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An extensive amount of financial and operational data on the public transit systems of Texas is presently being published by a variety of governmental agencies and industry associations. However, the manner in which much of this data is collected and published reduces its potential usefulness to transit operators and planning agencies. In response to this problem, standard transit system profiles are developed for the eighteen municipal systems of Texas. The transit system profiles were intended to include a range of financial, operational and performance variables in order to provide an overview of each system's characteristics. The development of these profiles will allow transit operators and planning agencies to: 1) monitor trends and evaluate changes in a transit system's performance over time; and 2) compare the financial and operational performance of one agency with that of similar operations in the state.

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THE DEVELOPMENT OF STANDARD TRANSIT PROFILES FOR TEXAS

By

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Associate Research Planner

Technical Report 2005-1F
Technical Study 2-10-89-2005

Sponsored by the
Texas State Department of Highways and Public Transportation
in cooperation with the
U.S. Department of Transportation
Urban Mass Transportation Administration

Texas Transportation Institute
The Texas A&M University System
College Station, Texas 77843-3135

November 1989

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METRIC (SI*) CONVERSION FACTORS

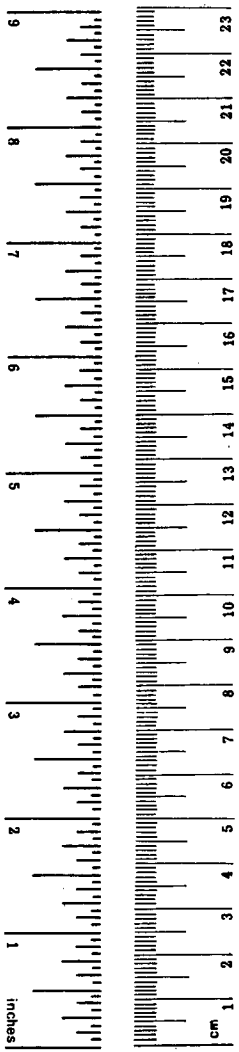
APPROXIMATE CONVERSIONS TO SI UNITS

Symbol	When You Know	Multiply By	To Find	Symbol
LENGTH				
in	inches	2.54	millimetres	mm
ft	feet	0.3048	metres	m
yd	yards	0.914	metres	m
mi	miles	1.61	kilometres	km
AREA				
in²	square inches	645.2	millimetres squared	mm²
ft²	square feet	0.0929	metres squared	m²
yd²	square yards	0.836	metres squared	m²
mi²	square miles	2.59	kilometres squared	km²
ac	acres	0.395	hectares	ha
MASS (weight)				
oz	ounces	28.35	grams	g
lb	pounds	0.454	kilograms	kg
T	short tons (2000 lb)	0.907	megagrams	Mg
VOLUME				
fl oz	fluid ounces	29.57	millilitres	mL
gal	gallons	3.785	litres	L
ft³	cubic feet	0.0328	metres cubed	m³
yd³	cubic yards	0.0765	metres cubed	m³

NOTE: Volumes greater than 1000 L shall be shown in m³.

TEMPERATURE (exact)

°F	Fahrenheit temperature	5/9 (after subtracting 32)	Celsius temperature	°C



APPROXIMATE CONVERSIONS TO SI UNITS

Symbol	When You Know	Multiply By	To Find	Symbol
LENGTH				
mm	millimetres	0.039	inches	in
m	metres	3.28	feet	ft
m	metres	1.09	yards	yd
km	kilometres	0.621	miles	mi
AREA				
mm²	millimetres squared	0.0016	square inches	in²
m²	metres squared	10.764	square feet	ft²
km²	kilometres squared	0.39	square miles	mi²
ha	hectores (10 000 m²)	2.53	acres	ac
MASS (weight)				
g	grams	0.0353	ounces	oz
kg	kilograms	2.205	pounds	lb
Mg	megagrams (1 000 kg)	1.103	short tons	T
VOLUME				
mL	millilitres	0.034	fluid ounces	fl oz
L	litres	0.264	gallons	gal
m³	metres cubed	35.315	cubic feet	ft³
m³	metres cubed	1.308	cubic yards	yd³

TEMPERATURE (exact)

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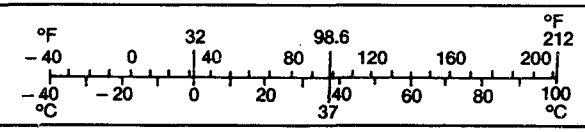

These factors conform to the requirement of FHWA Order 5190.1A.

* SI is the symbol for the International System of Measurements

ABSTRACT

An extensive amount of financial and operational data on the public transit systems of Texas is presently being published by a variety of governmental agencies and industry associations. However, the manner in which much of this data is collected and published reduces its potential usefulness to transit operators and planning agencies. In response to this problem, standard transit system profiles were developed for the eighteen municipal systems of Texas. The transit system profiles are intended to include a range of financial, operational and performance variables in order to provide an overview of each system's characteristics. The development of these profiles will allow transit operators and planning agencies to: 1) monitor trends and evaluate changes in a transit system's performance over time; and 2) compare the financial and operational performance of one agency with that of similar operations in the state.

Key Words: public transit, public transportation, transit profiles, transit performance, transit efficiency, transit effectiveness.

IMPLEMENTATION STATEMENT

In order to provide the best transportation service possible, transit and planning agencies must continuously monitor and evaluate the efficiency and effectiveness of transit system operations. The transit profiles developed as part of this study can be used by the SDHPT for statewide transit planning, for technical assistance, as background for transit legislation and in special programs. (Note: Because of the limitations inherent in this type of work, the performance profiles should not be used to determine funding levels for state funds or federal funds administered by the Department.)

Transit operators will be able to compare their own financial and operating performance with that of similar operations. In addition, transit operators will be able to use the data to monitor trends and evaluate changes in their own performance over time. The profiles can also be useful in quantifying transit system goals and objectives.

DISCLAIMER

SUMMARY

In recent years, rising costs and limited budgets have resulted in the need for transit properties to continually monitor and evaluate various aspects of the services they provide. In many instances, transit managers and planners could benefit from examining statistics from similar operations. In an effort to address this need, standard transit profiles for the eighteen municipal systems of Texas were developed.

Using the State Department of Highway and Public Transportation's Texas Transit Statistics as the basis for the profiles, individual transit system performance profiles in the following five categories were developed:

- Cost Efficiency (Total Vehicle Hours/Total Operating Expense);
- Service Effectiveness (Total Passengers/Total Vehicle Hours);
- Cost Effectiveness (Passenger Revenue/Total Operating Expense);
- Labor Efficiency (Total Vehicle Hours/Average Number of Employees); and
- Vehicle Efficiency (Total Vehicle Miles/Average Number of Buses).

In general, these profiles span 12 to 13 years of transit operations (1976-1988) and permit each transit agency to monitor and evaluate trends in its performance over time. While this information is probably the single most important use of the transit profiles, it is also desirable for an agency to compare its performance to that of similar operations. To do this, transit agencies were assigned to peer groups. Each agency was assigned to two different peer groups; one group was formed according to the fleet size of the transit system, and the other was formed according to the size of the metropolitan area served. This peer group comparison required that an average group performance be estimated for each indicator; each agency's scores were then compared with the group average.

The transit profiles developed as part of this study should help transit and planning agencies to monitor trends and identify strengths and weaknesses in various areas of overall transit system performance. Transit operators will also be able to compare the financial and operational performance of their system to that of similar operations in the state.

TABLE OF CONTENTS

CHAPTER 1
INTRODUCTION

An extensive amount of financial and operational data on the public transit systems of Texas is presently being published by a variety of governmental agencies and industry associations. Unfortunately, the manner in which much of this data is collected and published reduces its potential usefulness to transit operators and planning agencies. Many of the transit and planning agencies across the state simply do not have the resources available to perform the analyses necessary to get the full benefit from all the data that is published.

In response to this problem, the Texas State Department of Highways and Public Transportation (SDHPT) contracted with the Texas Transportation Institute (TTI) to develop standard transit profiles for Texas. These profiles would be patterned after those developed in California.

The primary goal of this study was to use existing data sources to develop a set of profiles for the transit systems of Texas that could be updated annually. To achieve this goal, a work program based on the following basic objectives was followed:

- To design the profiles to meet as closely as possible the needs of the transit operators and planning agencies;

- To make the profiles as comprehensive as possible within time and budget constraints, recognizing that provision of too much information would reduce the usefulness of the profiles;

- To explore methods of computerizing the profiles; and

- To recommend procedures for maintaining, updating and improving the transit system data base and profiles.

The development of these profiles would allow transit operators and planning agencies to:

- Monitor trends and evaluate changes in a transit system's performance over time; and

- Compare the financial and operational performance of one agency with that of similar operations in the state.

Organization of This Report

Following this introduction, Chapter 2 describes the conceptual plan for developing the transit system profiles. Chapter 3 presents the individual transit system statistical and performance profiles, and Chapter 4 presents recommendations for improving the data base and transit system profiles. Following these chapters, an address list of the eighteen municipal transit agencies in Texas is included in the Appendix.

CHAPTER 2
CONCEPTUAL PLAN FOR DEVELOPING TRANSIT SYSTEM PROFILES

Review of Existing Data Sources

The first task in the process of developing transit system profiles was to identify and review existing sources that could be used as the basis for developing the profiles. Three major sources of transit system data were identified:

- Data collected by the SDHPT for use in compiling the Texas Transit Statistics;
- Data collected by the Urban Mass Transportation Administration (UMTA) for use in compiling the National Urban Mass Transportation Statistics Section 15 Annual Reports; and
- Data collected by the American Public Transit Association (APTA) for use in compiling APTA's reports on Transit Operating and Financial Statistics.

All three of these agencies' reports are published annually and are readily available to transit operators and planning agencies. Both the APTA and UMTA data are national in scope, and both are extremely comprehensive; the statistics published by the SDHPT are statewide in nature and somewhat less comprehensive than either the UMTA or APTA statistics.

Originally, it was hoped that data from all three of these sources could be collected, edited and merged into a single computer file for use in developing the transit system profiles. This was not possible, however, due to major differences in reporting time periods and definitions of terms. For instance, UMTA and APTA data are reported on a transit

system fiscal year (rather than calendar year) basis. As shown by the following examples, the time periods covered by the fiscal years vary widely from one transit system to the next.

- Austin: January 1 - December 31
- San Antonio: March 1 - February 28
- Abilene: July 1 - June 30
- Houston: October 1 - September 30

While this does not present a problem for evaluating a single agency's performance over time, it does make comparisons between similar operations more difficult and less meaningful. A second major problem with the UMTA and APTA data is that statistics for all the Texas systems are not available for every year the data have been published. A third major drawback of these two sources is the age of the data. The most recent APTA data (as of August 1989) is now two years old; the most recent UMTA data is now three years old.

Statistics reported by the SDHPT, on the other hand, are reported on a calendar year basis, and data are generally available from 1976 through 1988. In addition, the Texas Transit Statistics reports contain most of the key items necessary to develop well-rounded transit profiles. It was therefore decided that SDHPT Texas Transit Statistics would form the basis for this study. By using these statistics, individual transit system profiles could be developed that would span 13 years of operations, and these profiles could be presented in such a manner as to allow comparisons between transit agencies.

In general, the Texas Transit Statistics reports provide information on both the operational and financial aspects of each of the eighteen municipal transit systems operating in Texas. A municipal transit system is defined as one having five or more vehicles in scheduled, fixed-route, intracity service. This includes seven metropolitan transit authorities operating in the state's seven largest cities.

Additional data collected quarterly and semi-annually by the SDHPT on Sections 16B(2)/18 transportation providers in the state was also reviewed for possible inclusion in the transit profiles. An analysis of the data, however, revealed a number of problems that precluded inclusion of these transportation providers in the transit profiles. First, insufficient information was available to develop the profiles as outlined in the following sections of this chapter. Second, many of the Sections 16B(2)/18 providers fail to file reports each quarter. Thus, yearly totals for those systems are low which, in turn, makes it impossible to: (1) monitor trends in a system's performance over time, or (2) make comparisons between similar systems. Data reliability is also a serious consideration. Unreported in-kind services (e.g., vehicle maintenance at the City yard) are much more likely with small systems and may seriously distort financial and performance measures.

Transit Systems Included in Profiles

The determination of which transit systems would be profiled in this study was largely determined by the availability of complete, reliable financial and operational data. This was also the case for the development of transit profiles in California. In California, the decision was made to prepare a comprehensive listing of the state's public and paratransit operators including address and ridership information. Then, for the largest operators, detailed information was provided in the following categories: 1) general system characteristics; 2) fleet operations; 3) financial data and vehicle needs; 4) employee data; and 5) performance statistics. A similar scenario was followed in this study. D-11 of the SDHPT presently maintains a comprehensive listing of: 1) rural and non-urbanized transportation services (Sections 16B(2)/18 providers); and 2) paratransit operators in the state (including taxicab systems, human services transportation systems, and other paratransit services such as airport ground transportation, employer operated transit and commuter services). This study, then, focused on profiling more detailed information on the larger municipal systems in the areas as outlined above for California. *(Note: Technical Study 2008, to be performed by TTI during FY 1989-90, will focus on measuring transit performance of rural and non-urbanized systems.)*

Variables Included in Data Base

The transit system profiles were intended to include a range of operating, financial and performance variables providing an overview of each system's characteristics. Variables selected included those that the transit industry has traditionally found to be most useful in assessing system operations:

- Total passengers;
- Total vehicle miles;
- Total vehicle hours;
- Average number of buses on regular routes (during peak periods);
- Average number of employees;
- Total operating revenue;
- Passenger revenue;
- Total operating expense;
- Net public operating cost;
- Total public capital cost; and
- Total public expense.

Efficiency and Effectiveness in Measuring Transit Performance

In using the SDHPT Texas Transit Statistics as the basis for developing standard transit system profiles, sufficient information is available to calculate more than 50 different indicators of transit system performance. For the purposes of this study, however, this list has been narrowed to a set of 5 indicators that measure various aspects of transit system efficiency and effectiveness adapted from the Irvine Performance Evaluation Method (IPEM).

IPEM was developed, in part, to assist UMTA with conducting Triennial Reviews of transit agencies required under the Surface Transportation Act of 1982. Its other purpose is to provide transit managers with a simple but reliable procedure for

systematically evaluating the performance of their organizations against systems which are similar to theirs. A summary of the attributes of the IPEM procedure is presented in the following pages (1,2,3).*

The concept of efficiency as it is employed in IPEM can be defined as the relationship between resources used and the output or level of service produced. Effectiveness can be defined as the use of output to accomplish goals, or the value the public actually derives from services. Briefly stated, efficiency is "doing things right;" effectiveness is "doing the right things."

The IPEM system recognizes that efficiency in public transit is an elusive concept because many goals are outlined which can be contradictory. Increasing transit ridership is the most frequently stated goal, and this has led to the pursuit of costly, peak-hour service in many cities.

Other goals have been to reduce auto congestion and pollution in cities, provide mobility for the transit-dependent, and to subsidize fares for the poor and elderly. Over the years, the unintended consequence of pursuing these conflicting objectives has been such an inflation in transit operating costs that it is now being directly questioned whether transit has been "doing the right thing" in pursuing them. Moreover, judging the performance of agencies by these criteria, many have done poorly, in substantial part because they have little control over the external factors which affect transit performance. For example, managers in small or medium-sized, low-density communities will have little ability to significantly increase the community's preference for transit services. As a result, it is difficult to reliably evaluate transit performance in terms of effectiveness. Goals conflict, and appropriate measures are frequently poor or non-existent.

