to your letter to him dated August 17, 1989.

We have thoroughly reviewed your draft Audit report entitled "A Review of Public Bus Operations in California" and look forward to meeting with your representatives during the morning of August 24, 1989. At that time we will discuss with them our written comments to be included in Volume I of the final report, and provide recommended corrections to the text drafted by your office.

Thank you for the opportunity to review and comment on your report.

Sincerely,

Gerald T. Haugh General Manager

GTH/dr

IV-1, Para. 1, Sent. 5 Should read: In fiscal year 1987-88, the private contractor provided 31 percent of SamTrans' total vehicle revenue miles 1 of the eight operators that were studied, SamTrans and Vallejo were the only two systems contracting a portion of their services.

IV-2, Para. 1, Sent. 2 Should Read:projected expenses and revenue of \$41,782,100 for fiscal year 1988-89. 2 The revenues do not show an additional \$20.8 million in local sales tax that is set aside for future capital projects. 3

IV-3, Next to last sentence Should Read: SamTrans negotiated increases in drivers and mechanics wages to gain controls over absenteeism and added part-time operator percentages and to make their hourly wages competitive with(4)

IV-3, Last Sentence Should Read: When compared to SCRTD, AC Transit and San Diego Transit, SamTrans drivers wages per hour fall slightly below the average of these three operators (based on operators cost July, 1987). (5)

IV-5, 3rd Sent. Delete: "according to SamTrans" This fact is easily verifiable. (6)

IV-4, Table IV-1 Greyhound Service cost should be shown under the line item "purchased transportation" and not "services". (7)

^{*}The Office of the Auditor General's comments on specific points begin after the response from the San Mateo County Transit District.

IV-6, Table IV-2 Greyhound Service cost as a percent of total operating cost should be shown under purchased transportation and not under services. (7)

IV-6, Para. 1 Add after first sentence: In F.Y. 84-85, state and federal revenues accounted for only 7.1% of the budget as compared to 92.9% in local support. In F.Y. 87-88, state and federal revenues reduced to 4.5% of the budget and local support increased to 95.5% of the budget. (8)

IV-7, Para. 1, Sent. 2 Should Read: In fiscal year 1987-88 passenger fares accounted for 22.6 percent of SamTrans' operating revenues and subsidies. 9

Note: This paragraph should also show a comparison of both fares and local revenue. (10)

Question: How was the passenger fare revenue of 32.4 percent for statewide operators and 32.2 percent for comparable size operators calculated, i.e. was the sum of fares divided by the sum of expenses? (11)

IV-9, Para. 2, Last Sent. Should Read: SamTrans attributes the decline in ridership to a fare increase in fiscal year 1985-86, as well as to competition from privately owned vehicles due to low gasoline costs, favorable auto financing, and a strong economy. (12)

IV-12, Para. 1 Comment: It would be more accurate to compare passengers per vehicle revenue miles with and without SCRTD. (13)

IV-12, Para. 2 Comment:

Size of operation is not a good criterion for comparison. (14)

IV-13, Para 1 Add to end of paragraph: For the other seven operators reviewed, excluding SCRTD, the operating costs per passenger were \$1.98 in fiscal year 1987-88.

Comment: Size of

operation is not a good criterion for comparison. (14)

IV-13, Para. 2, Sent. 2 Add: ...improved by 19.5 percent from fiscal year 1984-85 to 1987-88.

IV-15, Para. 2 Add after 4th sentence: However, when calculating the vehicle maintenance cost per bus (active fleet only), the cost per bus in fiscal year 1984-85 was \$17,809 and was a 22.5 percent increase from 1984-85 to 1987-88.

IV-16, Para. 2, Sent. 1 Add: ...increased by 19.5 percent.

