Trends in Bus Transit Operations 1960-1974



Prepared for
U. S. DEPARTMENT OF TRANSPORTATION
Office of the Assistant Secretary for Policy,
Plans, and International Affairs and the
Urban Mass Transportation Administration
JANUARY 1977

National Transportation Library

Section 508 and Accessibility Compliance

The National Transportation Library (NTL) both links to and collects electronic documents in a variety of formats from a variety of sources. The NTL makes every effort to ensure that the documents it collects are accessible to all persons in accordance with Section 508 of the Rehabilitation Act Amendments of 1998 (29 USC 794d), however, the NTL, as a library and digital repository, collects documents it does not create, and is not responsible for the content or form of documents created by third parties. Since June 21, 2001, all electronic documents developed, procured, maintained or used by the federal government are required to comply with the requirements of Section 508.

If you encounter problems when accessing our collection, please let us know by writing to librarian@bts.qov or by contacting us at (800) 853-1351. Telephone assistance is available 9AM to 6:30PM Eastern Time, 5 days a week (except Federal holidays). We will attempt to provide the information you need or, if possible, to help you obtain the information in an alternate format. Additionally, the NTL staff can provide assistance by reading documents, facilitate access to specialists with further technical information, and when requested, submit the documents or parts of documents for further conversion.

Document Transcriptions

In an effort to preserve and provide access to older documents, the NTL has chosen to selectively transcribe printed documents into electronic format. This has been achieved by making an OCR (optical character recognition) scan of a printed copy. Transcriptions have been proofed and compared to the originals, but these are NOT exact copies of the official, final documents. Variations in fonts, line spacing, and other typographical elements will differ from the original. All transcribed documents are noted as "Not a True Copy."

The NTL Web site provides access to a graphical representation of certain documents. Thus, if you have any questions or comments regarding our transcription of a document's text, please contact the NTL at librarian@bts.qov. If you have any comment regarding the content of a document, please contact the author and/or the original publisher.

TRENDS IN BUS TRANSIT OPERATIONS

1960 - 1974

by

CONTROL DATA CORPORATION

WELLS RESEARCH COMPANY

Prepared for the

U. S. DEPARTMENT OF TRANSPORTATION

Office of the Assistant Secretary for Policy, Plans, and International Affairs and the Urban Mass Transportation Administration

January 1977

TABLE OF CONTENTS

<u>Section</u>		<u>Page</u>
	SUMMARY	S-1
1	INTRODUCTION Sample Characteristics Data Limitations Analytical Procedure	1-1 1-2 1-6 1-7
2	PATRONAGE VERSUS SUPPLY SERVICES Patronage versus Resources Employed	2-1 2-6
3	REVENUES VERSUS COSTS	3-1
4	TRENDS IN COST CATEGORIES Relative Costs Costs per Bus Mile Depreciation and Amortization	4-1 4-1 4-13 4-15
5	UTILIZATION OF EMPLOYEES AND VEHICLES Bus Miles per Active Bus Bus Miles per Employee Bus Miles per Route Miles Bus Miles per Bus Hour Employees per Active Bus Bus Utilization	5-1 5-1 5-2 5-2 5-4 5-5 5-6
6	FUEL CONSUMPTION AND COSTS Trend in Fuel Cost Fuel consumption	6-6 6-1 6-2
APPENDI(CES	
А	LIST OF PROPERTIES IN SAMPLE	
В	SUMMARY TABLES - BASIC DATA	
С	SUMMARY TABLES - ANALYTICAL RATIOS	
D	TECHNICAL NOTES	

SUMMARY

This is the first of a series of reports which present the historical patterns of bus transit operations from 1960 to 1974. The emphasis herein is on long term trends. The basic data were obtained from the American Public Transit Association reporting system. Detailed annual reports of 50 bus operations were computerized and various ratios developed. Summary tables of the basic data and ratios appear in Appendices B and C, respectively.

SAMPLE CHARACTERISTICS AND DATA LIMITATIONS

The analysis in this report utilizes the 50 most complete sets of APTA bus transit financial and operating records from 1960 through 1974. The sample has wide coverage with respect to geographic areas and sizes of operation. The properties included in the sample are given in Appendix A. With respect to industrywide totals, the sample represents 28% of total operating revenue, 31% of vehicle miles operated, 26% of total passengers, and 33% of vehicles owned. Because of limitations on the available data, the analyzed data do not represent the universe of bus operations, nor is it a random sample, and no claim is made that it necessarily represents the industry. However, the trends in this sample may be indicative of the industry trends. Criteria for the selection of properties for the sample are given on page 1-2.

TRENDS IN BUS OPERATIONS

Patronage versus Supply of Services

The ratio, "total passengers per bus mile," is a rough indicator of the use of bus services (patronage) relative to the supply of such services. In general, the trend of this ratio was downward during the fifteen-year period, 1960-1974. The decline was most severe from about 1966 to 1972; then the ratio leveled off in 1973 and 1974. The primary reason for the decline was a loss of passengers. Bus miles also declined in the latter years but at a lower rate than passengers.

Patronage versus Resources Employed

In spite of the decline in passengers, the number of active buses, employees, and route miles had a slight upward trend. This had an important bearing on the relationship of revenues to costs.

Revenues versus Costs

On the average, total operating costs began to exceed total operating revenues beginning about 1968. Total operating expenses less depreciation

and amortization began to exceed total revenues about 1970. This means that revenues were not enough to cover capital costs as well as out-of-pocket costs. Moreover, "farebox" revenues did not cover operating costs beginning about 1970, and the situation worsened considerably by 1974.

In general, the operating deficits occurred because the rate of increase in revenues was not as high as the rate of increase in costs, and costs eventually came to exceed revenues. The low rate of increase in revenues was caused by an absolute decline in patronage and increases in average fare which were too small to offset this passenger decline. In fact, average fare and revenues stabilized since 1971. Costs per passenger, on the other hand, continued to increase, causing the deficits to increase substantially.

Apparently, average fares for bus transit have not increased as much as the Consumers Price Index for all items. From 1960 to 1970 costs per bus mile increased at a more rapid rate than the Wholesale Price Index for industrial commodities. From 1970 to 1974 costs per bus mile Increased at about the same rate as the index.

Trends in Cost Categories

The examination of certain cost categories relative to Total Costs Less Depreciation and Amortization (TC-DA) reveals that shifts have taken place over the 1960-1974 time period:

- 1. The relative cost of Drivers' and Helpers' Wages increased gradually throughout the period from about 42% of TC-DA to 45% in 1974.
- 2. Repairs to Revenue Vehicles remained stable at about 10%, of TC-DA throughout the period. Except for 1974, the repairs per active vehicle roughly follow the Wholesale Price Index; i.e., there is no indication that <u>real</u> expenditures on repairs have declined. Thus, there is no indication that deferred maintenance has been a general policy. However, a decline in repairs per vehicle occurred in 1974 and appears to be related to a sharp increase in wholesale prices.
- 3. The relative share of diesel fuel costs jumped sharply from 1972 to 1974, but this category still represents only about 5% of TC-DA.
- 4. Operating Taxes and Licenses were stable at about 7.5% from 1960 to 1970. After 1970 they dropped steadily to 5.2% in 1974.

- 5. At about 4% of TC-DA, Injuries and Damages remained quite stable throughout the period.
- 6. Administrative and General Costs account for about 12-13 percent of TC-DA, and the percentage was stable throughout the period.

Thus, the relative increases in labor and energy costs were offset primarily by relative decreases in Operating Taxes and Licenses. The other categories were relatively stable.

When expressed in terms of bus miles, the indexes of Drivers' and Helpers' Wages, Total Maintenance, and Repairs to Revenue Vehicles all follow each other very closely. This suggests that costs are increasing at about the same rate in both driver and mechanics' labor classifications.

<u>Utilization of Employees and Vehicles</u>

- Beginning about 1969-1970 a downward shift occurred in bus miles generated per bus, per employee, and per route mile. The reason for the decline is that bus miles declined in spite of the fact that the number of buses, employees, and route miles either remained at about the same levels or increased.
- 2. From 1960-1971 the number of employees per active bus was quite stable at a level just over 2 to 1. A decline to 1.88 occurred after 1971 largely because of an increase in the number of vehicles. There are indications that the ratio may return to the 2 to 1 level because of a lag relationship between vehicles and employees.
- 3. The speed of buses over urban highways increased slightly during the period.
- 4. The utilization of buses during off-peak hours appears to be related to the size of the operation. The figures suggest that the base to peak percentage for smaller operations is declining, which indicates a declining utilization of the fleet during the base period.
- 5. Bus hours per bus per day averaged about 3.5 from 1960-1971, but declined to about 3.2 in 1971.

All of these patterns ate consistent with the cost patterns discussed previously. Service in terms of bus miles is receding apparently in response to declining demand, but inputs of capital and labor are remaining stable or even increasing. Under these conditions, the increases in unit labor and capital costs are bound to drive up costs relative to revenues and eventually overtake revenues if revenues are stable.

Fuel Consumption and Costs

Diesel fuel cost per gallon actually declined about 1¢ per gallon from 1961 to 1965, but from 1965 on prices increased steadily. When the fuel crisis hit, cost per gallon jumped from 12¢ to about 25¢. The relative increase was slightly higher than the Wholesale Price Index for energy.

All of the diesel fuel consumption ratios--gallons per bus mile, gallons per bus hour, and gallons per passenger--exhibited an upward trend, especially from 1970 to 1974. This may reflect some fuel stockpiling in anticipation of price increases, but the general consumption trend appears to be upward. Consumption per passenger declined from 1973 to 1974.

1. INTRODUCTION

The Department of Transportation has developed computerized data files of the annual transit operating data that have been reported to the American Public Transit Association (APTA) by over 100 transit properties from 1960 through 1974. The existence of this computerized data bank makes it possible to analyze historical patterns in the transit industry in much greater detail than has been possible in the past. This is the first of a series of reports which present these historical patterns.

The analysis in this report examines for 50 bus properties the 1960-1974 trends in:

- a. Bus patronage versus the supply of bus services (Section 2),
- b. Operating revenue versus operating costs (Section 3),
- c. Operating cost components (Section 4),
- d. Resource utilization (Section 5), and
- e. Fuel consumption and costs (Section 6).

Subsequent reports will examine among other things the differences in these trends with respect to the size of the properties and their geographic locations.

¹The term "property," which is commonly used in the transit industry, rather than "company" or "system" will be used throughout this report, because the sample consists of a mixture of both privately and publicly owned operations. The term "company" is not appropriate for publicly owned operations, nor is the term "system" appropriate in cases where the operation is only part of an overall system.

SAMPLE CHARACTERISTICS

The 50 bus properties selected for this analysis appear in Appendix A. They were selected because they met the following criteria:

- a. They were exclusively bus operations. The single exception to this was New Orleans Public Service, which was selected for other reason presented below, particularly e (4).
- b. Their reports were relatively complete for the full 1960-1974 period.
- c. The full sample would cover the size spectrum of bus operations.
- d. The full sample would provide broad geographic coverage.
- e. The full sample would cover the various types of ownership and management, e.g.:
 - (1) Publicly owned and operated
 - (2) Publicly owned but manages by private company
 - (3) Privately owned and operated direct
 - (4) Privately owned by utility company

Some of the very large operations such as New York City, Chicago, and Cleveland are not included because they are mixed mode, and it us virtually impossible to sort out revenues and costs related to the bus operations. However, the sample does include several large operations (see Appendix A).

Table 1.1 compares for several aggregates the proportion of 1974 industry totals that are represented by the sample. In 1974 the 50 properties in the sample represented 27.9% of the industry's bus revenue, 31.4% of the bus mile operated, 25.9% of the passengers and 32.7% of the vehicles owned.

The size spectrum represented in the sample appears in Table 1.2 and in Appendix A. The smallest operation in 1974 was 12 buses (Duke Power Company in Anderson, S. C.). The largest single metropolitan area operation was 1,012 (Detroit). Two other very large operations were included: South California Rapid Transit (1,850 buses) and Transport of New Jersey (1,688 buses), but these actually represent a composite of several communities rather than a contiguous metropolitan area. In any case, the sample does in fact cover a broad size range.

¹Unfortunately, APTA does not indicate how many properties are represented by these totals; therefore, a comparison of the number of properties in the sample with the number in the universe is not possible. It is estimated that APTA's industrywide figures represent about 500 properties.

Table 1.1
50 PROPERTY SAMPLE AGGREGATES AS A PERCENT OF APTA INDUSTRYWIDE TOTALS FOR BUS PROPERTIES, 1974

	Industry	50 Propert	ies in Sample
Item	Total (APTA)*	Amount	Percent of Industry
Operating Revenue (\$ millions)	1,377	384	27.9
Vehicle Miles Operated (millions)	1,431	449	31.4
Total Passengers (millions)	4,916	1,274	25.9
Vehicles Owned and Leased	48,700	15,912	32.7

*Source: <u>Transit Fact Book: '75-'76 Edition</u> (American Public Transit Association, 1976)

1-3

Table 1.2
DISTRIBUTION OF 50 PROPERTIES IN SAMPLE
BY NUMBER OF ACTIVE BUSES IN 1974

Numb of B		Number of Properties	Percent of Total Proper- ties	Cumula- tive Percent of Proper- ties	Per- cent of Total Buses	Cumula- tive Percent of Buses
10 and und	der 25	7	14	14	0.8	0.8
25 "	" 50	6	12	26	1.5	2.3
50 "	" 100	9	18	44	4.3	6.6
100 "	" 250	11	22	66	11.2	17.8
250 "	" 500	9	18	84	25.2	43.0
500 "	1,000	5	10	94	26.9	69.9
1,000 "	2,500	_3	<u>6</u>	100	30.1	100.0
		50	100		100.0	

Table 1.3
GEOGRAPHICAL DISTRIBUTION OF SAMPLE OF 50 BUS PROPERTIES

Region	Number of	Region	Number of
and State	Properties	and State	Properties
NORTHEAST		SOUTH	
Connecticut		Alabama	
Maine		Arkansas	
Massachusetts	2	Delaware	
New Hampshire		District of Columbia	
New Jersey	1	Florida	2
New York	2	Georgia	2
Pennsylvania	2	Kentucky	1
Rhode Island		Louisiana	1
Vermont		Maryland	1
		Mississippi	
Total	7	North Carolina	4
		Oklahoma	
NORTH CENTRAL		South Carolina	4
		Tennessee	2
Illinois	1	Texas	3
Indiana	1	Virginia	
Iowa		West Virginia	<u> </u>
Kansas			
Michigan	2	Total	21
Minnesota	1		
Missouri	1	WEST	
Nebraska	1		
North Dakota		Alaska	
Ohio	4	Arizona	
South Dakota		California	5
Wisconsin	2	Colorado	1
		Hawaii	
Total	13	Idaho	
		Montana	
		Nevada	
		New Mexico	1
		Oregon	1
		Utah	
		Washington	1
		Wyoming	
		Total	_ 9
		Total	50

Table 1.3 shows the geographical representation of the sample. Twenty-seven of the 50 states have at least one property in the sample, and there is fairly good regional coverage. Representation in the western region east of the Pacific states is rather poor.

In general, the sample does provide broad size and geographical coverage; however, it should be recognized that it is not a random sample of the universe of bus properties. Therefore, no claim can be made that the trends presented herein necessarily represent the entire industry. However, it can be claimed that the trends represent roughly 1/4 to 1/3 of the industry and probably are <u>indicative</u> of general developments in the industry outside of the very large metropolitan areas. It should also be noted that the properties in the sample are those that have survived throughout the period. Not considered are operations which have succumbed for economic and other reasons. The sample, therefore, is biased toward "surviving" operations.

DATA LIMITATIONS

The APTA reporting system from which the sample has been drawn has been in operation for many decades, and over the years it has been recognized by APTA and the research community in general that the system has certain deficiencies and needs revision. Accordingly, a new system of accounts and records will soon be implemented called the "FARE" system which will eventually replace the current system. One of the main problems with the old system has been that it is purely voluntary, and this has led to irregular reporting and variations in the uniformity of data estimation methods. Although definitions and estimating methods were provided, there was no guarantee that they would be adhered to. This, of course, is a deficiency that all voluntary reporting systems have if they are not carefully audited.

The fact that the APTA reporting system has had these deficiencies does not mean that the data are useless. On the contrary, they are a valuable data base for obtaining <u>indications</u> of historical developments. The fact that the system has been voluntary or the estimating techniques may have varied does not necessarily mean that the contributors were not conscientious in adhering to definitions and procedures. Moreover, there are clear year-to-year consistencies in the data series for most individual properties so that historical trends are probably reasonably accurate. Unfortunately, there is no way to verify the degree of accuracy.

ANALYTICAL PROCEDURE

When the data contain limitations of this nature, it is important not to "Over analyze," i.e., use sophisticated analytical procedures that have stringent data and sampling requirements. Moreover, it is important not to "over interpret" the implications of the data. At best, the data can only suggest that certain trends have developed. If trends have important policy implications, they should be verified before actions are taken.

For these reasons, the analysis in this report relies heavily on descriptive statistical methods using the simplest measures, e.g., medians, percentiles, arithmetic means and indexes. The tables and charts in the text are drawn from summary tables in Appendices B and C, which contain all the basic data and ratios. Wherever possible and appropriate, industrywide data from APTA's annual "Transit Fact Book" are included in the analyses for comparative purposes.

Because the text of the report uses only those time series which bring out the important historical trends, much of the information in Appendices B and C has been ignored. Transit researchers will find there a wealth of additional interesting historical data. Users of this information should carefully read the technical notes appearing in Appendix D.

2. PATRONAGE VERSUS SUPPLY OF SERVICES

Total passengers carried per bus mile is a widely used measure which roughly indicates the relationship of the use of bus services (patronage) relative to the supply of such services. The total passenger concept used here includes revenue passengers using line services, charter passengers, paid transfers, free transfers, and other free rides. Therefore, it reflects the full utilization of the bus fleet. The bus mile concept includes all miles traveled by buses in the fleet (line service and charter) and is a general indicator of the supply of services available to all types of passengers.

Figures 2.1 and Table 2.1 display the trends in this ratio for the 50 bus properties during the period 1960-1974. The overall trend of the medians is clearly downward, as are the 25th and 75th percentiles. The decline accelerates from about 1966 to 1972 and appears to level off after 1972.

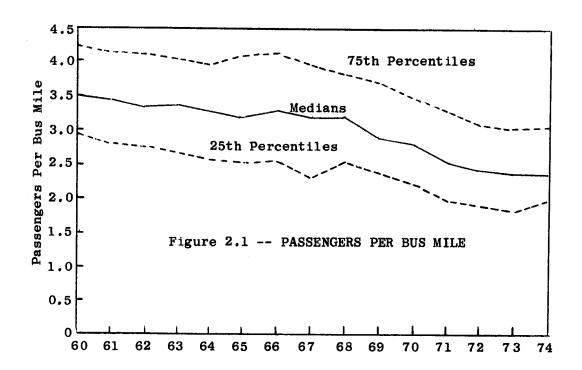


Table 2.1 TOTAL PASSENGERS PER BUS MILE 1960 - 1974

	S	ample of 50 E	Bus Propertie	S	APTA
Year	25th		75th	Arithmetic	Industry
	Percentile	Median	Percentile	Mean	Estimates
1960	2.93	3.48	4.24	3.68	4.08
1961	2.80	3.43	4.14	3.58	3.92
1962	2.76	3.32	4.12	3.56	3.87
1963	2.67	3.37	4.01	3.52	3.82
1964	2.56	3.27	3.94	3.49	3.80
1965	2.51	3.18	4.09	3.65	3.80
1966	2.56	3.28	4.11	3.71	3.79
1967	2.48	3.18	3.95	3.65	3.75
1968	2.54	3.20	3.84	3.57	3.72
1969	2.38	2.89	3.69	3.48	3.64
1970	2.21	2.82	3.47	3.33	3.52
1971	1.99	2.56	3.31	3.17	3.42
1972	1.91	2.43	3.07	3.05	3.44
1973	1.83	2.38	3.03	2.91	3.39
1974	1.98	2.39	3.05	3.05	3.48

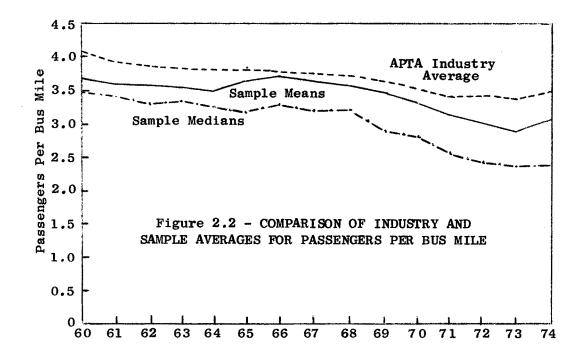


Figure 2.2 compares the sample averages with estimates of industry averages (means) obtained from the APTA annual fact book. Note that the sample means are higher than the medians, and the APTA estimates are higher yet. This probably indicates that the sample and industry means are influenced by the values for properties in the larger metropolitan areas where traffic densities are highest. The APTA estimates include New York City, Chicago, and other multi-mode cities. Note however, that all three series have similar downward trends, although the decline in the industry-wide averages is smaller. Both the sample means and the industry averages show an upward swing from 1973 to 1974.

Figure 2.3 -- INDEXES OF TOTAL PASSENGERS AND BUS MILES

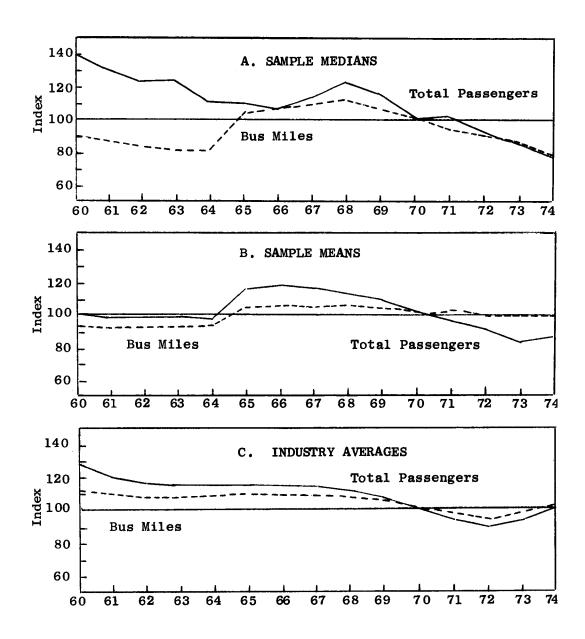


Table 2.2 INDEXES OF TOTAL PASSENGERS AND BUS MILES, 1960-74 (1970 = 100)

	Sample* M	edians	Sample*	ple* Means APTA Industry Average**		ry Average**
Year	Total	Bus	Total	Bus	Total	Bus
	Passengers	Miles	Passengers	Miles	Passengers	Miles
1960	139.0	89.8	101.8	92.6	127.6	111.9
1961	130.1	86.2	99.7	91.3	119.0	108.5
1962	123.7	83.4	99.2	91.4	116.5	107.5
1963	124.4	80.6	99.8	92.5	115.7	108.1
1964	110.2	80.8	97.5	93.2	115.5	108.4
1965	108.9	103.8	115.0	103.8	115.5	108.4
1966	105.9	105.3	117.4	104.3	114.5	108.0
1967	112.1	108.9	115.0	103.8	113.7	108.3
1968	121.9	110.4	112.0	104.6	111.4	107.0
1969	115.5	104.9	108.1	103.2	106.8	104.9
1970	100.0	100.0	100.0	100.0	100.0	100.0
1971	101.1	92.9	95.6	100.4	93.3	97.6
1972	90.3	89.0	90.3	98.5	89.3	92.8
1973	84.0	84.5	82.0	98.5	92.2	97.2
1974	77.1	77.5	85.8	98.8	98.9	101.5

^{*50} Bus Properties. **Derived from American Public Transit Association,

<u>Transit Fact Book</u>, 75-76 ed., pp 32 and 36

The reasons for the trends in the passenger per bus mile ratios lie in the trends in their respective numerators and denominators (Figure 2.3 and Table 2.2). Consider first the sample medians in Figure 2.3, Panel A. From 1960 to 1968 bus miles tended to increase, whereas passengers tended to decline. This will cause a decline in the ratio. From 1968 on, passengers declined at a more rapid rate than bus miles, which will also cause a decline in the ratio. The other two panels display relatively stable bus mile levels, whereas passengers tend to decline, especially from 1966 to 1972. This will also cause a decline in the ratio. From 1972 to 1974 the medians for both passengers and bus miles declined, but the means and industry averages increased.

Thus it can generally be concluded that the passenger per vehicle mile ratio has declined primarily because passengers declined at a faster rate than the supply of service. As will be demonstrated in Section 3, this has important ramifications with respect to the relationship between revenues and costs.

¹It should also be noted that if routes are being extended into low density suburban areas, vehicle miles can increase at a faster rate than the number of passengers, and this will cause a decline in the ratio.

It was mentioned earlier that the sample means and APTA industry estimates are influenced by the situation in large metropolitan areas. This is demonstrated in Table 2.3. Note that all of the population classes <u>less</u> than 500,000 indicate a general downward trend in revenue passengers throughout the 1960-1974 period, and the decline appears to have accelerated since about 1968. This is the sample medians pattern shown in Figure 2.3, Panel A. The number of revenue passengers in the 500,000 <u>and over</u> class is relatively stable from 1960-1967, declines from 1967 to 1972, and then increases during the last two years. This is about the pattern shown in Panels B and C of Figure 2.3.

The significance of the foregoing is that smaller operations have evidently experienced more drastic changes in patronage versus supply of services than large communities, and these smaller operations have not experienced improvement in the latter years. Stated another way, any improvement that has occurred in recent years has probably been confined to large operations in densely populated communities. 1

Patronage versus Resources Employed

The number of active buses, employees, and route miles indicate the resources employed to provide the services. The figures are provided in Figure 2.4 and Table 2.4. The index for the number of active buses appears to have a slightly upward trend and fluctuates within a narrow range. With the exception of 1965, the index for the number of employees fluctuates with a range of about 6 percent of the 100 line and is virtually flat. Route miles (one way), on the other hand, fluctuate rather widely and also have an upward trend. Note that route miles increased dramatically from 1971 to 1974.

When patronage is compared to the resources employed, patterns similar to passengers per bus mile appear (Figure 2.5 and Table 2.5). Here the declines are more drastic because the number of vehicles, employees, and route miles have flat or upward trends, whereas the number of passengers has a downward trend.

¹Subsequent reports will investigate in greater detail the cross-sectional and historical pattern of large versus small operations.

Table 2.3

REVENUE PASSENGERS FOR SURFACE LINES¹, BY POPULATION GROUP 1960-1975

(Millions of Passengers)

	Population Class						
	500,000	250,000-	100,000-	50,000-	Less	Suburban	Total
Year	and	500,000	250 , 000	100,000	Than	and	Revenue
	Over				50,000	Other	Passengers
1960	2 , 997	911	691	554	230	468	5 , 851
1961	3,089	701	523	554	217	478	5 , 562
1962	3,029	680	496	533	212	468	5,418
1963	2,990	642	462	504	205	451	5,254
1964	2,991	612	432	486	194	441	5,156
1965	3,000	606	416	474	192	432	5,120
1966	3,003	608	413	483	194	386	5 , 087
1967	3,945	597	409	469	190	374	4,990
1968	2,886	581	369	455	171	375	4,837
1969	2 , 787	565	365	422	150	365	4,654
1970	2,610	529	342	395	140	342	4,358
1971	2,399	739	234	196	107	328	4,003
1972	2,330	681	220	182	97	297	3 , 807
1973	2,386	682	229	175	104	294	3 , 870
1974	3,544	269	231	49	77	Note 2	4,170
1975	3 , 560	284	225	72	100	Note 2	4,241

¹Includes rail surface lines and bus lines. P-preliminary

Source: American Public Transit Association, <u>Transit Fact Book</u>, 1975-76 ed., pp 30.

²Population of areas were defined according to population of headquarters city in 1960 and 1970. In 1974 the population was defined according to population in urbanized area which includes suburban and other areas. These changes in population definitions could account for some of the increases and decreases in the various categories.