In contrast to effectiveness, the efficiency with which a transit agency utilizes resources can be accurately measured. As managers choose when and how to allocate resources, the efficiency of management's performance can be reliably assessed.

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* Numbers in parentheses denote references listed at the end of the report.

Because the efficiency of transit is that aspect of its performance which can be most confidently measured, the emphasis in IPEM is on evaluation of efficiency, although indicators are employed which measure effectiveness. The assumption in IPEM is that public transit managers can make their greatest contribution by being efficient -- by supplying the greatest amount of service for the least amount of resources. Managers must ensure that service supports the economic, social, and environmental goals of the community, since their agencies depend on the support of the communities they serve. However, if transit is to be expected to perform well, the demands made of it must be better related to its capacity to meet its goals efficiently. Where this occurs, performance can be reliably evaluated and managers can be realistically held accountable.

In using the IPEM procedure to evaluate performance, the underlying idea is that a small set of diagnostic indicators, which track an agency's performance over time as well as compare it with systems that are similar to it, will provide a balanced assessment of how efficiently and effectively the system is being operated. The indicators do not capture every activity of an agency, but they do indicate progress or deficiency in key areas.

The IPEM procedure consists of two main features: a set of performance indicators that measure the efficiency and effectiveness of a transit agency; and a peer-group typology that classifies agencies for the purposes of comparison according to their degree of similarity to each other. Peer-group comparison requires that average group performance be estimated on each indicator; an individual agency's scores are then compared with the group averages. These comparison scores are termed "standard scores." Information from the SDHPT Texas Transit Statistics constitutes the data base for the procedure in this study.

IPEM Performance Indicators

IPEM employs nine indicators to measure a system's performance. The indicators measure specific dimensions of transit efficiency and effectiveness. The performance indicators were selected through the statistical procedure of principal components factor analysis.

Factor analysis organizes an unwieldy number of variables into a manageable form. Through statistical procedures, it arranges the variables into groups composed of variables that are highly correlated with each other (that is, closely related), called factors or components or dimensions. From each group (factor), a single variable that is descriptive or representative of the variables composing the group is selected for use in subsequent statistical analysis. In the development of IPEM, 48 performance indicators based on Section 15 data formed the original set of variables. Factor analysis arranged these variables into seven groups. The variable best representing each group was selected for use in the study. Two more indicators were added later to improve informativeness.

The seven performance dimensions are cost efficiency, service effectiveness, cost effectiveness, labor efficiency, vehicle efficiency, maintenance efficiency, and safety. The indicators and the performance concepts they operationalize are listed in Table 1. The first three of the seven indicators (which measure output per cost, utilization of service and revenue generation per expense) were judged by statistical means to be the most informative and global measures available in the set.

Table 1.
IPEM "Marker" Variables Best Representing the Underlying Performance Concept

Performance Concept	Performance Indicator
1. Cost Efficiency (Output per Cost)	Total Vehicle Hours per Total Operating Expense
2. Service Effectiveness (Utilization of Service)	Total Passengers per Total Vehicle Hours
3. Cost Effectiveness (Revenue Generation per $ Expense)	Passenger Revenue per Total Operating Expense
4. Labor Efficiency	Total Vehicle Hours per Average Number of Employees
5. Vehicle Efficiency	Total Vehicle Miles per Average Number of Buses on Regular Routes
6. Maintenance Efficiency	Total Vehicle Miles per Maintenance Employee
	Total Vehicle Miles per Dollar Maintenance Expense
7. Safety	Total Vehicle Miles per Total Accidents
	Total Vehicle Miles per Dollar of Collision & Liability Expense

Cost Efficiency. Computed as vehicle hours per operating expense (Total Vehicle Hours/Total Operating Expense), this indicator measures the number of output units produced for each dollar of expense. The inverse of the more familiar operating cost per vehicle hour, it is probably the best overall measure of output. The inverted form provides

for a better graphic presentation. When a system's performance improves, the bar graph indicator rises; when performance declines, the bar graph falls.

Service Effectiveness. Measured by passengers per hour (Total Passengers/Total Vehicle Hours), this indicator reports how much service is utilized. Hours rather than miles are used as the denominator because the former are more consistent under varying conditions.

Cost Effectiveness. Calculated as the ratio of passenger revenue to total operating expense (Passenger Revenue/Total Operating Expense), this indicator reports the percentage of operating expense recovered from passenger and other operating revenues.

Six additional indicators are used in IPEM to explain performance in more specific areas of cost and service that are known to make an important impact on overall performance. Labor and vehicle efficiency are represented by single indicators, whereas two indicators are used to represent the safety and maintenance dimensions.

Labor Efficiency. Measured as the vehicle hours per employee (Total Vehicle Hours/Average Number of Employees), this indicator measures the number of output hours per employee (with employees expressed in terms of employee equivalent hours). Theoretically, maximum labor efficiency would be 2,080 hours per employee per year, the equivalent of one hour of service per employee pay hour. However, this is impossible because total employees includes many employees other than drivers. The indicator is presented in IPEM as a decimal in units of 10,000; for example, .118 is the equivalent of 1,180 vehicle hours per year for each employee.

Vehicle Efficiency. Calculated as the vehicle miles per bus (Total Vehicle Miles/Average Number of Buses on Regular Routes), this indicator measures vehicle efficiency by summarizing the number of miles traveled annually per vehicle. This indicator is also presented in units of 10,000 (e.g., a vehicle efficiency value of 3.94 is the equivalent of 39,400 average vehicle miles per year).

Maintenance Efficiency. Maintenance efficiency is measured in two ways. The first is vehicle miles per maintenance employee (Total Vehicle Miles/Total Maintenance Employees). As such, this indicator measures how efficiently buses are maintained from a labor standpoint. Systems with very old or very new buses may rate poorly on this indicator. The indicator is also presented in units of 10,000 (e.g., a value of 7.89 is equivalent to 78,900 annual vehicle miles per maintenance employee).

Maintenance efficiency can also be computed as vehicle miles per dollar maintenance expense (Total Vehicle Miles/Total Maintenance Expense). As such, this indicator was added as a companion maintenance performance measure and is represented directly (e.g., a value of 3.62 equals 3.62 vehicle miles per maintenance dollar).

Safety. Safety is the second performance dimension that can be measured in two ways. First, safety can be computed as vehicle miles per collision accident (Total Vehicle Miles/Total Number of Collision Accidents). This indicator gauges how safely service is operated. This indicator can be somewhat unreliable for comparing agencies, however, because of variations in how agencies define and report collision accidents. Actual values for this indicator are also reported in units of 10,000 (e.g., 2.31 is the equivalent of 23,100 vehicle miles between collision accidents).

A second measure of safety is the vehicle miles per dollar casualty and liability insurance expense (Total Vehicle Miles/Total Casualty and Liability Insurance Expense). This indicator was added by IPEM as companion measure of safety. However, because of the usual lag between the year of an accident and payment of a claim, an agency's expenses in a given year may not correspond to its accident rate. For this reason (and the lack of readily available data on casualty and liability insurance expense), this indicator of performance is not suggested for use in the development of transit profiles for Texas properties.

Application of IPEM Indicators in Measuring Transit Performance in Texas

For this study, sufficient data are available from the Texas Transit Statistics to calculate the first five performance indicators as outlined in the IPEM procedure:

1. Cost Efficiency or Output per Cost
   (Total Vehicle Hours/Total Operating Expense)

2. Service Effectiveness or Utilization of Service
   (Total Passengers/Total Vehicle Hours)

3. Cost Effectiveness or Revenue Generation per Dollar of Expense
   (Passenger Revenue/Total Operating Expense)

4. Labor Efficiency
   (Total Vehicle Hours/Average Number of Employees)

5. Vehicle Efficiency
   (Total Vehicle Miles/Average Number of Buses on Regular Routes)

As mentioned previously, the first three of these indicators (which measure output per cost, utilization of service and revenue generation per expense) were judged by statistical means to be the most informative and global measures available in the set.

Using these five measures of efficiency and effectiveness, profiles summarizing key financial and operational aspects of each transit agency's performance between the years of 1976 and 1988 were produced. This will allow each agency to monitor and evaluate trends in its performance over time.

While this information is probably the single most important use of the transit profiles, it is also desirable for a transit agency to compare its performance to that of similar operations. To do this, transit agencies were assigned to peer groups. Each agency

was assigned to two different peer groups. One group was formed according to the fleet size of the transit system, and the other was formed according to the size of the metropolitan area served as shown below.

By Size of Transit System (Average Number of Vehicles on Regular Routes)

Small Transit Systems - Under 25 Vehicles

Abilene
Amarillo
Beaumont
Brownsville
Galveston
Laredo
Port Arthur
San Angelo
Waco
Wichita Falls

Medium-Sized Transit Systems - 25-99 Vehicles

Corpus Christi
El Paso
Fort Worth
Lubbock

Large Transit Systems - 100 or More Vehicles

Austin
Dallas
Houston
San Antonio

By Size of Metropolitan Area Served

Small City Transit Systems - Serving Cities Under 200,000 Population

Abilene
Amarillo
Beaumont
Brownsville
Galveston
Laredo
Lubbock
Port Arthur
San Angelo
Waco
Wichita Falls

Large City Transit Systems - Serving Cities of 200,000 Population or More (Metropolitan Transit Authorities with dedicated sales tax funding)

Austin
Corpus Christi
Dallas
El Paso
Fort Worth
Houston
San Antonio

El Paso's transit system, for example, is included in the medium-sized transit systems peer group along with Corpus Christi, Fort Worth and Lubbock. El Paso's system is also included in the large city transit system peer group along with six other Metropolitan Transit Authorities (Austin, Corpus Christi, Dallas, Fort Worth, Houston and San Antonio).

Peer group comparison requires that an average peer group performance be estimated for each indicator. Individual agency's scores are then compared with the group average. These comparison scores are termed "standard scores." Calculation of the

standard scores is obtained by subtracting the peer group average (mean) from the agency value and dividing by the peer group standard deviation for a particular indicator.

$$\text{Standard Score} = \frac{\text{Agency Value - Group Mean}}{\text{Peer Group Standard Deviation}}$$

In this way, standard scores are calculated for each agency on each indicator, for each year data are available. Table 2 on the following page illustrates this concept. In this table, El Paso's service effectiveness is presented and compared to transit systems of similar size (top half of table) and then to transit systems operating in cities of similar size (lower half of table). In each instance, the first line represents the agency's values, the second line contains the averages for the particular peer group and the last line shows the standard scores. The actual values describe the agency's individual performance both for a single year and over time, and the standard scores describe its performance compared with its peers, both for a single year and over time.

A standard score for each of a system's indicators may range from above to below zero. Zero represents the average (mean) for the peer group on that indicator. A standard score above zero represents above average performance for the system; a standard score below zero represents below average performance. In all cases, negative standard scores indicate comparatively poor (although perhaps explainable) performance. For example, the reason Transit System "A" (that is almost fully accessible with wheelchair lifts) exhibits negative standard scores in the area of maintenance efficiency may be because the other transit systems in the peer group have very few (if any) wheelchair lift-equipped buses in service and have, therefore, had less maintenance required on their fleets.

Generally, very strong performance exists where a system's scores are between one and two positive standard deviations. Standard scores exceeding 3 standard deviations are statistically improbable and may suggest a borderline case where an agency is being inappropriately compared with other agencies and is achieving scores that are unrealistic.

Standard scores also allow the use of graphs to compare a system visually with its peers. Figure 1 illustrates the graph of the standard scores for the agency in Table 2.

Table 2.
Service Effectiveness Performance Profile
(Total Passengers/Total Vehicle Hours)

E L P A S O

Peer Group: Medium-Sized Transit Systems

	1976	1977	1978	1979	1980	1981	1982	1983	1984	1985	1986	1987	1988
Transit Agency Value	----	19.97	19.76	26.66	30.31	30.51	25.93	29.52	30.95	31.98	30.73	33.36	34.16
Peer Group Mean	----	24.35	22.64	25.02	27.78	27.38	26.62	22.86	24.20	24.53	22.68	23.79	24.24
Standard Score	----	-.67	-.54	.30	.33	.32	-.05	.91	.82	.86	.87	1.08	1.13

Peer Group: Large City Transit Systems

	1976	1977	1978	1979	1980	1981	1982	1983	1984	1985	1986	1987	1988
Transit Agency Value	----	19.97	19.76	26.66	30.31	30.51	25.93	29.52	30.95	31.98	30.73	33.36	34.16
Peer Group Mean	----	30.94	26.16	27.54	28.78	27.49	25.65	25.18	25.99	25.35	23.02	23.39	24.54
Standard Score	----	-1.02	-1.03	-.15	.24	.45	.04	.57	.63	.89	1.03	1.21	1.23

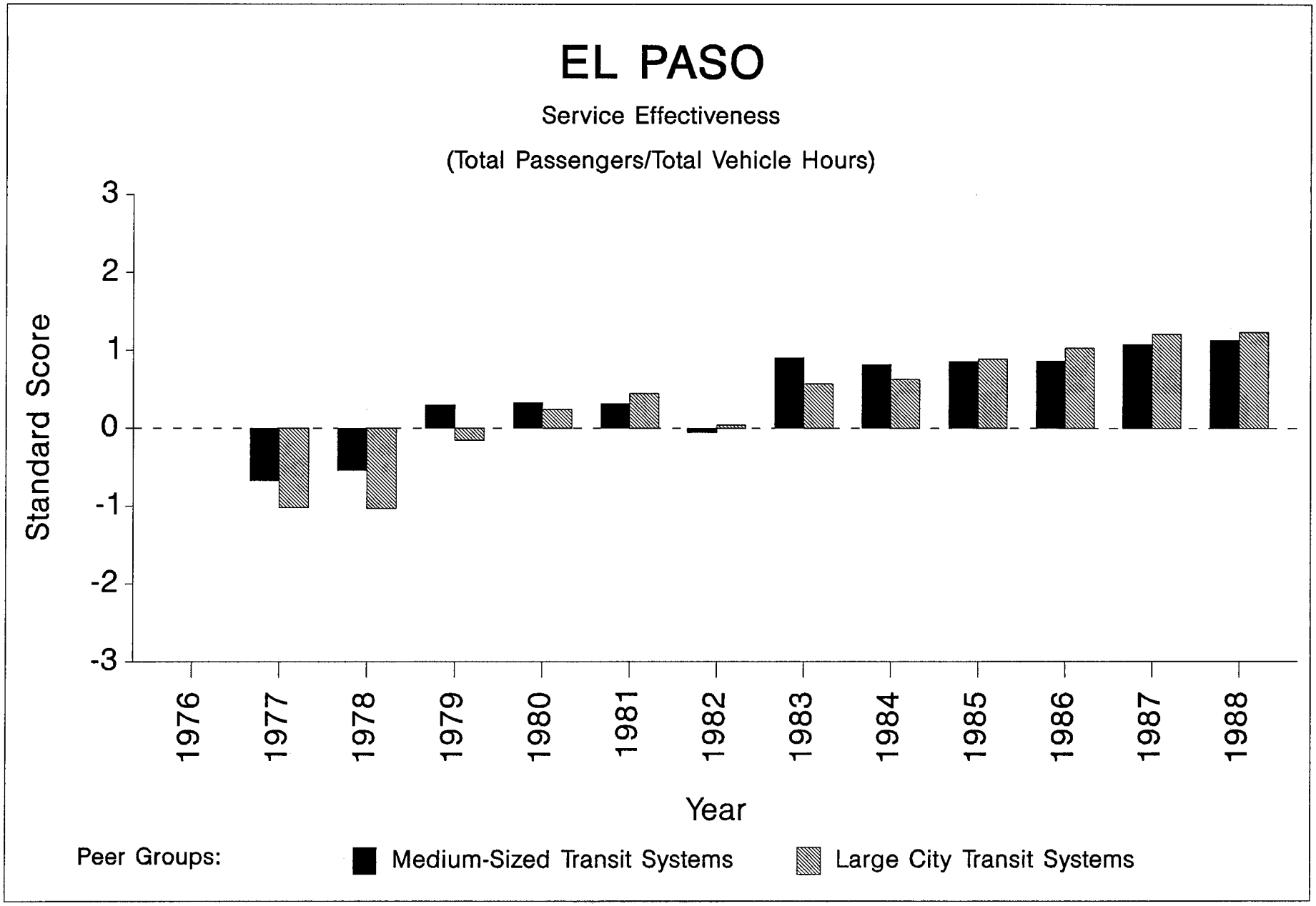

EL PASO
Service Effectiveness
(Total Passengers/Total Vehicle Hours)
Standard Score
3
2
1
0
-1
-2
-3
1976
1977
1978
1979
1980
1981
1982
1983
1984
1985
1986
1987
1988
Year
Peer Groups:
Medium-Sized Transit Systems
Large City Transit Systems

Figure 1.