IV-16, Para. 2, Sent. 5 Should Read: ...to request \$26.0 million. 15

IV-16, Para. 2, Sent. 5 Also, add after last sentence: SamTrans bus capital program from fiscal years 1988-89 to 1993-94 consist of \$29.9 million in federal assistance and \$34.0 million in local sales taxes. (15)

IV-18, Last Sentence Change: 235 hours to 240 hours (16)

IV-19, First Para. Change: 129 hours to 54; change 106 hours to 186;

Change: 220 hours to 202:15; change 68 hours to 39:15;

Change: 152 hours to 163. (16)

IV-19, 2nd Para. .. before last sentence

Add: Further, SamTrans schedules all drivers for advanced training every two years. Drivers are evaluated in various ways (180 checks/day on-time performance; street supervisors observations, etc.) on a consistent daily basis. (17)

GENERAL COMMENTS:

- 1. Many of the comparisons should have been done with and without SCRTD. (18)
- 2. We do not agree with the Auditors selection of comparable transit agencies, i.e. San Diego, Long Beach and Santa Monica. In all cases these agencies are urban in nature whereas, SamTrans is strictly a suburban system. Comparable size is not a good criterion for comparison. Comparisons should only be made between operators whose service areas are similar, e.g. urban, suburban, rural; topography; land use; social-economic characteristics; local economy; financing, etc. (19)
- 3. The report minimizes the significance of local support. We know of at least eight counties that have had sales tax in place during F.Y. 1987-88 for transit purposes. They are: San Mateo, San Francisco, Santa Clara, Alameda, Fresno, Contra Costa, Los Angeles and San Diego. (20)

In addition, TDA is a locally generated funding source, and, more recently, several counties have inacted additional sales tax measures for transit related improvements. Contrast with Federal operating subsidies of less than five percent and State subsidies of less than one percent, locally generated funds are very significant.

THE OFFICE OF THE AUDITOR GENERAL'S COMMENTS ON THE RESPONSE TO VOLUME 2 FROM THE SAN MATEO COUNTY TRANSIT DISTRICT

- Text changed.
- Text changed.
- This paragraph is background information on the operating budget, not the capital budget.
- Text changed.
- As stated on page i-4 of Volume 2, we do not make direct comparisons between operators.
- (6) The documentation provided by the operator supports that casualty liability costs have increased. However, the various financial statements do not explain the significant increase in provided the operator The explanation. Consequently, we attribute this statement to the operator.
- The operator did not report any "purchased transportation." Instead, it classified these costs as services. To be consistent (7) with the way the operator classified these costs on its reports to the State Controller's Office and its audited financial statements, we also classified these costs as services.
- 8 Text changed.
- Text changed.
- (9) (10) To be consistent with the other analyses in Volume 2, we did not change the text.
- (11)Yes, we computed a weighted average.
- Text changed.
- (13)We do present the passengers per vehicle revenue mile with and without the Southern California Rapid Transit District (SCRTD). The figure for operators statewide includes the SCRTD. The figure for operators of a comparable size to SamTrans excludes the SCRTD.
- (14)recognize difficulty of precise comparison among the Further, we recognize that size is not the sole operators. criterion. Therefore, we present statistics for operators statewide (regardless of size) in addition to statistics for operators of a comparable size.

- (15) Text changed.
- 0ur definition of the category "classroom instruction" and "training on a bus" makes the suggested change inappropriate. We did determine the total number of training hours from documentation provided by SamTrans and the private contractor.
- (17) Text changed.
- As stated in Volume 2, page i-5, we made the comparisons with and without the SCRTD. The figures for operators statewide includes the SCRTD, and the figures for operators of comparable size exclude the SCRTD.
- As cited in the Introduction of Volume 2, page i-4, we recognize the difficulty of precise comparisons among operators and therefore, do not make any direct comparisons among operators. In Volume 2, we compare each operator's data with statewide data and aggregate data for operators of a similar size. However, as indicated in footnotes in Volume 2 (for example, Volume 2, I-10) we did not have complete data for all 109 transit operators providing bus service in California. Therefore, rather than selecting operators, as suggested by SamTrans, we reported data on all operators of similar size for which complete data were available.
- We address this comment in our response to the operator's comments in Volume 1.



August 24, 1989

Mr. Kurt R. Sjoberg, Acting Auditor General Office of the Auditor General State of California 660 J Street, Suite 300 Sacramento, California 95814

Dear Mr. Sjoberg:

Reference is made to your letter dated August 17, 1989.

Omnitrans has received and reviewed the two draft copies of excerpts from your report entitled "A Review of Public Bus Operations in California (Volume 1)", and the two draft copies of excerpts from Volume 2 of the same report.