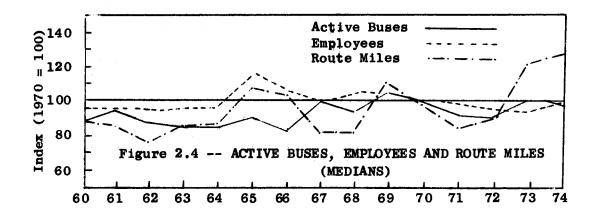


Table 2.4
INDEXES OF ACTIVE BUSES, EMPLOYEES AND
ROUTE MILES, 1960-1974
(Medians of 50 Bus Properties, 1970 = 100)

			One-Way
Year	Active	Employees	Route
	Buses		Miles
1960	89.8	94.4	88.6
1961	94.5	93.9	86.1
1962	86.7	93.9	76.6
1963	85.9	95.0	84.8
1964	85.2	95.0	86.1
1965	89.1	114.6	106.3
1966	82.0	105.6	104.4
1967	97.7	98.4	82.3
1968	93.8	104.0	82.9
1969	104.7	104.0	111.4
1970	100.0	100.0	100.0
1971	93.8	98.0	85.4
1972	91.4	95.5	90.5
1973	100.8	93.4	120.9
1974	100.8	98.5	129.1

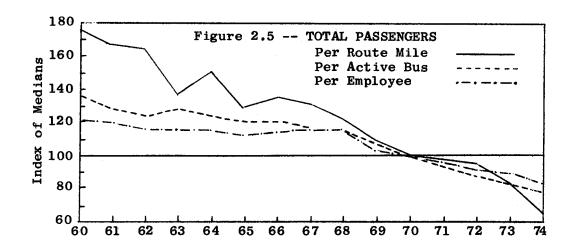


Table 2.5
INDEXES OF TOTAL PASSENGERS CARRIED
PER ACTIVE BUS, EMPLOYEE AND ROUTE MILE, 1960-1974
(Medians of 50 Bus Properties, 1970 = 100)

	Per		Per One-
Year	Active	Per	Way Route
	Bus	Employee	Mile
1960	134.8	121.0	175.2
1961	127.7	119.1	167.6
1962	123.6	114.8	165.9
1963	127.8	114.8	138.0
1964	122.6	114.5	150.4
1965	119.0	110.7	129.4
1966	119.6	114.2	135.1
1967	116.0	115.1	131.2
1968	114.7	115.4	122.6
1969	106.1	102.6	109.1
1970	100.0	100.0	100.0
1971	92.6	95.9	98.1
1972	88.6	91.7	96.4
1973	85.8	90.9	83.4
1974	80.0	85.2	69.8

3. REVENUE VERSUS COSTS

Beginning about 1968, a major change occurred in the financial condition of the typical bus transit operation. Total operating costs began to exceed total operating revenues (Figure 3.1). Prior to 1968, operating costs as a percent of total operating revenue averaged about 97% (Table 3.1), but from 1968 on, the financial situation steadily deteriorated, so that by 1974 total costs were about 154% of revenues. Twenty-five percent of the properties had percentages exceeding 195%.

That this is a general industry pattern and not one confined to small bus operations is indicated by arithmetic means and the APTA industry averages presented in Table 3.1. These are at about the same levels as the medians. Moreover, beginning at 1972 the 25th percentile values are over 100% and also show a substantial upswing after 1968.

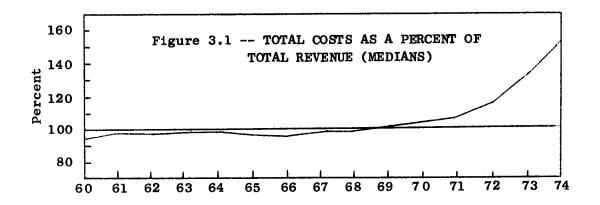


Table 3.1 TOTAL OPERATING COSTS AS A PERCENT OF TOTAL OPERATING REVENUE 1960-1974

	;		АРТА		
	25th		75th		Industry
Year	Percentile	Median	Percentile	Mean	Average*
1960	92.5	95.7	103.2	95.5	91.7
1961	93.9	97.4	103.8	97.0	93.2
1962	94.4	97.5	107.1	98.1	93.1
1963	94.5	98.1	104.5	98.6	94.4
1964	92.5	98.5	105.8	98.9	95.4
1965	92.5	96.2	101.7	95.9	95.2
1966	92.3	95.4	101.3	97.0	96.3
1967	94.3	97.8	102.6	98.8	98.4
1968	93.7	98.7	106.5	100.1	104.0
1969	97.0	101.2	111.2	103.4	117.3
1970	98.2	104.5	124.8	108.4	110.8
1971	98.9	106.1	135.2	112.3	117.2
1972	101.2	115.0	154.5	123.3	123.1
1973	110.4	132.1	171.2	137.2	134.6
1974	115.5	153.7	195.6	153.1	159.9

Note: APTA Percentages include all types of transit

*Source: American Public Transit Association, <u>Transit Fact Book</u>,

75-76 ed., p 28

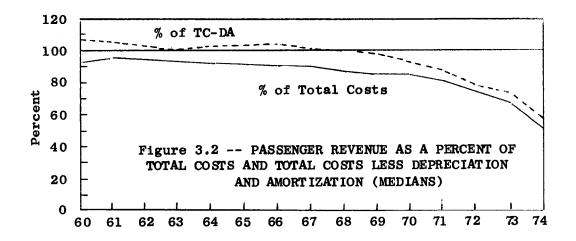
Table 3.2

TOTAL COSTS LESS DEPRECIATION AND AMORTIZATION
AS A PERCENT OF TOTAL REVENUE, 1960-1974

(Sample of 50 Bus Properties)

Year	25th Percentile	Median	75th Percentile	Mean
1960	86.4	89.9	97.9	89.5
1961	85.7	90.0	98.6	90.4
1962	86.4	91.4	98.4	91.4
1963	87.5	91.7	98.6	92.0
1964	85.9	92.5	102.6	92.4
1965	85.1	89.2	97.8	89.7
1966	85.4	87.7	100.3	90.8
1967	86.9	91.2	97.2	92.5
1968	87.0	91.6	100.5	93.6
1969	90.5	94.3	110.5	97.0
1970	92.2	97.5	119.1	103.0
1971	94.2	100.0	125.4	107.1
1972	96.9	108.5	148.1	118.0
1973	103.0	123.4	169.0	131.8
1974	112.0	146.0	192.6	146.9

The figures in Table 3.2 show the additional fact that since 1970 even out-of-pocket costs (total costs less depreciation and amortization) have exceeded total revenue; i.e., total revenues have not covered capital costs nor part of the day-to-day operating expenses. The operations were definitely in a net operating deficit position that would have to be financed from some outside source.



It is useful also to examine how well "farebox" revenues from regular line service passengers cover costs. This is displayed in Figure 3.2 and Tables 3.3 and 3.4. The most significant point to be noted here is that, on the average, line passenger revenues did not cover out-of-pocket expenses after 1968 and reached a low of 56.9% in 1974. It is also noteworthy that passenger revenues did not cover total costs throughout the 1960-1974 period, which implies that capital costs have typically not been covered.

 $^{^1{\}rm In}$ 1960 line service passenger revenue averaged 96% of total revenue. By 1974 this percentage declined to 91%. See Appendix Table C.

 $^{^{2}}$ Note that the numerators and denominators of the operating ratios have been reversed.

³The sum of depreciation and amortization is not necessarily equivalent to annual capital costs, but it does represent the amount expensed for the use of capital during the year.

Table 3.3

PASSENGER REVENUE AS A PERCENT OF TOTAL COSTS, 1960-1974 (Sample of 50 Bus Properties)

Year	25th Percentile	Median	75th Percentile	Mean
1960	82.5	93.1	97.5	94.7
1961	87.2	95.1	99.0	95.5
1962	84.2	94.1	96.5	93.7
1963	84.7	93.4	95.6	93.5
1964	83.9	92.2	97.3	91.2
1965	84.6	91.6	96.0	91.5
1966	78.8	90.3	95.4	90.4
1967	80.2	90.0	93.8	89.0
1968	77.6	87.2	96.0	89.0
1969	77.0	85.8	94.5	89.0
1970	74.8	85.6	93.2	84.9
1971	64.2	80.7	92.4	81.9
1972	57.1	75.2	85.8	75.2
1973	49.6	67.9	81.8	65.8
1974	46.2	53.4	76.9	59.4

Table 3.4

PASSENGER REVENUE AS A PERCENT OF TOTAL COSTS
LESS DEPRECIATION AND AMORTIZATION, 1960-1974

(Sample of 50 Bus Properties)

	25th	_	75th	
Year	Percentile	Median	Percentile	Mean
1960	98.1	107.1	111.8	106.4
1961	97.7	106.0	110.8	105.0
1962	94.7	103.2	109.4	103.7
1963	94.5	101.3	107.8	102.8
1964	87.1	103.5	112.9	102.5
1965	93.3	103.9	113.8	106.2
1966	90.4	104.6	111.7	104.5
1967	88.7	100.5	108.7	102.3
1968	83.6	100.4	107.6	100.8
1969	83.7	98.5	104.6	97.6
1970	76.6	93.8	100.8	91.3
1971	69.2	88.9	99.9	87.6
1972	60.5	78.6	95.1	78.7
1973	53.3	74.7	87.9	69.9
1974	46.8	56.9	80.7	61.9

The obvious reason for the increased deficits is that costs have increased at a much more rapid rate than revenues. In fact, total revenue has remained at virtually a constant level since 1968, whereas total costs have increased steadily (Figure 3.3 and Table 3.5). Again, this appears to be an industrywide phenomenon. The index of APTA industrywide averages shows a somewhat greater increase in the revenue index than the other indexes. The increases in total costs appear to be higher for the sample means and APTA averages, which suggest that larger properties have experienced higher rates of increase in costs.

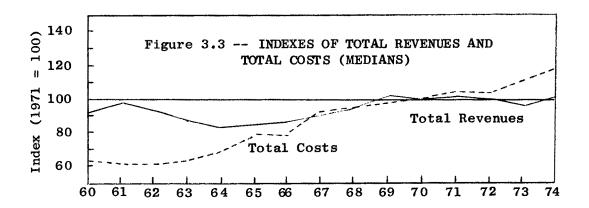


Table 3.5 INDEXES OF TOTAL OPERATING REVENUE AND COSTS, 1960-1974 (1970 = 100)

	Total	Operating H	Revenue	Total Operating Costs		
Year	Sample Medians	Sample Means	APTA Industry Average*	Sample Medians	Sample Means	APTA Industry Average*
1960 1961 1962 1963 1964 1965 1966 1967 1968 1969 1970	92.0 96.5 93.7 86.9 83.6 84.1 86.4 90.6 95.6 102.3 100.0 102.8	70.2 69.7 70.7 73.0 75.3 89.0 91.8 93.2 98.1 100.2 100.0 105.2	82.4 81.4 82.2 81.4 82.5 84.6 86.6 91.1 91.5 95.2 100.0 102.0	62.1 61.1 61.1 63.2 68.5 78.5 77.8 91.6 94.5 97.9 100.0 104.5	59.0 59.3 60.8 61.9 68.8 78.7 82.0 85.0 90.6 95.6 100.0 108.9	68.2 68.5 69.0 69.4 71.0 72.6 75.3 80.9 85.9 92.2 100.0 107.9
1972 1973 1974	101.7 97.0 102.3	102.7 102.5 104.0	101.2 105.3 113.6	103.6 110.5 118.3	115.8 126.7 143.8	112.5 127.9 164.0

Note: APTA data index includes all types of transit. Sample is for 50 bus properties.

*Source: American Public Transit Association. <u>Transit Fact Book</u>, `75-`76 ed., p 28

Table 3.6
LINE PASSENGER REVENUE PER LINE PASSENGER, 1960-1974
(Sample Values are for 50 Bus Properties)

	Passenger Revenue Per Passenger (Costs)			Index (1970 = 100)		
	ample edians	Sample Means	APTA Industry Average*	Sample Medians	Sample Means	APTA Industry Average*
1961 1962 1963 1964 1965 1966 1967 1968 1969 1970 1971 1972	18.9 19.2 19.2 20.5 21.8 22.1 21.9 22.2 23.3 25.2 26.2 29.7 30.2 30.0	20.1 20.7 21.2 22.0 22.8 23.6 23.9 24.7 25.5 27.9 30.4 32.7 33.2 32.5	18.0 18.6 19.1 19.6 20.1 20.6 21.2 22.4 23.2 25.7 29.4 32.3 33.1 32.4	72.3 73.2 73.3 78.2 83.1 84.2 83.7 84.6 88.8 96.1 100.0 112.3 115.4 114.5	66.2 68.0 69.9 72.4 74.9 77.8 78.7 81.3 83.9 92.0 100.0 107.6 109.3 106.9	61.2 63.3 65.0 66.7 78.4 70.1 72.1 76.2 78.9 87.4 100.0 109.9 112.6 110.2

*Source: American Public Transit Association, <u>Transit Fact Book</u>, \'75-'76 ed., p 42

Revenues increased only slightly over the 1960-1974 period primarily because the number of revenue passengers declined substantially (Figure 3.4 and Table 3.6). Line passenger revenue per passenger (average fare) increased enough over the period to cause revenue to increase, but the decline in passengers offset much of the effects of the fare increase. Note in Table 3.7 that the relationship of fare changes to changes in passengers is somewhat mixed. From 1964 to 1968 a minor increase in average fares is associated with a large increase in the number of passengers. From 1972 to 1974, a minor decline in average fares is associated with a large decline in passengers.

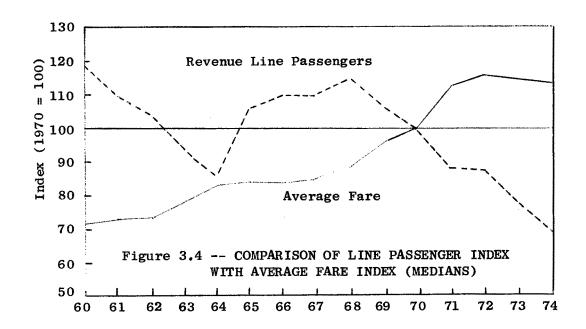


Table 3.7
PERCENT CHANGES IN AVERAGE BUS FARE* AND REVENUE LINE PASSENGERS
FOR SELECTED TIME PERIODS

	Percent Change			
	Average Fare	Line Passengers		
1960-1964 1964-1968 1968-1972 1972-1974 1960-1974	+14.9 + 6.9 +30.0 - 2.0 +56.4	-27.8 +34.2 -24.0 -19.9 -41.0		

^{*}Line service passenger revenue per revenue line service passenger

Two additional points should be noted regarding average fare. First, the sample means and the APTA industry averages follow the same general pattern as for the medians (Table 3.6). Second, from 1960 to 1970 the index of average bus fare generally followed the Consumers Price Index for all items, but from 1970 to 1974 the two indexes were quite different (Figure 3.5 and Table 3.8). The average bus fare index increased 15.4% from 1970 and then actually declined from 1972 to 1974. The Consumers Price Index increased 8.2% from 1970 to 1972, but increased drastically from 1972 to 1974. The behavior of average bus fare since 1972 undoubtedly reflects the stated industry objective to stabilize transit fares to help stop the decline of passengers. The policy evidently has not had much effect in the smaller communities, because passenger levels continue to decline.

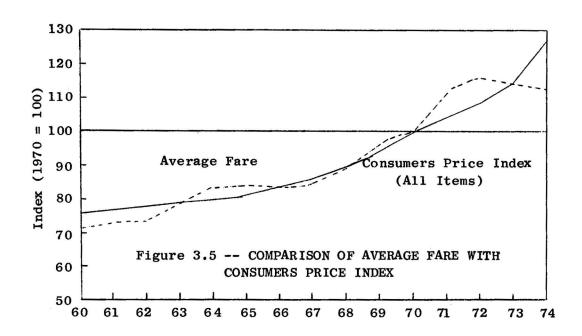


Table 3.8 WHOLESALE AND CONSUMERS PRICE INDEXES (1970 = 100)

	Wholesale Prices		Consumer's Prices			Sample
Year	Industrial		All	Transportation		Average
	Commodities	Energy	Items	Private	Public	Bus Fare
1960	87.1	90.5	76.3	80.4	63.0	72.0
1961	86.2	91.5	77.0	81.8*	65.0*	73.2
1962	86.2	91.0	77.9	82.0*	67.0*	73.3
1963	86.1	90.7	78.8	82.9	68.9	78.2
1964	86.6	88.2	79.9	84.0	70.1	83.1
1965	87.6	89.9	81.3	85.1	71.5	84.2
1966	89.6	92.1	83.6	86.5	74.1	83.7
1967	90.9	94.2	86.0	88.7	77.8	84.6
1968	93.2	93.1	89.6	91.6	81.4	88.8
1969	96.4	95.0	94.4	95.1	87.7	96.1
1970	100.0	100.0	100.0	100.0	100.0	100.0
1971	103.6	107.5	104.3	105.2	107.2	112.3
1972	107.2	111.7	108.2	106.4	111.6	115.4
1973	114.4	126.5	114.5	109.8	112.7	114.5
1974	139.8	196.1	127.0	122.2	115.2	113.1

^{*}Linear interpolation between 1960 and 1973

Note: All indexes were adjusted from a 1967 base to a 1970 base

Source: U.S. Bureau of the Census, <u>Statistical Abstract</u> of the <u>United States</u>, 1972 and 1975

At the same time that average fares stabilized, average bus operating costs increased substantially (Figure 3.6 and Table 3.9). The median total cost per bus mile increased 39.2% from 1970 to 1974, which is almost identical with the 39.8% increase in the Wholesale Price Index for Industrial Commodities (Table 3.8). Note also that from 1960 to 1970 the percent increase in total cost per bus mile was higher than for the Wholesale Price Index. The former increased 43.1%, whereas the latter increased only 14.8%.

Because APTA does not isolate total operating costs for bus operations only, it is not possible to compare the sample results with industrywide averages, but the percentiles and sample arithmetic means presented in Table 3.9 suggest that there are wide variations in costs per bus mile and that extremely large values affect the arithmetic means. Whether or not these large unit costs are related to the large properties in densely populated areas or to geographical differences is a subject for a more detailed investigation.

It is interesting to try to pinpoint the year when the <u>unit</u> cost of providing services began to exceed the unit revenues. Figure 3.7 and Table 3.10 show that the cross-over point occurred in 1967. After that year unit costs always exceeded unit revenues, and the gap widened nearly every year. Incidentally, the APTA industrywide revenue and cost per vehicle mile figures, which include rail as well as bus properties, also show 1967 as the cross-over point. The phenomenon, therefore, appears to be industrywide.

¹American Public Transit Association, <u>Transit Fact Book</u>, '75-'76 ed., p 37

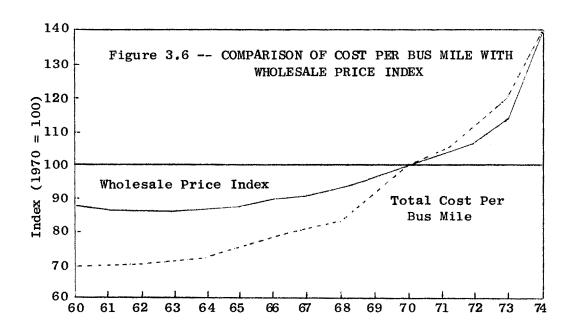


Table 3.9
TOTAL OPERATING COST PER BUS MILE, 1960-1974
(Sample of 50 Bus Properties)

	Total Cost	al Cost Per Bus Mile (Dollars)			Index (19	970=100)
l '	25th		75th			
Year	Percentile	Median	Percentile	Mean	Medians	Means
1960	.454	.536	.597	.591	69.9	65.8
1961	.481	.535	.622	.603	69.7	67.2
1962	.483	.539	.640	.617	70.2	68.8
1963	.478	.549	.647	.630	71.6	70.2
1964	.501	.555	.672	.662	72.3	73.7
1965	.522	.577	.687	.683	75.2	76.1
1966	.526	.603	.706	.710	78.6	79.1
1967	.554	.621	.709	.735	81.0	81.9
1968	.580	.638	.766	.774	83.1	86.2
1969	.609	.711	.803	.831	92.7	92.6
1970	.665	.767	.862	.898	100.0	100.0
1971	.730	.795	.912	.974	103.6	108.5
1972	.770	.859	.988	1.066	111.9	118.7
1973	.792	.919	1.091	1.165	119.8	129.8
1974	.872	1.068	1.253	1.319	139.2	147.0

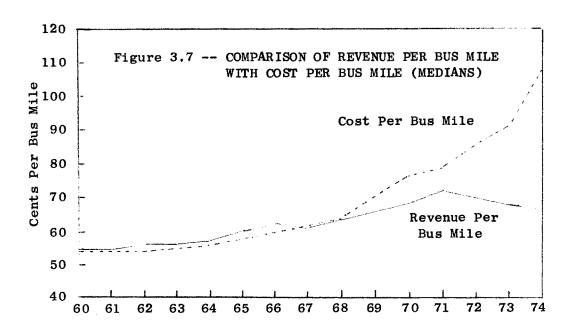


Table 3.10
MEANS TOTAL REVENUE AND COST PER BUS PASSENGER
AND PER BUS MILE, 1960-1974
(Medians of 50 Bus Properties, Cents)

Year	Revenue Per Bus Passenger	Cost Per Bus Passenger	Revenue Per Bus Mile	Cost Per Bus Mile
1960	16.3	15.7	55.3	53.6
1961	16.8	15.9	54.6	53.5
1962	16.5	16.1	55.5	53.9
1963	17.7	17.5	55.8	54.9
1964	18.4	17.8	56.7	55.5
1965	19.1	18.8	60.4	57.7
1966	18.7	18.9	61.5	60.3
1967	19.3	19.9	60.9	62.1
1968	21.3	21.4	63.5	63.8
1969	22.8	23.4	66.3	71.1
1970	24.8	26.4	67.6	76.7
1971	26.4	30.0	72.4	79.5
1972	27.0	34.6	70.3	85.9
1973	28.2	37.1	68.2	91.9
1974	28.1	43.3	67.2	106.8

4. TRENDS IN COST CATEGORIES

This section discusses the trends in various components of operating costs. Appendices B and C provide detailed tables of relative and unit costs derived from data reported under the APTA reporting system.

RELATIVE COSTS

In Table 4.1 the major cost categories are expressed as a percent of total costs less depreciation and amortization (TC-DA) rather than total costs in order to avoid the effects of varying accounting practices among properties. Several trends in the relative positions of the categories are apparent. First, the percentage that Drivers' and Helpers' Wages are of total operating costs has increased gradually throughout the 1960 to 1974 time period. Second, Operating Taxes and Licenses costs had a relatively stable relationship to the total from 1960 to 1970, but the relative share declined from 1970 to 1974. Third, the percentages in the other categories have been relatively stable throughout the period. Finally, a sharp increase in the relative size of diesel fuel costs occurred in 1974, but these costs were still only 5.2% of the total in 1974.

A more detailed discussion of each category follows.

¹The trends in relative depreciation and amortization costs are discussed at the end of this section.

Table 4.1

SELECTED COSTS AS A PERCENT OF TOTAL COSTS
LESS DEPRECIATION AND AMORTIZATION, 1960-1974

(Medians of 50 Properties)

Year	Drivers & Helpers Wages	Repairs to Revenue Equipment	Diesel Fuel Cost ¹	Operating Taxes & Licenses	Injuries & Damages	Adminis- trative & General
1000	4.0.4	11 -	2 0]	0 [10.5
1960	42.4	11.5	3.8	7.7	3.7	13.5
1961	42.3	11.0	3.7	7.2	3.7	13.3
1962	43.0	10.7	3.6	7.6	3.8	12.7
1963	43.6	10.5	3.7	7.6	3.4	11.8
1964	43.4	10.4	3.5	7.4	3.5	12.1
1965	44.4	9.9	3.4	7.2	3.8	12.4
1966	45.0	9.9	3.5	7.6	3.6	11.6
1967	44.9	9.9	3.6	7.6	3.7	11.9
1968	45.0	10.5	3.6	7.7	3.8	11.9
1969	45.3	10.1	3.6	7.3	3.8	11.8
1970	45.9	10.1	3.4	7.2	3.9	12.0
1971	46.2	10.2	3.2	6.7	4.1	13.0
1972	47.1	9.7	3.1	6.2	4.0	13.5
1973	47.6	10.0	3.8	5.6	3.9	12.2
1974	45.1	9.8	5.2	5.2	3.5	12.9

¹Excludes taxes

Table 4.2

DRIVERS AND HELPERS WAGES AS A PERCENT OF TOTAL COSTS

LESS DEPRECIATION AND AMORTIZATION, 1960-1974

(50 Bus Properties)

	25th		75th	Arithmetic
Year	Percentile	Median	Percentile	Mean
1960	39.68	42.44	45.35	43.07
1961	40.11	42.33	45.43	43.27
1962	41.39	42.96	46.02	43.84
1963	41.32	43.62	46.08	43.91
1964	41.77	43.42	46.08	43.59
1965	41.89	44.36	47.52	45.16
1966	42.55	44.98	47.43	45.17
1967	42.70	44.93	47.85	45.38
1968	43.00	44.98	48.69	45.97
1969	43.49	45.29	48.55	46.19
1970	43.82	45.87	50.18	45.86
1971	43.83	46.21	49.31	45.99
1972	43.46	47.08	50.49	45.85
1973	43.86	47.57	51.13	45.57
1974	41.31	45.08	49.05	44.13

Drivers' and Helpers' Wages

It is significant that the percent of TC-DA spent on drivers' and helpers' wages is quite uniform throughout the sample of 50 properties. This is shown by the 25th and 75th percentile figures in Table 4.2. In 1960 the variation between these two percentiles was only about 3 percentage points from the median. In 1974 the variation was only about 4 percentage points. Note also that the arithmetic mean was about the same as the median, which indicates that the distribution is nearly symmetrical.

Thus the relative driver and helper cost is roughly the same, regardless of the size or location of the property.

Drivers' and Helpers' Wages per bus hour (a proxy for wage rates) increased considerably during the period (Figure 4.1 and Table 4.3), and the variation between wage rates appears to have increased. In 1960 the difference between the 25th percentile and the 75th percentile was about 90¢. By 1974 the difference was over \$2. Note also that the arithmetic means are considerably above the medians, which indicates that some of the properties have extremely high wage rates. A check of the basic data reveals that the highest rates occur in large properties in California, Michigan, and New Jersey. The southern states appear to have the lowest rates. These geographical and property-size differences will be investigated in other reports.

It is interesting that in spite of these differences the indexes of medians and means follow one another very closely. This suggests that the relative rates between geographical areas and property sizes have not changed much.

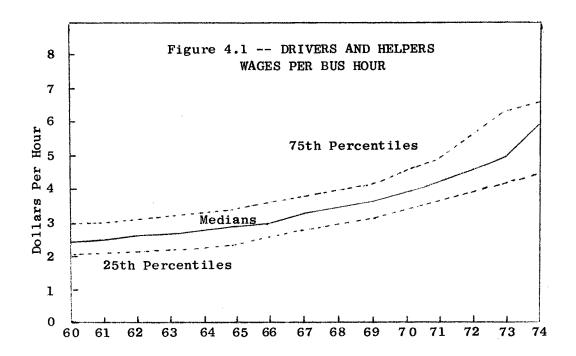


Table 4.3
DRIVERS AND HELPERS WAGES PER BUS HOUR (50 Bus Properties)

	Drivers and	Helpers W	ages Per Bus	Hour (\$)	Index (1	970=100)
Year	25th		75th	Arithmetic		Arithmetic
	Percentile	Median	Percentile	Mean	Medians	Means
1960	2.04	2.45	2.94	2.83	63.2	59.5
1961	2.06	2.49	2.95	2.91	64.2	61.2
1962	2.13	2.62	3.08	3.04	67.5	63.9
1963	2.17	2.65	3.16	3.14	68.1	65.8
1964	2.20	2.72	3.26	3.23	70.1	67.7
1965	2.33	2.86	3.37	3.45	73.5	72.4
1966	2.53	2.96	3.54	3.60	76.1	75.5
1967	2.72	3.22	3.70	3.77	82.8	79.1
1968	2.91	3.42	3.89	4.03	88.0	84.5
1969	3.08	3.62	4.19	4.39	93.0	92.1
1970	3.37	3.89	4.57	4.76	100.0	100.0
1971	3.61	4.20	4.83	5.04	108.1	105.8
1972	3.90	4.57	5.64	5.64	117.5	118.5
1973	4.17	4.96	6.32	6.32	127.7	132.6
1974	4.43	5.87	6.56	7.03	151.0	147.6

Repairs to Revenue Equipment

Under conditions of financial deterioration, properties might elect to defer maintenance in order to minimize current expenditures and present more favorable current financial statements. The figures in Table 4.4 indicate no definite tendencies along these lines. In fact the figures are remarkably stable. The medians hover around 10% and the means around 8.5%. The lower level of the means is probably a reflection of differences in large versus small properties with respect to cost distributions in general.

A further indication that deferred maintenance has not been a general policy is provided in Figure 4.4 (see also Tables 4.5 and 4.6). From 1960 to 1967, Repairs Per Active Bus roughly followed the Wholesale Price Index so that <u>real</u> expenditures per bus were about constant. From 1967 to 1973 the rate of change in repairs per active bus was <u>greater</u> than the Wholesale Price Index, which implies that <u>real</u> expenditures per bus actually increased. Note, however, that from 1973 to 1974 the sharp increase in the Wholesale Price Index is associated with a decline in repairs per vehicle. This suggests that maintenance policies may have been affected.