As shown in Figure 1, each year is represented by two different bars; one bar describes the agency's performance as compared to transit systems of similar size, and the other bar describes its performance compared to transit systems operating in cities of similar size. Ideally, a system would have positive scores on each indicator, and these scores would be improving each year against the mean for the peer group.

The preceding example illustrates how the evaluation of a system's performance is enhanced by having both the trends in actual values and the comparative data obtained through the peer group generated standard scores. This example also shows how the standard scores may vary depending on make-up of the peer group. The standard scores suggest the range within which an agency may be expected to perform well, and perhaps more important, indicate when it is doing poorly.

However, standard scores can be deceptive because they reflect variations in aggregated data, and they may imply improvement or decline in an agency's performance that is not real. For example, in Table 2, the actual passenger trips per vehicle hour increased in 1984, but the peer group's average increased at a higher rate, so the agency's standard score decreased in 1984. In this instance, the standard score implies a loss of performance that did not occur in real terms. Thus, both the actual values and standard scores are important in any evaluation of an agency's performance.

From a management perspective, the actual values provide information with which to monitor improvement or decline in performance from one year to the next. In this respect, they are more informative than the standard scores. The standard scores, however, are helpful as benchmarks for what an agency might achieve.

The developers of the IPEM procedure note that several points about IPEM should be stated in concluding the description of the system. First, IPEM provides an indication of "high" or "low," "good" or "poor" performance in terms of what the systems in a given peer group are presently achieving over a given period of years. Systems are compared against their peers, not against all systems, and no fixed or national standard is presumed that all transit systems should meet. In addition, IPEM provides for evaluation of those

aspects of performance that are quantifiable; it cannot account for intangible factors such as employee or passenger satisfaction, nor can it provide an assessment of how well a system meets the individual transit needs of its service area (although IPEM may be informative to management attempting to make such types of evaluations. For example, passenger and revenue statistics may indirectly reflect customer satisfaction).

Computerization of Profiles

Transit system data (yearly totals) from published Texas Transit Statistics were entered onto Texas A&M University's mainframe computer. The transit system performance profiles (standard scores) were produced using the Statistical Analysis System (SAS) statistical package. The data base and all SAS programs will be transferred onto a computer tape compatible with the SDHPT's mainframe computer facilities upon final approval of the study. The data base and performance profiles can then be easily updated and maintained annually by SDHPT staff with a minimum level programming time.

Transit system reports submitted to the SDHPT for the calculation of the Texas Transit Statistics are presently maintained by D-11 on a microcomputer using dBaseIII+. Copies of the data on floppy disks can easily be made for those transit operators who desire to perform further evaluations of various aspects of transit performance.

CHAPTER 3
TRANSIT SYSTEM PROFILES

This chapter presents individual profiles on the eighteen municipal transit systems in Texas. For each system, a table summarizing data collected for 1976 through 1988 is included for an overall transit agency statistical profile spanning thirteen years of operation.

Next, transit agency performance profiles are presented in the following five categories:

- Cost Efficiency;
- Service Effectiveness;
- Cost Effectiveness;
- Labor Efficiency; and
- Vehicle Efficiency

For each performance category, a two-part table is included in which the first line of each part represents the transit agency's values for that specific performance dimension. The second line contains the averages for the particular peer group, and the last line presents the standard scores. The actual transit agency values describe the agency's individual performance both for a single year and over time, and the standard scores describe its performance compared with its peers, both for a single year and over time. Following each table is a graphic representation of the agency's performance profiles (standard scores).

In reviewing the transit system statistical profiles, it should be noted that data on total vehicle hours, average number of buses on regular routes and average number of employees is generally not available for 1976. Therefore, Cost Efficiency, Service Effectiveness, Labor Efficiency and Vehicle Efficiency Performance Profiles could not be calculated for 1976.

ABILENE

Table 3.
Transit System Statistical Profile

ABILENE													
	1976	**1977**	**1978**	**1979**	**1980**	**1981**	**1982**	**1983**	**1984**	**1985**	**1986**	**1987**	**1988**
Total Passengers	181,908	254,402	288,750	298,386	314,838	344,207	421,640	418,923	437,719	423,416	424,053	403,935	359,158
Total Vehicle Miles	234,064	277,705	317,669	352,837	309,902	462,606	501,279	463,627	449,640	472,131	478,194	428,129	462,637
Total Vehicle Hours	-	16,991	20,678	21,272	18,102	29,848	35,814	33,129	32,004	32,764	33,818	32,893	32,738
Average No. Buses on Regular Routes	-	6	6	6	6	11	13	13	12	13	12	10	10
Average No. Employees	-	13	15	16	16	26	30	30	26	25	26	29	28
Total Operating Revenue ($)	49,803	49,662	47,965	38,699	45,725	82,676	111,753	129,186	129,220	145,599	152,753	130,257	125,194
Passenger Revenue ($)	49,803	49,662	47,965	38,699	45,725	82,676	111,631	127,383	129,198	145,599	124,657	112,398	106,419
Total Operating Expense ($)	181,753	181,355	240,862	297,742	406,867	664,715	778,692	831,904	794,228	840,752	925,964	820,065	809,157
Net Public Operating Cost ($)	131,950	131,693	192,897	259,043	361,142	582,039	666,939	702,718	665,008	695,153	773,211	689,808	683,963
Total Public Capital Cost ($)	-	-	-	-	-	1,759,500	361,454	618,362	3,609	6,751	157,924	-	8,008
Total Public Expense ($)	131,950	131,693	192,897	259,043	361,142	2,341,539	1,028,393	1,321,080	668,617	701,904	931,135	689,808	691,971

Source: Texas Transit Statistics and Abilene Transit System

Table 4.
Cost Efficiency Performance Profile
(Total Vehicle Hours/Total Operating Expense)

A B I L E N E

Peer Group: Small Transit Systems

	1976	1977	1978	1979	1980	1981	1982	1983	1984	1985	1986	1987	1988
Transit Agency Value	—	.094	.086	.071	.044	.045	.046	.040	.040	.039	.037	.040	.040
Peer Group Mean	—	.087	.089	.066	.055	.048	.051	.045	.041	.040	.039	.038	.037
Standard Score	—	.43	-.14	.39	-1.00	-.37	-.28	-.54	-.12	-.19	-.43	.53	.75

Peer Group: Small City Transit Systems

	1976	1977	1978	1979	1980	1981	1982	1983	1984	1985	1986	1987	1988
Transit Agency Value	—	.094	.086	.071	.044	.045	.046	.040	.040	.039	.037	.040	.040
Peer Group Mean	—	.087	.088	.066	.055	.048	.051	.045	.042	.041	.039	.038	.037
Standard Score	—	.45	-.09	.44	-1.01	-.39	-.29	-.54	-.16	-.32	-.48	.47	.71

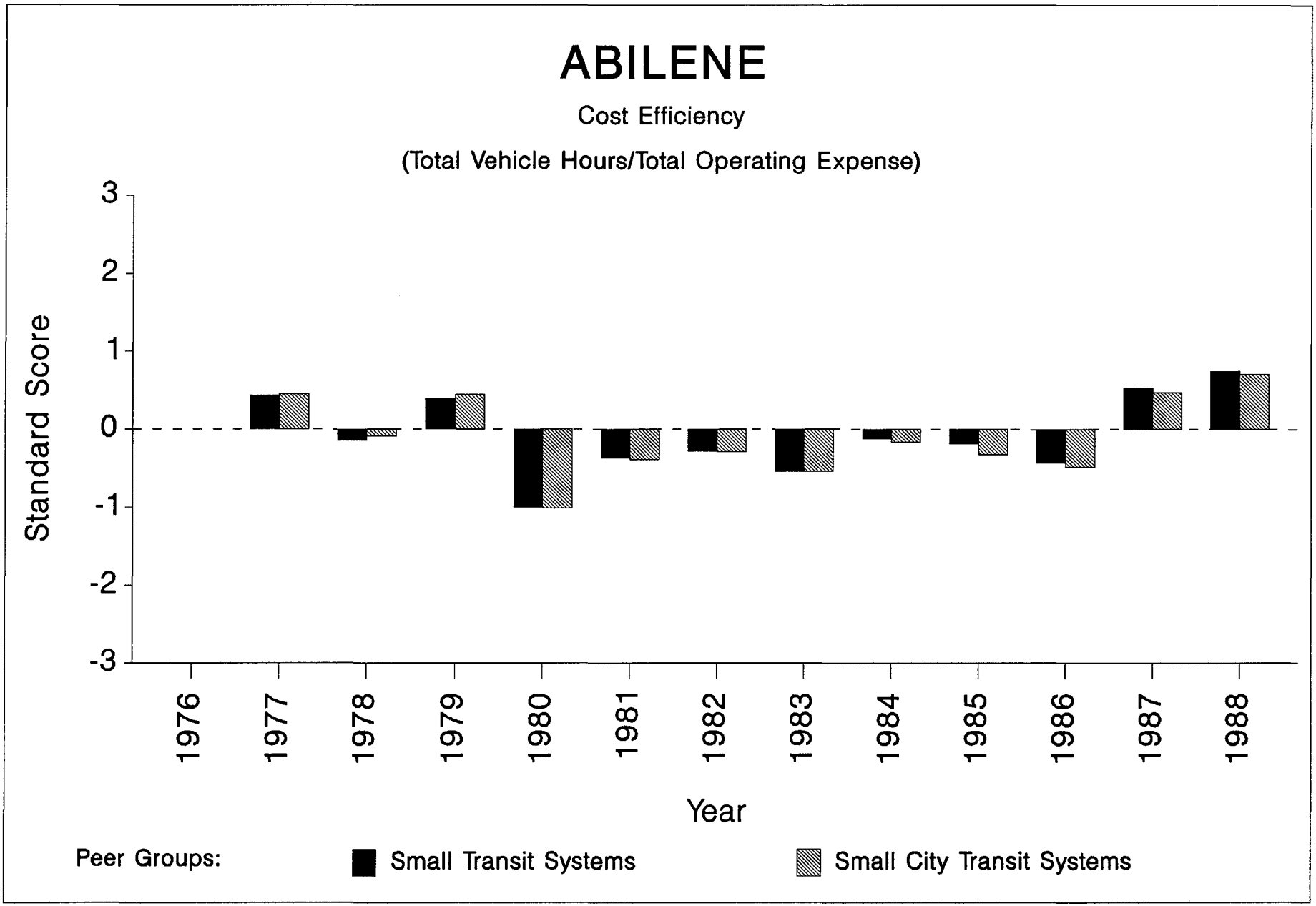

ABILENE
Cost Efficiency
(Total Vehicle Hours/Total Operating Expense)
Standard Score
3
2
1
0
-1
-2
-3
1976
1977
1978
1979
1980
1981
1982
1983
1984
1985
1986
1987
1988
Year
Peer Groups:
Small Transit Systems
Small City Transit Systems

Table 5.
Service Effectiveness Performance Profile
(Total Passengers/Total Vehicle Hours)

A B I L E N E

Peer Group: Small Transit Systems

	1976	1977	1978	1979	1980	1981	1982	1983	1984	1985	1986	1987	1988
Transit Agency Value	—	14.97	13.96	14.03	17.39	11.53	11.77	12.65	13.68	12.92	12.54	12.28	10.97
Peer Group Mean	—	19.20	18.49	20.03	20.72	21.44	19.80	19.75	20.70	19.66	19.82	19.34	19.12
Standard Score	—	-.60	-.58	-.70	-.47	-1.43	-1.15	-1.13	-.97	-.92	-.96	-.86	-.85

Peer Group: Small City Transit Systems

	1976	1977	1978	1979	1980	1981	1982	1983	1984	1985	1986	1987	1988
Transit Agency Value	—	14.97	13.96	14.03	17.39	11.53	11.77	12.65	13.68	12.92	12.54	12.28	10.97
Peer Group Mean	—	20.85	19.69	21.05	22.20	23.10	22.06	20.55	21.69	20.79	20.79	20.23	20.02
Standard Score	—	-.72	-.69	-.80	-.58	-1.35	-1.03	-1.21	-1.05	-1.00	-1.05	-.95	-.95

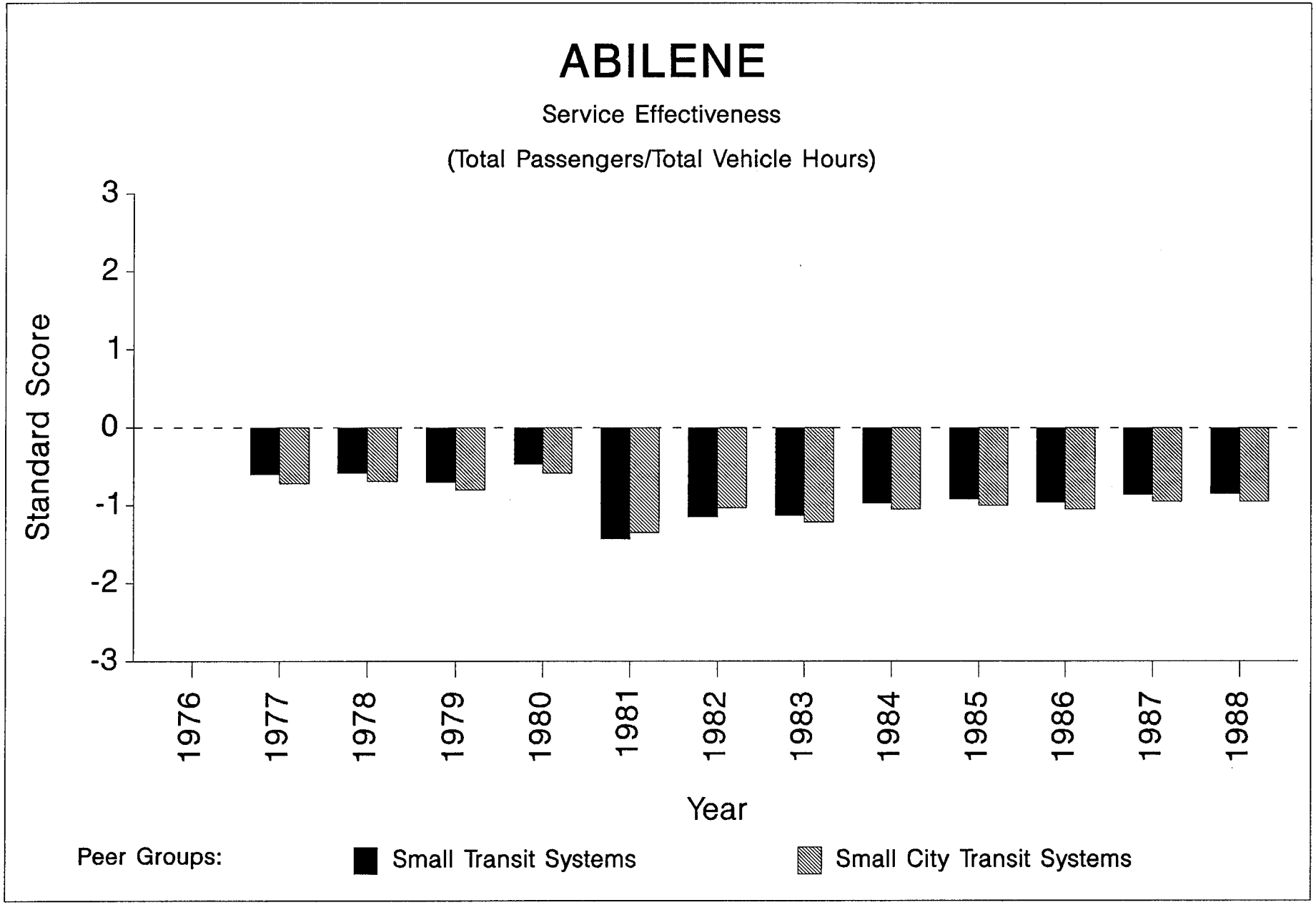

ABILENE
Service Effectiveness
(Total Passengers/Total Vehicle Hours)
Standard Score
3
2
1
0
-1
-2
-3
1976
1977
1978
1979
1980
1981
1982
1983
1984
1985
1986
1987
1988
Year
Peer Groups:
Small Transit Systems
Small City Transit Systems