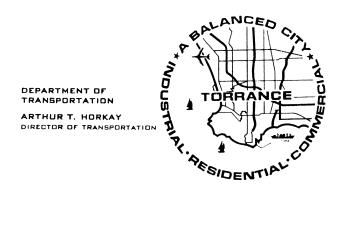
Thank you for the opportunity to comment on your report. Omnitrans is pleased to have been a part of your review. We are certain that the information contained therein will be informative and helpful in developing policies that will enhance and promote the future role of public transit in our state.

If you have any further questions, please contact John R. Cuevas, Administrative Assistant at (714) 889-0811.

Sincerely,

Robert E. Chafin General Manager

REC:JRC:bw cc: Ron Kral



CITY OF TORRANCE

3031 TORRANCE BOULEVARD, TORRANCE, CALIFORNIA TELEPHONE (213) 618-2840 90509-2970

August 25, 1989

Mr. Kurt Sjoberg Acting Auditor General State of California 660 J. Street, Suite 300 Sacramento, CA 95814

Dear Mr. Sjoberg:

RE: A REVIEW OF PUBLIC BUS OPERATIONS IN CALIFORNIA (VOLUME 2)

The City of Torrance would like to comment on Chapter VI, trends and practices of the Torrance Transit System. Although your in-depth financial information appears to be substantially accurate, we would like to provide a few clarifications and qualify certain statements.

The Financial Trends section states that "passenger fare revenue accounted for only 20.7 percent of Torrance's operating revenues and subsidies while for transit operators statewide, passenger fare revenue accounted for 32.5 percent of total operating revenues and subsidies." Per the requirements of the Transit Performance Measurement (TPM) program as administered by the Los Angeles County Transportation Commission (LACTC), passenger fares and local source revenues shall not be less than one-third of total operating costs. The Torrance Transit System has been in full compliance with this standard since inception of the TPM program. Consequently, our passenger fares and local subsidies have consistently accounted for 33.3 per cent of our total operating revenues and subsidies during the period of your audit.

The Maintenance Trends section states that "Torrance's maintenance efficiency, as measured by vehicle maintenance costs per bus and vehicle maintenance costs per vehicle mile, declined significantly ...vehicle maintenance costs increased 56.2 percent...while the area CPI increased 18.0 percent". During the audit period, our total fleet of fixed-route buses decreased while our peak fleet increased and our vehicle miles increased. Based upon these factors alone, our vehicle maintenance cost per bus would have increased significantly.

Mr. Kurt Sjoberg August 25, 1989 Page 2

Moreover, our new transit facility became operational during the audit period which necessitated a significant increase in maintenance staffing and support services. Clearly our enhanced maintenance effort and improved operational performance account for the increases above the 18.0 percent CPI quideline.

Please feel free to call us if you have any questions or require any additional information on the City of Torrance Transit System.

Yours very truly,

Arthur T. Hork

Director of Transportation

Mary K. Giordano

Finance Director

ATH: RPZ:acd

Ray A. Schmidt, cc: Transit Manager



the intelligent way to go!

Stockton Metropolitan Transit District 1533 East Lindsay Street Stockton, California 95205 209/948-5566

August 24, 1989

Mr. Kurt R. Sjoberg Acting Auditor General Office of the Auditor General 660 J Street, Suite 300 Sacramento, CA 95814

RE: Response to "A Review of Public Bus Operations in California"

Dear Mr. Sjoberg:

Thank you for allowing us to review the draft audit report entitled "A Review of Public Bus Operations in California." We are in general agreement with the content of the report, however, we have one point of clarification concerning the scope of volume 2. This clarification involves the surplus indicated in the Financial Trends section of the report.

As discussed with members of your staff, some financial figures do not show the total organizational picture, since the scope of the review was limited to the District's fixed route service. Large surpluses are reflected in Table VII-1, Page VII-3, which can be misleading due to the fact that the District also offers demand response service. When the large deficit figures from the demand response service are taken into consideration, the operation in its entirety, does not result in a surplus. The attached table, compiled from the Annual Reports of Financial Trans-actions for the FY1984-1988 period, reflects this. It is our hope that this table plus additional backup from the annual reports, will dispel a potentially misleading representation.

The other concerns with the draft report have been resolved through discussions with members of your staff.

If you should have any questions or comments concerning this response, please do not hesitate to contact me or my staff.