Table 4.4

REPAIRS TO REVENUE EQUIPMENT AS A PERCENT OF TOTAL COSTS

LESS DEPRECIATION AND AMORTIZATION, 1960-1974

(50 Bus Properties)

	25th		75th	
Year	Percentile	Median	Percentile	Mean
1960	8.23	11.46	12.42	9.04
1961	7.58	11.04	12.84	8.72
1962	7.74	10.73	13.00	8.78
1963	7.78	10.51	12.54	8.66
1964	7.92	10.43	12.98	8.63
1965	7.82	9.87	12.34	8.65
1966	7.70	9.91	11.95	8.59
1967	7.16	9.91	12.08	8.45
1968	7.13	10.49	12.19	8.32
1969	7.24	10.01	12.35	8.42
1970	7.49	10.10	12.04	8.60
1971	7.63	10.19	12.24	8.83
1972	7.25	9.72	12.79	8.48
1973	6.76	9.98	13.12	8.39
1974	6.43	9.82	12.07	7.84

Table 4.5
REPAIRS TO REVENUE EQUIPMENT PER ACTIVE BUS 1960-1974
(50 BUS Properties)

Veen	25th	Madian	75th	Mana
Year	Percentile	Median	Percentile	Mean
1960	1322.48	1730.89	2102.42	1733.96
1961	1332.44	1591.87	2023.42	1694.09
1962	1395.92	1649.26	1957.42	1714.42
1963	1426.30	1628.31	2047.98	1719.95
1964	1409.19	1637.68	2146.29	1765.72
1965	1378.64	1637.08	2044.73	1857.29
1966	1309.76	1649.95	2187.73	1912.14
1967	1353.05	1650.73	2137.44	1930.94
1968	1459.07	1779.78	2241.43	2023.05
1969	1594.23	1890.36	2475.77	2185.89
1970	1678.40	2019.64	2689.01	2340.74
1971	1751.99	2289.71	3240.65	2719.94
1972	1745.34	2412.54	2954.03	2732.53
1973	1882.17	2607.94	3398.11	3083.55
1974	1845.92	2454.90	3462.62	2955.56

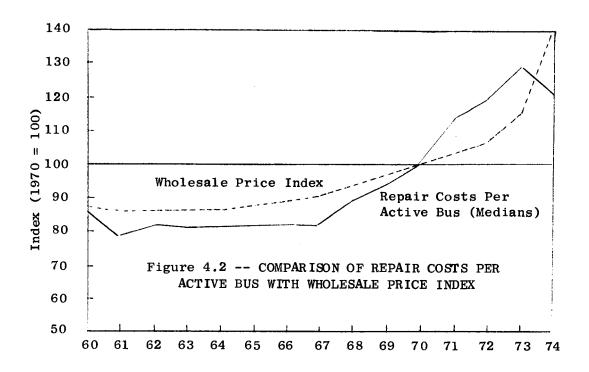


Table 4.6

INDEXES OF REPAIRS TO REVENUE Equipment

PER ACTIVE BUS AND WHOLESALE PRICE INDEX, 1960-1974

(50 Bus Properties, 1970=100)

	Sample	Wholesale Price	
Year	Medians	Means	Index*
1960	85.70	74.08	87.1
1961	78.82	72.37	86.2
1962	81.66	73.24	86.2
1963	80.62	73.48	86.1
1964	81.09	75.43	86.6
1965	81.06	79.35	87.6
1966	81.70	81.69	89.6
1967	81.73	82.49	90.9
1968	88.12	86.43	93.2
1969	93.60	93.38	96.4
1970	100.00	100.00	100.0
1971	113.37	116.20	103.6
1972	119.45	116.74	107.2
1973	129.13	131.73	114.4
1974	121.55	126.27	139.8

^{*}Industrial Commodities

Table 4.7
DIESEL FUEL COSTS AS A PERCENT OF TOTAL COSTS LESS
DEPRECATION AND AMORTIZATION, 1960-1974
(50 Bus Properties)

Year	25th Percentile	Median	75th Percentile	Mean
1001	rerecherre	11001011	10100110110	mean
1960	2.77	3.76	4.94	3.16
1961	3.28	3.70	4.97	3.44
1962	3.18	3.55	4.87	3.37
1963	3.10	3.66	5.07	3.31
1964	2.88	3.46	4.27	3.12
1965	2.92	3.38	4.48	3.16
1966	3.03	3.45	4.46	3.18
1967	3.10	3.56	4.48	3.31
1968	3.19	3.63	4.28	3.34
1969	3.17	3.62	4.20	3.22
1970	2.79	3.40	3.98	3.01
1971	2.84	3.22	3.69	2.84
1972	2.67	3.14	3.76	2.83
1973	2.84	3.77	4.38	3.18
1974	4.26	5.15	6.90	4.87

Diesel Fuel Costs

The very narrow margin between the 25th and 75th percentiles in Table 4.7 indicates that the percentage of TC-DA spent on diesel fuel has been quite uniform throughout the industry. The sharp increase in fuel costs since 1972 had a definite impact on the size of the percentages, but note that the difference between the 25th and 75th percentiles remained about the same. This implies that the impact of the energy crisis was uniform throughout the industry.

Table 4.8

OPERATING TAXES AND LICENSES AS A PERCENT OF TOTAL COSTS

LESS DEPRECIATION AND AMORTIZATION, 1960-1974

(50 Bus Properties)

Year	25th Percentile	Median	75th Percentile	Mean
1960	6.08	7.67	10.20	7.71
1961	5.45	7.24	10.16	7.61
1962	5.33	7.59	10.10	7.32
1963	5.56	7.59	9.84	7.41
1964	5.40	7.41	9.31	7.77
1965	5.13	7.22	9.26	6.72
1966	5.62	7.59	10.25	7.17
1967	5.50	7.57	9.38	7.15
1968	5.43	7.73	9.21	6.78
1969	5.54	7.34	9.23	6.34
1970	5.15	7.24	8.94	5.43
1971	5.17	6.71	8.46	5.25
1972	4.27	6.19	7.49	4.69
1973	4.25	5.61	7.60	4.36
1974	4.07	5.17	6.67	4.19

Operating Taxes and Licenses

From 1960 to 1970, Operating Taxes and Licenses as a percent of TC-DA exhibited a stable pattern for the medians at about 7.5% (Table 4.8). After 1970 the percentage declined steadily so that by 1974 it reached a level of about 5.2%. The arithmetic means, the 25th and 75th percentiles show similar trends, indicating that the trends are industrywide.

These figures undoubtedly reflect more lenient taxation policies by state and local governments since 1970 in response to the financial difficulties experienced by the properties. In addition, the public takeover of properties gained momentum in the early 1970's.

Table 4.9
INJURIES AND DAMAGES COSTS AS A PERCENT OF TOTAL COSTS
LESS DEPRECIATION AND AMORTIZATION, 1960-1974
(50 Bus Properties)

Year	25th Percentile	Median	75th Percentile	Mean
icai	rerecherre	IICALAII	rereenerie	nean
1960	2.56	3.71	4.80	4.30
1961	2.99	3.67	4.31	4.15
1962	2.92	3.81	4.57	3.97
1963	2.81	3.35	4.41	3.88
1964	2.87	3.53	4.60	4.28
1965	2.62	3.78	4.62	4.41
1966	2.78	3.61	4.76	4.31
1967	2.38	3.70	4.44	4.24
1968	2.90	3.77	4.82	4.28
1969	2.82	3.76	4.93	4.49
1970	2.72	3.94	5.41	4.66
1971	3.15	4.14	5.32	4.52
1972	2.86	3.98	4.90	4.74
1973	2.57	3.87	5.00	4.71
1974	2.06	3.52	5.11	4.61

Injuries and Damages

Injuries and Damages as a percentage of TC-DA shows a high degree of stability throughout the period (Table 4.9). The means are consistently higher than the medians, which may reflect higher costs in larger properties; however, with the exception of 1974, the difference between the two averages is less than 1 percentage point. Here is another case where an investigation of the relationship between injury and damage costs to size of property and geographic area would probably be fruitful.

Table 4.10
ADMINISTRATIVE AND GENERAL EXPENSES AS A PERCENT OF
TOTAL COSTS LESS DEPRECIATION AND AMORTIZATION, 1960-1974
(50 Bus Properties)

Year	25th Percentile	Median	75th Percentile	Mean
icai	TCTCCTTCTTC	ricaran	TCTCCTCTTC	rican
1960	10.04	13.54	15.03	13.74
1961	10.56	13.33	15.43	14.16
1962	10.64	12.71	15.56	14.53
1963	9.68	11.78	14.89	14.63
1964	9.84	12.09	15.91	15.84
1965	9.83	12.36	16.21	15.24
1966	9.64	11.56	16.12	15.23
1967	8.85	11.93	14.81	14.95
1968	8.80	11.90	14.65	14.23
1969	9.01	11.81	14.76	14.65
1970	9.59	12.00	14.61	15.31
1971	10.12	13.02	15.58	16.17
1972	10.14	13.47	15.38	15.84
1973	10.30	13.18	16.03	16.54
1974	10.96	12.94	16.29	17.41

Administrative and General

The medians presented in Table 4.10 indicate that Administrative and General Expenses account for about 12-13 percent of TC-DA and that the percentage is relatively stable throughout the period. However, the arithmetic means show an increasing tendency, especially in the last two years, and the fact that the means are significantly higher than the medians indicates an influence by extremely large values. It would be expected that larger properties would require higher proportionate expenditures on administration, marketing, etc., and it probably would be fruitful to investigate the correlation between the size of property and these expenditures. It would also be interesting to determine whether the larger properties account for the upward trend in the means. These are matters that will be investigated in subsequent reports.

COSTS PER BUS MILE1

The median costs per bus mile for the major categories are given in Table 4.11. Their indexes appear in Table 4.12. Note first that indexes of maintenance costs closely follow that of drivers' and helpers' wages. This is undoubtedly due to the fact that there is a high labor component in maintenance and repair. In addition, maintenance and repair wage rates evidently have increased at about the same rate as drivers' and helpers' wages.

The sharp jump in diesel fuel costs from 1973 to 1974 is brought out clearly in the tables. Diesel fuel cost per bus mile increased from about 3¢ to 6¢. The index jumped from 130.1 to 234.3, a percent change of about 80%. This compares with a 55% increase in the Wholesale Price Index for energy (see Table 3.8) and 72% increase in diesel fuel cost per gallon (see Appendix Table C.4.16). As will be discussed in more detail in the last section, the higher cost per bus mile figures reflect increased fuel consumption per mile and/or stockpiling by bus properties in anticipation of higher prices.

¹Other unit cost figures such as costs per bus hour, active bus and employee, are provided in Appendix C. They are not discussed here, because they indicate about the same general trends.

Table 4.11
COSTS PER BUS MILE FOR SELECTED COST CATEGORIES, 1960-1974
(Medians of 50 Properties, in Cents)

Year	Total Cost	Total Cost Less Depr. and Amort.	Drivers and Helpers Wages	Total Maintenance Cost	Repairs to Revenue Vehicles	Diesel Fuel Cost*
1960	53.6	49.9	21.3	8.8	5.2	1.9
1961	53.5	50.5	21.0	9.0	5.2	2.0
1962	53.9	49.2	22.5	8.9	5.3	2.1
1963	54.9	51.0	23.5	8.9	5.4	2.1
1964	55.5	53.4	24.1	9.2	5.6	1.9
1965	57.7	55.4	25.3	9.3	5.3	2.0
1966	60.3	57.4	26.1	9.2	5.4	2.1
1967	62.1	58.6	27.1	10.4	5.7	2.2
1968	63.8	62.5	29.1	10.5	6.1	2.4
1969	71.1	66.9	31.0	11.5	6.2	2.5
1970	76.7	72.2	33.2	12.8	6.6	2.6
1971	79.5	77.2	35.3	13.1	7.2	2.5
1972	85.9	81.5	38.7	14.6	7.9	2.7
1973	91.9	86.7	42.8	15.9	8.3	3.3
1974	106.8	98.7	47.7	18.3	9.2	6.0

^{*}Excludes taxes

Table 4.12 INDEXES OF COSTS PER US MILE FOR SELECTED COST CATEGORIES, 1960-1974 (Medians of 50 properties, 1970 = 100)

Year	Total Cost	Total Cost Less Depr. and Amort.	Drivers and Helpers Wages	Total Maintenance Cost	Repairs to Revenue Vehicles	Diesel Fuel Cost
1960	69.9	69.1	64.0	69.1	79.6	76.0
1961	69.8	70.0	63.4	70.8	79.6	79.8
1962	70.2	68.1	67.7	69.5	80.1	80.3
1963	71.6	70.7	70.1	69.8	82.8	81.6
1964	72.4	74.0	72.7	71.7	84.7	75.6
1965	75.2	76.8	76.3	73.1	81.0	79.8
1966	78.6	79.5	78.9	72.1	93.0	83.3
1967	81.0	81.1	81.8	81.4	86.5	87.2
1968	83.1	86.6	87.7	81.9	93.1	94.0
1969	92.7	92.6	93.5	90.1	95.1	97.6
1970	100.0	100.0	100.0	100.0	100.0	100.0
1971	103.6	107.0	106.4	102.2	110.6	98.9
1972	111.9	112.9	116.7	113.9	120.6	104.4
1973	119.8	120.1	129.0	124.7	126.5	130.1
1974	139.2	136.8	143.7	143.1	140.5	234.3

Table 4.13
DEPRECIATION AND AMORTIZATION AS A PERCENT OF TOTAL COSTS 1960-1974
(50 Bus Properties)

	25th		75th	
Year	Percentile	Median	Percentile	Mean
1960	5.62	6.57	8.23	6.43
1961	6.01	7.26	8.80	7.04
1962	5.48	6.95	8.72	7.18
1963	5.03	6.27	8.33	6.96
1964	4.40	6.68	7.86	6.87
1965	4.70	6.85	8.52	6.90
1966	4.98	6.57	8.93	6.81
1967	5.14	6.49	8.91	6.86
1968	5.25	6.30	9.17	6.79
1969	4.95	6.71	9.05	6.42
1970	4.85	6.39	8.70	5.44
1971	4.27	6.07	7.02	5.26
1972	4.07	5.75	7.59	4.96
1973	3.51	5.16	7.69	4.68
1974	3.57	4.74	7.31	4.65

DEPRECIATION AND AMORTIZATION (D&A)

Because the sample contains a mixture of private and public ownership of the properties, it can be expected that accounting procedures for D&A will vary considerably. In addition, two important changes have occurred during the period that affect the D&A figures. First, more and more private properties have been taken over by the communities they served, so that the mix of private versus public ownership has changed. Second, and probably most important, the Federal capital grants program has become a major source of funds for capital expenditures, and depreciation cannot be taken on the Federal share of a capital item. Thus, uniformity among the properties in the treatment of D&A cannot be assumed, and there are fundamental changes in capital financing which affect the treatment of the D&A in accounting systems. This is why it was excluded from total costs in the previous analyses.

Table 4.13 shows the relationship of D&A to total costs over the 15-year period. Prior to 1970 D&A averaged about 6.5% of total costs. By 1974 the percentage dropped to about 4.7%. This decline is closely related to the advent of the capital grants program as well as to the acceleration of public takeovers in recent years. The 75th percentile figures show that in 1968 and 1969 at least 25% of the properties charged over 9% to D&A. The 25th percentiles in those two years were about 5%. Both percentiles declined since 1969 along with the medians, an indication that the industry did indeed experience a general shift.

5. UTILIZATION OF EMPLOYEES AND VEHICLES

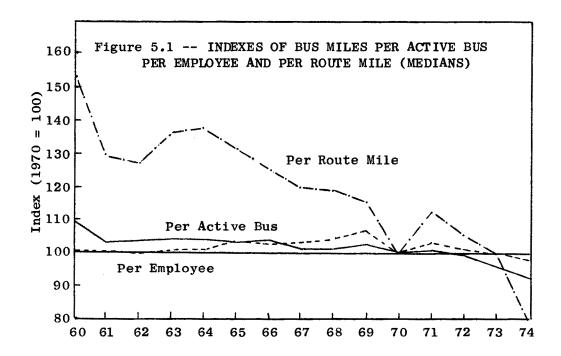
To help explain the trends in the ratios to be presented in this section, it will be useful at this point to turn back to Figure 2.4 and Table 2.4 (page 2-8) and note that throughout the period the number of buses had a slightly upward trend, the number of employees remained relatively stable, and the number of route miles fluctuated considerably but had an upward trend. A substantial increase in route miles occurred from 1971 to 1974. Bus miles, a measure of service supplied, had an upward trend from 1964 to 1968 but declined from 1968 to 1973 (Figure 2.3, page 2-4).

Consider first the trends in the three ratios given in Figure 5.1 and Tables 5.1 and 5.2.

BUS MILES PER ACTIVE BUS

The ratio measures the utilization of buses in terms of the miles driven during a year's period. In 1960 the median annual miles per bus was 33.2 thousand (Table 5.1). From 1961 to 1966 the figure averaged about 31.8 thousand, then it declined to about 31.0 thousand from 1967 to 1971. From that point it dropped to 28.5 thousand in 1974. Thus, the ratio has tended to decline gradually throughout the period with an acceleration in the decline from 1971 to 1974. When the trends in the numerators and denominators are considered, it is clear that the downward movements in bus miles per active bus ratio were caused primarily by the general decline of bus miles, and a slight upward trend in the number of vehicles.

¹The behavior of the arithmetic means is very similar, especially during the latter years. See Appendix Table C.7.1.



BUS MILES PER EMPLOYEE

Because the trend in the number of employees was rather flat during the period, this ratio reflects primarily the changes in bus miles. The index presented in Figure 5.1 and Table 5.2 shows that bus miles per employee increased slightly from 1960-1968, then declined generally from 1968-1974. This is approximately the trend in bus miles per se.

BUS MILES PER ROUTE MILE

The relatively sharp decline in this ratio (Figure 5.1) is caused by a strong upward trend in route miles, especially from 1971 to 1974, and a generally downward trend in bus miles. The increase in route miles is probably linked to the expansion of service in suburban areas, but one would expect an <u>increase</u> rather than a decrease in bus miles in relation to this expansion. This suggests that the increased suburban coverage may be linked to a deterioration of service in other areas, e.g., reduced service frequency or route abandonment.

Table 5.1
ANNUAL BUS MILES PER ACTIVE BUS, PER EMPLOYEE
AND PER ROUTE MILE, 1960-1974
(Medians of 50 Bus Properties)

	I	Annual Bus Miles	
Year	Per Active Bus (000)	Per Employee (000)	Per Route Mile* (000)
1960	33.2	15.0	31.6
1961	31.7	15.0	26.6
1962	31.9	14.8	26.2
1963	31.9	15.1	28.0
1964	31.9	15.0	28.3
1965	31.6	15.5	27.0
1966	31.9	15.3	25.9
1967	31.0	15.4	24.8
1968	31.0	15.6	24.5
1969	31.4	16.0	23.7
1970	30.5	14.9	20.5
1971	31.0	15.4	23.2
1972	30.4	15.1	21.7
1973	29.5	15.0	20.5
1974	28.5	14.7	16.2

*One-way

Table 5.2

INDEXES OF ANNUAL BUS MILES PER ACTIVE BUS, PER EMPLOYEE, AND PER ROUTE MILE, 1960-1974 (Medians of 50 Bus Properties, 1970 = 100)

	Index of Bus Miles					
Year	Per Active Bus	Per Employee	Per Route Mile*			
1960	109.1	100.6	153.9			
1961	103.9	100.5	129.7			
1962	104.7	99.5	127.7			
1963	104.8	101.1	136.2			
1964	104.6	100.4	137.9			
1965	103.7	103.9	131.4			
1966	104.7	102.3	126.3			
1967	101.6	103.5	120.9			
1968	101.7	104.7	119.3			
1969	103.1	107.2	115.6			
1970	100.0	100.0	100.0			
1971	101.7	103.4	112.7			
1972	99.9	101.5	105.9			
1973	96.8	100.4	99.8			
1974	93.4	98.7	78.9			

*One-way

Table 5.3
BUS MILES PER BUS HOUR, 1960-1974
(50 Bus Properties)

	25th		75th		Index (1	970=100)
Year	Percentile	Median	Percentile	Mean	Medians	Means
1960	10.4	11.1	12.2	11.7	93.0	96.2
1961	10.4	11.3	12.3	11.8	94.5	96.8
1962	10.4	11.3	12.4	11.9	94.6	97.6
1963	10.5	11.3	12.4	12.0	95.1	98.2
1964	10.4	11.4	12.4	12.0	95.6	98.4
1965	10.6	11.5	12.6	12.0	96.5	98.4
1966	10.8	11.6	12.7	12.0	97.5	98.5
1967	11.0	11.7	12.9	12.0	98.2	98.8
1968	10.7	11.7	12.7	12.1	97.9	99.0
1969	10.5	11.7	12.9	12.1	98.5	99.5
1970	10.5	11.9	12.9	12.2	100.0	100.0
1971	10.5	11.6	12.8	11.6	97.2	95.0
1972	10.9	11.9	12.8	12.1	100.3	98.9
1973	11.0	12.2	12.9	12.4	102.1	101.7
1974	11.2	12.3	13.3	12.6	103.3	103.6

BUS MILES PER BUS HOUR

This ratio provides a rough measure of the ability of the buses to traverse urban roadways. Table 5.3 shows that the general trend in the medians is slightly upward. The lowest point was 11.077 miles per hour in 1960, and the highest point was reached in 1974 at 12.304. The arithmetic means are slightly higher and exhibit the same general trend. Note also that there is only about two miles per hour difference between the 25th percentile and the 75th percentile, which indicates a high degree of uniformity within the sample and probably within the industry. These percentiles also show an upward trend.

There are several plausible explanations for the upward trend. The fact that route miles increased, especially from 1971 to 1974, suggests that routes are extending out into the suburbs. The lower traffic densities in the suburbs and longer distances between stops may allow buses to operate at higher speeds. In addition, there may be a greater proportion of express trips from the suburbs to various work centers. A further explanation may be that greater use has been made of reserved bus lanes and/or that traffic congestion has declined.

Table 5.4
EMPLOYEES PER ACTIVE BUS, 1960-1974, (50 Bus Properties)

	25th		75th		Index (1	970=100)
Year	Percentile	Median	Percentile	Mean	Medians	Means
1960	1.81	2.10	2.33	2.31	104.6	108.9
1961	1.81	2.05	2.30	2.30	102.3	108.2
1962	1.87	2.09	2.29	2.28	104.3	107.2
1963	1.89	2.07	2.30	2.24	103.1	105.5
1964	1.78	2.06	2.34	2.24	102.6	105.6
1965	1.74	2.05	2.24	2.26	102.5	106.5
1966	1.67	2.08	2.27	2.26	104.0	106.3
1967	1.74	2.05	2.22	2.22	102.3	104.7
1968	1.75	2.04	2.26	2.21	101.8	104.1
1969	1.58	1.95	2.19	2.17	97.2	102.2
1970	1.71	2.00	2.19	2.12	100.0	100.0
1971	1.63	2.06	2.23	2.00	102.8	94.3
1972	1.71	1.89	2.11	2.05	94.4	96.4
1973	1.61	1.94	2.16	2.16	97.1	101.5
1974	1.67	1.88	2.10	2.10	93.5	98.9

EMPLOYEES PER ACTIVE BUS

From 1960 to 1971 the median number of employees per active bus was remarkably stable at just over a 2 to 1 ratio (Table 5.4). After 1971 the ratio trended downward reaching a level of 1.88 to 1. The decline is apparently caused by a slightly higher average rate of increase in buses than for employees during these latter years (see Table 2.4). There also appears to be a lag effect—employees increased one year after buses increased—which suggests that the ratio may return back to the 2 to 1 level.

There is probably a close relationship between the employees per bus and the size of the operation. It would be expected that larger, more complex operations would require a greater proportion of non-driver employees, especially administrative personnel. The 25th percentile figures probably represent the typical small operation, and the 75th percentile the typical large operation. In any case the spread between the two percentiles consistently is only about ½ of an employee. Moreover, the trends over the 15-year period are about the same as for the medians, which indicates that the trends apply generally to the sample and probably to the industry.

BUS UTILIZATION

It will be recalled that the number of bus miles per active bus showed a tendency to decline over the 15-year period, which is an indication that the utilization of the buses declined. Two other measures of bus utilization appear in Tables 5.5 and 5.6.

The percentage of buses used in the base schedule relative to those used in the peak schedule roughly indicates the utilization of the fleet during off-peak periods. Table 5.5 shows that there is a great deal of variation in the sample. The base to peak percentage for the lower 25 percent of the properties hovers around 35%; i.e., they use only 35% of the fleet during off-peak periods. The highest 25% uses around 65% of the fleet. In this case it is suspected that the percentage is inversely correlated with the size of operation. Large properties tend to have higher peak volumes to deal with. Small properties tend to run all or most of the buses all day long.

It is interesting that the arithmetic means have a downward trend, whereas the medians have a stable or upward trend. This suggests that off-peak utilization of the fleets for smaller properties may be declining. This would be consistent with the decline in patronage for smaller properties noted in Section 2. A more thorough investigation is needed to confirm this possibility.

Another measure of bus utilization appears in Table 5.6. Here annual bus hours is divided by active buses and then by 365 to place the ratio on a daily basis. Note that the means, medians, and percentiles are relatively stable from 1960 to 1971 and then decline to their lowest levels in 1974. In addition, there is a very narrow margin between the percentiles and the means are very close to the medians. This indicates that the distributions are quite uniform and symmetrical. In general, the figures suggest that a bus is used only about 3-4 hours per day and that the daily utilization may have declined during the last few years.

Table 5.5

BUSES IN BASE SCHEDULE AS A PERCENT OF BUSES
IN PEAK SCHEDULE, 1960-1974
(50 Bus Properties)

	25th		75th		Index (1	970=100)
Year	Percentile	Median	Percentile	Mean	Medians	Means
1960	37.8	45.2	63.8	55.1	101.7	107.7
1961	38.5	44.4	62.7	55.6	100.0	108.7
1962	36.4	42.4	65.5	53.6	95.3	104.9
1963	34.8	42.0	67.6	53.1	94.5	103.9
1964	34.8	41.7	64.4	52.5	93.7	102.6
1965	34.0	45.3	64.4	52.0	102.0	101.7
1966	35.7	45.6	63.4	52.0	102.6	101.7
1967	34.7	45.5	62.5	52.9	102.3	103.4
1968	34.6	42.6	59.9	52.6	96.0	102.8
1969	34.5	42.9	57.6	51.6	96.4	100.9
1970	35.0	44.4	60.6	51.1	100.0	100.0
1971	33.0	45.1	68.3	50.2	101.5	98.1
1972	35.3	49.3	66.7	50.7	111.0	99.1
1973	34.8	45.9	65.0	48.9	103.2	95.7
1974	37.2	48.6	59.3	49.8	109.4	97.3

Table 5.6
BUS HOURS PER ACTIVE BUS PER DAY, 1960-1974
(50 Bus Properties)

	25th		75th		Index (1	970=100)
Year	Percentile	Median	Percentile	Mean	Medians	Means
1960	3.29	3.54	45.2	34.5	99.9	103.9
1961	3.23	3.50	43.4	34.1	98.7	102.9
1962	3.16	3.41	39.7	34.0	96.3	102.6
1963	3.22	3.53	41.3	33.9	99.7	102.2
1964	3.19	3.55	43.6	33.9	100.0	102.2
1965	3.20	3.50	38.4	33.9	98.7	102.3
1966	3.21	3.45	37.9	34.2	97.2	103.0
1967	3.23	3.39	38.2	33.8	95.7	101.8
1968	3.24	3.60	40.4	34.4	101.6	103.7
1969	3.23	3.53	42.4	34.3	99.6	103.4
1970	3.17	3.54	41.9	33.2	100.0	100.0
1971	3.15	3.53	42.5	36.1	99.5	115.0
1972	3.07	3.39	37.7	34.5	95.7	103.9
1973	3.02	3.36	36.6	33.2	94.8	100.1
1974	2.91	3.20	35.1	30.8	90.3	92.0

6. FUEL CONSUMPTION AND COSTS

At the outset it should be pointed out that gallons of diesel fuel consumed in the APTA system are actually gallons purchased, not necessarily gallons used up by buses. Under normal conditions the distinction is not important, because the properties replenish their fuel inventories on a regular basis. However, during periods when prices are expected to increase some stockpiling may occur in advance of the increase. Figure 6.1 shows that in 1965 gallons consumed (purchased) increased sharply in advance of the price upswing beginning in 1966 and dropped prior to the stabilization beginning in 1969. Gallons consumed again rose sharply from 1971 to 1972 prior to the major price increase beginning in 1972.

The effect of stockpiling on the consumption ratios, however, can only be temporary. Once storage capacities have been reached, the properties purchase only that which is consumed or slightly less than the consumption rate if it is anticipated that prices may stabilize. Thus, a long-term trend in consumption ratios will not be affected.

TREND IN FUEL COST

It is interesting to note for historical annals that diesel fuel prices actually declined about 1¢ per gallon from 1961 to 1965, but that was the end of the trend (Figure 6.1 and Table 6.1). From 1965 on, costs per gallon climbed steadily through 1972, but not enough to have an impact on fuel costs relative to TC-DA. Then the "energy crisis" hit. Diesel cost per gallon jumped from 12.0¢ in 1972 to 24.9¢ in 1974. Fuel costs relative to TC-DA jumped from 3.1% to 5.2%.

FUEL CONSUMPTION

Although bus miles per gallon of diesel fuel is a popular measure used in consumption analysis and is presented in Table 6.1, the reciprocal of this ratio, fuel consumption per bus mile, is used herein so that it can be compared with other consumption ratios. These are displayed in Figure 6.2 and Table 6.2.

It is clear that fuel consumption per bus mile increased during the 15-year period (bus miles per gallon decreased). The lowest level was .181 gallons per mile in 1960, and the highest was .233 in 1974. After a brief hesitation in the upward trend in 1969 and 1970, consumption continued to increase and showed no signs of diminishing by 1974. This might be partly influenced by stockpiling, but gallons consumed leveled off after 1972 so that the ratio probably reflects actual consumption rates in 1973 and 1974.

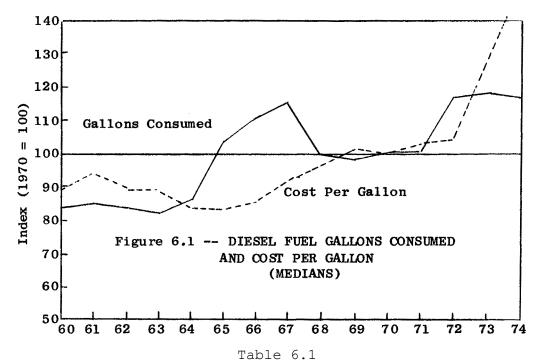
Fuel consumption per bus hour also increased during the 15-year period and especially since 1972. Here again stockpiling may have influenced this ratio.