Table 6.
Cost Effectiveness Performance Profile
(Passenger Revenue/Total Operating Expense)

A B I L E N E

Peer Group: Small Transit Systems

	1976	1977	1978	1979	1980	1981	1982	1983	1984	1985	1986	1987	1988
Transit Agency Value	.27	.27	.20	.13	.11	.12	.14	.15	.16	.17	.13	.14	.13
Peer Group Mean	.51	.48	.39	.34	.34	.33	.33	.33	.33	.30	.29	.27	.27
Standard Score	-.89	-.85	-1.32	-1.41	-1.39	-1.27	-1.31	-1.24	-1.09	-1.04	-1.33	-1.16	-1.01

Peer Group: Small City Transit Systems

	1976	1977	1978	1979	1980	1981	1982	1983	1984	1985	1986	1987	1988
Transit Agency Value	.27	.27	.20	.13	.11	.12	.14	.15	.16	.17	.13	.14	.13
Peer Group Mean	.49	.46	.39	.34	.34	.33	.34	.34	.34	.31	.29	.28	.28
Standard Score	-.86	-.84	-1.40	-1.49	-1.46	-1.35	-1.42	-1.33	-1.19	-1.12	-1.43	-1.26	-1.10

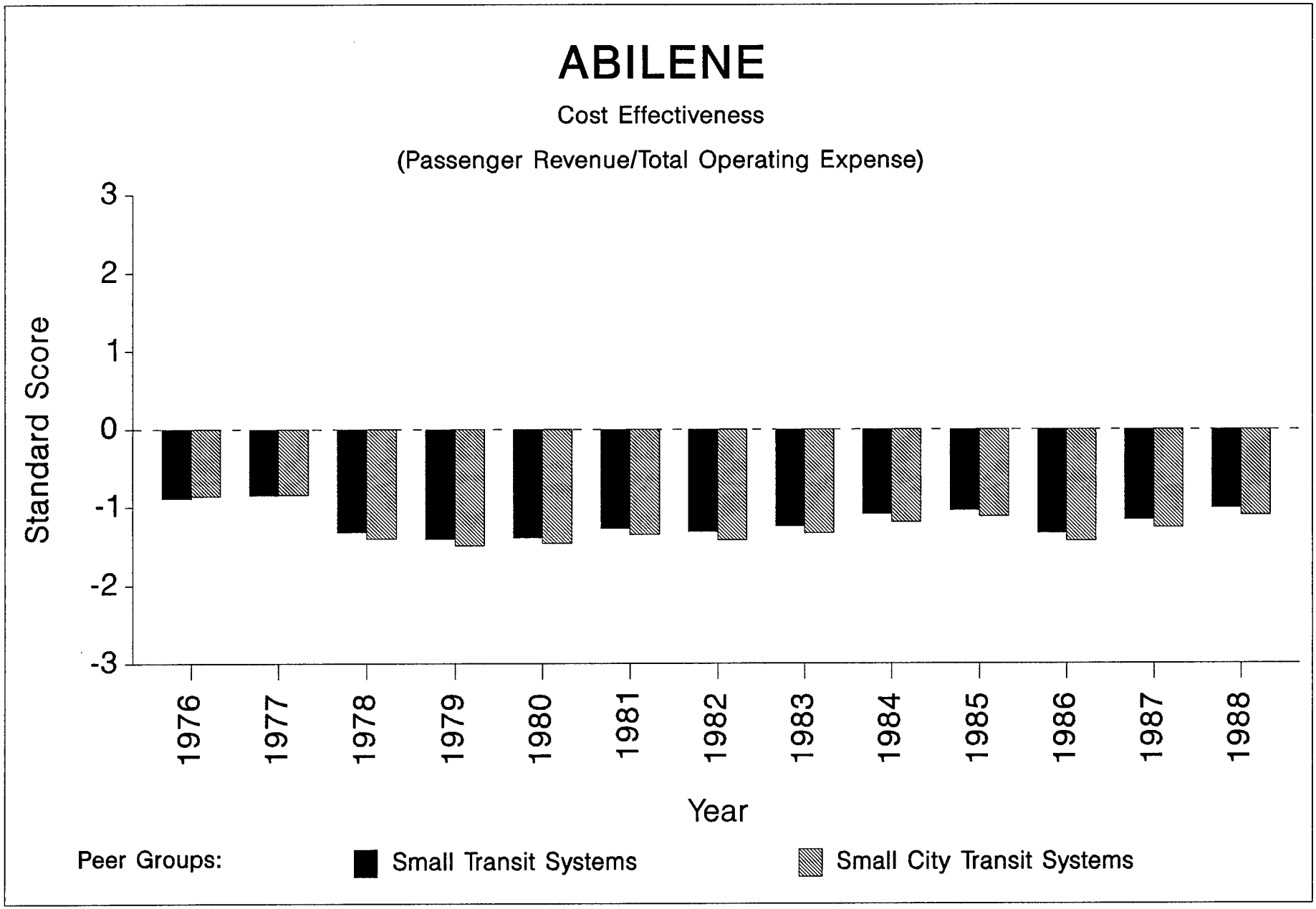

ABILENE
Cost Effectiveness
(Passenger Revenue/Total Operating Expense)
Standard Score
3
2
1
0
-1
-2
-3
1976
1977
1978
1979
1980
1981
1982
1983
1984
1985
1986
1987
1988
Year
Peer Groups:
Small Transit Systems
Small City Transit Systems

Table 7.
Labor Efficiency Performance Profile
(Total Vehicle Hours/Average Number of Employees)

A B I L E N E

Peer Group: Small Transit Systems

	1976	1977	1978	1979	1980	1981	1982	1983	1984	1985	1986	1987	1988
Transit Agency Value	----	.131	.138	.133	.113	.115	.119	.110	.123	.131	.130	.113	.117
Peer Group Mean	----	.131	.140	.129	.125	.122	.131	.122	.123	.124	.122	.116	.119
Standard Score	----	-.03	-.10	.11	-.42	-.25	-.30	-.40	.01	.30	.41	-.26	-.18

Peer Group: Small City Transit Systems

	1976	1977	1978	1979	1980	1981	1982	1983	1984	1985	1986	1987	1988
Transit Agency Value	----	.131	.138	.133	.113	.115	.119	.110	.123	.131	.130	.113	.117
Peer Group Mean	----	.130	.139	.128	.124	.121	.128	.120	.121	.123	.121	.116	.119
Standard Score	----	.06	-.04	.13	-.41	-.24	-.25	-.36	.06	.36	.49	-.25	-.20

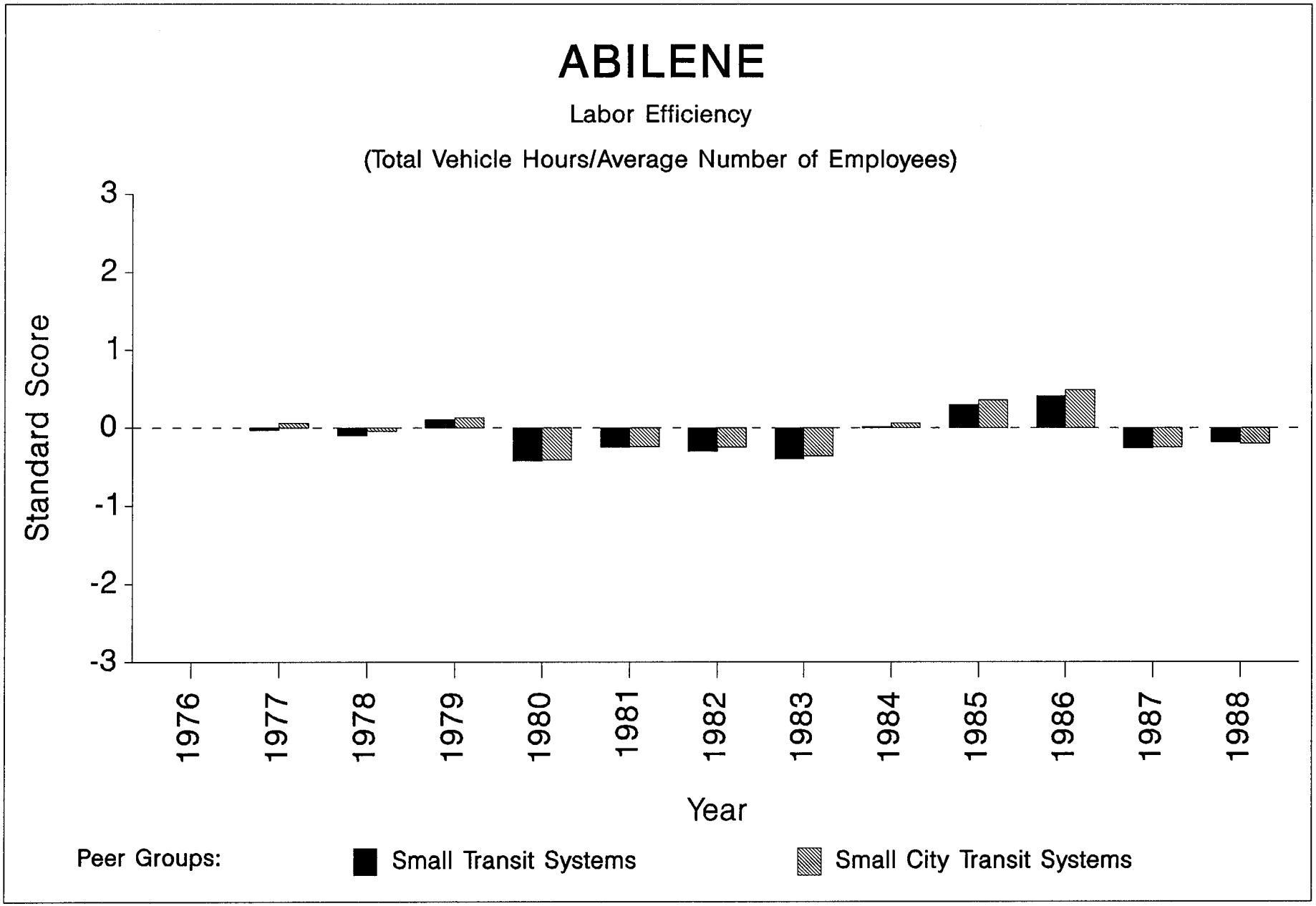

ABILENE
Labor Efficiency
(Total Vehicle Hours/Average Number of Employees)
Standard Score
3
2
1
0
-1
-2
-3
1976
1977
1978
1979
1980
1981
1982
1983
1984
1985
1986
1987
1988
Year
Peer Groups:
Small Transit Systems
Small City Transit Systems

Table 8.
Vehicle Efficiency Performance Profile
(Total Vehicle Miles/Average Number of Buses on Regular Routes)

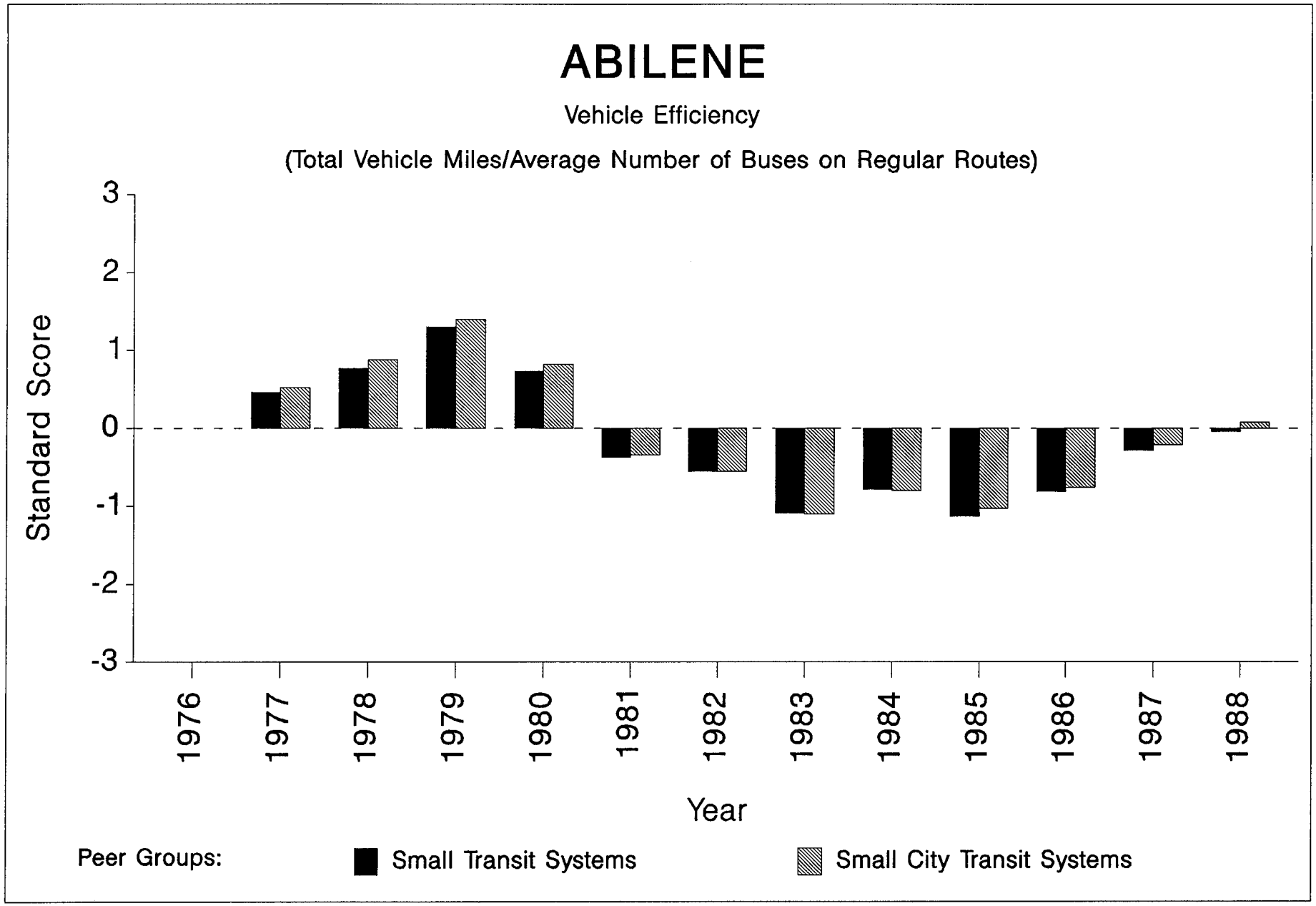
A B I L E N E

Peer Group: Small Transit Systems

	1976	1977	1978	1979	1980	1981	1982	1983	1984	1985	1986	1987	1988
Transit Agency Value	----	4.63	5.29	5.88	5.17	4.21	3.86	3.57	3.75	3.63	3.98	4.28	4.63
Peer Group Mean	----	4.22	4.66	4.51	4.59	4.51	4.37	4.46	4.45	4.54	4.45	4.44	4.65
Standard Score	----	.46	.77	1.30	.73	-.37	-.55	-1.09	-.78	-1.13	-.81	-.28	-.04