Sincerely,

Elliott C. Jones General Manager

ECJ:jr Enclosure

OPERATING REVENUES, SUBSIDIES AND COSTS FOR BUS SERVICE

FISCAL YEARS 1984-1988

(in thousands of dollars)

	Total	989 209 4,303 508 1,084	7,111	4,402 996 391 38 465	6,292	819 (819)	0 -
FY1988	Demand Response	45	45	383 86 33 4 4	573	(528)	(551)
	Fixed	944 209 4,303 508 1,084	7,066	4,019 910 358 34 398	5,719	1,347 (796)	551
FY1987	Total	916 119 4,039 454 11,101	6,647	4,193 793 398 37 580	6,001	646 (646)	0
	Demand Response	41	41	333 61 39 4 4	464	(453) (28)	(481)
	Fixed	875 119 4,039 454 1,101	909*9	3,860 732 359 33 523	5,507	1,099 (618)	481
FY1986	Total	934 175 3,541 427 19 756	5,852	3,538 844 349 14 529	5,274	578 (578)	0
	Demand Response	48	48	231 41 34 1 41	348	(300)	(336)
	Fixed	886 175 3,541 427 19 756	5,804	3,307 803 315 13 488	4,926	878 (542)	336
FY1985	Total	862 173 2,645 687 52 1,099	5,518	3,422 788 327 11 384	4,932	586 (586)	0
	Demand Response	40	40	333 43 33 11 27	447	(407)	(448)
	Fixed	822 173 2,645 687 52 1,099	5,478	3,089 745 294 0 357	4,485	993 (545)	448
FY1984	Total	816 251 2,134 909 111	4,988	3,066 741 313 313	4,442	546 (546)	0
	Demand Response	12	12	319 50 34 9	437	(425)	(467)
	Fixed Route	804 251 2,134 909 111	4,976	2,747 691 279 0 288	4,005	971 (504)	467
		Operating Revenues and Subsidies Passenger fare revenue Other revenue Local TDA subsidies Other local subsidies State subsidies Federal subsidies	Total Operating Revenue	Operating Costs Wages and benefits Materials and supplies Services Purchased transportation Other	Total Operating Cost	Operating Surplus (Deficit) Depreciation Expense	Surplus (Deficit) with Depreciation

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August 24, 1989

Mr. Kurt Sjoberg, Acting Auditor General Office of the Auditor General 660 J Street, Suite 300 Vallejo, CA. 95814

RE: Draft "A Review of Public Bus Operations in California, v.2"

Dear Mr. Sjoberg:

Thank you for the City of Vallejo's opportunity to review and comment on your office's recent review of Vallejo Transit operations, the primary public transit system serving Vallejo residents. We found the report to be insightful and helpful in our internal review and planning process.

We agree with most of the conclusions drawn regarding Vallejo Transit's operating costs, employee productivity, and system performance. We are proud of our record of keeping costs under control, increasing productivity, and declining maintenance costs per vehicle mile. We wish to offer the following comments to present a complete picture of Vallejo Transit operations.

Regarding the report's discussion of Vallejo Transit's passenger productivity trends in comparison with statewide averages, it should be noted that since FY 1987-88, increased ridership has raised average passengers per revenue vehicle hour to the 26 per hour range. Ridership continues to grow and we expect the FY 1989-90 patronage to reach the 26.4 passengers per revenue vehicle hour which is the statewide average for transit systems in Vallejo's size range. Similarly, we expect the average number of passengers per revenue vehicle mile to exceed the statewide average of 1.7 this year.

Regarding the report's discussion of maintenance costs and productivity, we would like to note that Vallejo Transit has been diligent in providing an ongoing Preventative Maintenance and Inspection (PMI) program which has resulted in improved maintenance performance. This improvement was made despite an average fleet age of 13 years. Upon arrival of 22 new vehicles in April, 1989, we expect maintenance performance will improve further.

City of Vallejo: Review of California Bus Operations, v.2 Page 2

Thank you for this opportunity to comment on your office's report regarding Vallejo Transit. If you require more assistance or information, please call me at (707) 648-4306.

Sincerely yours,

PAMELA BELCHAMBER

Transportation Analyst

Manila Machende

cc: Director of Public Works
Anthony J. Intintoli, Mayor
Edward Wohlenberg, City Manager

Members of the Legislature cc: Office of the Governor

Office of the Lieutenant Governor

State Controller Legislative Analyst

Assembly Office of Research Senate Office of Research

Assembly Majority/Minority Consultants Senate Majority/Minority Consultants Capitol Press Corps