Finally, fuel consumption per passenger has also increased every year from 1961 to 1973, then declined in 1974. Although the latter drop is not consistent with median patronage figures given in Figure 2.3, Panel A (page 2-4), it is consistent with those in Panel B, which show an increase in passengers from 1973 to 1974. It is possible, therefore, that the fuel effectiveness of hauling bus passengers has improved, but it is too early to come to definite conclusions.

The surprising point that the foregoing figures bring out is that in spite of the increase in fuel prices there appears to be no tendency toward physical reduction of fuel consumption. Some explanations for the increase may be:

- (1) Increased use of pollution control devices
- (2) Shift from 6 to 8 cylinder engines
- (3) Increased use of air conditioners

¹Consumption per passenger mile would be a better ratio, but passenger mile figures are not available in the APTA system.



INDEXES OF GALLONS CONSUMED, COST PER GALLON
AND BUS MILES PER GALLON, 1960-1974
(Medians of 50 Bus Properties)

	Percent	Cost	Bus Miles	Inc	dex (1970=1	00)
Year	Fuel	Per Gallon ²	Per	Gallons	Cost Per	Bus Miles
	Costs ₁	Cents	Gallon	Consumed	Gallon	Per Gallon
1960	3.8	10.2	5.43	84.9	89.0	119.1
1961	3.7	10.8	5.24	85.9	94.0	114.9
1962	3.6	10.2	4.95	84.5	89.5	108.5
1963	3.7	10.2	5.07	82.7	89.2	111.2
1964	3.5	9.6	4.88	86.1	83.8	107.0
1965	3.4	9.6	4.70	103.7	83.4	103.1
1966	3.5	9.8	4.76	110.8	85.9	104.5
1967	3.6	10.5	4.72	115.5	91.9	103.6
1968	3.6	11.0	4.65	100.6	96.3	102.1
1969	3.6	11.5	4.58	98.6	100.6	100.5
1970	3.4	11.5	4.56	100.0	100.0	100.0
1971	3.2	11.8	4.51	100.2	102.9	98.9
1972	3.1	12.0	4.51	117.2	104.6	98.9
1973	3.8	14.5	4.38	118.1	126.6	96.1
1974	5.2	24.9	4.30	117.7	217.4	94.2

¹As a percent of total costs less depreciation and amortization.

²Excludes taxes.

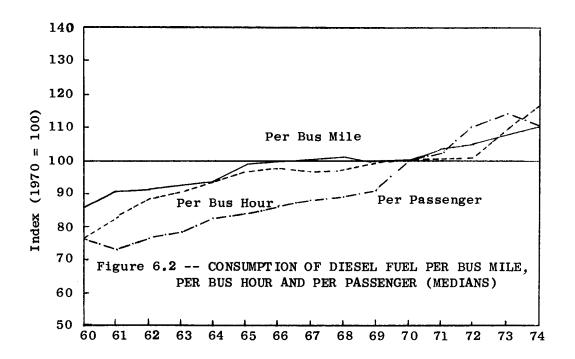


Table 6.2
DIESEL FUEL GALLONS CONSUMED PER BUS MILE., PER BUS HOUR.,
AND PER PASSENGER, 1960-1974

	Medians of	f 50 Bus P	roperties	Inde	exes (1970	=100)
	Gallons	Gallons	Gallons	Gallons	Gallons	Gallons
Year	Per	Per	Per	Per	Per	Per
	Bus Mile	Bus Hour	Passenger	Bus Mile	Bus Hour	Passenger
1960	.181	1.93	.063	85.7	76.2	76.0
1961	.190	2.09	.060	90.2	82.5	73.1
1962	.192	2.23	.063	91.3	88.3	76.3
1963	.195	2.28	.064	92.6	90.2	78.0
1964	.197	2.36	.068	93.6	93.2	82.7
1965	.208	2.44	.069	98.9	96.5	83.9
1966	.210	2.47	.071	99.6	97.5	86.1
1967	.212	2.44	.072	100.5	96.6	88.0
1968	.215	2.46	.073	102.0	97.2	89.0
1969	.210	2.53	.077	99.7	99.8	91.1
1970	.211	2.53	.082	100.0	100.0	100.0
1971	.219	2.55	.084	103.8	100.6	102.2
1972	.222	2.54	.091	105.2	100.3	110.4
1973	.228	2.76	.094	108.3	109.0	114.2
1974	.233	2.94	.091	110.4	116.1	110.2

APPENDIX A

LIST OF PROPERTIES IN SAMPLE, BY STATE AND NUMBER OF ACTIVE BUSES, 1967 AND 1974

LIST OF PROPERTIES IN SAMPLE, BY STATE AND NUMBER OF ACTIVE BUSES, 1967 AND 1974

	Activ	ve Buses
State and Property	1967	1974
California	104	1.00
Long Beach Public Transit	104	129
Santa Monica Muni	105	104
San Diego Transit	218	346
AC Transit (Oakland)	682	812
Southern California Rapid Transit	1,512	1,850
<u>Colorado</u>		
Denver Metropolitan Transit	215	667
<u>Florida</u>		
Miami Metropolitan Transit Authority	380	454
Jacksonville Coach Company	168	168
Georgia		
Atlanta Transit System	475	715
Savannah Transit Authority	75	70
<u>Illinois</u>		
United Motor Coach (Des Plaines)	89	78
<u>Indiana</u>		
Indianapolis Transit System	236	233
Kentucky		
Cincinnati-Newport-Coventry	103	83
Taniaiana		
Louisiana New Orleans Public Service	480	477
New Officialis Tubific Service	100	1//
Maryland		
Baltimore Mass Transit Administration	797	988
Massachusetts Massachusetts		
Fitchburg & Leominster Railway	54	63
Greenfield-Montague Transit Co.	19	17
Michigan Detroit Deportment of Charact Bailways	1 000	1 010
Detroit Department of Street Railways	1,200	1,012
Grand Rapids Transit Authority	83	24

	Acti	Active Buses		
State and Property	1967	1974		
<u>Minnesota</u>				
Twin Cities Metro Transit Authority	635	885		
<u>Missouri</u>				
City Utilities of Springfield	66	66		
<u>Nebraska</u>				
Omaha Transit Co.	155	156		
New Jersey				
Transport of New Jersey (Maplewood)	2 , 357	1,688		
New Mexico				
Albuquerque Transit System	58	67		
New York				
Niagara Frontier Transit System	505	439		
Syracuse Transit Corp.	180	165		
North Carolina				
Charlotte City Lines	125	132		
Duke Power Company (Greensboro)	35	33		
Raleigh City Coach Lines	39	41		
Duke Power Company (Durham)	40	44		
<u>Ohio</u>				
Columbus Transit Co.	251	244		
Cincinnati Transit Co.	399	421		
Akron Metro Reg. Trans. Auth.	92	72		
Y-City Transit Co.	33	30		
<u>Oregon</u>				
Tri-County Metro Transit Dist. (Portland)	206	422		
<u>Pennsylvania</u>				
Harrisburg Railways Co.	74	90		
Newcastle Area Transit	24	13		
South Carolina				
Duke Power Co. (Anderson)	13	12		
S.C. Electric & Gas Co. (Charleston)	40	45		
S.C. Electric & Gas Co. (Columbia)	41	55		
Greenville City Coach Co.	40	41		

	Active Buses		
State and Property		1967	1974
<u>Tennessee</u>			
Memphis Transit Authority		290	300
Nashville Transit Co.		139	136
<u>Texas</u>			
Dallas Transit System		440	469
Fort Worth Transit Co.		137	104
Country Club Bus Line (El Paso)		15	13
<u>Washington</u>			
Takoma Transit System		98	116
West Virginia			
West Virginia City Lines (Clarksburg)		18	13
<u>Wisconsin</u>			
Milwaukee Suburban Transit Corp.		638	480
City Transit Line, Inc. (Oshkosh)		<u>27</u>	21
	Total	14,205	15,10

APPENDIX B

SUMMARY TABLES - BASIC DATA

APPENDIX B

LIST OF SUMMARY TABLES - BASIC DATA

Table Number	
<u>Number</u>	B.1 Revenue Statistics
	DVI NOVOMAC DEACTS CLOS
B.1.1	Total Operating Revenue
B.1.2	Line Service Passenger Revenue
в.1.3	Charter Revenue
B.1.4	Other Operating Revenue
	B.2 Operating Expense Statistics
B.2.1	Total Operating Expenses
B.2.2	Total Operating Expenses Less Depreciation and Amortization
B.2.3	Total Equipment Maintenance and Garage Expense
B.2.4	Repairs to Revenue Equipment Expense
B.2.5	Tires and Tubes Expense
B.2.6	Total Transportation Expense
B.2.7	Drivers' and Helpers' Wages Expense
B.2.8	Diesel Fuel Expense (Excluding Taxes)
B.2.9	Other Fuel Expense (Excluding Taxes)
B.2.10	Lubricating Oil Expense (Excluding Taxes)
B.2.11	Total Station Expense
B.2.12	Traffic and Advertising Expense
B.2.13	Insurance and Safety Expense
B.2.14	Injuries and Damages Expense
B.2.15	Administrative and General Expense
B.2.16	Depreciation Expense
B.2.17	Amortization Chargeable to Operations
B.2.18	Operating Taxes and Licenses
B.2.19	Operating Rents, Net
	B.3 Operating Statistics
B.3.1	Route Miles - One Way
B.3.2	Route Miles - Round Trip
в.3.3	Buses Owned
B.3.4	Buses Active
в.3.5	Buses in Peak Schedule
в.3.6	Buses in Base Schedule
в.3.7	Average Number of Employees
в.3.8	Total Bus Miles
в.3.9	Diesel Bus Miles Operated

B.3.10	Other Fuel Bus Miles Operated
B.3.11	Total Bus Hours
B.3.12	Gallons of Diesel Fuel Consumed
B.3.13	Gallons of Other Fuel Consumed
B.3.14	Gallons of Lubricating Oil Consumed
B.3.15	Total Passengers Carried
B.3.16	Line Service Revenue Passengers Carried
B.3.17	Charter Revenue Passengers Carried

Table B.1.1 -- TOTAL OPERATING REVENUE

(Sample of 50 Bus Properties, 1960 - 1974)

	25TH	75TH -		INDEX (1970=100)		
YEAR	PERCENTILE	MEDIAN	PERCENTILE	MEAN	MEDIANS	MEANS
1960	589460.	2360658.	5207321.	5279592.	92.0	70.2
1961	571777.	2477988.	5101735.	5243115.	96.5	69.7
1962	567856.	2405767.	5384543.	5322983.	93.7	70.7
1963	621243.	2230888.	5586433.	5492574.	86.9	73.0
1964	646587.	2146307.	5852378.	5664393.	83.6	75.3
1965	695413.	2159691.	6667911.	6695013.	84.1	89.0
1966	728059.	2218409.	7270809.	6907005.	86.4	91.8
1967	749155.	2324495.	8138376.	7017041.	90.5	93.2
1968	765926.	2454748.	8278472.	7383176.	95.6	98.1
1969	763618.	2627214.	8192419.	7544486.	102.3	100.2
1970	770325.	2567127.	10247334.	7526100.	100.0	100.0
1971	782568.	2638973.	10583611.	7916241.	102.8	105.2
1972	774181.	2609376.	10522316.	7725659.	101.6	102.7
1973	789423.	2489119.	8925002.	7711707.	97.0	102.5
1974	804666.	2626422.	9240991.	7830350.	102.3	104.0

Table B.1.2 -- LINE SERVICE PASSENGER REVENUE

(Sample of 50 Bus Properties, 1960 - 1974)

	25TH	75TH		INDEX(1970=100)		
YEAR	PERCENTILE	MEDIAN	PERCENTILE	MEAN	MEDIANS	MEANS
1960 1961	570677. 549895.	2251212. 2328414.	5091078. 5015932.	5045560. 4997785.	94.7 98.0	71.3 70.6
1962 1963	533160. 581325.	2212353. 2064978.	5293871.	5064438. 5222377.	93.1	71.6
1954	653233 • 675677 •	1925816.	5697458.	5382315.	86.9 81.0	73.8 75.1
1955 1966 1957	585301. 581288.	1935660. 1946697. 2014912.	6344892. 6817198.	6378934. 6555811.	81.5 81.9	90.2 92.7
1958	730196.	2244462.	7714703. 8063054.	6639994. 6959173.	84•8 94•4	93.9 98.4
1959	654057. 723178.	2423195 . 2376442 .	7999711. 9612531.	7145498. 7074070.	102.0	101.0
1971	711945. 739575.	2289187 • 2338306 •	9966280. 9874317.	7430332. 7186560.	96.3 98.4	105.0 101.6
1973 1974	741276• 552932•	2228762 . 2255379 .	7010907. 7222402.	7004830. 7029109.	93.8 94.9	99.1 99.4

Table B.1.3 -- CHARTER REVENUE

	OETLI		75TLI		INDEX (19	970=100)
YEAR	25TH PERCENTILE	MEDIAN	75TH PERCENTILE	MEAN	MEDIANS	MEANS
1960	12603.	47029.	142773.	178453.	32.3	49.5
1961	15490.	59152.	155640.	190844.	40.6	52.9
1962	14857.	68194.	175406.	206592.	46.8	57.3
1963	18974.	64880.	186455.	216375.	44.6	60.0
1964	23431.	75351.	203858.	239928.	51.7	66.5
1965	23100.	91763.	218271.	246122.	63.0	68.2
1966	32110.	107544.	242122.	290124.	73.9	80.4
1967	33839.	121534.	260109.	306441.	83.5	84.9
1968	48920.	128566.	261367.	331120.	88.3	91.8
1969	42627.	149536.	301957.	356955.	102.7	98.9
1970	45312.	145609.	263536.	360776.	100.0	100.0
1971	43340.	151197.	296227.	396319.	103.8	109.9
1972	41521.	149757.	286403.	409897.	102.8	113.6
1973	47989.	147501.	313117.	407354.	101.3	112.9
1974	53686.	124809.	423940.	470219.	85.7	130.3

Table B.1.4 -- OTHER OPERATING REVENUE

	25TH		75TH		INDEX (19	970=100)
YEAR	PERCENTILE	MEDIAN	PERCENTILE	MEAN	MEDIANS	MEANS
1960	1202.	1292.	1651.	1257.	99.9	103.9
1961	1179.	1277.	1583.	1245.	98.7	102.9
1962	1155.	1246.	1450.	1241.	96.3	102.6
1963	1173.	1290.	1507.	1237.	99.7	102.2
1964	1164.	1294.	1593.	1237.	100.0	102.2
1965	1167.	1277.	1401.	1239.	98.7	102.3
1966	1171.	1257.	1384.	1247.	97.2	103.0
1967	1180.	1238.	1394.	1232.	95.7	101.8
1968	1182.	1314.	1494.	1255.	101.6	103.7
1969	1178.	1288.	1549.	1251.	99.6	103.4
1970	1157.	1293.	1529.	1210.	100.0	100.0
1971	1150.	1287.	1552.	1391.	99.5	115.0
1972	1121.	1238.	1376.	1258.	95.7	103.9
1973	1102.	1227.	1337.	1211.	94.8	100.1
1974	1063.	1168.	1281.	1113.	90.3	92.0

Table B.2.1 -- TOTAL OPERATING EXPENSES

	25TH		75TH		INDEX (1	970=100)
YEAR	PERCENTILE	MEDIAN	PERCENTILE	MEAN	MEDIANS	MEANS
1960	628787.	1565379.	4795612.	4816520.	62.1	59.0
1961	614832.	1540622.	4787132.	4838561.	61.1	59.3
1962	608216.	1540622.	4913926.	4960772.	61.1	60.8
1963	631180.	1592542.	4922843.	5052357.	63.2	61.9
1964	666160.	1726376.	5612016.	5611046.	68.5	68.8
1965	719870.	1980064.	6242653.	6423644.	78.5	78.7
1966	758907.	1961326.	7066035.	6693812.	77.8	82.0
1967	760029.	2309253.	8033661.	6933251.	91.6	85.0
1968	822418.	2382631.	9226512.	7392221.	94.5	90.6
1969	795967.	2469627.	9310428.	7801057.	98.0	95.6
1970	923497.	2521309.	9998164.	8160088.	100.0	100.0
1971	949505.	2633932.	10312413.	8889523.	104.5	108.9
1972	972638.	2612604.	10789300.	9452414.	103.6	115.8
1973	1031145.	2786160.	12808443.	10334592.	110.5	126.6
1974	1047508.	2982619.	14821144.	11731944.	118.3	143.8

Table B.2.2 -- TOTAL OPERATING EXPENSES LESS DEPRECIATION AND AMORTIZATION (Sample of 50 Bus Properties, 1960 - 1974)

	25TH		75TH		INDEX (1	970=100)
YEAR	PERCENTILE	MEDIAN	PERCENTILE	MEAN	MEDIANS	MEANS
1960	577007.	1485637.	4526778.	4518523.	63.9	58.3
1961	561290.	1485637.	4526778.	4510334.	63.9	58.2
1962	574155.	1485637.	4746163.	4617530.	63.9	59.6
1963	581126.	1510734.	4756106.	4714750.	65.0	60.8
1964	653795.	1629779.	5102545.	5244015.	70.2	67.7
1965	716768.	1813914.	6242653.	6006190.	78.1	77.5
1966	755733.	1841937.	7066035.	6265964.	79.3	80.9
1967	756789.	2040549.	7337125.	6488241.	87.8	83.7
1968	807446.	2085284.	8671047.	6907091.	89.8	89.1
1969	745670.	2301801.	8879974.	7319001.	99.1	94.4
1970	923497.	2323135.	9488343.	7749142.	100.0	100.0
1971	949505.	2513898.	9969353.	8480459.	108.2	109.4
1972	911351.	2401090.	9913656.	9048956.	103.4	116.8
1973	977934.	2535249.	11852306.	9927791.	109.1	128.1
1974	997814.	2750848.	14521177.	11255965.	118.4	145.3

Table B.2.3 -- TOTAL EQUIPMENT MAINTENANCE AND GARAGE EXPENSE

	25TH		75TH		INDEX (19	970=100)
YEAR	PERCENTILE	MEDIAN	PERCENTILE	MEAN	MEDIANS	MEANS
1960	123845.	340005.	666298.	776755.	83.0	62.3
1961	130125.	327755.	634917.	760184.	80.1	61.0
1962	134866.	327964.	618331.	782167.	80.1	62.8
1963	132584.	356686.	769139.	790918.	87.1	63.5
1964	124493.	391044.	751160.	805877.	95.5	64.7
1965	123582.	371374.	889956.	938942.	90.7	75.4
1966	136477.	374509.	950619.	963634.	91.5	77.3
1967	143833.	375906.	1072356.	1008785.	91.8	81.0
1968	154875.	433871.	1276725.	1077584.	106.0	86.5
1969	162189.	402210.	1429014.	1843555.	98.2	148.0
1970	168799.	409418.	1557748.	1246047.	100.0	100.0
1971	190560.	442303.	1750541.	1382378.	108.0	110.9
1972	206487.	446541.	1876788.	1578096.	109.1	126.6
1973	214685.	518543.	1966726.	1728368.	126.7	138.7
1974	214685.	631885.	2566777.	1874890.	154.3	150.5

Table B.2.4 -- REPAIRS TO REVENUE EQUIPMENT EXPENSE (Sample of 50 Bus Properties, 1960 - 1974)

	25TH	75TH			INDEX (1970=100)	
YEAR	PERCENTILE	MEDIAN	PERCENTILE	MEAN	MEDIANS	MEANS
1960	64849.	170677.	433150.	434461.	66.0	65.2
1961	74024.	181099.	404795.	422543.	70.1	63.4
1962	69082.	214971.	426999.	429505.	83.2	64.4
1963	76624.	208903.	410490.	439680.	80.8	66.0
1964	83563.	188082.	404079.	452155.	72.8	67.8
1965	90016.	216056.	574423.	520267.	83.6	78.0
1966	92993.	217882.	583089.	536841.	84.3	80.5
1967	103471.	216596.	598852.	548580.	83.8	82.3
1968	95996.	212323.	601263.	574507.	82.1	86.2
1969	108430.	237541.	643561.	616028.	91.9	92.4
1970	113995.	258514.	735823.	666599.	100.0	100.0
1971	103037.	262769.	1070670.	748509.	101.6	112.3
1972	115314.	233697.	1033023.	963276.	90.4	144.5
1973	133871.	238788.	1059330.	1200215.	92.4	180.1
1974	132332.	268155.	1113143.	1421960.	103.7	213.3

Table B.2.5 -- TIRES AND TUBES EXPENSE

	25TH		75TH			970=100)
YEAR	PERCENTILE	MEDIAN	PERCENTILE	MEAN	MEDIANS	MEANS
1960	16054.	31719.	87215.	84918.	84.0	89.1
1961	12922.	31322.	87215.	81145.	83.0	85.2
1962	12762.	25799.	81928.	76780.	68.4	80.6
1963	11962.	26725.	76416.	78887.	70.8	82.8
1964	12103.	25252.	78719.	76422.	66.9	80.2
1965	13157.	33296.	82488.	83978.	88.2	88.1
1966	12849.	33296.	85736.	85124.	88.2	89.3
1967	12864.	34471.	75088.	82883.	91.3	87.0
1968	13156.	35983.	92507.	89230.	95.3	93.6
1969	14296.	38420.	93655.	92853.	101.8	97.4
1970	13688.	37742.	96101.	95293.	100.0	100.0
1971	14062.	36313.	112931.	101964.	96.2	107.0
1972	15329.	42600.	103154.	104695.	112.9	109.9
1973	19091.	44974.	116967.	112733.	119.2	118.3
1974	20312.	40667.	135584.	127345.	107.7	133.6

Table B.2.6 -- TOTAL TRANSPORTATION EXPENSE

	25TH		75TH		INDEX (19	970=100)
YEAR	PERCENTILE	MEDIAN	PERCENTILE	MEAN	MEDIANS	MEANS
1960	345274.	1086376.	2890779.	2674666.	73.6	60.4
1961	334720.	1070964.	2824855.	2687836.	72.5	60.7
1962	328367.	1041306.	2850388.	2753225.	70.5	62.2
1963	338473.	1004245.	2925678.	2847230.	68.0	64.3
1964	378611.	964971.	2888791.	2943948.	65.4	66.5
1965	457534.	1198802.	3452857.	3498368.	81.2	79.1
1966	470133.	1228315.	3968757.	3637679.	83.2	82.2
1967	491579.	1191671.	3394934.	3598723.	80.7	81.3
1968	549325.	1367077.	5018515.	4026652.	92.6	91.0
1969	472230.	1451455.	5018700.	4239547.	98.3	95.8
1970	580546.	1476402.	5325863.	4424918.	100.0	100.0
1971	554018.	1536048.	5391552.	4800572.	104.0	108.5
1972	502636.	1602484.	6666807.	5162580.	108.5	116.7
1973	569469.	1736387.	6947850.	5634088.	117.6	127.3
1974	662612.	1847910.	9054679.	6293193.	125.2	142.2

Table B.2.7 -- DRIVERS' AND HELPERS' WAGES EXPENSE

	25TH		75TH		INDEX (1	970=100)
YEAR	PERCENTILE	MEDIAN	PERCENTILE	MEAN	MEDIANS	MEANS
1960	259581.	820122.	2122178.	2015398.	63.9	56.7
1961	255902.	814427.	2122178.	2029156.	63.5	57.1
1962	250165.	793879.	2133944.	2104741.	61.9	59.2
1963	266848.	791787.	2420731.	2186858.	61.7	61.5
1964	277751.	788754.	2356721.	2271487.	61.5	63.9
1965	300222.	1060399.	2700277.	2706145.	82.7	76.1
1966	321545.	1024551.	2786849.	2828991.	79.9	79.6
1967	335850.	1095497.	3120985.	2944308.	85.4	82.8
1968	364157.	1188345.	3497949.	3175469.	92.6	89.4
1969	340152.	1274286.	3609480.	3380956.	99.3	95.1
1970	424645.	1282646.	3772172.	3553874.	100.0	100.0
1971	453992.	1335010.	4236834.	3900544.	104.1	109.8
1972	416109.	1390478.	4772614.	4186737.	108.4	117.8
1973	430343.	1472972.	5697376.	4633530.	114.8	130.4
1974	434575.	1560297.	6350171.	5076710.	121.6	142.9

Table B.2.8 -- DIESEL FUEL EXPENSE (EXCLUDING TAXES)

	25TH		75TH		INDEX (19	970=100)
YEAR	PERCENTILE	MEDIAN	PERCENTILE	MEAN	MEDIANS	MEANS
1960	37764.	60710.	165385.	156495.	72.6	64.4
1961	41282.	60332.	181800.	169505.	72.2	69.8
1962	41266.	61234.	175293.	169199.	73.3	69.7
1963	41443.	66720.	225778.	171777.	79.8	70.7
1964	38412.	61900.	215354.	170524.	74.1	70.2
1965	37772.	77168.	259718.	197761.	92.3	81.4
1966	40861.	79267.	298995.	208174.	94.8	85.7
1967	38259.	81549.	332915.	223470.	97.6	92.0
1968	39733.	90605.	353520.	240447.	108.4	99.0
1969	39495.	98424.	338915.	245564.	117.8	101.1
1970	40952.	83583.	363115.	242926.	100.0	100.0
1971	39541.	91245.	326158.	245924.	109.2	101.2
1972	39361.	101111.	305897.	276370.	121.0	113.8
1973	43841.	141376.	481374.	343045.	169.1	141.2
1974	75865.	205229.	1089217.	585986.	245.5	241.2

Table B.2.9 -- OTHER FUEL EXPENSE (EXCLUDING TAXES)

	25TH		75TH		INDEX (19	970=100)
YEAR	PERCENTILE	MEDIAN	PERCENTILE	MEAN	MEDIANS	MEANS
1960	4650.	14941.	63573.	53211.	175.5	251.6
1961	4909.	14520.	48162.	38089.	170.6	180.1
1962	3315.	12104.	47740.	33592.	142.2	158.8
1963	2487.	10956.	37849.	29030.	128.7	137.2
1964	1875.	8584.	19128.	22151.	100.9	104.7
1965	2459.	6907.	20246.	349820.	81.2	1653.9
1966	2158.	5960.	19445.	386061.	70.0	1825.2
1967	1522.	9152.	16353.	16637.	107.5	78.7
1968	510.	7451.	16462.	17977.	87.5	85.0
1969	713.	7020.	16132.	18297.	82.5	86.5
1970	951.	8511.	15188.	21151.	100.0	100.0
1971	1227.	6179.	13860.	14800.	72.6	70.0
1972	2605.	8863.	14899.	79119.	104.1	374.1
1973	1758.	9503.	17008.	11580.	111.7	54.7
1974	1758.	14266.	21056.	15934.	167.6	75.3

Table B.2.10 -- LUBRICATING OIL EXPENSE (EXCLUDING TAXES)

	25TH		75TH		INDEX (1	970=100)
YEAR	PERCENTILE	MEDIAN	PERCENTILE	MEAN	MEDIANS	MEANS
1960	2435.	5644.	12375.	11649.	114.4	97.0
1961	2617.	5574.	10277.	11208.	113.0	93.3
1962	1885.	5574.	10266.	11373.	113.0	94.7
1963	2450.	5770.	14154.	11928.	116.9	99.3
1964	2150.	5065.	13163.	11349.	102.7	94.5
1965	2404.	4770.	15459.	11888.	96.7	99.0
1966	2435.	5036.	15615.	12467.	102.1	103.8
1967	2275.	4858.	14685.	11056.	98.5	92.0
1968	2260.	5056.	16233.	11993.	102.5	99.8
1969	2217.	5025.	17439.	11723.	101.8	97.6
1970	2418.	4934.	16393.	12013.	100.0	100.0
1971	2408.	5384.	16336.	12421.	109.1	103.4
1972	2665.	5163.	15516.	12370.	104.6	103.0
1973	2945.	5253.	15043.	14346.	106.5	119.4
1974	3217.	7237.	35889.	21543.	146.7	179.3

Table B.2.11 -- TOTAL STATION EXPENSE

	25TH		75TH			INDEX (1970=100)	
YEAR	PERCENTILE	MEDIAN	PERCENTILE	MEAN	MEDIANS	MEANS	
1960	4268.	8308.	58025.	104518.	87.8	56.6	
1961	20.	15331.	60881.	123003.	162.0	66.6	
1962	31.	16292.	66111.	126092.	172.1	68.3	
1963	24.	17093.	65391.	138809.	180.6	75.2	
1964	17.	17448.	66474.	144503.	184.3	78.2	
1965	156.	1855.	52274.	99016.	19.6	53.6	
1966	79.	728.	45613.	100251.	7.7	54.3	
1967	213.	4832.	49389.	106367.	51.1	57.6	
1968	165.	6252.	54609.	150864.	66.1	81.7	
1969	797.	9628.	72868.	177134.	101.7	95.9	
1970	751.	9465.	117217.	184687.	100.0	100.0	
1971	212.	12710.	121391.	189092.	134.3	102.4	
1972	5278.	10512.	171581.	243390.	111.1	131.8	
1973	4455.	131588.	491266.	328888.	1390.3	178.1	
1974	8829.	247710.	1528000.	765065.	2617.1	414.2	