Peer Group: Small City Transit Systems

	1976	1977	1978	1979	1980	1981	1982	1983	1984	1985	1986	1987	1988
Transit Agency Value	----	4.63	5.29	5.88	5.17	4.21	3.86	3.57	3.75	3.63	3.98	4.28	4.63
Peer Group Mean	----	4.19	4.58	4.45	4.52	4.47	4.34	4.43	4.43	4.47	4.41	4.40	4.58
Standard Score	----	.52	.88	1.40	.82	-.34	-.55	-1.10	-.80	-1.03	-.76	-.21	.08


ABILENE
Vehicle Efficiency
(Total Vehicle Miles/Average Number of Buses on Regular Routes)
Standard Score
3
2
1
0
-1
-2
-3
1976
1977
1978
1979
1980
1981
1982
1983
1984
1985
1986
1987
1988
Year
Peer Groups:
Small Transit Systems
Small City Transit Systems

AMARILLO

Table 9.
Transit System Statistical Profile

AMARILLO

	1976	1977	1978	1979	1980	1981	1982	1983	1984	1985	1986	1987	1988
Total Passengers	996,994	670,928	626,647	666,750	746,664	777,434	871,473	835,572	842,068	839,434	781,477	742,266	684,731
Total Vehicle Miles	838,219	893,099	845,190	842,740	850,657	778,608	786,410	746,707	765,305	744,382	750,451	740,384	745,119
Total Vehicle Hours	-	51,552	60,156	57,822	56,832	39,698	51,694	49,927	51,593	50,143	50,448	49,683	49,944
Average No. Buses on Regular Routes	-	14	14	14	14	14	14	14	14	14	14	14	14
Average No. Employees	-	42	40	37	37	33	39	41	43	43	43	43	42
Total Operating Revenue ($)	245,454	268,606	251,876	266,963	298,421	283,733	256,234	294,330	348,082	281,607	283,061	280,972	246,094
Passenger Revenue ($)	192,856	167,029	171,049	255,865	286,323	237,923	239,641	273,256	322,919	262,686	254,297	235,738	218,918
Total Operating Expense ($)	583,246	697,588	756,273	809,053	784,503	832,917	865,152	921,266	1,052,128	1,063,134	1,044,323	1,126,842	1,133,293
Net Public Operating Cost ($)	337,792	428,982	504,397	542,090	486,082	549,184	608,918	626,936	704,046	781,527	761,262	845,870	887,199
Total Public Capital Cost ($)	-	258,369	152,670	44,534	58,018	-	1,397,169	107,700	-	783,740	-	-	-
Total Public Expense ($)	337,792	687,351	657,067	586,624	544,100	549,184	2,006,087	734,636	704,046	1,565,267	761,262	845,870	887,199

Source: Texas Transit Statistics

Table 10.
Cost Efficiency Performance Profile
(Total Vehicle Hours/Total Operating Expense)

A M A R I L L O

Peer Group: Small Transit Systems

	1976	1977	1978	1979	1980	1981	1982	1983	1984	1985	1986	1987	1988
Transit Agency Value	—	.074	.080	.071	.072	.048	.060	.054	.049	.047	.048	.044	.044
Peer Group Mean	—	.087	.089	.066	.055	.048	.051	.045	.041	.040	.039	.038	.037
Standard Score	—	-.80	-.41	.39	1.59	-.05	.45	.98	.91	1.11	1.79	1.34	1.46

Peer Group: Small City Transit Systems

	1976	1977	1978	1979	1980	1981	1982	1983	1984	1985	1986	1987	1988
Transit Agency Value	—	.074	.080	.071	.072	.048	.060	.054	.049	.047	.048	.044	.044
Peer Group Mean	—	.087	.088	.066	.055	.048	.051	.045	.042	.041	.039	.038	.037
Standard Score	—	-.87	-.37	.44	1.70	-.04	.48	1.06	.92	.91	1.86	1.31	1.44

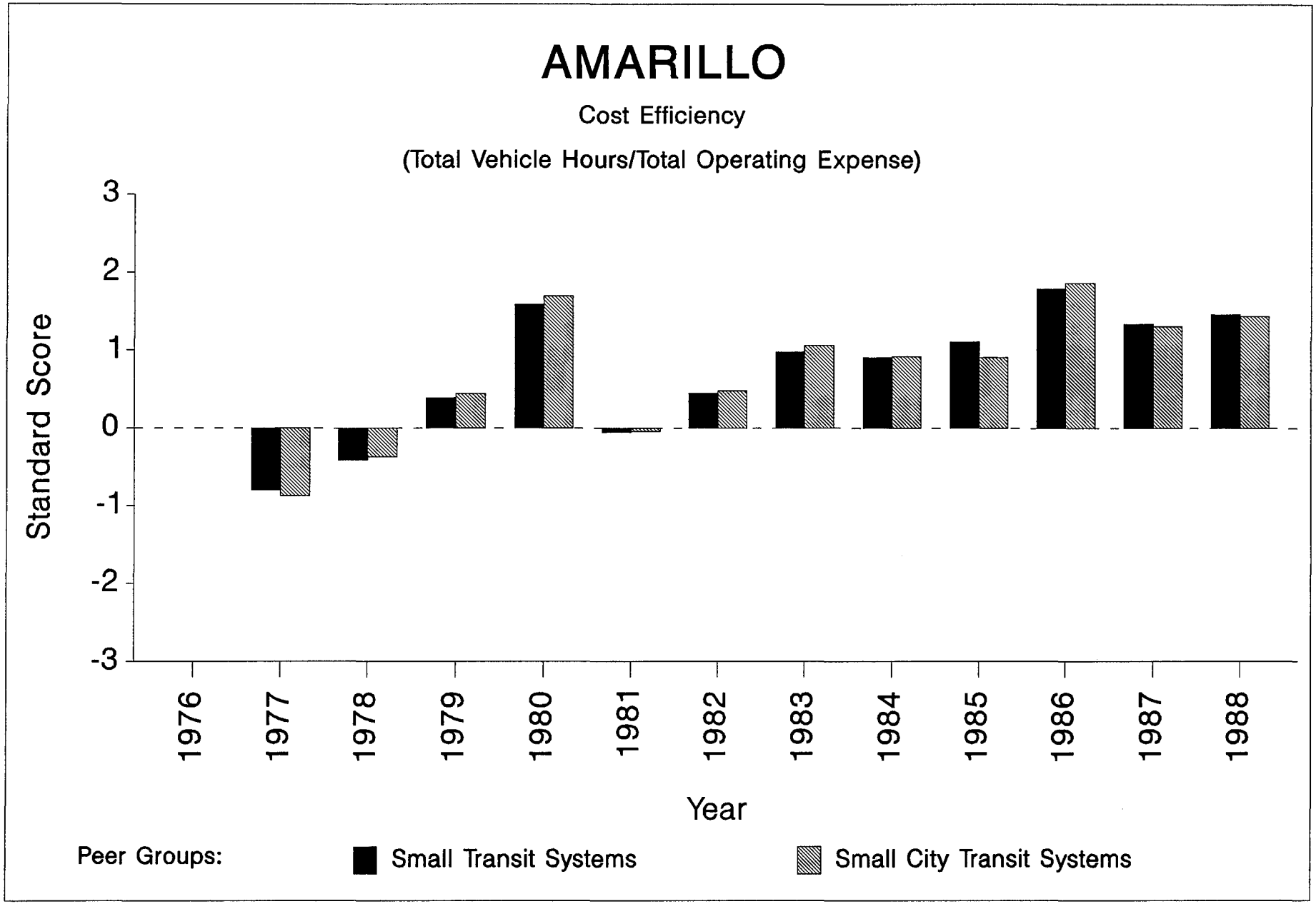

AMARILLO
Cost Efficiency
(Total Vehicle Hours/Total Operating Expense)
Standard Score
3
2
1
0
-1
-2
-3
1976
1977
1978
1979
1980
1981
1982
1983
1984
1985
1986
1987
1988
Year
Peer Groups:
Small Transit Systems
Small City Transit Systems

Table 11.
Service Effectiveness Performance Profile
(Total Passengers/Total Vehicle Hours)

AMARILLO

Peer Group: Small Transit Systems

	1976	1977	1978	1979	1980	1981	1982	1983	1984	1985	1986	1987	1988
Transit Agency Value	---	13.01	10.42	11.53	13.14	19.58	16.86	16.74	16.32	16.74	15.49	14.94	13.71
Peer Group Mean	---	19.20	18.49	20.03	20.72	21.44	19.80	19.75	20.70	19.66	19.82	19.34	19.12
Standard Score	---	-.88	-1.04	-.99	-1.07	-.27	-.42	-.48	-.60	-.40	-.57	-.53	-.57

Peer Group: Small City Transit Systems

	1976	1977	1978	1979	1980	1981	1982	1983	1984	1985	1986	1987	1988
Transit Agency Value	---	13.01	10.42	11.53	13.14	19.58	16.86	16.74	16.32	16.74	15.49	14.94	13.71
Peer Group Mean	---	20.85	19.69	21.05	22.20	23.10	22.06	20.55	21.69	20.79	20.79	20.23	20.02
Standard Score	---	-.95	-1.13	-1.08	-1.09	-.41	-.52	-.58	-.70	-.51	-.67	-.63	-.66

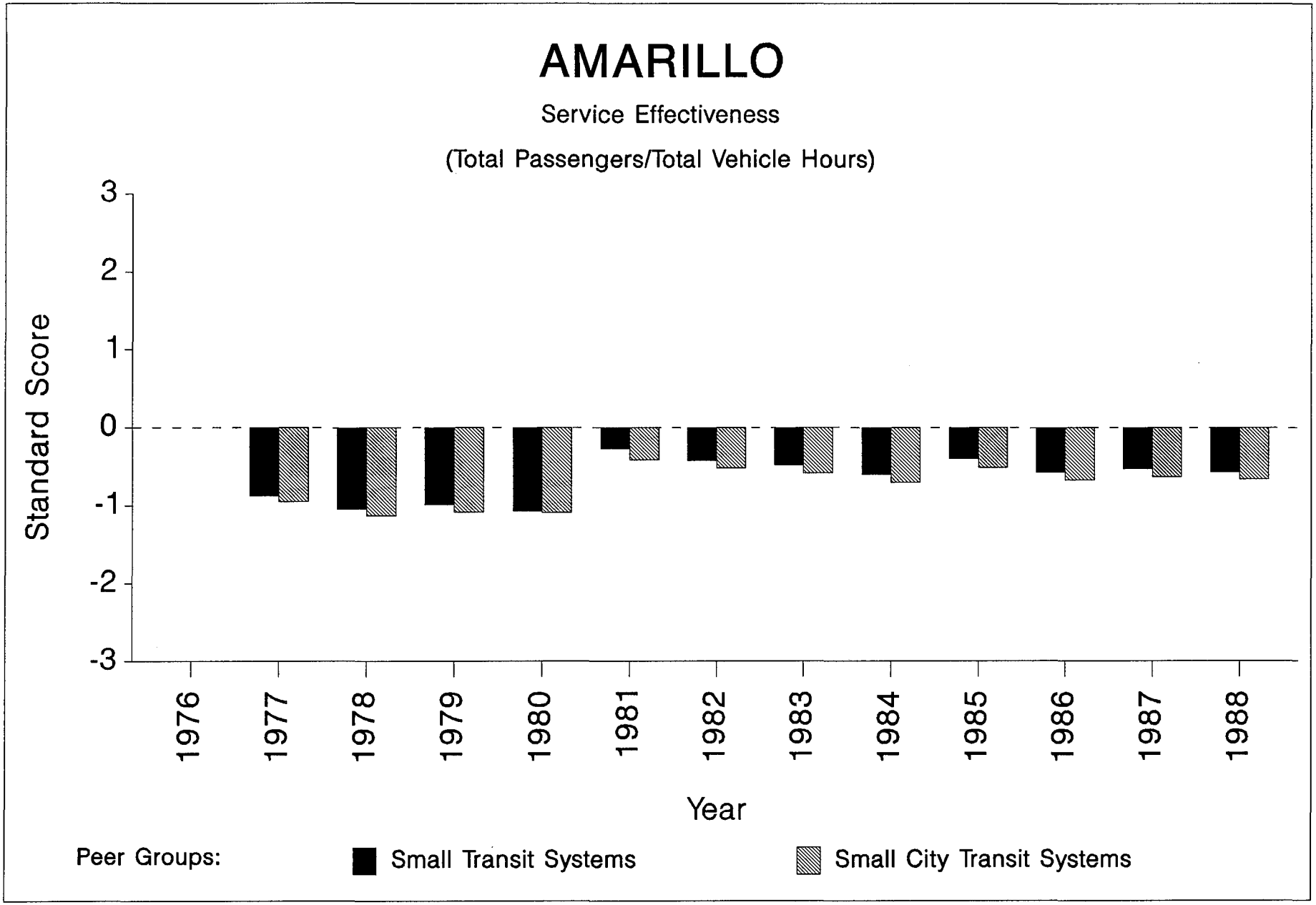

AMARILLO
Service Effectiveness
(Total Passengers/Total Vehicle Hours)
Standard Score
3
2
1
0
-1
-2
-3
1976
1977
1978
1979
1980
1981
1982
1983
1984
1985
1986
1987
1988
Year
Peer Groups:
Small Transit Systems
Small City Transit Systems

Table 12.
Cost Effectiveness Performance Profile
(Passenger Revenue/Total Operating Expense)

A M A R I L L O

Peer Group: Small Transit Systems

	1976	1977	1978	1979	1980	1981	1982	1983	1984	1985	1986	1987	1988
Transit Agency Value	.33	.24	.23	.32	.36	.29	.28	.30	.31	.25	.24	.21	.19
Peer Group Mean	.51	.48	.39	.34	.34	.33	.33	.33	.33	.30	.29	.27	.27
Standard Score	-.68	-1.00	-1.13	-.14	.18	-.25	-.39	-.24	-.13	-.42	-.37	-.52	-.55

Peer Group: Small City Transit Systems

	1976	1977	1978	1979	1980	1981	1982	1983	1984	1985	1986	1987	1988
Transit Agency Value	.33	.24	.23	.32	.36	.29	.28	.30	.31	.25	.24	.21	.19
Peer Group Mean	.49	.46	.39	.34	.34	.33	.34	.34	.34	.31	.29	.28	.28
Standard Score	-.64	-.99	-1.20	-.15	.19	-.28	-.46	-.29	-.20	-.53	-.45	-.61	-.63

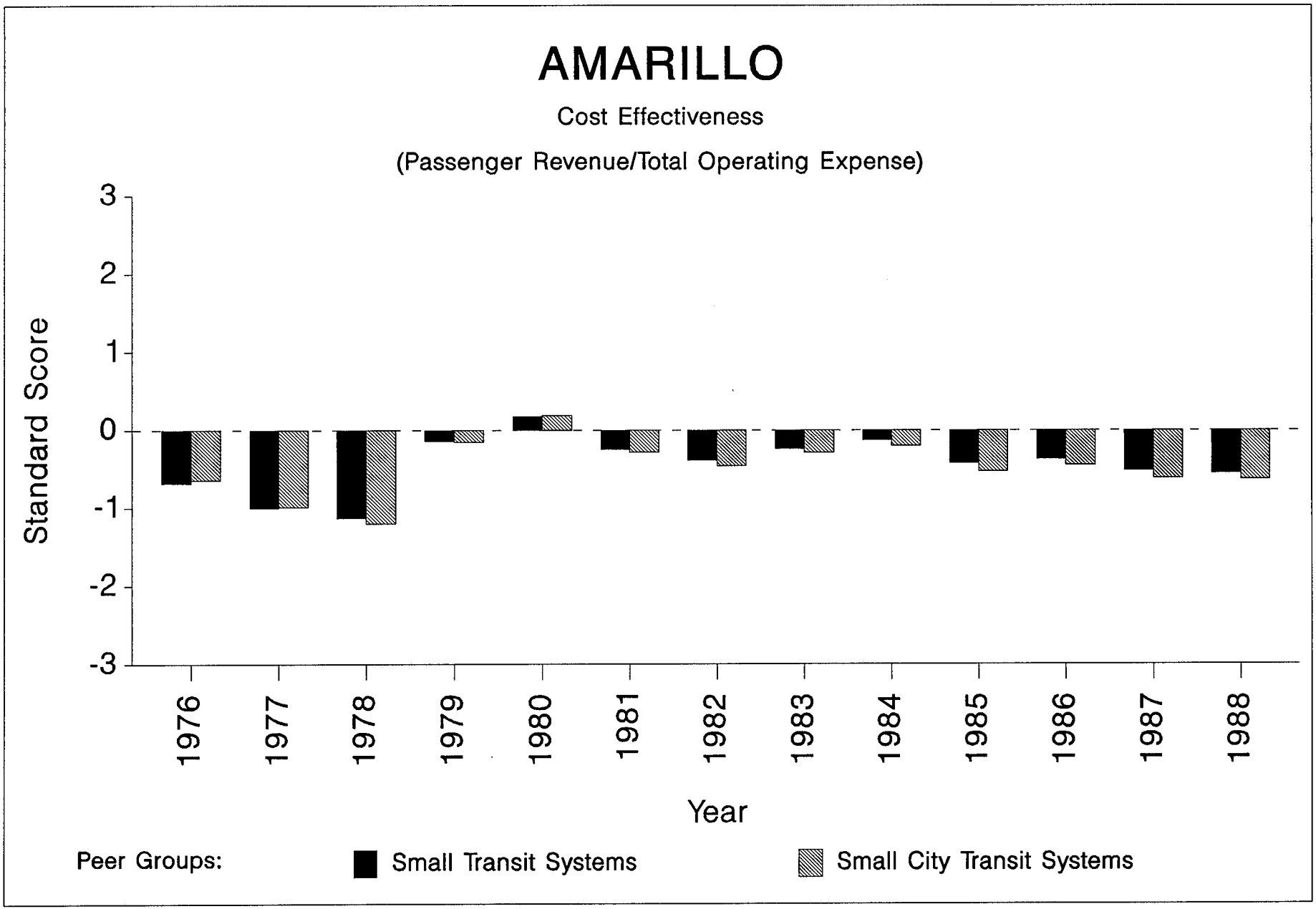

AMARILLO
Cost Effectiveness
(Passenger Revenue/Total Operating Expense)
Standard Score
3
2
1
0
-1
-2
-3
1976
1977
1978
1979
1980
1981
1982
1983
1984
1985
1986
1987
1988
Year
Peer Groups:
Small Transit Systems
Small City Transit Systems

Table 13.
Labor Efficiency Performance Profile
(Total Vehicle Hours/Average Number of Employees)

A M A R I L L O

Peer Group: Small Transit Systems

	1976	1977	1978	1979	1980	1981	1982	1983	1984	1985	1986	1987	1988
Transit Agency Value	—	.123	.150	.156	.154	.120	.133	.122	.120	.117	.117	.116	.119
Peer Group Mean	—	.131	.140	.129	.125	.122	.131	.122	.123	.124	.122	.116	.119
Standard Score	—	-.53	.40	.72	1.02	-.05	.05	.00	-.10	-.31	-.25	-.08	-.02

Peer Group: Small City Transit Systems

	1976	1977	1978	1979	1980	1981	1982	1983	1984	1985	1986	1987	1988
Transit Agency Value	—	.123	.150	.156	.154	.120	.133	.122	.120	.117	.117	.116	.119
Peer Group Mean	—	.130	.139	.128	.124	.121	.128	.120	.121	.123	.121	.116	.119
Standard Score	—	-.46	.48	.78	1.10	-.03	.11	.05	-.05	-.28	-.18	-.05	-.03

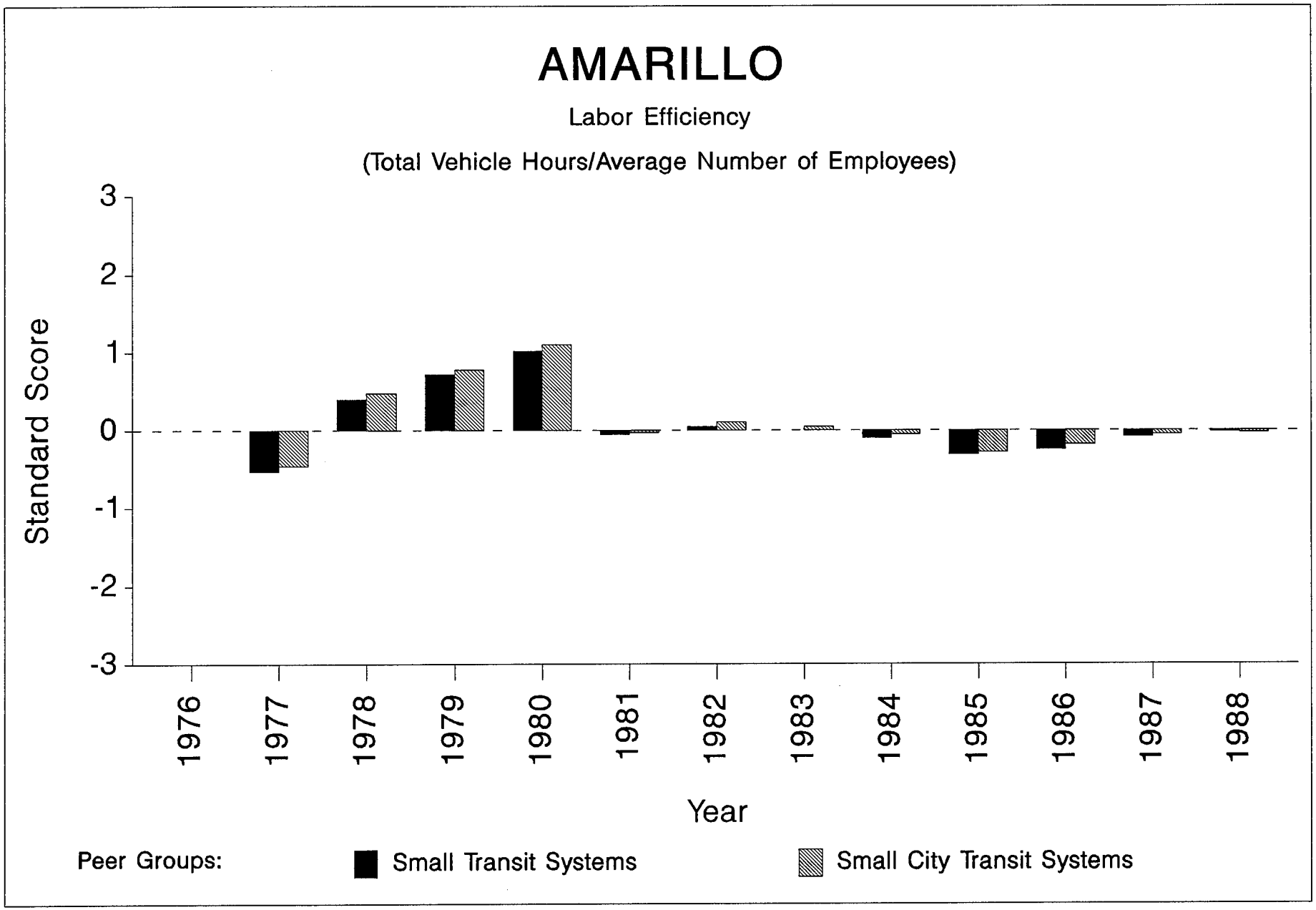

AMARILLO
Labor Efficiency
(Total Vehicle Hours/Average Number of Employees)
Standard Score
3
2
1
0
-1
-2
-3
1976
1977
1978
1979
1980
1981
1982
1983
1984
1985
1986
1987
1988
Year
Peer Groups:
Small Transit Systems
Small City Transit Systems

Table 14.
Vehicle Efficiency Performance Profile
(Total Vehicle Miles/Average Number of Buses on Regular Routes)

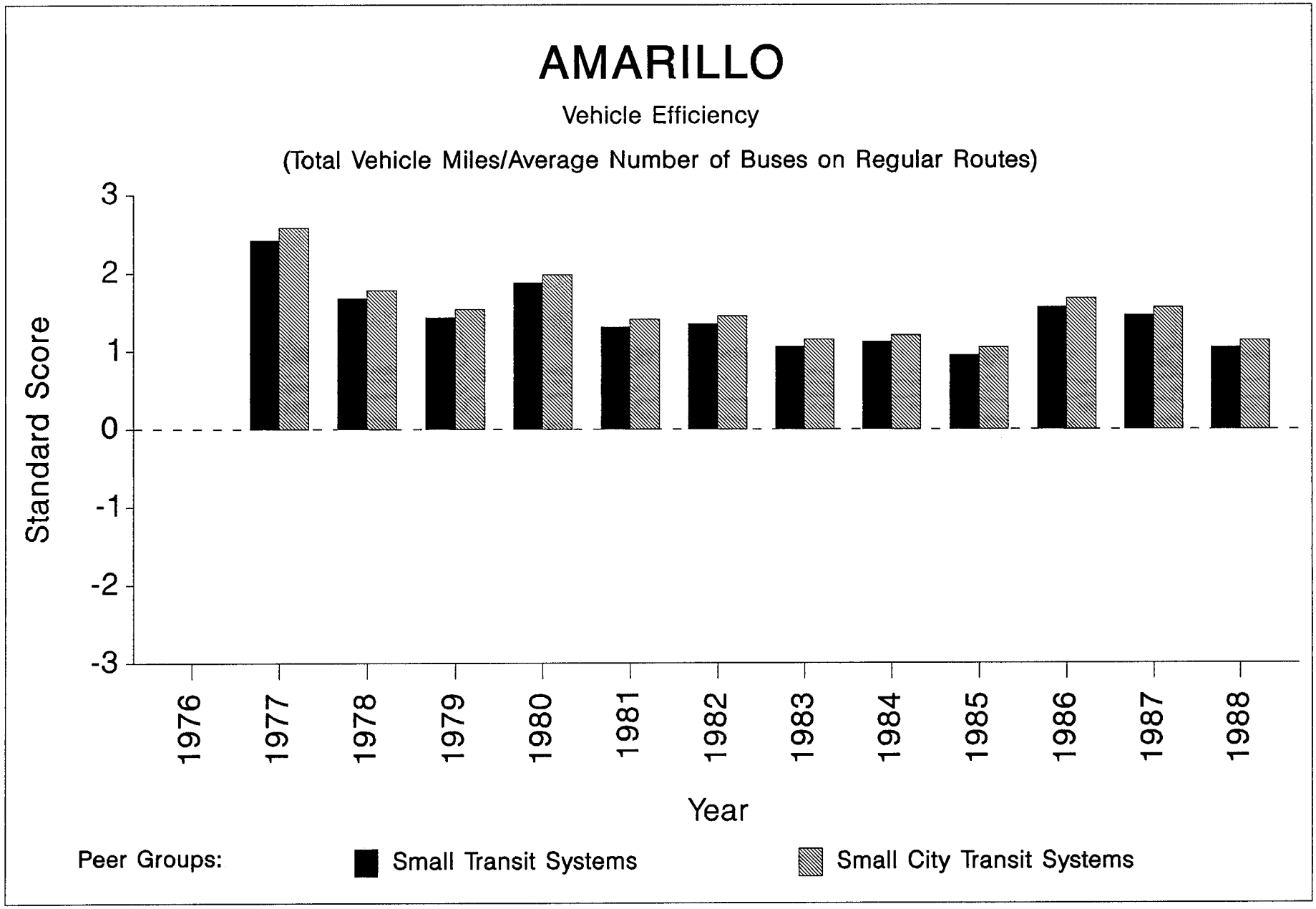
AMARILLO

Peer Group: Small Transit Systems

	1976	1977	1978	1979	1980	1981	1982	1983	1984	1985	1986	1987	1988
Transit Agency Value	—	6.38	6.04	6.02	6.08	5.56	5.62	5.33	5.47	5.32	5.36	5.29	5.32
Peer Group Mean	—	4.22	4.66	4.51	4.59	4.51	4.37	4.46	4.45	4.54	4.45	4.44	4.65
Standard Score	—	2.42	1.68	1.43	1.88	1.31	1.35	1.06	1.12	.95	1.57	1.46	1.05

Peer Group: Small City Transit Systems

	1976	1977	1978	1979	1980	1981	1982	1983	1984	1985	1986	1987	1988
Transit Agency Value	—	6.38	6.04	6.02	6.08	5.56	5.62	5.33	5.47	5.32	5.36	5.29	5.32
Peer Group Mean	—	4.19	4.58	4.45	4.52	4.47	4.34	4.43	4.43	4.47	4.41	4.40	4.58
Standard Score	—	2.58	1.78	1.54	1.98	1.41	1.45	1.15	1.20	1.05	1.68	1.56	1.14


AMARILLO
Vehicle Efficiency
(Total Vehicle Miles/Average Number of Buses on Regular Routes)
Standard Score
3
2
1
0
-1
-2
-3
1976
1977
1978
1979
1980
1981
1982
1983
1984
1985
1986
1987
1988
Year
Peer Groups:
Small Transit Systems
Small City Transit Systems