Table B.2.12 -- TRAFFIC AND ADVERTISING EXPENSE

	25TH		75TH		INDEX (19	970=100)
YEAR	PERCENTILE	MEDIAN	PERCENTILE	MEAN	MEDIANS	MEANS
1960	4250.	14855.	61706.	51652.	59.2	44.7
1961	3652.	15129.	41853.	50115.	60.2	43.4
1962	3360.	16673.	48907.	52438.	66.4	45.4
1963	3748.	14688.	48416.	50574.	58.5	43.8
1964	3520.	17047.	51960.	57277.	67.9	49.6
1965	3658.	16637.	54206.	67533.	66.2	58.5
1966	5216.	22556.	56383.	71340.	89.8	61.8
1967	5058.	18738.	84562.	91007.	74.6	78.8
1968	5312.	21873.	101741.	90494.	87.1	78.4
1969	5504.	28173.	134950.	104703.	112.2	90.7
1970	5253.	25113.	96517.	115452.	100.0	100.0
1971	4960.	14113.	136011.	127129.	56.2	110.1
1972	2910.	16206.	173069.	138772.	64.5	120.2
1973	2405.	27261.	186783.	159577.	108.6	138.2
1974	2939.	39819.	201840.	207220.	158.6	179.5

Table B.2.13 -- INSURANCE AND SAFETY EXPENSE

	25TH		75TH			970=100)
YEAR	PERCENTILE	MEDIAN	PERCENTILE	MEAN	MEDIANS	MEANS
1960	9221.	40435.	104475.	195622.	41.0	59.5
1961	13007.	45870.	98752.	184972.	46.5	56.3
1962	12777.	41051.	103644.	179600.	41.6	54.0
1963	12552.	39982.	123039.	170159.	40.5	51.8
1964	13627.	38402.	109111.	178449.	38.9	54.3
1965	14686.	47007.	143337.	181799.	47.7	55.3
1966	15328.	50941.	136213.	181242.	51.6	55.1
1967	18493.	57453.	167948.	196418.	58.2	59.8
1968	26406.	69795.	292059.	271334.	70.8	82.5
1969	24838.	80212.	262155.	288663.	81.3	87.8
1970	24336.	98650.	222329.	328701.	100.0	100.0
1971	31537.	109510.	223058.	336065.	111.1	102.2
1972	32271.	107878.	275440.	420957.	109.4	128.1
1973	33838.	116314.	442836.	492712.	117.9	149.9
1974	48879.	117479.	451867.	521811.	119.1	158.7

Table B.2.14 -- INJURIES AND DAMAGES EXPENSE

	25TH		75TH		INDEX (1	970=100)
YEAR	PERCENTILE	MEDIAN	PERCENTILE	MEAN	MEDIANS	MEANS
1960	19337.	89956.	223188.	232473.	69.9	59.5
1961	25756.	89956.	191847.	222331.	69.9	56.9
1962	24656.	63210.	221247.	216722.	49.1	55.5
1963	23502.	68914.	242483.	216912.	53.6	55.5
1964	23757.	86032.	355670.	247419.	66.9	63.4
1965	18980.	131484.	345784.	286966.	102.2	73.5
1966	25504.	89994.	326928.	292637.	69.9	74.9
1967	29905.	86271.	331854.	297781.	67.0	76.3
1968	25237.	91087.	336796.	313083.	70.8	80.2
1969	27812.	112894.	352865.	355647.	87.7	91.1
1970	30975.	128680.	402282.	390509.	100.0	100.0
1971	48854.	129782.	362309.	414707.	100.9	106.2
1972	43194.	117754.	361992.	474165.	91.5	121.4
1973	44288.	126777.	467699.	533381.	98.5	136.6
1974	31496.	112684.	537993.	583675.	87.6	149.5

Table B.2.15 -- ADMINISTRATIVE AND GENERAL EXPENSE

	25TH		75TH			INDEX (1970=100)	
YEAR	PERCENTILE	MEDIAN	PERCENTILE	MEAN	MEDIANS	MEANS	
1960	75074.	202161.	784286.	679721.	79.8	57.3	
1961	78678.	202161.	933767.	703815.	79.8	59.3	
1962	76528.	191384.	890838.	732902.	75.5	61.8	
1963	74760.	181220.	962139.	763005.	71.5	64.3	
1964	72433.	178733.	1038832.	830802.	70.5	70.0	
1965	80943.	216690.	1089333.	913224.	85.5	77.0	
1966	80754.	216690.	1097823.	953538.	85.5	80.4	
1967	81641.	225349.	1194576.	970184.	88.9	81.8	
1968	87706.	243987.	1258290.	983017.	96.3	82.8	
1969	95778.	240156.	1133585.	1072148.	94.8	90.3	
1970	104625.	253397.	1035097.	1186572.	100.0	100.0	
1971	127540.	278393.	1197008.	1370885.	109.9	115.5	
1972	131011.	296706.	1515893.	1494630.	117.1	126.0	
1973	144443.	346460.	1719119.	1702913.	136.7	143.5	
1974	144443.	373017.	2498668.	2020634.	147.2	170.3	

Table B.2.16 -- DEPRECIATION EXPENSE

	25TH		75TH		INDEX (1	970=100)
YEAR	PERCENTILE	MEDIAN	PERCENTILE	MEAN	MEDIANS	MEANS
1960	42451.	131256.	334477.	306500.	84.9	63.9
1961	44161.	133614.	382859.	335865.	86.4	70.0
1962	34061.	137973.	331573.	352642.	89.2	73.5
1963	33384.	113983.	366565.	354857.	73.7	74.0
1964	30909.	96242.	535681.	381634.	62.2	79.6
1965	34982.	148492.	611700.	445980.	96.0	93.0
1966	37568.	135888.	677000.	461134.	87.9	96.2
1967	51068.	145930.	682100.	473477.	94.4	98.7
1968	62968.	191964.	783481.	522368.	124.1	108.9
1969	61744.	183526.	934693.	528687.	118.7	110.3
1970	52200.	154639.	630002.	479488.	100.0	100.0
1971	57822.	153565.	818000.	490825.	99.3	102.4
1972	62831.	164956.	833100.	485220.	106.7	101.2
1973	54100.	250911.	616394.	515348.	162.3	107.5
1974	49694.	299967.	774792.	588352.	194.0	122.7

Table B.2.17 -- AMORTIZATION CHARGEABLE TO OPERATIONS

	25TH		75TH			INDEX (10=100)	
YEAR	PERCENTILE	MEDIAN	PERCENTILE	MEAN	MEDIANS	MEANS	
1960	643.	1250.	6045.	41652.	31.7	-588.9	
1961	1174.	2527.	7000.	45628.	64.1	-645.1	
1962	1174.	3731.	7000.	41618.	94.6	-588.4	
1963	490.	2027.	7000.	46369.	51.4	-655.6	
1964	1174.	2027.	309948.	63474.	51.4	-897.5	
1965	-116483.	1574.	3942.	5442.	39.9	-76.9	
1966	-159915.	1251.	3942.	-2730.	31.7	38.6	
1967	246.	490.	20000.	-324.	12.4	4.6	
1968	815.	3942.	273096.	83329.	100.0	-1178.2	
1969	490.	3942.	268948.	93402.	100.0	-1320.6	
1970	353.	3942.	20000.	-7073.	100.0	100.0	
1971	490.	4704.	20000.	-17937.	119.3	253.6	
1972	3420.	6000.	22189.	-13845.	152.2	195.8	
1973	3915.	5000.	41518.	50004.	126.8	-707.0	
1974	2734.	6091.	38667.	41913.	154.5	-592.6	

Table B.2.18 -- OPERATING TAXES AND LICENSES

	25TH	75TH			INDEX (1970=100)	
YEAR	PERCENTILE	MEDIAN	PERCENTILE	MEAN	MEDIANS	MEANS
1960	34950.	156469.	334348.	348515.	81.9	82.9
1961	34297.	147834.	328270.	343223.	77.3	81.6
1962	38003.	133510.	314270.	338089.	69.8	80.4
1963	40868.	125371.	343050.	349582.	65.6	83.1
1964	41905.	136204.	516958.	407268.	71.2	96.9
1965	39721.	139591.	431620.	403612.	73.0	96.0
1966	47712.	146986.	458472.	449019.	76.9	106.8
1967	47806.	191951.	470599.	464165.	100.4	110.4
1968	54133.	193137.	453121.	468338.	101.0	111.4
1969	48627.	199128.	484680.	464199.	104.2	110.4
1970	57931.	191165.	492448.	420494.	100.0	100.0
1971	65527.	170920.	539587.	439068.	89.4	104.4
1972	60155.	160498.	561868.	424443.	84.0	100.9
1973	49658.	156730.	452942.	438776.	82.0	104.3
1974	55527.	140959.	504304.	489423.	73.7	116.4

Table B.2.19 -- OPERATING RENTS, NET

	25TH		75TH		INDEX (1	970=100)
YEAR	PERCENTILE	MEDIAN	PERCENTILE	MEAN	MEDIANS	MEANS
1960	1395.	9000.	23374.	34156.	127.9	68.5
1961	1395.	15000.	23311.	38484.	213.2	77.1
1962	2393.	8550.	24608.	40260.	121.5	80.7
1963	357.	10800.	24233.	41845.	153.5	83.9
1964	360.	10800.	47017.	49467.	153.5	99.1
1965	418.	3895.	23795.	45040.	55.4	90.3
1966	15.	2683.	31204.	42402.	38.1	85.0
1967	-392.	5759.	23585.	42317.	81.9	84.8
1968	1475.	6540.	54322.	49854.	93.0	99.9
1969	1636.	6859.	53179.	54761.	97.5	109.8
1970	15.	7036.	52416.	49894.	100.0	100.0
1971	-693.	7267.	52141.	58768.	103.3	117.8
1972	-1276.	11400.	52261.	24960.	162.0	50.0
1973	-2616.	3957.	41004.	30609.	56.2	61.3
1974	-2616.	3957.	48544.	34494.	56.2	69.1

Table B.3.1 -- ROUTE MILES - ONE WAY

(Sample of 50 Bus Properties, 1960 - 1974)

	25TH	75TH			INDEX (1970=100)	
YEAR	PERCENTILE	MEDIAN	PERCENTILE	MEAN	MEDIANS	MEANS
1960	66.	140.	270.	250.	88.6	66.4
1961	66.	136.	273.	255.	86.1	67.9
1962	69.	121.	280.	256.	76.6	68.1
1963	64.	134.	277.	270.	84.8	71.9
1964	66.	136.	280.	276.	86.1	73.4
1965	77.	168.	292.	272.	106.3	72.3
1966	69.	165.	298.	275.	104.4	73.1
1967	69.	130.	290.	273.	82.3	72.5
1968	69.	131.	290.	279.	82.9	74.2
1969	85.	176.	377.	333.	111.4	88.6
1970	85.	158.	424.	376.	100.0	100.0
1971	70.	135.	424.	357.	85.4	95.0
1972	74.	143.	461.	365.	90.5	97.1
1973	76.	191.	537.	408.	120.9	108.4
1974	93.	204.	551.	508.	129.1	135.0

Table B.3.2 -- ROUTE MILES - ROUND TRIP

25TH			75TH			INDEX (1970=100)	
YEAR	PERCENTILE	MEDIAN	PERCENTILE	MEAN	MEDIANS	MEANS	
1960	119.	265.	625.	501.	74.6	65.5	
1961	119.	267.	690.	517.	75.2	67.5	
1962	128.	264.	579.	522.	74.4	68.2	
1963	134.	268.	579.	553.	75.5	72.2	
1964	136.	284.	596.	614.	80.0	80.2	
1965	148.	312.	696.	678.	87.9	88.6	
1966	138.	284.	732.	688.	80.0	89.8	
1967	138.	297.	711.	697.	83.7	91.0	
1968	134.	290.	698.	679.	81.7	88.8	
1969	120.	298.	736.	681.	83.9	89.0	
1970	134.	355.	959.	765.	100.0	100.0	
1971	128.	339.	978.	751.	95.5	98.1	
1972	134.	355.	985.	689.	100.0	90.0	
1973	144.	371.	1094.	844.	104.5	110.2	
1974	185.	398.	1196.	1021.	112.1	133.4	

Table B.3.3 -- BUSES OWNED

(Sample of 50 Bus Properties, 1960 - 1974)

	25TH	75TH -			INDEX (1970=100)	
YEAR	PERCENTILE	MEDIAN	PERCENTILE	MEAN	MEDIANS	MEANS
1960	41.	113.	283.	260.	88.3	90.6
1961	43.	115.	283.	254.	89.8	88.3
1962	41.	109.	281.	254.	85.2	88.4
1963	41.	107.	277.	261.	83.6	90.8
1964	39.	98.	275.	264.	76.6	92.0
1965	48.	114.	348.	286.	89.1	99.6
1966	40.	108.	360.	287.	84.4	100.0
1967	41.	125.	380.	288.	97.7	100.4
1968	45.	123.	379.	292.	96.1	101.6
1969	48.	138.	352.	287.	107.8	99.9
1970	51.	128.	351.	287.	100.0	100.0
1971	50.	120.	361.	285.	93.8	99.3
1972	50.	126.	428.	290.	98.4	101.0
1973	50.	132.	419.	294.	103.1	102.4
1974	45.	129.	469.	318.	100.8	110.8

Table B.3.4 -- BUSES ACTIVE

(Sample of 50 Bus Properties, 1960 - 1974)

	25TH		75TH -			INDEX (1970=100)	
YEAR	PERCENTILE	MEDIAN	PERCENTILE	MEAN	MEDIANS	MEANS	
1960	41.	115.	281.	253.	89.8	100.5	
1961	40.	121.	281.	252.	94.5	100.2	
1962	40.	111.	281.	254.	86.7	100.8	
1963	38.	110.	276.	259.	85.9	102.8	
1964	41.	109.	354.	265.	85.2	105.5	
1965	50.	114.	348.	285.	89.1	113.4	
1966	49.	105.	408.	286.	82.0	113.7	
1967	41.	125.	380.	284.	97.7	112.9	
1968	45.	120.	377.	284.	93.8	112.8	
1969	48.	134.	352.	282.	104.7	112.0	
1970	50.	128.	351.	252.	100.0	100.0	
1971	44.	120.	339.	250.	93.8	99.3	
1972	46.	117.	304.	254.	91.4	100.8	
1973	44.	129.	410.	283.	100.8	112.4	
1974	45.	129.	439.	302.	100.8	120.0	

Table B.3.5 -- BUSES IN PEAK SCHEDULE

	25TH		75TH -			INDEX (1970=100)	
YEAR	PERCENTILE	MEDIAN	PERCENTILE	MEAN	MEDIANS	MEANS	
1960	36.	123.	254.	235.	113.9	90.2	
1961	35.	132.	253.	233.	122.2	89.5	
1962	35.	134.	238.	243.	124.1	93.1	
1963	37.	125.	287.	247.	115.7	94.6	
1964	36.	120.	333.	251.	111.1	96.1	
1965	36.	119.	362.	269.	110.2	103.2	
1966	37.	115.	363.	268.	106.5	102.8	
1967	40.	114.	345.	259.	105.6	99.1	
1968	42.	118.	344.	272.	109.3	104.4	
1969	36.	112.	339.	264.	103.7	101.1	
1970	39.	108.	340.	261.	100.0	100.0	
1971	36.	113.	340.	258.	104.6	98.8	
1972	35.	108.	340.	256.	100.0	98.1	
1973	46.	118.	335.	264.	109.3	101.1	
1974	45.	106.	364.	268.	98.1	102.7	

Table B.3.6 -- BUSES IN BASE SCHEDULE

	25TH		75TH –			970=100)
YEAR	PERCENTILE	MEDIAN	PERCENTILE	MEAN	MEDIANS	MEANS
1960	22.	48.	113.	132.	100.0	109.6
1961	19.	53.	120.	133.	110.4	109.8
1962	19.	61.	122.	133.	127.1	110.5
1963	19.	51.	131.	134.	106.3	111.3
1964	22.	58.	116.	139.	120.8	114.9
1965	24.	59.	138.	144.	122.9	119.3
1966	22.	59.	138.	143.	122.9	118.8
1967	24.	57.	132.	139.	118.8	115.3
1968	24.	56.	143.	144.	116.7	119.5
1969	18.	49.	147.	137.	102.1	113.2
1970	22.	48.	128.	121.	100.0	100.0
1971	19.	48.	124.	116.	100.0	96.4
1972	20.	56.	120.	116.	116.7	96.5
1973	19.	48.	123.	115.	100.0	94.9
1974	24.	48.	171.	133.	100.0	110.4

Table B.3.7 -- AVERAGE NUMBER OF EMPLOYEES

	25TH		75TH -			INDEX (1970=100)	
YEAR	PERCENTILE	MEDIAN	PERCENTILE	MEAN	MEDIANS	MEANS	
1960	81.	187.	552.	489.	94.4	92.0	
1961	80.	186.	529.	485.	93.9	91.2	
1962	78.	186.	521.	480.	93.9	90.4	
1963	75.	188.	502.	528.	94.9	99.4	
1964	77.	188.	559.	565.	94.9	106.3	
1965	80.	227.	806.	634.	114.6	119.4	
1966	79.	209.	863.	630.	105.6	118.6	
1967	83.	195.	905.	635.	98.5	119.6	
1968	93.	206.	874.	631.	104.0	118.8	
1969	81.	206.	817.	521.	104.0	98.1	
1970	105.	198.	807.	531.	100.0	100.0	
1971	81.	194.	621.	497.	98.0	93.6	
1972	79.	189.	614.	510.	95.5	96.0	
1973	81.	185.	622.	523.	93.4	98.4	
1974	81.	195.	880.	627.	98.5	118.0	

Table B.3.8 -- TOTAL BUS MILES

	25TH		75TH			INDEX (1970=100)	
YEAR	PERCENTILE	MEDIAN	PERCENTILE	MEAN	MEDIANS	MEANS	
1960	1264106.	3593502.	9586777.	8418268.	89.8	92.6	
1961	1258642.	3450390.	9586777.	8294043.	86.2	91.2	
1962	1272406.	3338888.	9422602.	8307339.	83.4	91.4	
1963	1279517.	3226618.	10035991.	8405876.	80.6	92.5	
1964	1292073.	3230935.	10524753.	8470361.	80.8	93.2	
1965	1304717.	4153907.	11048497.	9438738.	103.8	103.8	
1966	1280734.	4214462.	11996581.	9481567.	105.3	104.3	
1967	1292270.	4356225.	10946501.	9435378.	108.9	103.8	
1968	1305532.	4416925.	11361025.	9510888.	110.4	104.6	
1969	1318005.	4198120.	10949131.	9382420.	104.9	103.2	
1970	1283612.	4001113.	10857714.	9089459.	100.0	100.0	
1971	1249550.	3718726.	11477735.	9122785.	92.9	100.4	
1972	1195244.	3560985.	10859554.	8957158.	89.0	98.5	
1973	1194601.	3379715.	10542900.	8956568.	84.5	98.5	
1974	1147180.	3102301.	10513922.	8978338.	77.5	98.8	

Table B.3.9 -- DIESEL BUS MILES OPERATED

	25TH		75711			INDEX (1970=100)	
YEAR	PERCENTILE	MEDIAN	75TH PERCENTILE	MEAN	MEDIANS	MEANS	
1960	1126704.	2896699.	8533808.	7586828.	87.4	83.2	
1961	1170722.	3107904.	9185504.	7882212.	93.7	86.5	
1962	1094448.	3110455.	9422602.	8048210.	93.8	88.3	
1963	1278225.	2937934.	10016923.	8114201.	88.6	89.0	
1964	1275129.	3061503.	10524753.	8387120.	92.3	92.0	
1965	1252909.	3544430.	11810187.	9469534.	106.9	103.9	
1966	1628127.	3587047.	12497824.	9595536.	108.2	105.3	
1967	1610137.	3661080.	13318243.	9605829.	110.4	105.4	
1968	1620339.	3369192.	13638938.	9550134.	101.6	104.8	
1969	1585861.	3361514.	12804028.	9391499.	101.4	103.0	
1970	1645194.	3315663.	13347376.	9115693.	100.0	100.0	
1971	1245767.	3238190.	10586955.	8148260.	97.7	89.4	
1972	1642726.	3555690.	10859554.	8399763.	107.2	92.1	
1973	1703520.	3434635.	10542900.	8377194.	103.6	91.9	
1974	1588528.	3405960.	13037073.	9785060.	102.7	107.3	

Table B.3.10 -- OTHER FUEL BUS MILES OPERATED

	25TH		75TH -			INDEX (1970=100)	
YEAR	PERCENTILE	MEDIAN	PERCENTILE	MEAN	MEDIANS	MEANS	
1960	207611.	401273.	2174473.	1686531.	114.1	302.9	
1961	128636.	384886.	1757270.	1183724.	109.5	212.6	
1962	42618.	335326.	1552302.	1030916.	95.4	185.2	
1963	26672.	264769.	1319665.	895926.	75.3	160.9	
1964	16944.	230510.	1485685.	718343.	65.6	129.0	
1965	110572.	214914.	1003100.	656773.	61.1	118.0	
1966	57900.	168690.	876679.	562191.	48.0	101.0	
1967	63847.	289155.	700272.	509901.	82.2	91.6	
1968	74778.	296717.	756319.	551280.	84.4	99.0	
1969	14055.	334903.	679754.	523213.	95.2	94.0	
1970	59871.	351620.	623658.	556796.	100.0	100.0	
1971	41785.	313403.	593454.	388862.	89.1	69.8	
1972	73079.	293844.	334905.	252343.	83.6	45.3	
1973	67429.	192147.	367948.	236340.	54.6	42.4	
1974	67429.	191285.	372000.	232398.	54.4	41.7	

Table B.3.11 -- TOTAL BUS HOURS

	25TH		75TH -			INDEX (1970=100)	
YEAR	PERCENTILE	MEDIAN	PERCENTILE	MEAN	MEDIANS	MEANS	
1960	151463.	367079.	851896.	805872.	100.8	104.5	
1961	152954.	365427.	888679.	788652.	100.3	102.3	
1962	153139.	414822.	833231.	783002.	113.9	101.5	
1963	139858.	327298.	815613.	752907.	89.9	97.6	
1964	138004.	391832.	859336.	750125.	107.6	97.3	
1965	141655.	400024.	1117465.	869966.	109.8	112.8	
1966	138727.	393798.	1283226.	872345.	108.1	113.1	
1967	141588.	386806.	1330790.	865583.	106.2	112.2	
1968	142976.	390268.	1340211.	876086.	107.2	113.6	
1969	133436.	368071.	1053187.	819503.	101.1	106.3	
1970	137097.	364187.	1076580.	771173.	100.0	100.0	
1971	131047.	331110.	1065499.	811522.	90.9	105.2	
1972	137524.	355249.	983438.	791865.	97.5	102.7	
1973	140230.	356600.	1048855.	787244.	97.9	102.1	
1974	126729.	269052.	991210.	750539.	73.9	97.3	

Table B.3.12 -- GALLONS OF DIESEL FUEL CONSUMED

25TH			75TH			INDEX (1970=100)	
YEAR	PERCENTILE	MEDIAN	PERCENTILE	MEAN	MEDIANS	MEANS	
1960	227522.	625882.	1676344.	1600512.	84.9	77.6	
1961	226032.	629001.	1853645.	1671077.	85.4	81.0	
1962	219297.	622804.	1790775.	1727985.	84.5	83.8	
1963	299213.	609490.	2521291.	1757266.	82.7	85.2	
1964	300868.	634225.	2574753.	1829756.	86.1	88.7	
1965	284803.	764535.	2861335.	2078280.	103.7	100.8	
1966	319562.	816260.	3208996.	2123482.	110.8	103.0	
1967	319991.	850846.	3319172.	2133996.	115.5	103.5	
1968	332298.	741658.	3370169.	2128445.	100.6	103.2	
1969	337395.	733608.	3079836.	1906307.	99.5	92.5	
1970	349504.	736950.	3172107.	2061983.	100.0	100.0	
1971	345557.	738379.	2767105.	2088782.	100.2	101.3	
1972	330831.	863897.	2576072.	2135200.	117.2	103.6	
1973	325350.	870419.	2790090.	2181331.	118.1	105.8	
1974	321506.	867080.	3280941.	2289863.	117.7	111.1	

Table B.3.13 -- GALLONS OF OTHER FUEL CONSUMED

	25TH		75TH -			INDEX (1970=100)	
YEAR	PERCENTILE	MEDIAN	PERCENTILE	MEAN	MEDIANS	MEANS	
1960	46510.	166244.	716149.	527875.	406.6	361.7	
1961	31940.	126902.	591309.	362764.	310.4	248.6	
1962	19832.	89008.	628404.	314688.	217.7	215.6	
1963	12227.	69414.	450323.	283962.	169.8	194.6	
1964	13791.	59037.	460706.	232307.	144.4	159.2	
1965	19728.	59809.	302881.	197026.	146.3	135.0	
1966	18603.	41337.	311476.	171685.	101.1	117.7	
1967	13711.	48600.	248093.	159473.	118.9	109.3	
1968	5651.	45614.	225626.	155563.	111.6	106.6	
1969	2535.	43250.	165340.	145506.	105.8	99.7	
1970	7032.	40887.	255095.	145927.	100.0	100.0	
1971	8475.	39486.	149681.	112295.	96.6	77.0	
1972	20194.	64177.	126762.	72080.	157.0	49.4	
1973	11887.	60883.	96688.	64382.	148.9	44.1	
1974	11887.	54801.	92068.	87447.	134.0	59.9	

Table B.3.14 -- GALLONS OF LUBRICATING OIL CONSUMED

	25TH		75TH -			970=100)
YEAR	PERCENTILE	MEDIAN	PERCENTILE	MEAN	MEDIANS	MEANS
1960	4222.	10165.	25113.	24566.	100.8	98.5
1961	5599.	10555.	23338.	24630.	104.7	98.8
1962	4675.	9600.	22354.	25573.	95.2	102.6
1963	4365.	10260.	32127.	26529.	101.8	106.4
1964	4181.	11339.	36082.	26087.	112.5	104.6
1965	3191.	12879.	34105.	27638.	127.7	110.8
1966	3300.	13313.	41522.	29350.	132.0	117.7
1967	3870.	12158.	35918.	27495.	120.6	110.3
1968	3786.	11755.	36997.	27070.	116.6	108.6
1969	3726.	8324.	35312.	29378.	82.6	117.8
1970	3543.	10083.	33836.	24934.	100.0	100.0
1971	4014.	7305.	33216.	24396.	72.4	97.8
1972	3388.	9088.	35692.	26058.	90.1	104.5
1973	3300.	8732.	31829.	29056.	86.6	116.5
1974	3706.	11969.	37703.	26046.	118.7	104.5

Table B.3.15 -- TOTAL PASSENGERS CARRIED

	25TH	75TH -			INDEX (1970=100)	
YEAR	PERCENTILE	MEDIAN	PERCENTILE	MEAN	MEDIANS	MEANS
1960	4581609.	13316509.	29461152.	30877157.	139.0	101.8
1961	4331181.	12462722.	30792501.	30228057.	130.0	99.7
1962	4743361.	11850537.	27791645.	30083987.	123.7	99.2
1963	4307474.	11922224.	34558349.	30261070.	124.4	99.8
1964	3926095.	10559409.	34357678.	29575535.	110.2	97.5
1965	4033999.	10431002.	41625320.	34889518.	108.8	115.0
1966	4137888.	10144378.	40501643.	35610083.	105.9	117.4
1967	4166629.	10743736.	42586525.	34879119.	112.1	115.0
1968	4051334.	12624872.	36588976.	33967963.	131.7	112.0
1969	3606240.	11071971.	42717529.	32787208.	115.5	108.1
1970	3110482.	9583130.	40408268.	30327518.	100.0	100.0
1971	2963492.	9683709.	35043478.	28992981.	101.0	95.6
1972	2766350.	8652707.	33639419.	27388368.	90.3	90.3
1973	2550369.	8050292.	23065743.	24872275.	84.0	82.0
1974	3156835.	7385372.	31328093.	26009865.	77.1	85.8

Table B.3.16 -- LINE SERVICE REVENUE PASSENGERS CARRIED

25TH		75TH			INDEX (1970=100)	
YEAR	PERCENTILE	MEDIAN	PERCENTILE	MEAN	MEDIANS	MEANS
1960	3782900.	10760895.	26180054.	25083285.	118.5	107.8
1961	3728891.	9946612.	25475017.	24177598.	109.5	103.9
1962	3863869.	9458640.	22861051.	23846424.	104.1	102.4
1963	3530845.	8484778.	26600044.	23748442.	93.4	102.0
1964	3263510.	7763920.	26206288.	23658005.	85.5	101.6
1965	3320552.	9675566.	26877580.	26985388.	106.5	115.9
1966	3414667.	9951288.	28809292.	27404148.	109.6	117.7
1967	3480957.	9940206.	28614464.	26890079.	109.5	115.5
1968	3541549.	10419041.	31102703.	27306105.	114.7	117.3
1969	3075004.	9604581.	32571171.	25581666.	105.8	109.9
1970	2910690.	9081782.	30664243.	23276465.	100.0	100.0
1971	2594410.	7981953.	27449412.	22707309.	87.9	97.6
1972	2341276.	7920061.	20617883.	21571883.	87.2	92.7
1973	2090797.	7045657.	21422927.	20344149.	77.6	87.4
1974	2954710.	6345207.	25458771.	20422351.	69.9	87.7