AUSTIN

Table 15.
Transit System Statistical Profile

AUSTIN

	1976	1977	1978	1979	1980	1981	1982	1983	1984	1985	1986	1987	1988
Total Passengers	6,066,771	6,199,344	6,016,524	5,940,126	5,842,987	5,142,578	4,742,369	4,363,230	5,048,309	5,778,005	8,548,455	10,156,311	14,710,349
Total Vehicle Miles	2,543,760	2,887,674	2,844,565	2,911,148	2,968,808	2,742,958	2,973,686	2,979,608	3,086,637	4,010,310	6,148,469	9,203,384	10,627,273
Total Vehicle Hours	-	186,593	230,919	242,766	242,474	221,314	234,634	230,237	232,827	311,674	505,797	715,470	806,406
Average No. Buses on Regular Routes	-	44	56	63	63	63	64	67	67	97	172	193	214
Average No. Employees	-	182	192	196	201	195	208	217	225	348	649	697	687
Total Operating Revenue ($)	955,303	1,115,976	1,022,067	1,191,382	1,563,623	1,654,824	1,841,027	1,767,858	1,966,119	2,376,568	2,912,366	3,291,988	4,481,839
Passenger Revenue ($)	811,067	1,017,854	935,086	1,145,590	1,533,272	1,621,599	1,802,819	1,723,735	1,918,344	2,323,628	2,602,753	2,990,474	3,271,985
Total Operating Expense ($)	2,592,850	3,141,218	3,649,372	4,611,683	5,322,807	5,862,421	6,490,619	6,662,587	7,833,896	11,092,623	31,238,152	35,549,627	35,392,774
Net Public Operating Cost ($)	1,637,547	2,025,242	2,627,305	3,420,301	3,759,184	4,207,597	4,649,592	4,894,729	5,867,777	8,716,055	28,325,786	32,257,639	30,910,935
Total Public Capital Cost ($)	-	11,920	2,117,147	27,099	-	2,705,392	1,590,446	405,502	99,116	5,840,268	19,296,907	11,320,080	6,184,506
Total Public Expense ($)	1,637,547	2,037,162	4,744,452	3,447,400	3,759,184	6,912,989	6,240,038	5,300,231	5,966,893	14,556,323	47,622,693	43,577,719	37,095,441

Source: Texas Transit Statistics and Capital Area Metropolitan Transit Authority

Table 16.
Cost Efficiency Performance Profile
(Total Vehicle Hours/Total Operating Expense)

AUSTIN

Peer Group: Large Transit Systems

	1976	1977	1978	1979	1980	1981	1982	1983	1984	1985	1986	1987	1988
Transit Agency Value	—	.059	.063	.053	.046	.038	.036	.035	.030	.028	.016	.020	.023
Peer Group Mean	—	.051	.052	.043	.036	.030	.029	.028	.026	.024	.021	.022	.022
Standard Score	—	1.41	1.01	1.11	.91	.88	.86	.91	.60	.65	-.68	-.24	.09

Peer Group: Large City Transit Systems

	1976	1977	1978	1979	1980	1981	1982	1983	1984	1985	1986	1987	1988
Transit Agency Value	—	.059	.063	.053	.046	.038	.036	.035	.030	.028	.016	.020	.023
Peer Group Mean	—	.069	.060	.047	.039	.033	.031	.031	.029	.026	.024	.023	.022
Standard Score	—	-.23	.12	.59	.71	.57	.79	.54	.06	.40	-1.21	-.53	.08

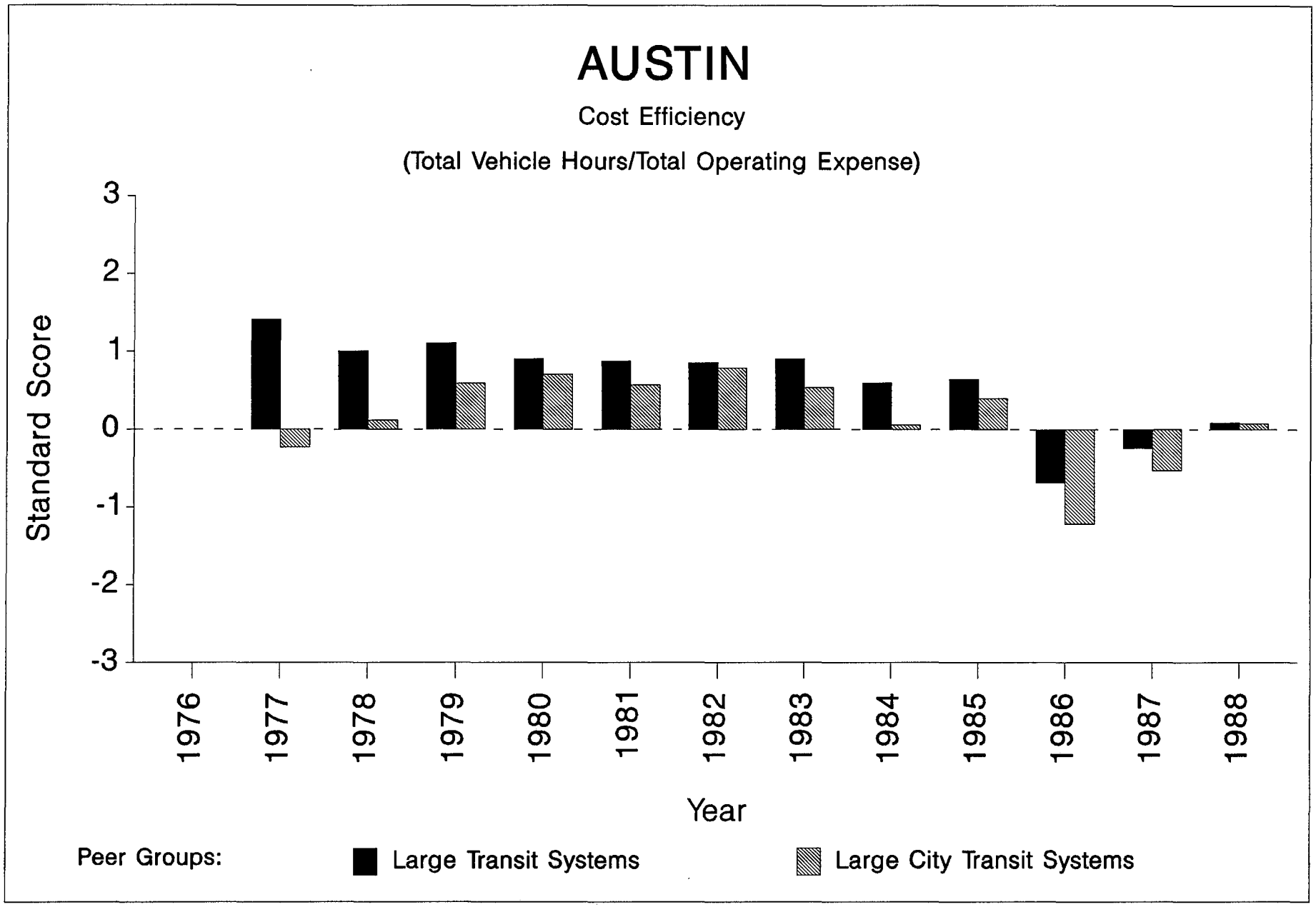

AUSTIN
Cost Efficiency
(Total Vehicle Hours/Total Operating Expense)
Standard Score
3
2
1
0
-1
-2
-3
1976
1977
1978
1979
1980
1981
1982
1983
1984
1985
1986
1987
1988
Year
Peer Groups:
Large Transit Systems
Large City Transit Systems

Table 17.
Service Effectiveness Performance Profile
(Total Passengers/Total Vehicle Hours)

AUSTIN

Peer Group: Large Transit Systems

	1976	1977	1978	1979	1980	1981	1982	1983	1984	1985	1986	1987	1988
Transit Agency Value	—	33.22	26.05	24.47	24.10	23.24	20.21	18.95	21.68	18.54	16.90	14.20	18.24
Peer Group Mean	—	38.30	30.76	30.99	31.83	30.67	29.44	28.34	29.18	27.87	25.23	24.43	25.96
Standard Score	—	-.64	-1.45	-1.35	-1.44	-1.36	-1.43	-1.36	-1.09	-1.45	-1.34	-1.27	-1.09

Peer Group: Large City Transit Systems

	1976	1977	1978	1979	1980	1981	1982	1983	1984	1985	1986	1987	1988
Transit Agency Value	—	33.22	26.05	24.47	24.10	23.24	20.21	18.95	21.68	18.54	16.90	14.20	18.24
Peer Group Mean	—	30.94	26.16	27.54	28.78	27.49	25.65	25.18	25.99	25.35	23.02	23.39	24.54
Standard Score	—	.21	-.02	-.51	-.74	-.63	-.75	-.81	-.55	-.91	-.82	-1.12	-.80

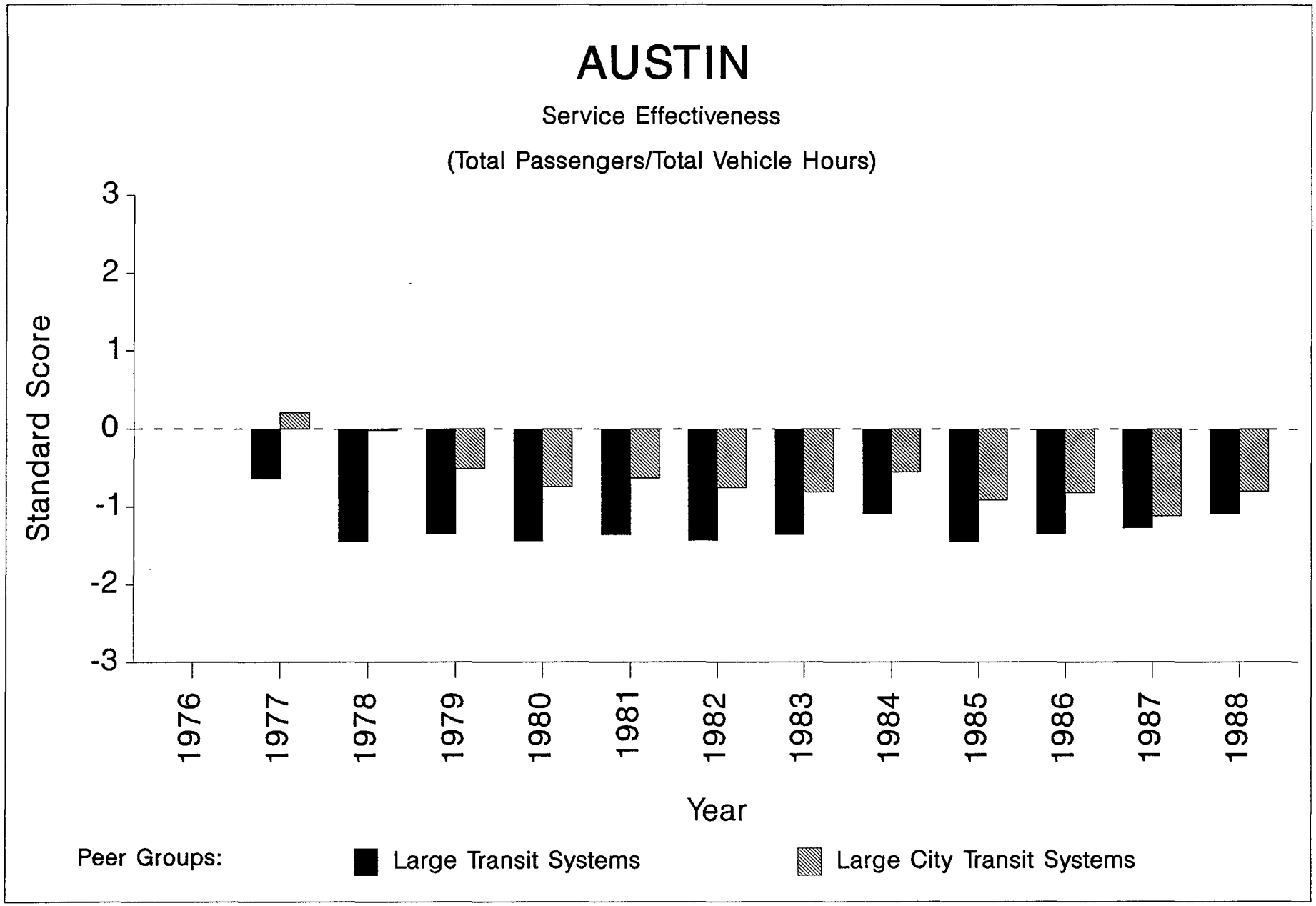

AUSTIN
Service Effectiveness
(Total Passengers/Total Vehicle Hours)
Standard Score
3
2
1
0
-1
-2
-3
1976
1977
1978
1979
1980
1981
1982
1983
1984
1985
1986
1987
1988
Year
Peer Groups:
Large Transit Systems
Large City Transit Systems

Table 18.
Cost Effectiveness Performance Profile
(Passenger Revenue/Total Operating Expense)

AUSTIN

Peer Group: Large Transit Systems

	1976	1977	1978	1979	1980	1981	1982	1983	1984	1985	1986	1987	1988
Transit Agency Value	.31	.32	.26	.25	.29	.28	.28	.26	.24	.21	.08	.08	.09
Peer Group Mean	.52	.49	.40	.37	.36	.36	.35	.33	.28	.26	.22	.21	.22
Standard Score	-1.45	-1.25	-.91	-.72	-.53	-.52	-.45	-.52	-.65	-.93	-1.35	-1.46	-1.47

Peer Group: Large City Transit Systems

	1976	1977	1978	1979	1980	1981	1982	1983	1984	1985	1986	1987	1988
Transit Agency Value	.31	.32	.26	.25	.29	.28	.28	.26	.24	.21	.08	.08	.09
Peer Group Mean	.55	.53	.43	.39	.37	.36	.34	.34	.32	.28	.25	.24	.23
Standard Score	-1.03	-.88	-1.02	-.95	-.70	-.60	-.53	-.77	-.98	-.98	-1.47	-1.16	-1.21

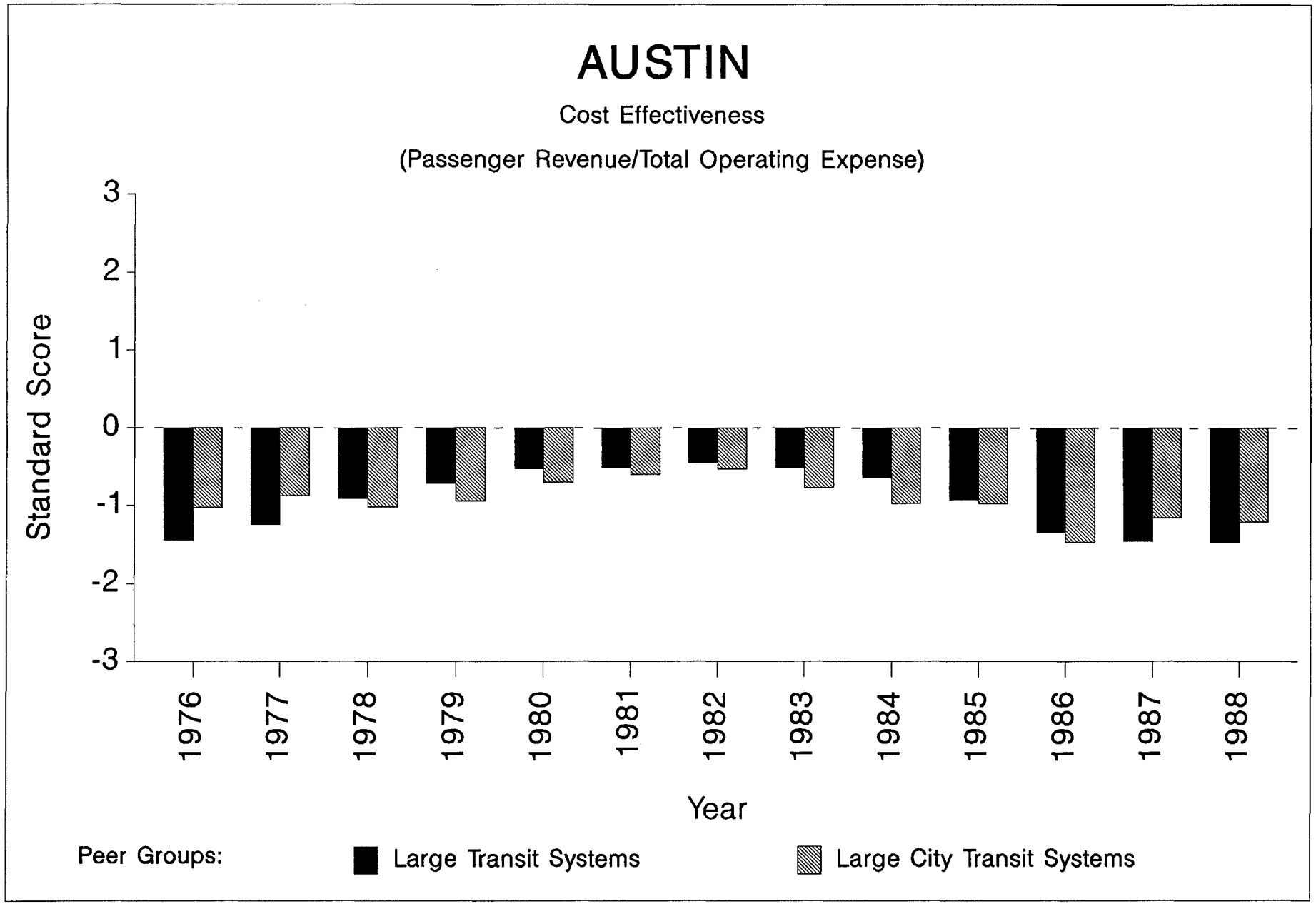

AUSTIN
Cost Effectiveness
(Passenger Revenue/Total Operating Expense)
Standard Score
3
2
1
0
-1
-2
-3
1976
1977
1978
1979
1980
1981
1982
1983
1984
1985
1986
1987
1988
Year
Peer Groups:
Large Transit Systems
Large City Transit Systems