Table B.3.17 -- CHARTER REVENUE PASSENGERS CARRIED

	25TH		75TH		INDEX (1	970=100)
YEAR	PERCENTILE	MEDIAN	PERCENTILE	MEAN	MEDIANS	MEANS
1960	29217.	321181.	814759.	827625.	196.4	102.1
1961	33953.	373376.	859785.	880486.	228.3	108.6
1962	102101.	358119.	903446.	1009564.	219.0	124.5
1963	41752.	403740.	981025.	1041082.	246.9	128.4
1964	41765.	404924.	948369.	1070602.	247.6	132.0
1965	46560.	391256.	682515.	1024498.	239.2	126.3
1966	57569.	466719.	738630.	1101479.	285.4	135.8
1967	43049.	339923.	688486.	990206.	207.8	122.1
1968	43974.	333335.	796724.	992251.	203.8	122.4
1969	40733.	326748.	726570.	984717.	199.8	121.4
1970	27743.	163547.	449845.	810951.	100.0	100.0
1971	35124.	264490.	466734.	457623.	161.7	56.4
1972	36637.	314708.	442232.	1488711.	192.4	183.6
1973	52479.	101610.	322517.	190047.	62.1	23.4
1974	52479.	121804.	344468.	562093.	74.5	69.3

APPENDIX C

SUMMARY TABLES - ANALYTICAL RATIOS

APPENDIX C

LIST OF SUMMARY TABLES - ANALYTICAL RATIOS

	LIST OF SUMMARY TABLES - ANALYTICAL RATIOS
Table	
<u>Number</u>	
	<u>C.1 Expense Distributions</u>
C.1.1	Drivers' and Helpers' Wages as a Percent of Total Expenses
	Less Depreciation and Amortization
C.1.2	Diesel Fuel Expense as a Percent of Total Expenses Less Depreciation and Amortization
C.1.3	Other Fuel Expense as a Percent of Total Expenses Less Depreciation and Amortization
C.1.4	Lubrication Oil Expense as a Percent of Total Expenses Less Depreciation and Amortization
C.1.5	Repairs to Revenue Equipment Expense as a Percent of Total Expenses Less Depreciation and Amortization
C.1.6	Tires and Tubes Expense as a Percent of Total Expenses Less Depreciation and Amortization
C.1.7	Operating Taxes and Licenses Expense as a Percent of Total Expenses Less Depreciation and Amortization
C.1.8	Injuries and Damages Expense as a Percent of Total Expenses Less Depreciation and Amortization
C.1.9	Administration and General Expense as a Percent of Total Expenses Less Depreciation and Amortization
C.1.10	Equipment Maintenance and Garage Expense as a Percent of Total Expenses Less Depreciation and Amortization
C.1.11	Depreciation and Amortization as a Percent of Total Expenses
	C.2 Expense Relative to Revenues
C.2.1	Total Operating Expenses as a Percent of Total Operating Revenue
C.2.2	Total Operating Expenses Less Depreciation and Amortization as a Percent of Total Revenue
C.2.3	Passenger Revenue from Line Service as a Percent of Total Expenses
C.2.4	Passenger Revenue from Line Service as a Percent of Total Expenses Less Depreciation and Amortization
	C.3 Revenue Ratios
C.3.1	Revenue from Line Service Passengers as a Percent of Total Revenue
C.3.2	

C.3.3 Other Revenue as a Percent of Total Revenue C.3.4 Total Operating Revenue per Total Passenger Carried C.3.5 Revenue from Line Service Passengers per Line Service Passenger Revenue from Charter Service Passengers per Charter Service C.3.6 Passenger C.3.7 Total Operating Revenue per Bus Mile C.3.8 Total Operating Revenue per Bus Hour C.3.9 Total Operating Revenue per Active Bus C.3.10 Total Operating Revenue per Employee C.4 Cost Ratios C.4.1 Total Operating Cost per Bus Mile Total Operating Cost per Bus Hour C.4.2 C.4.3 Total Operating Cost per Passenger C.4.4 Total Operating Cost Less Depreciation and Amortization per Bus Mile C.4.5 Total Operating Cost Less Depreciation and Amortization per Bus Hour C.4.6 Total Operating Cost Less Depreciation and Amortization per Passenger C.4.7 Total Operating Cost Less Depreciation and Amortization per Owned Bus C.4.8 Total Operating Cost Less Depreciation and Amortization per Active Bus C.4.9 Total Operating Cost Less Depreciation and Amortization per Employee C.4.10 Repair Costs to Revenue Equipment per Owned Bus C.4.11 Repair Costs to Revenue Equipment per Active Bus C.4.12 Repair Costs to Revenue Equipment per Bus Mile C.4.13 Total Equipment Maintenance and Garage Expense per Owned Bus C.4.14 Total Equipment Maintenance and Garage Expense per Active Bus C.4.15 Total Equipment Maintenance and Garage Expense per Bus Mile C.4.16 Drivers' and Helpers' Wages per Bus Mile C.4.17 Drivers' and Helpers' Wages per Bus Hour C.5 Passengers versus Services and Resources C.5.1 Line Service Revenue Passengers as a Percent of Total Passengers C.5.2 Charter Passengers as a Percent of Total Passengers C.5.3 Total Passengers Carried per Route Mile (One Way) Total Passengers Carried per Active Bus C.5.4 C.5.5 Total Passengers Carried per Bus Mile C.5.6 Total Passengers Carried per Bus Hour C.5.7 Total Passengers Carried per Employee

C.6 Fuel Costs and Consumption

C.6.1 C.6.2 C.6.3 C.6.4 C.6.5	Total Bus Miles per Gallon of Diesel Fuel Diesel Fuel Cost per Gallon of Diesel Fuel Diesel Fuel Cost per Bus Mile Diesel Fuel Gallons per Bus Mile Diesel Fuel Gallons per Bus Hour
	Diesel Fuel Gallons per Passenger
C. O. O	bleder ruer darions per rubbenger
	C.7 Use of Equipment and Employees
C.7.1	Bus Miles per Owned Bus
C.7.2	Bus Miles per Active Bus
C.7.3	Bus Miles per Employee
C.7.4	Bus Miles per Route Mile (One Way)
C.7.5	Bus Miles per Bus Hour
C.7.6	Buses in Base Schedule as a Percent of Buses in Peak Schedule
C.7.7	Employees per Bus
C.7.8	Bus Hours per Active Bus per Day

Table C.1.1 -- DRIVERS AND HELPERS WAGES AS A PERCENT OF TOTAL EXPENSES LESS DEPRECIATION AND AMORTIZATION

25TH			75TH		INDEX (19	970=100)
YEAR	PERCENTILE	MEDIAN	PERCENTILE	MEAN	MEDIANS	MEANS
1960	39.681	42.435	45.348	43.073	92.5	93.9
1961	40.112	42.328	45.435	43.272	92.3	94.4
1962	41.390	42.965	46.024	43.837	93.7	95.5
1963	41.317	43.617	46.081	43.905	95.1	95.7
1964	41.774	43.417	46.084	43.586	94.7	95.0
1965	41.886	44.357	47.516	45.155	96.7	98.5
1966	42.547	44.985	47.426	45.172	98.1	98.5
1967	42.696	44.927	47.848	45.379	98.0	98.9
1968	42.995	44.981	48.691	45.974	98.1	100.2
1969	43.488	45.294	48.546	46.194	98.8	100.7
1970	43.824	45.867	50.180	45.862	100.0	100.0
1971	43.831	46.213	49.309	45.994	100.8	100.3
1972	43.463	47.082	50.486	45.854	102.6	100.0
1973	43.862	47.575	51.130	45.571	103.7	99.4
1974	41.313	45.080	49.051	44.127	98.3	96.2

Table C.1.2 -- DIESEL FUEL EXPENSE AS A PERCENT OF TOTAL EXPENSES LESS DEPRECIATION AND AMORTIZATION

	25TH		75TH		INDEX (19	970=100)
YEAR	PERCENTILE	MEDIAN	PERCENTILE	MEAN	MEDIANS	MEANS
1960	2.766	3.763	4.941	3.164	110.7	105.1
1961	3.277	3.704	4.970	3.437	108.9	114.1
1962	3.176	3.555	4.867	3.368	104.6	111.8
1963	3.095	3.658	5.074	3.311	107.6	109.9
1964	2.876	3.462	4.267	3.115	101.8	103.4
1965	2.919	3.384	4.483	3.160	99.6	104.9
1966	3.026	3.450	4.460	3.175	101.5	105.4
1967	3.096	3.561	4.476	3.315	104.7	111.1
1968	3.185	3.625	4.280	3.345	106.6	110.0
1969	3.167	3.625	4.204	3.223	106.6	107.0
1970	2.791	3.400	3.985	3.012	100.0	100.0
1971	2.841	3.222	3.690	2.843	94.8	94.4
1972	2.670	3.140	3.764	2.827	92.4	93.9
1973	2.837	3.773	4.379	3.180	111.0	105.6
1974	4.262	5.150	6.897	4.872	151.5	161.8

Table C.1.3 -- OTHER FUEL EXPENSE AS A PERCENT OF TOTAL EXPENSES LESS DEPRECIATION AND AMORTIZATION

	25TH		75TU		INDEX (19	970=100)
YEAR	PERCENTILE	MEDIAN	75TH PERCENTILE	MEAN	MEDIANS	MEANS
1960	.437	1.182	2.589	1.435	180.8	293.8
1961	.451	.710	1.782	.942	108.6	192.9
1962	.209	.602	2.901	.838	92.0	171.6
1963	.288	.461	2.480	.681	70.5	139.4
1964	.150	.424	2.301	.534	64.9	109.2
1965	.082	.359	2.127	.379	54.9	77.7
1966	.123	.456	1.688	.399	69.7	81.7
1967	.100	.522	1.480	.368	79.9	75.4
1968	.038	.580	2.520	.515	88.6	105.5
1969	.034	.370	2.853	.488	56.6	99.9
1970	.100	.654	3.124	.488	100.0	100.0
1971	.050	.288	1.634	.188	44.1	38.5
1972	.039	.350	1.766	.829	53.6	169.7
1973	.047	.243	5.288	.088	37.2	18.1
1974	.057	.204	5.288	.105	31.3	21.4

Table C.1.4 -- LUBRICATION OIL EXPENSE AS A PERCENT OF TOTAL EXPENSES LESS DEPRECIATION AND AMORTIZATION

	25TH		75TH		INDEX (19	970=100)
YEAR	PERCENTILE	MEDIAN	PERCENTILE	MEAN	MEDIANS	MEANS
1960	.223	.332	.532	.233	145.1	150.4
1961	.226	.335	.498	.224	146.8	145.1
1962	.217	.313	.423	.224	136.8	144.7
1963	.232	.291	.422	.224	127.5	144.5
1964	.219	.274	.401	.217	120.0	140.3
1965	.177	.262	.372	.198	114.6	128.2
1966	.169	.255	.419	.199	111.7	128.5
1967	.152	.238	.375	.170	104.1	109.9
1968	.145	.250	.378	.173	109.5	111.7
1969	.141	.236	.354	.159	103.1	103.0
1970	.131	.229	.298	.155	100.0	100.0
1971	.139	.221	.313	.146	96.8	94.5
1972	.148	.205	.320	.133	89.7	86.1
1973	.142	.213	.292	.140	93.3	90.8
1974	.163	.256	.363	.188	112.0	121.5

Table C.1.5 -- REPAIRS TO REVENUE EQUIPMENT AS A PERCENT OF TOTAL EXPENSES LESS DEPRECIATION AND AMORTIZATION

	25TH		75TH		INDEX (19	970=100)
YEAR	PERCENTILE	MEDIAN	PERCENTILE	MEAN	MEDIANS	MEANS
1960	8.232	11.460	12.422	9.044	113.5	105.1
1961	7.584	11.036	12.837	8.719	109.3	101.4
1962	7.737	10.730	12.998	8.776	106.3	102.0
1963	7.784	10.507	12.535	8.660	104.0	100.7
1964	7.919	10.429	12.982	8.627	103.3	100.3
1965	7.818	9.874	12.336	8.646	97.8	100.5
1966	7.702	9.915	11.951	8.585	98.2	99.8
1967	7.156	9.912	12.081	8.455	98.2	98.3
1968	7.131	10.494	12.185	8.318	103.9	96.7
1969	7.239	10.015	12.350	8.417	99.2	97.8
1970	7.489	10.098	12.037	8.602	100.0	100.0
1971	7.627	10.191	12.241	8.826	100.9	102.6
1972	7.252	9.717	12.789	8.484	96.2	98.6
1973	6.765	9.984	13.125	8.388	98.9	97.5
1974	6.429	9.819	12.075	7.838	97.2	91.1

Table C.1.6 --TIRES AND TUBES EXPENSE AS A PERCENT OF TOTAL EXPENSES LESS DEPRECIATION AND AMORTIZATION

	OETLI		75711		INDEX (19	970=100)
YEAR	25TH PERCENTILE	MEDIAN	75TH PERCENTILE	MEAN	MEDIANS	MEANS
1960	1.555	1.815	2.496	1.808	128.4	147.0
1961	1.482	1.759	2.306	1.729	125.1	140.6
1962	1.318	1.648	1.935	1.595	116.6	129.7
1963	1.316	1.515	1.764	1.578	107.1	128.3
1964	1.294	1.481	1.705	1.460	104.7	118.7
1965	1.303	1.481	1.732	1.395	104.8	113.4
1966	1.213	1.394	1.675	1.355	98.6	110.1
1967	1.198	1.383	1.695	1.277	97.8	103.9
1968	1.158	1.378	1.690	1.292	97.5	105.1
1969	1.139	1.378	1.580	1.269	97.4	103.2
1970	1.093	1.414	1.579	1.230	100.0	100.0
1971	1.163	1.366	1.576	1.202	96.6	97.8
1972	1.120	1.301	1.626	1.130	92.0	91.9
1973	1.070	1.276	1.564	1.107	90.3	90.0
1974	.972	1.312	1.520	1.104	92.8	89.8

Table C.1.7 -- OPERATING TAXES AND LICENSE EXPENSE AS A PERCENT OF TOTAL EXPENSES LESS DEPRECIATION AND AMORTIZATION

	25TH		75TH		INDEX (19	970=100)
YEAR	PERCENTILE	MEDIAN	PERCENTILE	MEAN	MEDIANS	MEANS
1960	6.085	7.672	10.203	7.713	106.0	142.1
1961	5.448	7.240	10.157	7.610	100.0	140.2
1962	5.331	7.589	10.097	7.322	104.8	134.9
1963	5.556	7.591	9.845	7.415	104.9	136.6
1964	5.398	7.411	9.311	7.766	102.4	143.1
1965	5.132	7.218	9.264	6.720	99.7	123.8
1966	5.619	7.591	10.253	7.166	104.9	132.1
1967	5.496	7.566	9.382	7.154	104.5	131.8
1968	5.432	7.730	9.209	6.781	106.8	125.0
1969	5.539	7.338	9.230	6.342	101.4	116.9
1970	5.147	7.239	8.942	5.426	100.0	100.0
1971	5.169	6.711	8.458	5.253	92.7	96.8
1972	4.265	6.193	7.489	4.691	85.6	86.4
1973	4.253	5.606	7.601	4.356	77.4	80.3
1974	4.072	5.171	6.665	4.193	71.4	77.3

Table C.1.8 -- INJURIES AND DAMAGES EXPENSE AS A PERCENT OF TOTAL EXPENSES LESS DEPRECIATION AND AMORTIZATION

	25TH		75TH		INDEX (1	970=100)
YEAR	PERCENTILE	MEDIAN	PERCENTILE	MEAN	MEDIANS	MEANS
1960	2.561	3.707	4.796	4.304	94.1	92.4
1961	2.985	3.670	4.307	4.147	93.1	89.0
1962	2.919	3.809	4.565	3.966	96.7	85.1
1963	2.807	3.351	4.414	3.880	85.0	83.3
1964	2.872	3.530	4.599	4.283	89.6	92.0
1965	2.622	3.779	4.625	4.407	95.9	94.6
1966	2.784	3.612	4.757	4.310	91.7	92.5
1967	2.381	3.699	4.444	4.244	93.9	91.1
1968	2.896	3.775	4.821	4.279	95.8	91.9
1969	2.816	3.762	4.935	4.491	95.5	96.4
1970	2.724	3.941	5.410	4.658	100.0	100.0
1971	3.152	4.144	5.322	4.521	105.2	97.1
1972	2.856	3.978	4.904	4.735	101.0	101.7
1973	2.568	3.871	5.001	4.714	98.2	101.2
1974	2.061	3.521	5.114	4.610	89.4	99.0

Table C.1.9 -- ADMINISTRATION AND GENERAL EXPENSE AS A PERCENT OF TOTAL EXPENSES LESS DEPRECIATION AND AMORTIZATION

	OFTLI	76711		INDEX (1970=100)		
YEAR	25TH PERCENTILE	MEDIAN	75TH PERCENTILE	MEAN	MEDIANS	MEANS
1960	10.045	13.539	15.029	13.745	112.8	89.8
1961	10.556	13.328	15.431	14.162	111.0	92.5
1962	10.640	12.708	15.558	14.530	105.9	94.9
1963	9.679	11.777	14.892	14.630	98.1	95.5
1964	9.837	12.087	15.908	15.838	100.7	103.4
1965	9.830	12.357	16.215	15.243	102.9	99.5
1966	9.637	11.564	16.123	15.231	96.3	99.5
1967	8.851	11.931	14.812	14.953	99.4	97.6
1968	8.802	11.900	14.652	14.232	99.1	92.9
1969	9.005	11.815	14.762	14.649	98.4	95.7
1970	9.585	12.005	14.615	15.314	100.0	100.0
1971	10.124	13.022	15.577	16.165	108.5	105.6
1972	10.137	13.466	15.381	15.840	112.2	103.4
1973	10.300	13.181	16.028	16.538	109.8	108.0
1974	10.957	12.943	16.292	17.411	107.8	113.7

Table C.1.10 -- EQUIPMENT MAINTENANCE AND GARAGE EXPENSE AS A PERCENT OF TOTAL EXPENSES LESS DEPRECIATION AND AMORTIZATION

	OFTLI	75711		INDEX (1970=100)		
YEAR	25TH PERCENTILE	MEDIAN	75TH PERCENTILE	MEAN	MEDIANS	MEANS
1960	16.304	20.027	21.565	16.648	113.6	103.5
1961	15.385	19.722	22.162	16.258	111.9	101.1
1962	14.931	18.737	21.930	16.176	106.3	100.6
1963	14.966	19.316	21.243	16.092	109.6	100.1
1964	14.507	19.435	20.903	15.509	110.3	96.5
1965	14.420	17.604	20.670	15.660	99.9	97.4
1966	14.002	17.771	21.042	15.441	100.8	96.0
1967	14.012	17.667	21.364	15.548	100.2	96.7
1968	14.133	17.832	20.713	15.601	101.2	97.0
1969	14.412	17.335	21.323	16.517	98.4	102.7
1970	15.081	17.624	20.438	16.080	100.0	100.0
1971	15.029	17.548	21.307	16.301	99.6	101.4
1972	15.742	18.237	21.388	16.847	103.5	104.8
1973	15.814	18.125	21.216	16.804	102.8	104.5
1974	15.141	17.746	20.924	16.062	100.7	99.9

Table C.1.11 -- DEPRECIATION AND AMORTIZATION AS A PERCENT OF TOTAL EXPENSES (Sample of 50 Bus Properties, 1960 - 1974)

	25TH		75TH -		INDEX (1970=100)	
YEAR	PERCENTILE	MEDIAN	PERCENTILE	MEAN	MEDIANS	MEANS
1960	5.623	6.571	8.235	6.430	102.8	118.2
1961	6.013	7.257	8.803	7.037	113.5	129.4
1962	5.481	6.954	8.721	7.178	108.8	132.0
1963	5.030	6.273	8.334	6.956	98.1	127.9
1964	4.399	6.678	7.864	6.875	104.5	126.4
1965	4.700	6.853	8.515	6.901	107.2	126.9
1966	4.984	6.572	8.925	6.808	102.8	125.2
1967	5.140	6.494	8.915	6.859	101.6	126.1
1968	5.254	6.302	9.172	6.789	98.6	124.8
1969	4.954	6.706	9.055	6.420	104.9	118.0
1970	4.845	6.392	8.704	5.439	100.0	100.0
1971	4.275	6.073	7.022	5.262	95.0	96.7
1972	4.067	5.750	7.594	4.955	90.0	91.1
1973	3.511	5.156	7.692	4.684	80.7	86.1
1974	3.572	4.744	7.306	4.653	74.2	85.5

Table C.2.1-- TOTAL OPERATING EXPENSES AS A PERCENT OF TOTAL OPERATING REVENUE

	OFTLI	75711			INDEX (1970=100)	
YEAR	25TH PERCENTILE	MEDIAN	75TH PERCENTILE	MEAN	MEDIANS	MEANS
1960	92.466	95.711	102.237	95.445	91.6	88.0
1961	93.860	97.363	103.832	97.008	93.2	89.5
1962	94.416	97.522	107.107	98.135	93.4	90.5
1963	94.509	98.060	104.480	98.636	93.9	91.0
1964	92.511	98.479	105.794	98.848	94.3	91.2
1965	92.530	96.190	101.695	95.939	92.1	88.5
1966	92.257	95.353	101.321	97.018	91.3	89.5
1967	94.342	97.807	102.564	98.806	93.6	91.1
1968	93.701	98.669	106.537	100.123	94.5	92.3
1969	96.975	101.227	111.147	103.401	96.9	95.4
1970	98.215	104.452	124.828	108.424	100.0	100.0
1971	98.925	106.124	135.222	112.295	101.6	103.6
1972	101.200	115.037	154.541	123.262	110.1	113.7
1973	110.368	132.120	171.146	137.193	126.5	126.5
1974	115.481	153.694	195.641	153.136	147.1	141.2

Table C.2.2 -- TOTAL OPERATING EXPENSES LESS DEPRECIATION AND AMORTIZATION AS A PERCENT OF TOTAL REVENUE

	25TU	75TH			INDEX (1970=100)	
YEAR	25TH PERCENTILE	MEDIAN	PERCENTILE	MEAN	MEDIANS	MEANS
1960	86.437	89.878	97.887	89.540	92.2	87.0
1961	85.727	90.037	98.591	90.427	92.4	87.8
1962	86.367	91.353	98.426	91.345	93.7	88.7
1963	87.536	91.741	98.593	92.045	94.1	89.4
1964	85.868	92.528	102.549	92.382	94.9	89.7
1965	85.115	89.209	97.765	89.704	91.5	87.1
1966	85.363	87.669	100.340	90.817	89.9	88.2
1967	86.898	91.204	97.152	92.464	93.6	89.8
1968	86.993	91.581	100.533	93.552	93.9	90.9
1969	90.533	94.261	110.505	97.011	96.7	94.2
1970	92.245	97.487	119.098	102.964	100.0	100.0
1971	94.196	100.045	125.412	107.127	102.6	104.0
1972	96.891	108.464	148.062	118.000	111.3	114.6
1973	103.017	123.423	169.026	131.794	126.6	128.0
1974	111.965	145.950	192.620	146.924	149.7	142.7

Table C.2.3 -- PASSENGER REVENUE FROM LINE SERVICE AS A PRECENT OF TOTAL EXPENSES

	25TH	75TH			INDEX (1970=100)	
YEAR	PERCENTILE	MEDIAN	PERCENTILE	MEAN	MEDIANS	MEANS
1960	82.454	93.087	97.536	94.655	108.8	111.5
1961	87.171	95.062	99.004	95.522	111.1	112.6
1962	84.258	94.106	96.492	93.727	110.0	110.4
1963	84.688	93.365	95.555	93.501	109.1	110.2
1964	83.856	92.241	97.292	91.187	107.8	107.4
1965	84.625	91.590	95.985	91.496	107.1	107.8
1966	78.855	90.248	95.443	90.417	105.5	106.5
1967	80.151	90.005	93.790	89.001	105.2	104.9
1968	77.607	87.243	96.052	88.963	102.0	104.8
1969	77.008	85.763	94.449	88.965	100.2	104.8
1970	74.770	85.553	93.221	84.870	100.0	100.0
1971	64.274	80.712	92.407	81.899	94.3	96.5
1972	57.073	75.235	85.761	75.177	87.9	88.6
1973	49.572	67.857	81.763	65.800	79.3	77.5
1974	46.151	53.411	76.876	59.400	62.4	70.0

Table C.2.4 -- PASSENGER REVENUE FROM LINE SERVICE AS A PERCENT OF TOTAL EXPENSES LESS DEPRECIATION AND AMORTIZATION

	OFTL	75TH			INDEX (1970=100)	
YEAR	25TH PERCENTILE	MEDIAN	PERCENTILE	MEAN	MEDIANS	MEANS
1960	98.064	107.061	111.794	106.355	114.2	116.5
1961	97.725	106.001	110.756	104.986	113.0	115.0
1962	94.730	103.213	109.384	107.706	110.1	113.6
1963	94.517	101.300	107.825	102.765	108.0	112.6
1964	87.105	103.519	112.896	102.495	110.4	112.3
1965	93.265	103.855	113.811	106.218	110.7	116.4
1966	90.431	104.579	111.739	104.541	111.5	114.5
1967	88.710	100.533	108.668	102.339	107.2	112.1
1968	85.592	100.354	107.584	100.753	107.0	110.4
1969	83.736	98.495	104.596	97.629	105.0	106.9
1970	76.556	93.783	100.819	91.288	100.0	100.0
1971	69.169	88.865	99.920	87.617	94.8	96.0
1972	60.495	78.591	95.071	78.739	83.8	86.3
1973	53.262	74.690	87.911	69.932	79.6	76.6
1974	46.787	56.900	80.695	61.929	60.7	67.8

Table C.3.1 -- REVENUE FROM LINE SERVICE PASSENGERS AS A PERCENT OF TOTAL REVENUE (Sample of 50 Bus Properties, 1960 - 1974)

	OFTLI	75711			INDEX (1970=100)	
YEAR	25TH PERCENTILE	MEDIAN	75TH PERCENTILE	MEAN	MEDIANS	MEANS
1960	94.507	96.340	97.831	95.567	102.7	101.7
1961	93.968	95.870	97.829	95.321	102.2	101.4
1962	93.441	96.473	97.635	95.143	102.8	101.2
1963	92.613	96.054	97.386	95.081	102.4	101.2
1964	91.362	95.932	96.956	94.774	102.3	100.8
1965	92.186	95.825	97.180	95.279	102.2	101.4
1966	91.107	95.873	96.918	94.915	102.2	101.0
1967	90.607	95.525	97.028	94.627	101.8	100.7
1968	90.470	94.127	97.074	94.256	100.3	100.3
1969	89.828	94.495	96.901	94.195	100.7	100.2
1970	90.041	93.805	97.093	93.994	100.0	100.0
1971	89.896	93.652	96.790	93.862	99.8	99.9
1972	89.176	92.664	96.814	93.022	98.8	99.0
1973	86.317	91.893	96.680	92.377	98.0	98.3
1974	85.833	91.123	96.077	91.276	97.1	97.1

Table C.3.2 -- CHARTER REVENUE AS A PERCENT OF TOTAL REVENUE (Sample of 50 Bus Properties, 1960 - 1974)

	25TH		75TH			INDEX (1970=100)	
YEAR	PERCENTILE	MEDIAN	PERCENTILE	MEAN	MEDIANS	MEANS	
1960	1.105	2.241	4.272	3.380	45.9	62.6	
1961	1.116	2.406	4.846	3.640	49.3	67.4	
1962	1.329	2.531	5.238	3.881	51.8	71.9	
1963	1.397	2.743	6.487	3.939	56.2	73.0	
1964	1.449	2.914	6.824	4.236	59.7	78.5	
1965	1.330	3.177	7.367	4.137	65.1	76.6	
1966	2.008	4.070	8.357	4.626	83.4	85.7	
1967	1.941	3.791	8.947	4.847	77.6	89.8	
1968	1.873	4.427	10.441	4.981	90.7	92.3	
1969	1.938	5.009	10.174	5.241	102.6	97.1	
1970	1.950	4.883	10.242	5.399	100.0	100.0	
1971	1.992	4.906	8.922	5.592	100.5	103.6	
1972	2.030	5.945	9.225	5.936	121.8	110.0	
1973	2.079	5.050	9.938	5.924	103.4	109.7	
1974	1.746	6.667	10.571	6.643	136.5	123.0	

Table C.3.3 --OTHER REVENUE AS A PERCENT OF TOTAL REVENUE (Sample of 50 Bus Properties, 1960 - 1974)

	25TH		75TH			INDEX (1970=100)	
YEAR	PERCENTILE	MEDIAN	PERCENTILE	MEAN	MEDIANS	MEANS	
1960	.714	1.055	1.634	1.053	95.8	77.8	
1961	.702	1.056	1.707	1.039	95.8	76.8	
1962	.726	1.025	1.395	.976	93.1	72.1	
1963	.721	.993	1.343	.980	90.2	72.4	
1964	.775	1.013	1.368	.988	92.0	73.0	
1965	.775	1.045	1.372	1.125	94.9	83.2	
1966	.831	1.135	1.449	1.126	103.1	83.2	
1967	.850	1.128	1.457	1.181	102.4	87.3	
1968	.837	1.230	1.793	1.460	111.7	107.9	
1969	.965	1.213	1.684	1.322	110.1	97.7	
1970	.981	1.101	1.694	1.353	100.0	100.0	
1971	.863	1.146	1.683	1.283	104.0	94.8	
1972	.850	1.293	2.000	1.841	117.4	136.1	
1973	.991	1.504	2.429	2.593	136.6	191.7	
1974	.997	1.560	2.834	3.045	141.6	225.1	

Table C.3.4 -- TOTAL OPERATING REVENUE PER TOTAL PASSENGER CARRIED

(Sample of 50 Bus Properties, 1960 - 1974)

	25TH	75TH		INDEX (1970=100)		
YEAR	PERCENTILE	MEDIAN	PERCENTILE	MEAN	MEDIANS	MEANS
1960	.131	.163	.184	.171	65.8	68.9
1961	.142	.168	.187	.176	67.7	71.1
1962	.149	.165	.200	.181	66.6	72.8
1963	.153	.177	.203	.186	71.3	74.8
1964	.154	.184	.210	.192	74.2	77.1
1965	.162	.191	.220	.194	76.9	78.3
1966	.163	.187	.222	.197	75.5	79.2
1967	.167	.193	.242	.204	77.8	82.1
1968	.180	.213	.244	.217	85.8	87.6
1969	.191	.228	.263	.230	92.0	92.8
1970	.208	.248	.287	.248	100.0	100.0
1971	.222	.264	.326	.273	106.5	110.0
1972	.227	.270	.329	.282	108.9	113.6
1973	.213	.282	.309	.282	113.7	113.6
1974	.221	.281	.328	.274	113.4	110.3

Table C.3.5 -- REVENUE FROM LINE SERVICE PASSENGERS PER LINE SERVICE PASSENGER
(Sample of 50 Bus Properties, 1960 - 1974)

	25TH 75TH				INDEX (1970=100)	
YEAR	PERCENTILE	MEDIAN	75TH PERCENTILE	MEAN	MEDIANS	MEANS
1960	.147	.189	.210	.201	72.3	66.2
1961	.147	.192	.223	.207	73.2	68.0
1962	.146	.192	.230	.212	73.3	69.9
1963	.159	.205	.237	.220	78.2	72.4
1964	.163	.218	.247	.228	83.1	74.9
1965	.175	.221	.250	.236	84.2	77.8
1966	.176	.219	.255	.239	83.7	78.7
1967	.182	.222	.256	.247	84.6	81.3
1968	.194	.233	.273	.255	88.7	83.9
1969	.202	.252	.290	.279	96.1	92.0
1970	.220	.262	.311	.304	100.0	100.0
1971	.233	.297	.340	.327	113.3	107.6
1972	.229	.302	.354	.332	115.4	109.3
1973	.211	.300	.365	.325	114.5	106.9
1974	.213	.296	.365	.327	113.1	107.5

Table C.3.6 -- REVENUE FROM CHARTER SERVICE PASSENGER PER CHARTER SERVICE PASSENGER
(Sample of 50 Bus Properties, 1960 - 1974)

	25TH		75TH		INDEX (1970=100)	
YEAR	PERCENTILE	MEDIAN	PERCENTILE	MEAN	MEDIANS	MEANS
1960	.205	.230	.504	.447	36.8	60.8
1961	.190	.244	.506	.481	38.9	61.3
1962	.206	.318	.777	.487	50.8	62.0
1963	.212	.329	.833	.495	52.5	63.0
1964	.237	.440	.772	.563	70.3	71.7
1965	.264	.474	.626	.565	75.7	72.0
1966	.300	.535	.623	.592	85.5	75.4
1967	.399	.599	.676	.644	95.6	82.1
1968	.345	.585	.908	.660	93.4	84.1
1969	.510	.605	1.011	.706	96.7	90.0
1970	.509	.626	1.197	.785	100.0	100.0
1971	.474	.678	1.279	.684	108.3	87.1
1972	.533	.723	1.484	.262	115.5	33.4
1973	.558	1.251	1.697	1.007	199.9	128.2
1974	.661	1.244	2.022	1.315	198.7	167.5

Table C.3.7 -- TOTAL OPERATING REVENUE PER BUS MILE

25TH			75TH		INDEX (1970=100)	
YEAR	PERCENTILE	MEDIAN	PERCENTILE	MEAN	MEDIANS	MEANS
1960	.439	.553	.631	.627	81.7	75.7
1961	.442	.546	.671	.623	8.08	76.3
1962	.447	.555	.688	.641	82.1	77.4
1963	.446	.558	.704	.653	82.5	78.9
1964	.459	.567	.705	.669	83.8	80.8
1965	.480	.604	.726	.709	89.2	85.7
1966	.484	.615	.735	.728	91.0	88.8
1967	.502	.609	.748	.744	90.1	89.8
1968	.512	.635	.764	.776	93.8	93.8
1969	.544	.663	.815	.804	98.0	97.1
1970	.534	.676	.811	.828	100.0	100.0
1971	.529	.724	.844	.868	107.0	104.8
1972	.529	.703	.844	.863	104.0	104.2
1973	.514	.682	.852	.848	100.9	102.4
1974	.541	.672	.909	.859	99.4	103.8

Table C.3.8 -- TOTAL OPERATING REVENUE PER BUS HOUR

	OFTLI	75711			INDEX (1970=100)	
YEAR	25TH PERCENTILE	MEDIAN	75TH PERCENTILE	MEAN	MEDIANS	MEANS
1961	4.798	6.431	7.659	7.413	75.3	73.5
1961	4.859	6.476	7.758	7.518	75.9	74.5
1962	5.000	6.847	7.950	7.691	80.2	76.2
1963	4.897	6.703	8.057	7.866	78.5	77.9
1964	4.981	7.402	8.427	8.045	86.7	79.7
1965	5.566	7.503	8.860	8.557	87.9	84.5
1966	5.572	7.680	9.060	8.804	90.0	87.2
1967	5.640	7.823	8.990	9.014	91.6	89.3
1968	5.543	8.111	9.074	9.384	95.0	93.0
1969	5.580	8.558	9.474	9.815	100.3	97.2
1970	5.845	8.537	10.014	10.093	100.0	100.0
1971	6.257	8.449	10.642	10.087	99.0	99.9
1972	6.216	8.182	10.115	10.449	95.8	103.5
1973	6.103	8.069	10.589	10.551	94.5	104.5
1974	6.695	8.476	10.370	10.833	99.3	107.3

Table C.3.9 -- TOTAL OPERATING REVENUE PER ACTIVE BUS

	25TH		75TH -			INDEX (1970=100)	
YEAR	PERCENTILE	MEDIAN	PERCENTILE	MEAN	MEDIANS	MEANS	
1960	14847.	17403.	20189.	21145.	80.8	79.6	
1961	14589.	17977.	20669.	21049.	83.5	79.3	
1962	15103.	18574.	20661.	21254.	86.3	80.1	
1963	14417.	18079.	20906.	21521.	84.0	81.1	
1964	14078.	18239.	21536.	22161.	85.1	83.5	
1965	14836.	19195.	22606.	23915.	89.2	90.1	
1966	15173.	20964.	24881.	24614.	97.4	92.7	
1967	14760.	19807.	23154.	24699.	92.0	93.8	
1968	15984.	21160.	25180.	25999.	98.3	97.9	
1969	15177.	21145.	24785.	26771.	98.2	100.8	
1970	14785.	21527.	24314.	26548.	100.0	100.0	
1971	15856.	22975.	27152.	29374.	106.7	110.6	
1972	14767.	20875.	24630.	28197.	97.0	106.2	
1973	16208.	20043.	24368.	27766.	93.1	104.6	
1974	15931.	19180.	23267.	25537.	89.1	96.2	

Table C.3.10 -- TOTAL OPERATING REVENUE PER EMPLOYEE

	25TH		75TH			INDEX (1970=100)	
YEAR	PERCENTILE	MEDIAN	PERCENTILE	MEAN	MEDIANS	MEANS	
1960	7102.	8260.	9214.	8782.	77.2	74.2	
1961	6850.	8380.	9258.	8842.	78.4	74.7	
1962	7066.	8566.	9290.	9004.	80.1	76.1	
1963	7206.	8394.	9453.	9487.	78.5	80.2	
1964	7290.	8953.	9926.	9889.	83.7	83.6	
1965	7794.	9614.	10742.	10609.	89.9	89.7	
1966	7896.	9888.	11228.	11010.	92.5	93.1	
1967	7970.	9920.	11238.	11094.	92.8	93.8	
1968	8211.	10226.	11624.	11756.	95.6	99.4	
1969	8076.	10650.	11977.	11920.	99.6	100.8	
1970	8346.	10694.	12109.	11829.	100.0	100.0	
1971	8405.	11493.	13491.	13306.	107.5	112.5	
1972	8629.	11111.	13074.	12490.	103.9	105.6	
1973	7951.	10924.	12771.	11982.	102.2	101.3	
1974	7827.	10319.	13152.	12213.	96.5	103.2	

Table C.4.1 -- TOTAL OPERATING COST PER BUS MILE

	25TH	75TH			INDEX (1970=100)	
YEAR	PERCENTILE	MEDIAN	PERCENTILE	MEAN	MEDIANS	MEANS
1960	.454	.536	.597	.591	69.9	65.8
1961	.481	.535	.622	.603	69.7	67.2
1962	.483	.539	.640	.617	70.2	68.8
1963	.478	.549	.647	.630	71.6	70.2
1964	.501	.555	.672	.662	72.3	73.7
1965	.522	.577	.687	.683	75.2	76.1
1966	.526	.603	.706	.710	78.6	79.1
1967	.554	.621	.709	.735	81.0	81.9
1968	.580	.638	.766	.774	83.1	86.2
1969	.609	.711	.803	.831	92.7	92.6
1970	.665	.767	.862	.898	100.0	100.0
1971	.730	.795	.912	.974	103.6	108.5
1972	.770	.859	.988	1.066	111.9	118.7
1973	.792	.919	1.091	1.165	119.8	129.8
1974	.872	1.068	1.253	1.319	139.2	147.0

Table C.4.2 -- TOTAL OPERATING COST PER BUS HOUR

	25TH	75TH			INDEX (1970=100)	
YEAR	PERCENTILE	MEDIAN	PERCENTILE	MEAN	MEDIANS	MEANS
1960	5.015	6.083	7.093	7.006	67.9	64.0
1961	5.120	6.179	7.274	7.204	69.0	65.8
1962	5.354	6.266	7.557	7.451	70.0	68.0
1963	5.054	6.453	7.740	7.641	72.1	69.8
1964	5.180	6.531	8.131	7.947	72.9	72.6
1965	5.486	6.894	8.374	8.219	77.0	75.1
1966	5.819	7.099	8.499	8.563	79.3	78.2
1967	6.105	7.353	8.883	8.903	82.1	81.3
1968	6.388	7.916	9.393	9.395	88.4	85.8
1969	6.826	8.447	9.921	10.158	94.4	92.8
1970	7.266	8.952	10.656	10.950	100.0	100.0
1971	7.777	9.605	11.065	11.311	107.3	103.3
1972	8.582	10.277	12.254	13.004	114.8	118.8
1973	9.359	11.614	14.160	14.623	129.7	133.5
1974	10.139	13.792	15.457	16.827	154.1	153.7

Table C.4.3 -- TOTAL OPERATING COST PER PASSENGER

	25TH	75TH -		INDEX (19	INDEX (1970=100)	
YEAR	PERCENTILE	MEDIAN	PERCENTILE	MEAN	MEDIANS	MEANS
1960	.138	.157	.172	.164	59.5	60.6
1961	.143	.159	.185	.171	60.2	63.4
1962	.143	.161	.197	.178	61.1	65.9
1963	.145	.175	.195	.184	66.3	68.0
1964	.155	.178	.218	.189	67.4	70.2
1965	.159	.188	.213	.187	71.3	69.1
1966	.153	.189	.219	.191	71.5	70.7
1967	.168	.199	.250	.201	75.4	74.6
1968	.189	.214	.255	.218	81.1	80.6
1969	.206	.234	.290	.239	88.5	88.4
1970	.218	.264	.320	.270	100.0	100.0
1971	.252	.310	.364	.308	117.4	114.0
1972	.278	.346	.464	.369	131.3	136.7
1973	.308	.371	.457	.411	140.5	152.2
1974	.322	.433	.489	.439	164.3	162.7

Table C.4.4 -- TOTAL OPERATING COST LESS DEPRECIATION AND AMORTIZATION PER BUS MILE

	25TH	75TH			INDEX (19	970=100)
YEAR	PERCENTILE	MEDIAN	PERCENTILE	MEAN	MEDIANS	MEANS
1960	.409	.499	.570	.554	69.1	65.0
1961	.429	.505	.585	.562	70.0	65.9
1962	.448	.492	.593	.575	68.1	67.4
1963	.445	.510	.604	.588	70.7	69.0
1964	.467	.534	.622	.618	74.0	72.5
1965	.479	.554	.644	.639	76.8	74.9
1966	.494	.574	.676	.664	79.5	77.9
1967	.513	.586	.686	.688	81.1	80.7
1968	.541	.625	.718	.726	86.6	85.2
1969	.564	.669	.750	.780	92.6	91.5
1970	.618	.722	.812	.853	100.0	100.0
1971	.681	.772	.861	.930	107.0	109.0
1972	.712	.815	.942	1.021	112.9	119.7
1973	.744	.867	1.035	1.120	120.1	131.3
1974	.859	.987	1.194	1.266	136.7	148.5

Table C.4.5 -- TOTAL OPERATING COST LESS DEPRECIATION AND AMORTIZATION PER BUS HOUR

	25TH	75TH			INDEX (19	INDEX (1970=100)	
YEAR	PERCENTILE	MEDIAN	PERCENTILE	MEAN	MEDIANS	MEANS	
1960	4.585	5.625	6.665	6.575	65.8	63.2	
1961	4.722	5.861	6.833	6.717	68.6	64.6	
1962	4.919	5.891	7.045	6.936	68.9	66.7	
1963	4.676	5.913	7.047	7.130	69.2	68.5	
1964	4.835	6.080	7.404	7.426	71.1	71.4	
1965	5.074	6.297	7.849	7.689	73.7	73.9	
1966	5.346	6.603	7.943	8.021	77.3	77.1	
1967	5.960	6.993	8.189	8.337	81.8	80.1	
1968	5.936	7.501	8.645	8.783	87.8	84.4	
1969	6.337	7.833	9.203	9.536	91.6	91.7	
1970	6.762	8.547	9.925	10.403	100.0	100.0	
1971	7.405	9.029	10.645	10.795	105.6	103.8	
1972	8.248	9.787	12.145	12.457	114.5	119.7	
1973	8.589	11.156	13.588	14.059	130.5	135.1	
1974	10.019	12.982	14.680	16.150	151.9	155.2	

Table C.4.6 -- TOTAL OPERATING COST LESS DEPRECIATION AND AMORTIZATION PER PASSENGER

	25TH	75TH			INDEX (1970=100)	
YEAR	PERCENTILE	MEDIAN	PERCENTILE	MEAN	MEDIANS	MEANS
1960	.130	.143	.169	.154	57.2	59.8
1961	.136	.144	.171	.160	57.9	62.2
1962	.137	.151	.184	.166	60.5	64.5
1963	.141	.160	.189	.171	64.5	66.7
1964	.145	.165	.205	.177	66.3	69.0
1965	.147	.174	.195	.175	69.7	68.0
1966	.145	.180	.210	.179	72.3	69.6
1967	.155	.181	.227	.189	72.7	73.5
1968	.169	.195	.224	.203	78.4	79.2
1969	.198	.214	.271	.224	85.7	87.3
1970	.214	.249	.300	.257	100.0	100.0
1971	.237	.287	.346	.294	115.0	114.5
1972	.261	.323	.441	.354	129.5	137.8
1973	.298	.356	.457	.394	142.9	153.6
1974	.308	.409	.468	.420	164.1	163.8

Table C.4.7 -- TOTAL OPERATING COST LESS DEPRECIATION AND AMORTIZATION PER OWNED BUS

	OFTLI	75TH			INDEX (1970=100)	
YEAR	25TH PERCENTILE	MEDIAN	PERCENTILE	MEAN	MEDIANS	MEANS
1960	13725.	15574.	17443.	18167.	72.5	67.3
1961	13317.	15388.	18180.	18567.	71.6	68.8
1962	13423.	15632.	18853.	19008.	72.8	70.5
1963	13628.	16072.	18660.	19248.	74.8	71.4
1964	13174.	16678.	20230.	19882.	77.6	73.7
1965	13536.	17379.	20794.	21077.	80.9	78.1
1966	13548.	18409.	21803.	22044.	85.7	81.7
1967	14560.	18626.	21952.	22507.	86.7	83.4
1968	15459.	19361.	23436.	23664.	90.1	87.7
1969	14795.	19840.	23644.	25496.	92.3	94.5
1970	17572.	21484.	26411.	26976.	100.0	100.0
1971	16824.	23277.	28133.	29718.	108.3	110.0
1972	16193.	23368.	27566.	31590.	108.8	117.1
1973	18444.	24911.	30314.	34181.	115.9	126.7
1974	21425.	26319.	32939.	35752.	122.5	132.5

Table C.4.8 -- TOTAL OPERATING COST LESS DEPRECIATION AND AMORTIZATION PER ACTIVE BUS

	25TH		75TH			970=100)
YEAR	PERCENTILE	MEDIAN	PERCENTILE	MEAN	MEDIANS	MEANS
1960	14046.	15780.	18369.	19046.	72.9	70.1
1961	13447.	15388.	18180.	18976.	71.1	69.9
1962	13780.	15975.	19217.	19333.	73.8	71.2
1963	13928.	16072.	19013.	19775.	74.2	72.8
1964	13592.	16764.	20492.	20604.	77.4	75.9
1965	13536.	17919.	21029.	21561.	82.8	79.4
1966	13548.	18893.	21866.	22592.	87.3	83.2
1967	14134.	19008.	21952.	22838.	87.8	84.1
1968	15459.	19860.	23771.	24332.	91.7	89.6
1969	15690.	20449.	24665.	25970.	94.5	95.6
1970	17572.	21649.	26658.	27153.	100.0	100.0
1971	17083.	24129.	29408.	30777.	111.5	113.3
1972	18006.	23948.	27566.	32402.	110.6	119.3
1973	19257.	25341.	33976.	36817.	117.1	135.6
1974	22419.	28071.	35267.	37710.	129.7	138.9

Table C.4.9 -- TOTAL OPERATING COST LESS DEPRECIATION AND AMORTIZATION PER EMPLOYEE

	OFT!!		75.7.1			970=100)
YEAR	25TH PERCENTILE	MEDIAN	75TH PERCENTILE	MEAN	MEDIANS	MEANS
1960	6838.	7491.	8113.	7976.	70.0	65.2
1961	6845.	7574.	8078.	8068.	70.8	66.0
1962	7067.	7655.	8154.	8318.	71.6	68.0
1963	7042.	7826.	8456.	8797.	73.2	71.9
1964	7010.	8120.	9128.	9185.	75.9	75.1
1965	7745.	8582.	9557.	9503.	80.2	77.7
1966	7814.	8762.	9772.	9982.	81.9	81.6
1967	8399.	9023.	10109.	10251.	84.4	83.8
1968	8423.	9921.	10971.	10990.	92.8	89.8
1969	8747.	10240.	11324.	11579.	95.8	94.7
1970	9491.	10694.	11874.	12233.	100.0	100.0
1971	10124.	12099.	12958.	14352.	113.1	117.3
1972	10795.	12547.	14068.	15049.	117.3	123.0
1973	10928.	13815.	15091.	16357.	129.2	133.7
1974	12408.	14825.	16794.	17952.	138.6	146.7

Table C.4.10 -- REPAIR COST TO REVENUE EQUIPMENT PER OWNED BUS

	OETH	7ETU		INDEX (1970=100)		
YEAR	25TH PERCENTILE	MEDIAN	75TH PERCENTILE	MEAN	MEDIANS	MEANS
1960	1293.	1630.	2022.	1672.	79.6	72.1
11961	1332.	1599.	2023.	1671.	75.8	72.0
1962	1396	1649.	1951.	1696.	78.2	73.1
1963	1415.	1606.	1992.	1688.	76.1	72.7
1964	1409.	1623.	2087.	1713.	76.9	73.8
1965	1367.	1637.	2021.	1818.	77.6	78.3
1966	1202.	1642.	2115.	1868.	77.8	80.5
1967	1306.	1667.	2065.	1903.	79.0	82.0
1968	1372.	1780.	2210.	1968.	84.3	84.8
1969	1549.	1847.	2476.	2146.	87.5	92.5
1970	1672.	2110.	2253.	2321.	100.0	100.0
1971	1720.	2287.	2988.	2623.	108.4	113.0
1972	1640.	2182.	3028.	2680.	103.4	115.5
1973	1616.	2424.	3190.	2867.	114.9	123.5
1974	1735.	2363.	3290.	2802.	112.0	120.8

Table C.4.11-- REPAIR COSTS TO REVENUE EQUIPMENT PER ACTIVE BUS

	25TH	75TH –		INDEX (1970=100)		
YEAR	PERCENTILE	MEDIAN	PERCENTILE	MEAN	MEDIANS	MEANS
1960	1322.	1731.	2102.	1734.	85.7	74.1
1961	1332.	1592.	2023.	1694.	78.8	72.4
1962	1396.	1649.	1957.	1714.	81.7	73.2
1963	1426.	1628.	2048.	1720.	80.6	73.5
1964	1409.	1638.	2146.	1766.	81.1	75.4
1965	1379.	1637.	2045.	1857.	81.1	79.3
1966	1310.	1650.	2188.	1912.	81.7	81.7
1967	1353.	1651.	2137.	1931.	81.7	82.5
1968	1459.	1780.	2241.	2023.	88.1	86.4
1969	1594.	1890.	2476.	2186.	93.6	93.4
1970	1678.	2020.	2689.	2341.	100.0	100.0
1971	1752.	2290.	3241.	2720.	113.4	116.2
1972	1745.	2413.	2954.	2733.	119.5	116.7
1973	1882.	2608.	3398.	3084.	129.1	131.7
1974	1846.	2455.	3463.	2956.	121.6	126.3

Table C.4.12 -- REPAIR COSTS TO REVENUE EQUIPMENT PER BUS MILE

	25TH	75TH			INDEX (1970=100)	
YEAR	PERCENTILE	MEDIAN	PERCENTILE	MEAN	MEDIANS	MEANS
1960	.043	.052	.065	.052	79.6	70.6
1961	.042	.052	.067	.051	79.6	69.7
1962	.044	.053	.066	.052	80.1	70.9
1963	.046	.054	.062	.053	82.8	71.7
1964	.046	.056	.066	.054	84.7	73.2
1965	.046	.053	.067	.055	81.0	75.2
1966	.044	.054	.069	.057	83.0	77.2
1967	.046	.057	.071	.058	86.5	79.3
1968	.046	.061	.072	.060	93.1	82.4
1969	.052	.062	.080	.066	95.1	89.5
1970	.054	.066	.083	.073	100.0	100.0
1971	.058	.072	.091	.082	110.6	111.9
1972	.060	.079	.101	.087	120.6	118.1
1973	.068	.083	.113	.094	126.5	128.0
1974	.070	.092	.119	.099	140.5	135.3

Table C.4.13 -- TOTAL EQUIPMENT MAINTENANCE AND GARAGE EXPENSE PER OWNED BUS (Sample of 50 Bus Properties, 1960 - 1974)

	25TH		75TH			INDEX (1970=100)	
YEAR	PERCENTILE	MEDIAN	PERCENTILE	MEAN	MEDIANS	MEANS	
1960	2380.	2887.	3244.	2990.	77.3	68.9	
1961	2370.	2797.	3199.	3006.	74.9	69.3	
1962	2285.	2880.	3238.	3088.	77.1	71.2	
1963	2371.	2857.	3169.	3036.	76.5	70.0	
1964	2348.	2913.	3211.	3053.	78.0	70.4	
1965	2417.	2903.	3205.	3280.	77.7	75.6	
1966	2212.	2920.	3636.	3353.	78.2	77.3	
1967	2604.	3149.	3596.	3499.	84.3	80.7	
1968	2830.	3295.	3883.	3592.	88.3	85.1	
1969	2860.	3438.	4222.	4127.	92.1	95.1	
1970	3002.	3734.	4386.	4338.	100.0	100.0	
1971	3148.	4191.	4798.	4844.	112.2	111.7	
1972	3119.	4214.	5221.	5353.	112.9	123.4	
1973	3471.	4457.	5480.	5783.	119.4	133.3	
1974	3641.	4676.	5964.	5798.	125.2	133.7	

Table C.4.14 -- TOTAL EQUIPMENT MAINTENANCE AND GARAGE EXPENSE PER ACTIVE BUS

(Sample of 50 Bus Properties, 1960 - 1974)

	25TH	75TH		INDEX (1970=100)		
YEAR	PERCENTILE	MEDIAN	PERCENTILE	MEAN	MEDIANS	MEANS
1960	2380.	2919.	3418.	3106.	77.3	71.9
1961	2370.	2779.	3207.	3049.	73.5	70.6
1962	2285.	2896.	3345.	3124.	76.6	72.3
1963	2371.	2888.	3328.	3095.	76.4	71.6
1964	2349.	2994.	3287.	3148.	79.2	72.9
1965	2473.	2978.	3213.	3353.	78.8	77.6
1966	2493.	3000.	3732.	3434.	79.4	79.5
1967	2662.	3126.	3596.	3551.	82.7	82.2
1968	2851.	3295.	3911.	3795.	87.2	87.8
1969	2921.	3438.	4231.	4211.	91.0	97.5
1970	3006.	3779.	4386.	4320.	100.0	100.0
1971	3199.	4191.	4962.	4962.	110.9	114.9
1972	3435.	4403.	5115.	5515.	116.5	127.7
1973	3828.	4641.	5567.	6201.	122.8	143.5
1974	3828.	4802.	6235.	6110.	127.1	141.4

Table C.4.15 -- TOTAL EQUIPMENT MAINTENANCE AND GARAGE EXPENSE PER BUS MILE (Sample of 50 Bus Properties, 1960 - 1974)

	25TH		75 TH			INDEX (1970=100)	
YEAR	PERCENTILE	MEDIAN	PERCENTILE	MEAN	MEDIANS	MEANS	
1960	.078	.088	.104	.093	69.1	67.5	
1961	.077	.090	.107	.092	70.8	67.1	
1962	.079	.089	.106	.095	69.5	69.0	
1963	.081	.089	.108	.095	69.8	69.0	
1964	.080	.092	.114	.096	71.7	69.8	
1965	.079	.093	.111	.099	73.1	72.6	
1966	.079	.092	.117	.102	72.1	74.1	
1967	.085	.104	.118	.107	81.4	78.0	
1968	.086	.105	.132	.113	81.8	82.2	
1969	.097	.115	.142	.126	90.1	92.1	
1970	.107	.128	.150	.137	100.0	100.0	
1971	.116	.131	.160	.152	102.2	110.5	
1972	.125	.146	.185	.174	113.9	126.6	
1973	.129	.159	.203	.190	124.7	138.7	
1974	.149	.183	.211	.206	143.1	150.1	

Table C.4.16 -- DRIVERS AND HELPERS WAGES PER BUS MILE

	25TH	75TH		INDEX (19	970=100)	
YEAR	PERCENTILE	MEDIAN	PERCENTILE	MEAN	MEDIANS	MEANS
1960	.189	.213	.241	.239	64.0	61.2
1961	.191	.210	.247	.245	63.4	62.6
1962	.200	.225	.265	.253	67.7	64.8
1963	.203	.235	.269	.260	70.9	66.5
1964	.207	.241	.279	.268	72.7	68.6
1965	.213	.253	.292	.287	76.3	73.3
1966	.223	.261	.298	.298	78.8	76.3
1967	.229	.271	.311	.312	81.8	79.8
1968	.241	.291	.334	.333	87.7	85.1
1969	.260	.310	.357	.360	93.5	92.2
1970	.281	.332	.389	.391	100.0	100.0
1971	.309	.353	.427	.428	106.4	109.4
1972	.338	.387	.450	.467	116.6	119.5
1973	.356	.428	.498	.509	129.0	130.3
1974	.371	.477	.579	.557	143.7	142.5

Table C.4.17-- DRIVERS AND HELPERS WAGES PER BUS HOUR

	25TU		75 TU		INDEX (19	970=100)
YEAR	25TH PERCENTILE	MEDIAN	75TH PERCENTILE	MEAN	MEDIANS	MEANS
1960	2.036	2.455	2.935	2.833	63.2	59.5
1961	2.063	2.493	2.951	2.913	64.1	61.1
1962	2.131	2.623	3.084	3.045	67.5	63.9
1963	2.174	2.648	3.157	3.136	68.1	65.8
1964	2.196	2.724	3.256	3.226	70.1	67.7
1965	2.334	2.858	3.370	3.449	73.5	72.4
1966	2.526	2.957	3.543	3.596	76.1	75.5
1967	2.724	3.217	3.696	3.770	82.8	79.1
1968	2.910	3.419	3.888	4.025	88.0	84.5
1969	3.084	3.616	4.191	4.389	93.0	92.1
1970	3.372	3.887	4.565	4.764	100.0	100.0
1971	3.607	4.244	4.829	4.953	109.2	104.0
1972	3.905	4.574	5.645	5.644	117.7	118.5
1973	4.171	4.964	6.319	6.318	127.7	132.6
1974	4.432	5.869	6.561	7.032	151.0	147.6

Table C.5.1 -- LINE SERVICE REVENUE PASSENGERS AS A PERCENT OF TOTAL PASSENGERS (Sample of 50 Bus Properties, 1960 - 1974)

	OFTLI		75711		INDEX (19	970=100)
YEAR	25TH PERCENTILE	MEDIAN	75TH PERCENTILE	MEAN	MEDIANS	MEANS
1960	79.189	82.567	87.476	80.712	99.1	105.2
1961	77.994	82.373	86.235	80.773	98.9	105.2
1962	78.443	82.347	87.444	80.606	98.9	105.0
1963	77.896	82.068	87.140	80.236	98.5	104.5
1964	77.224	82.274	87.384	79.992	98.8	104.2
1965	77.761	83.102	87.810	78.193	99.8	101.9
1966	77.010	82.707	87.252	77.811	99.3	101.4
1967	77.487	82.969	87.583	77.943	99.6	101.6
1968	77.925	84.221	89.218	80.388	101.1	104.7
1969	76.925	83.853	90.409	78.023	100.7	101.7
1970	78.370	83.282	89.485	76.750	100.0	100.0
1971	78.726	83.039	88.180	78.320	99.7	102.0
1972	78.316	84.239	89.220	79.042	101.1	103.0
1973	77.832	82.796	87.947	77.913	99.4	101.5
1974	78.623	83.861	90.861	76.951	100.7	100.3

Table C.5.2 -- CHARTER PASSENGERS AS A PERCENT OF TOTAL PASSENGERS
(Sample of 50 Bus Properties, 1960 - 1974)

25TH			75TH			INDEX (1970=100)	
YEAR	PERCENTILE	MEDIAN	PERCENTILE	MEAN	MEDIANS	MEANS	
1960	.512	2.091	3.289	1.696	249.3	70.5	
1961	.547	2.091	6.066	1.885	249.3	78.4	
1962	.581	2.661	6.338	2.083	317.2	86.6	
1963	.520	3.041	7.055	2.182	362.6	90.8	
1964	.602	3.016	5.823	2.221	359.6	92.4	
1965	.801	1.374	4.018	2.273	163.8	94.5	
1966	.948	1.577	4.604	2.391	188.1	99.5	
1967	.614	1.136	3.928	1.923	135.4	80.0	
1968	.520	1.291	4.303	2.385	154.0	99.2	
1969	.480	1.185	4.649	2.481	141.2	103.2	
1970	.310	.839	4.805	2.404	100.0	100.0	
1971	.494	.955	10.777	2.002	113.8	83.3	
1972	.645	1.159	4.431	6.219	138.2	258.6	
1973	.499	1.167	4.385	1.073	139.1	44.6	
1974	.500	1.167	4.569	2.002	139.1	83.3	

Table C.5.3 -- TOTAL PASSENGERS CARRIED PER ROUTE MILE (ONE WAY)

	25TU		75TH -			INDEX (1970=100)	
YEAR	25TH PERCENTILE	MEDIAN	PERCENTILE	MEAN	MEDIANS	MEANS	
1960	60284.	102255.	130452.	131412.	175.2	151.3	
1961	56179.	97827.	126043.	122460.	167.6	141.0	
1962	57041.	96803.	120213.	121883.	165.9	140.3	
1963	52688.	80528.	112031.	108957.	138.0	125.4	
1964	48947.	87804.	106556.	105481.	150.4	121.4	
1965	47144.	75534.	110099.	117054.	129.4	134.8	
1966	48806.	78871.	104457.	117536.	135.1	135.3	
1967	48017.	76544.	105421.	117041.	131.2	134.7	
1968	45871.	71555.	103799.	112566.	122.6	129.6	
1969	47426.	63687.	99085.	103922.	109.1	119.6	
1970	34289.	58363.	89698.	86862.	100.0	100.0	
1971	34934.	57271.	81745.	87216.	98.1	100.4	
1972	30508.	56264.	82735.	79041.	96.4	91.0	
1973	27952.	48953.	67291.	69391.	83.9	79.9	
1974	27042.	40748.	56857.	55061.	69.8	63.4	

Table C.5.4 -- TOTAL PASSENGERS CARRIED PER ACTIVE BUS

	25TU		75TH -			INDEX (1970=100)	
YEAR	25TH PERCENTILE	MEDIAN	PERCENTILE	MEAN	MEDIANS	MEANS	
1960	93459.	114354.	129688.	123927.	134.8	116.4	
1961	86849.	108329.	124735.	119053.	127.7	111.8	
1962	93668.	104822.	124646.	117841.	123.6	110.6	
1963	89404.	108384.	120797.	116001.	127.7	108.9	
1964	85600.	104011.	119936.	115679.	122.6	108.6	
1965	74511.	100973.	126143.	123033.	119.0	115.5	
1966	73444.	101444.	133948.	125274.	119.6	117.6	
1967	69645.	98386.	121079.	121211.	116.0	113.8	
1968	69455.	97318.	120797.	119614.	114.7	112.3	
1969	65568.	90033.	112184.	115990.	106.1	108.9	
1970	57594.	84842.	99617.	106501.	100.0	100.0	
1971	58524.	78556.	106443.	105870.	92.6	99.4	
1972	53309.	75177.	88951.	98120.	88.6	92.1	
1973	55376.	72786.	98543.	96229.	85.8	90.4	
1974	53557.	67917.	86496.	90447.	80.1	84.9	

Table C.5.5 -- TOTAL PASSENGERS CARRIED PER BUS MILE

	25TU	75711			INDEX (1970=100)	
YEAR	25TH PERCENTILE	MEDIAN	75TH PERCENTILE	MEAN	MEDIANS	MEANS
1960	2.930	3.477	4.241	3.680	123.5	110.6
1961	2.798	3.426	4.142	3.575	121.7	107.5
1962	2.764	3.320	4.123	3.557	117.9	107.0
1963	2.671	3.366	4.006	3.521	119.6	105.9
1964	2.558	3.273	3.941	3.492	116.2	105.0
1965	2.508	3.180	4.088	3.649	112.9	109.7
1966	2.560	3.285	4.106	3.708	116.6	111.5
1967	2.485	3.181	3.950	3.650	113.0	109.7
1968	2.540	3.203	3.837	3.571	113.7	107.4
1969	2.384	2.894	3.694	3.482	102.8	104.7
1970	2.215	2.816	3.470	3.326	100.0	100.0
1971	1.990	2.558	3.314	3.168	90.9	95.3
1972	1.907	2.428	3.066	3.048	86.2	91.6
1973	1.833	2.382	3.032	2.913	84.6	87.6
1974	1.978	2.391	3.047	3.049	84.9	91.7

Table C.5.6 -- TOTAL PASSENGERS CARRIED PER BUS HOUR

	OFTLI		7571			INDEX (1970=100)	
YEAR	25TH PERCENTILE	MEDIAN	75TH PERCENTILE	MEAN	MEDIANS	MEANS	
1960	34.349	40.534	46.866	43.581	127.4	107.7	
1961	34.725	41.426	45.512	42.659	130.3	105.4	
1962	34.250	40.826	45.313	42.831	128.4	105.8	
1963	31.711	40.424	44.805	42.550	127.1	105.1	
1964	29.026	38.308	44.317	42.098	120.5	104.0	
1965	30.472	37.558	46.974	44.106	118.1	109.0	
1966	29.940	38.541	49.048	44.899	121.2	110.9	
1967	30.344	38.795	47.882	44.305	122.0	109.4	
1968	29.654	37.226	44.080	43.232	117.0	106.8	
1969	27.167	34.226	42.865	42.551	107.6	105.1	
1970	24.393	31.804	39.716	40.480	100.0	100.0	
1971	24.416	30.661	35.824	36.782	96.4	90.9	
1972	23.238	29.564	35.746	36.822	93.0	91.0	
1973	22.917	30.190	36.168	36.039	94.9	89.0	
1974	25.218	29.804	37.457	38.302	93.7	94.6	

Table C.5.7 -- TOTAL PASSENGERS CARRIED PER EMPLOYEE

	OETU.		75TH -		INDEX (1970=100)	
YEAR	25TH PERCENTILE	MEDIAN	PERCENTILE	MEAN	MEDIANS	MEANS
1960	43339.	50850.	60498.	50470.	121.0	98.5
1961	41261.	50061.	55706.	48536.	119.1	94.8
1962	41541.	48253.	55398.	48447.	114.8	94.6
1963	40678.	48272.	55006.	51351.	114.8	100.3
1964	38747.	48125.	59505.	51964.	114.5	101.5
1965	38364.	46525.	62781.	54313.	110.7	106.1
1966	39560.	48012.	65186.	55760.	114.2	108.9
1967	37988.	48375.	63654.	54240.	115.1	106.0
1968	38990.	48486.	63047.	54264.	115.3	106.0
1969	34992.	43109.	57694.	55336.	102.6	108.1
1970	31167.	42034.	52711.	51194.	100.0	100.0
1971	31539.	40289.	52657.	52744.	95.9	103.0
1972	28057.	38532.	46708.	45280.	91.7	88.4
1973	26056.	38200.	41598.	38774.	90.9	75.7
1974	28437.	35809.	44025.	38296.	85.2	74.8

Table C.6.1 -- TOTAL BUS MILES PER GALLON OF DIESEL FUEL

	25TH	75TH			INDEX (1970=100)	
YEAR	PERCENTILE	MEDIAN	PERCENTILE	MEAN	MEDIANS	MEANS
1960	4.625	5.428	6.243	5.342	119.0	119.3
1961	4.631	5.237	6.017	5.052	114.9	112.8
1962	4.532	4.946	5.785	4.901	108.5	109.4
1963	4.483	5.069	5.720	4.847	111.2	108.2
1964	4.431	4.879	5.700	4.791	107.0	107.0
1965	4.411	4.701	5.622	4.684	103.1	104.6
1966	4.317	4.763	5.454	4.630	104.5	103.4
1967	4.278	4.722	5.621	4.582	103.6	102.3
1968	4.174	4.654	5.521	4.553	102.1	101.7
1969	4.157	4.582	5.149	4.380	100.5	97.8
1970	4.138	4.559	5.314	4.478	100.0	100.0
1971	4.188	4.510	5.089	4.438	98.9	99.1
1972	4.187	4.510	5.038	4.352	98.9	97.2
1973	4.110	4.382	5.026	4.262	96.1	95.2
1974	3.868	4.300	4.855	4.073	94.3	91.0

Table C.6.2 -- DIESEL FUEL COST PER GALLON OF DIESEL FUEL

	25TH	75TH			INDEX (1970=100)	
YEAR	PERCENTILE	MEDIAN	PERCENTILE	MEAN	MEDIANS	MEANS
1960	.097	.102	.119	.099	89.0	86.1
1961	.100	.108	.120	.103	93.9	89.5
1962	.097	.102	.120	.100	89.5	86.4
1963	.095	.102	.117	.098	89.2	84.7
1964	.090	.096	.109	.093	83.8	80.7
1965	.091	.096	.106	.095	83.4	82.4
1966	.095	.098	.106	.098	85.9	84.9
1967	.100	.105	.109	.105	91.9	90.7
1968	.105	.110	.115	.111	96.3	95.9
1969	.106	.115	.121	.126	100.6	109.4
1970	.109	.115	.125	.115	100.0	100.0
1971	.112	.118	.125	.118	102.9	102.0
1972	.114	.120	.129	.129	104.6	112.1
1973	.132	.145	.173	.157	126.6	136.2
1974	.197	.249	.305	.256	217.4	221.6

Table C.6.3 -- DIESEL FUEL COST PER BUS MILE

	25TU	75TH			INDEX (1970=100)	
YEAR	25TH PERCENTILE	MEDIAN	PERCENTILE	MEAN	MEDIANS	MEANS
1960	.016	.019	.023	.018	76.0	69.4
1961	.017	.020	.024	.020	79.8	76.2
1962	.017	.021	.024	.020	80.3	75.9
1963	.018	.021	.024	.020	81.6	76.2
1964	.016	.019	.022	.019	75.6	75.1
1965	.017	.020	.022	.020	79.8	78.6
1966	.018	.021	.023	.021	83.3	82.3
1967	.018	.022	.025	.023	87.2	88.8
1968	.020	.024	.026	.024	94.0	94.6
1969	.021	.025	.027	.025	97.5	97.9
1970	.019	.026	.028	.026	100.0	100.0
1971	.022	.025	.028	.026	98.9	102.9
1972	.023	.027	.029	.030	104.4	115.5
1973	.026	.033	.037	.037	130.1	143.3
1974	.041	.060	.075	.063	234.3	244.2

Table C.6.4 -- DIESEL FUEL GALLONS PER BUS MILE

	25TH	75TH			INDEX (1970=100)	
YEAR	PERCENTILE	MEDIAN	PERCENTILE	MEAN	MEDIANS	MEANS
1960	.155	.181	.216	.181	85.7	81.4
1961	.162	.190	.213	.191	90.2	86.0
1962	.162	.192	.217	.197	91.2	88.7
1963	.168	.195	.222	.202	92.6	90.9
1964	.168	.197	.226	.207	93.6	93.0
1965	.173	.208	.227	.212	98.9	95.4
1966	.181	.210	.232	.216	99.6	97.1
1967	.168	.212	.234	.218	100.5	98.0
1968	.181	.215	.240	.219	102.0	98.6
1969	.163	.210	.241	.199	99.7	89.6
1970	.168	.211	.242	.222	100.0	100.0
1971	.175	.219	.239	.225	103.8	100.9
1972	.197	.222	.239	.229	105.2	103.0
1973	.198	.228	.243	.234	108.3	105.3
1974	.204	.233	.259	.245	110.4	110.2

Table C.6.5 -- DIESEL FUEL GALLONS PER BUS HOUR

	OETLI	75TH			INDEX (1970=100)	
YEAR	25TH PERCENTILE	MEDIAN	PERCENTILE	MEAN	MEDIANS	MEANS
1960	1.783	1.928	2.298	2.121	76.2	78.1
1961	1.889	2.088	2.385	2.258	82.5	83.1
1962	1.953	2.234	2.475	2.353	88.3	86.6
1963	1.959	2.283	2.509	2.421	90.2	89.2
1964	1.920	2.358	2.553	2.489	93.2	91.6
1965	2.043	2.442	2.627	2.550	96.5	93.9
1966	2.106	2.466	2.680	2.598	97.4	95.6
1967	2.208	2.444	2.705	2.634	96.6	97.0
1968	2.278	2.459	2.750	2.657	97.2	97.8
1969	2.142	2.526	2.791	2.430	99.8	89.5
1970	2.172	2.530	2.855	2.716	100.0	100.0
1971	2.217	2.440	2.807	2.605	96.4	95.9
1972	2.313	2.537	2.884	2.768	100.3	101.9
1973	2.334	2.758	2.992	2.903	109.0	106.9
1974	2.529	2.937	3.223	3.095	116.0	114.0

Table C.6.6 -- DIESEL FUEL GALLONS PER PASSENGER

	OETLI	75TH			INDEX (1970=100)	
YEAR	25TH PERCENTILE	MEDIAN	PERCENTILE	MEAN	MEDIANS	MEANS
1960	.055	.063	.074	.064	76.0	87.0
1961	.055	.060	.072	.064	73.1	87.9
1962	.053	.063	.071	.062	76.3	84.2
1963	.055	.064	.073	.063	78.0	86.5
1964	.056	.068	.075	.066	82.7	89.6
1965	.060	.069	.079	.066	83.9	90.1
1966	.059	.071	.079	.067	86.1	91.0
1967	.061	.072	.080	.066	88.0	90.4
1968	.061	.073	.083	.068	89.0	92.8
1969	.064	.077	.089	.067	94.1	92.2
1970	.070	.082	.091	.073	100.0	100.0
1971	.071	.084	.097	.077	102.2	105.2
1972	.078	.091	.106	.082	110.4	112.3
1973	.081	.094	.107	.086	114.2	117.6
1974	.080	.091	.109	.085	110.2	116.3

Table C.7.1 -- BUS MILES PER OWNED BUS

(Sample of 50 Bus Properties, 1960 - 1974)

	25TH	75TH			INDEX (1970=100)	
YEAR	PERCENTILE	MEDIAN	PERCENTILE	MEAN	MEDIANS	MEANS
1960	27869.	31801.	34294.	32335.	104.4	102.2
1961	27676.	31625.	33876.	32702.	103.8	103.3
1962	27608.	30989.	35034.	32712.	101.7	103.4
1963	26517.	30155.	34778.	32215.	99.0	101.8
1964	26379.	29941.	34115.	32054.	98.3	101.3
1965	26399.	31588.	34142.	32977.	103.7	104.2
1966	27070.	31906.	35182.	32995.	104.7	104.3
1967	24612.	30907.	34472.	32730.	101.4	103.4
1968	26433.	30829.	35575.	32585.	101.2	103.0
1969	25608.	30871.	34255.	32685.	101.3	103.3
1970	24602.	30467.	33173.	31642.	100.0	100.0
1971	24301.	30251.	34205.	31969.	99.3	101.0
1972	23550.	28665.	33623.	30880.	94.1	97.6
1973	22396.	29009.	33377.	30450.	95.2	96.2
1974	22502.	27220.	31095.	28212.	89.3	89.2

Table C.7.2 -- BUS MILES PER ACTIVE BUS

	25TH	75TH			INDEX (1970=100)	
YEAR	PERCENTILE	MEDIAN	PERCENTILE	MEAN	MEDIANS	MEANS
1960	29453.	33244.	35226.	33744.	109.1	104.8
1961	28959.	31662.	34117.	33344.	103.9	103.6
1962	28762.	31910.	35345.	33209.	104.7	103.2
1963	26999.	31926.	35241.	32965.	104.8	102.4
1964	28099.	31871.	35942.	33124.	104.6	102.9
1965	28276.	31588.	35274.	33705.	103.7	104.7
1966	27451.	31906.	36797.	33778.	104.7	104.9
1967	26195.	30966.	35440.	33211.	101.6	103.2
1968	26433.	30998.	36244.	33491.	101.7	104.0
1969	25608.	31397.	34543.	33292.	103.1	103.4
1970	25325.	30467.	34317.	32190.	100.0	100.0
1971	24323.	30989.	35850.	33471.	101.7	104.0
1972	23946.	30436.	35338.	32227.	99.9	100.1
1973	23591.	39492.	36031.	32651.	96.8	101.4
1974	23932.	28469.	31803.	29724.	93.4	92.3

Table C.7.3 -- BUS MILES PER EMPLOYEE

	25TH	75TH		INDEX (1970=100)		
YEAR	PERCENTILE	MEDIAN	PERCENTILE	MEAN	MEDIANS	MEANS
1960	13719.	14989.	16758.	14771.	100.5	101.7
1961	12889.	14981.	16278.	14728.	100.5	101.4
1962	12806.	14827.	16415.	14811.	99.5	102.0
1963	12919.	15071.	15906.	14959.	101.1	103.0
1964	12868.	14972.	16281.	14839.	100.4	102.2
1965	12893.	14485.	16703.	14899.	103.9	102.6
1966	13585.	15257.	16701.	15027.	102.3	103.5
1967	13432.	15426.	17114.	14906.	103.5	102.7
1968	13539.	15600.	17310.	15127.	104.6	104.2
1969	13432.	15981.	17557.	15017.	107.2	103.4
1970	13384.	14907.	16330.	14521.	100.0	100.0
1971	13222.	15417.	16889.	15642.	103.4	107.7
1972	13190.	15130.	16569.	14979.	101.5	103.2
1973	13628.	14959.	16111.	14897.	100.3	102.6
1974	13610.	14720.	16354.	14182.	98.7	97.7

Table C.7.4 -- BUS MILES PER ROUTE MILE (ONE WAY)

	25TH		75TH -		INDEX (1970=100)	
YEAR	PERCENTILE	MEDIAN	PERCENTILE	MEAN	MEDIANS	MEANS
1960	18765.	31603.	37655.	35737.	153.9	139.6
1961	18258.	26637.	35765.	34144.	129.7	133.4
1962	17700.	26217.	36991.	34183.	127.7	133.5
1963	16625.	27968.	32029.	31596.	136.2	123.4
1964	16876.	28314.	31676.	30931.	137.9	120.8
1965	17100.	26991.	31065.	31366.	131.4	122.5
1966	18088.	25929.	31508.	31172.	126.3	121.8
1967	17574.	24833.	32271.	31392.	120.9	122.6
1968	17559.	24493.	29117.	30745.	119.3	120.1
1969	17297.	23742.	28392.	29239.	115.6	114.2
1970	14902.	20537.	27117.	25598.	100.0	100.0
1971	16511.	23152.	26374.	26952.	112.7	105.3
1972	16989.	21745.	25811.	25213.	105.9	98.5
1973	13363.	20504.	24603.	23298.	99.8	91.0
1974	11176.	16180.	22400.	17945.	78.8	70.1

Table C.7.5 -- BUS MILES PER BUS HOUR

	25TU		7ETU		INDEX (1970=100)	
YEAR	25TH PERCENTILE	MEDIAN	75TH PERCENTILE	MEAN	MEDIANS	MEANS
1960	10.443	11.077	12.244	11.723	93.0	96.2
1961	10.409	11.260	12.340	11.785	94.5	96.8
1962	10.412	11.270	12.364	11.889	94.6	97.6
1963	10.473	11.330	12.436	11.958	95.1	98.2
1964	10.352	11.392	12.444	11.982	95.6	98.4
1965	10.628	11.491	12.557	11.980	96.5	98.4
1966	10.835	11.610	12.674	12.002	97.5	98.5
1967	11.009	11.690	12.869	12.033	98.2	98.8
1968	10.667	11.661	12.746	12.063	97.9	99.0
1969	10.489	11.726	12.909	12.118	98.5	99.5
1970	10.497	11.910	12.941	12.180	100.0	100.0
1971	10.546	11.572	12.774	11.575	97.2	95.0
1972	10.853	11.945	12.802	12.051	100.3	98.9
1973	10.958	12.162	12.895	12.382	102.1	101.7
1974	11.174	12.304	13.319	12.615	103.3	103.6

Table C.7.6 -- BUS IN BASE SCHEDULE AS A PERCENT OF BUSES IN PEAK SCHEDULE

	25TH	75TH		INDEX (1970=100)		
YEAR	PERCENTILE	MEDIAN	PERCENTILE	MEAN	MEDIANS	MEANS
1960	37.795	45.185	63.793	55.084	101.7	107.7
1961	38.547	44.444	62.712	55.588	100.0	108.7
1962	36.364	42.353	65.517	53.619	95.3	104.9
1963	34.783	42.009	67.568	53.109	94.5	103.9
1964	34.835	41.667	64.407	52.459	93.7	102.6
1965	33.962	45.320	64.407	51.981	102.0	101.7
1966	35.652	45.588	63.441	52.003	102.6	101.7
1967	34.746	45.455	62.457	52.879	102.3	103.4
1968	34.630	42.647	59.873	52.573	96.0	102.8
1969	34.545	42.857	57.558	51.594	96.4	100.9
1970	35.000	44.444	60.577	51.133	100.0	100.0
1971	33.010	45.133	68.293	50.150	101.5	98.1
1972	35.294	49.315	66.667	50.653	111.0	99.1
1973	34.783	45.862	64.984	48.942	103.2	95.7
1974	37.272	48.615	59.259	49.777	109.4	97.3

Table C.7.7 -- EMPLOYEES PER BUS

	25TH	75TH		INDEX (1970=100)		
YEAR	PERCENTILE	MEDIAN	PERCENTILE	MEAN	MEDIANS	MEANS
1960	1.808	2.096	2.329	2.314	104.6	108.9
1961	1.808	2.050	2.300	2.297	102.3	108.2
1962	1.870	2.091	2.287	2.278	104.3	107.2
1963	1.886	2.066	2.300	2.242	103.1	105.5
1964	1.778	2.057	2.338	2.244	102.6	105.6
1965	1.739	2.053	2.238	2.262	102.5	106.5
1966	1.667	2.084	2.271	2.258	104.0	106.3
1967	1.744	2.050	2.221	2.223	102.3	104.7
1968	1.747	2.041	2.255	2.210	101.8	104.1
1969	1.578	1.949	2.188	2.170	97.2	102.2
1970	1.712	2.004	2.186	2.124	100.0	100.0
1971	1.625	2.060	2.231	2.003	102.8	94.3
1972	1.706	1.892	2.112	2.047	94.4	96.4
1973	1.609	1.946	2.163	2.156	97.1	101.5
1974	1.667	1.875	2.101	2.101	93.5	98.9

Table C.7.8 -- BUS HOURS PER ACTIVE BUS PER DAY

OFTIL			75711		INDEX (1970=100)	
YEAR	25TH PERCENTILE	MEDIAN	75TH PERCENTILE	MEAN	MEDIANS	MEANS
1960	3.293	3.540	4.524	3.445	99.9	103.9
1961	3.229	3.498	4.336	3.412	98.7	102.9
1962	3.164	3.413	3.973	3.401	96.3	102.6
1963	3.215	3.533	4.130	3.390	99.7	102.2
1964	3.188	3.545	4.364	3.389	100.0	102.2
1965	3.196	3.499	3.837	3.393	98.7	102.3
1966	3.209	3.445	3.791	3.417	97.2	103.0
1967	3.233	3.393	3.821	3.376	95.7	101.8
1968	3.240	3.599	4.037	3.438	101.6	103.7
1969	3.227	3.528	4.244	3.428	99.6	103.4
1970	3.169	3.543	4.190	3.316	100.0	100.0
1971	3.152	3.525	4.252	3.812	99.5	115.0
1972	3.072	3.393	3.771	3.446	95.7	103.9
1973	3.020	3.360	3.662	3.319	94.8	100.1
1974	2.912	3.201	3.510	3.050	90.3	92.0

APPENDIX D

TECHNICAL NOTES

APPENDIX D

TECHNICAL NOTES

DATA SOURCE

The basic data used in this report were obtained from the American Public Transit Association reporting system. This is a voluntary annual reporting system administered by APTA and usually involves over 100 properties. The Association processes the individual reports sent in by the participants and publishes the data in an annual report. Distribution is limited to the participants and the membership on request. The data from these reports for the period 1960 - 1974 were placed on magnetic tapes by the Department of Transportation and the specific data needed for this report extracted (see Table D-1).

DATA ADJUSTMENTS

Three types of adjustments were made.

First, because APTA has used three financial reporting systems during the period (ICC, ATA, and FARE), it was necessary to consolidate the data into a single framework. In this case the ICC system was used because most of the properties reported on this basis. Although the various systems do not map into one another directly, most of the detailed accounts are compatible, as are Total Expenses and Total Expenses Less Depreciation and Amortization. Lack of comparability occurs primarily in the subtotal accounts, i.e., lines 4, 7, and 12 in Table D-1. All operating variables are comparable (lines 32-52).

Second, APTA changed the format of the annual report in 1972, 1973, and 1974. Fortunately, the detail was not lost, and it was possible to reorganize the data into the 1972 format. Some judgment was required in re-classifying the accounts, but this should not be a major source of error.

Third, because some of the properties did not report every year or failed to report specific items in a particular year, it was necessary to estimate missing values. These missing values were estimated by linear interpolations between adjacent years. If more than two consecutive years were missing, no interpolation was made; and the particular variable was excluded from the analysis by the process described in the next section. Missing 1974 values were replaced by 1973 values. This interpolation procedure is recognized to be rather crude; however, the data base per se is not precise enough to warrant more sophisticated procedures.

The net effect of these adjustments and the general quality of the data base is to place limitations on the claims that can be made as to the precision of any <u>particular</u> sample estimate. Moreover, the degree of precision cannot be estimated. However, as a practical matter, the estimates of the percentiles, medians, and means are accurate enough to reflect the general historical trends in the particular variables.

CALCULATION METHODS

To obtain the 25th percentiles, medians, and 75th percentiles, each of the variables and ratios was ordered from lowest to highest value for each year. Each ordered array was examined for invalid values, i.e., zero values because of missing numerators or denominators and extremely low or high values caused by bad data. After the ordered arrays were purged of invalid values, the 25th percentiles, medians, and 75th percentiles were obtained by determining the values 1/4, 1/2, and 3/4 of the way up the arrays, respectively. The arithmetic means were calculated from the totals of the numerators and denominators of the same data set. Thus, all measures represent the same data set for a given year.

A result of this procedure is that the number of observations for a particular variable in a given year can be less than 50. In no case were there less than 30 observations in a given year. The 1966 to 1974 period averaged about 48 observations per year. The 1960 to 1965 time period averaged about 40 observations per year. This can account for some of the large year-to-year variations in the earlier years, but the overall trends should not be affected.

Table D-1 LIST OF VARIABLES USED IN THE ANALYSIS

1. Total Operating Revenue 2. Passenger 3. Charter 4. Equip., Maint. & Garage - Total Repairs to Revenue Equipment 5. 6. Tires & Tubes 7. Transportation - Total Drivers', Helpers' Wages, Etc. 8. 9. Diesel Fuel (Ex. Taxes) Other Fuel (Ex. Taxes) 10. Lubricating Oil (Ex. Taxes) 11. 12. Station - Total 13. Traffic, Advertising - Total Insurance & Safety - Total 14. 15. Injuries & Damages 16. Administrative & General - Total 17. Depreciation 18. Amortization Chargeable to Operations 19. Operating Taxes and Licenses 20. Operating Rents - Net 21. Total Operating Expense 32. Route Miles - One Way 33. Route Miles - Round Trip 34. Buses Owned 35. Buses Active 36. Buses in Peak Schedule 37. Buses in Base Schedule 38. Number of Employees - Average Bus Miles - Total 39. 40. Diesel Bus Miles Operated 41. Other Fuel Bus Miles Operated 42. Bus Hours - Total 43. Diesel Fuel Consumed - Gallons 44. Other Fuel Consumed - Gallons 45. Lubricating Oil Consumed - Gallons 46. Passengers Carried - Total 51. Revenue Passengers - Line Service 52. Charter Passengers