Table 19.
Labor Efficiency Performance Profile
(Total Vehicle Hours/Average Number of Employees)

AUSTIN

Peer Group: Large Transit Systems

	1976	1977	1978	1979	1980	1981	1982	1983	1984	1985	1986	1987	1988
Transit Agency Value	—	.103	.120	.124	.121	.113	.113	.106	.103	.090	.078	.103	.117
Peer Group Mean	—	.102	.116	.112	.106	.105	.104	.104	.101	.098	.100	.104	.109
Standard Score	—	.10	.55	.94	.95	.82	.84	.16	.19	-.85	-.95	-.08	.37

Peer Group: Large City Transit Systems

	1976	1977	1978	1979	1980	1981	1982	1983	1984	1985	1986	1987	1988
Transit Agency Value	—	.103	.120	.124	.121	.113	.113	.106	.103	.090	.078	.103	.117
Peer Group Mean	—	.118	.126	.117	.110	.108	.107	.105	.102	.098	.097	.101	.101
Standard Score	—	-.42	-.23	.63	.85	.60	.65	.08	.23	-1.20	-1.12	.12	.88

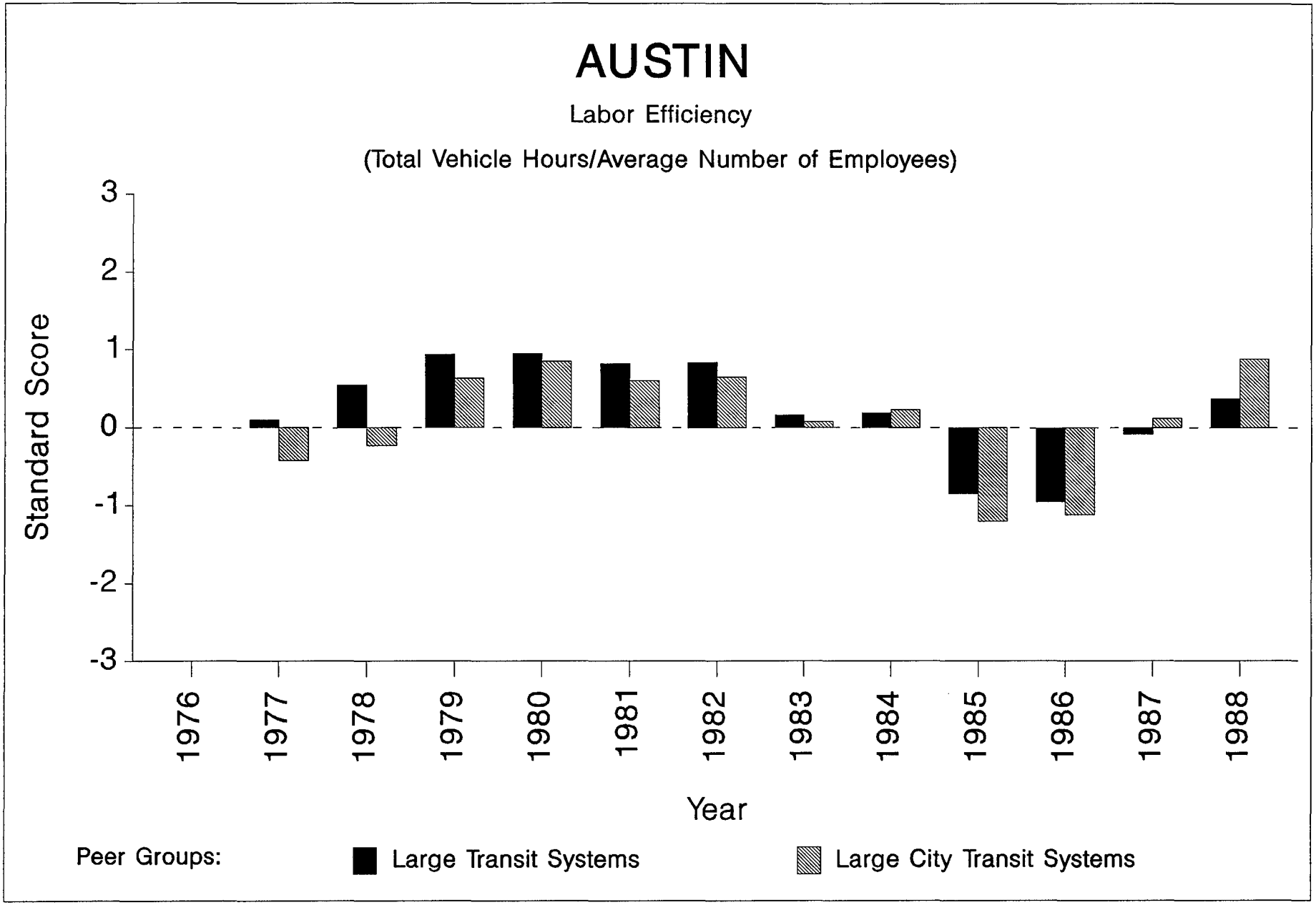

AUSTIN
Labor Efficiency
(Total Vehicle Hours/Average Number of Employees)
Standard Score
3
2
1
0
-1
-2
-3
1976
1977
1978
1979
1980
1981
1982
1983
1984
1985
1986
1987
1988
Year
Peer Groups:
Large Transit Systems
Large City Transit Systems

Table 20.
Vehicle Efficiency Performance Profile
(Total Vehicle Miles/Average Number of Buses on Regular Routes)

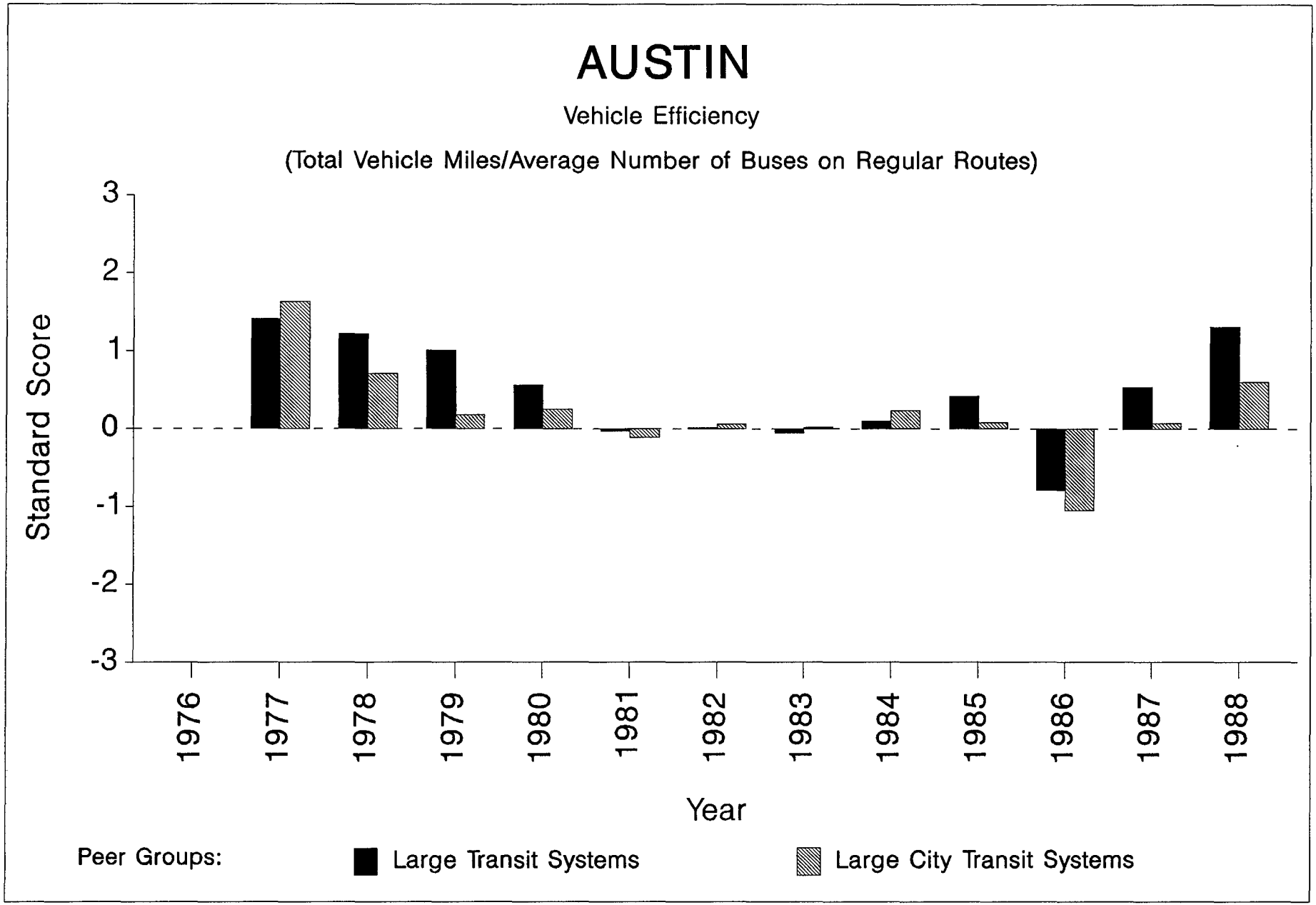
AUSTIN

Peer Group: Large Transit Systems

	1976	1977	1978	1979	1980	1981	1982	1983	1984	1985	1986	1987	1988
Transit Agency Value	----	6.56	5.08	4.62	4.71	4.35	4.65	4.45	4.61	4.13	3.57	4.77	4.97
Peer Group Mean	2.85	4.49	4.31	4.17	4.23	4.39	4.63	4.53	4.48	3.88	3.97	4.40	4.34
Standard Score	----	1.41	1.22	1.01	.56	-.03	.01	-.05	.10	.42	-.79	.54	1.31

Peer Group: Large City Transit Systems

	1976	1977	1978	1979	1980	1981	1982	1983	1984	1985	1986	1987	1988
Transit Agency Value	----	6.56	5.08	4.62	4.71	4.35	4.65	4.45	4.61	4.13	3.57	4.77	4.97
Peer Group Mean	2.85	4.60	4.50	4.46	4.46	4.48	4.57	4.42	4.40	4.09	4.22	4.71	4.57
Standard Score	----	1.63	.71	.18	.25	-.11	.06	.02	.23	.08	-1.05	.07	.60


AUSTIN
Vehicle Efficiency
(Total Vehicle Miles/Average Number of Buses on Regular Routes)
Standard Score
3
2
1
0
-1
-2
-3
1976
1977
1978
1979
1980
1981
1982
1983
1984
1985
1986
1987
1988
Year
Peer Groups:
Large Transit Systems
Large City Transit Systems

B E A U M O N T

Table 21.
Transit System Statistical Profile

BEAUMONT

	1976	1977	1978	1979	1980	1981	1982	1983	1984	1985	1986	1987	1988
Total Passengers	1,126,018	1,293,266	1,238,641	1,316,571	1,497,805	1,579,775	1,525,783	1,507,800	1,466,626	1,380,762	1,167,414	1,081,187	1,086,207
Total Vehicle Miles	697,468	588,047	561,414	561,913	615,422	642,648	643,462	662,845	678,675	676,816	574,537	589,850	589,246
Total Vehicle Hours	-	52,725	53,673	53,494	58,834	64,462	67,939	67,838	65,311	63,833	51,038	45,665	49,360
Average No. Buses on Regular Routes	-	14	13	14	16	15	15	15	16	16	14	13	11
Average No. Employees	-	35	36	36	41	43	46	45	43	42	37	37	38
Total Operating Revenue ($)	263,349	272,984	264,035	291,586	329,238	411,875	470,792	444,028	468,731	436,562	370,836	345,406	342,031
Passenger Revenue ($)	263,349	272,532	263,939	290,941	327,717	411,572	468,603	441,988	468,431	436,562	370,836	345,406	342,031
Total Operating Expense ($)	664,228	635,406	661,958	749,284	1,019,595	1,175,820	1,214,301	1,473,048	1,493,920	1,538,271	1,356,668	1,370,562	1,416,532
Net Public Operating Cost ($)	400,879	362,422	397,923	457,698	690,357	763,945	743,509	1,029,020	1,025,189	1,101,709	985,832	1,025,156	1,074,501
Total Public Capital Cost ($)	1,661,764	815,253	-	-	359,142	72,450	81,477	10,837	-	-	80,159	104,111	-
Total Public Expense ($)	2,062,643	1,177,675	397,923	457,698	1,049,499	836,395	824,986	1,039,857	1,025,189	1,101,709	1,065,991	1,129,267	1,074,501

Source: Texas Transit Statistics

Table 22.
Cost Efficiency Performance Profile
(Total Vehicle Hours/Total Operating Expense)

B E A U M O N T

Peer Group: Small Transit Systems

	1976	1977	1978	1979	1980	1981	1982	1983	1984	1985	1986	1987	1988
Transit Agency Value	—	.083	.081	.071	.058	.055	.056	.046	.044	.041	.038	.033	.035
Peer Group Mean	—	.087	.089	.066	.055	.048	.051	.045	.041	.040	.039	.038	.037
Standard Score	—	-.23	-.34	.38	.22	.80	.25	.12	.28	.21	-.23	-.87	-.36

Peer Group: Small City Transit Systems

	1976	1977	1978	1979	1980	1981	1982	1983	1984	1985	1986	1987	1988
Transit Agency Value	—	.083	.081	.071	.058	.055	.056	.046	.044	.041	.038	.033	.035
Peer Group Mean	—	.087	.088	.066	.055	.048	.051	.045	.042	.041	.039	.038	.037
Standard Score	—	-.26	-.30	.43	.27	.85	.27	.16	.26	.06	-.26	-.96	-.44

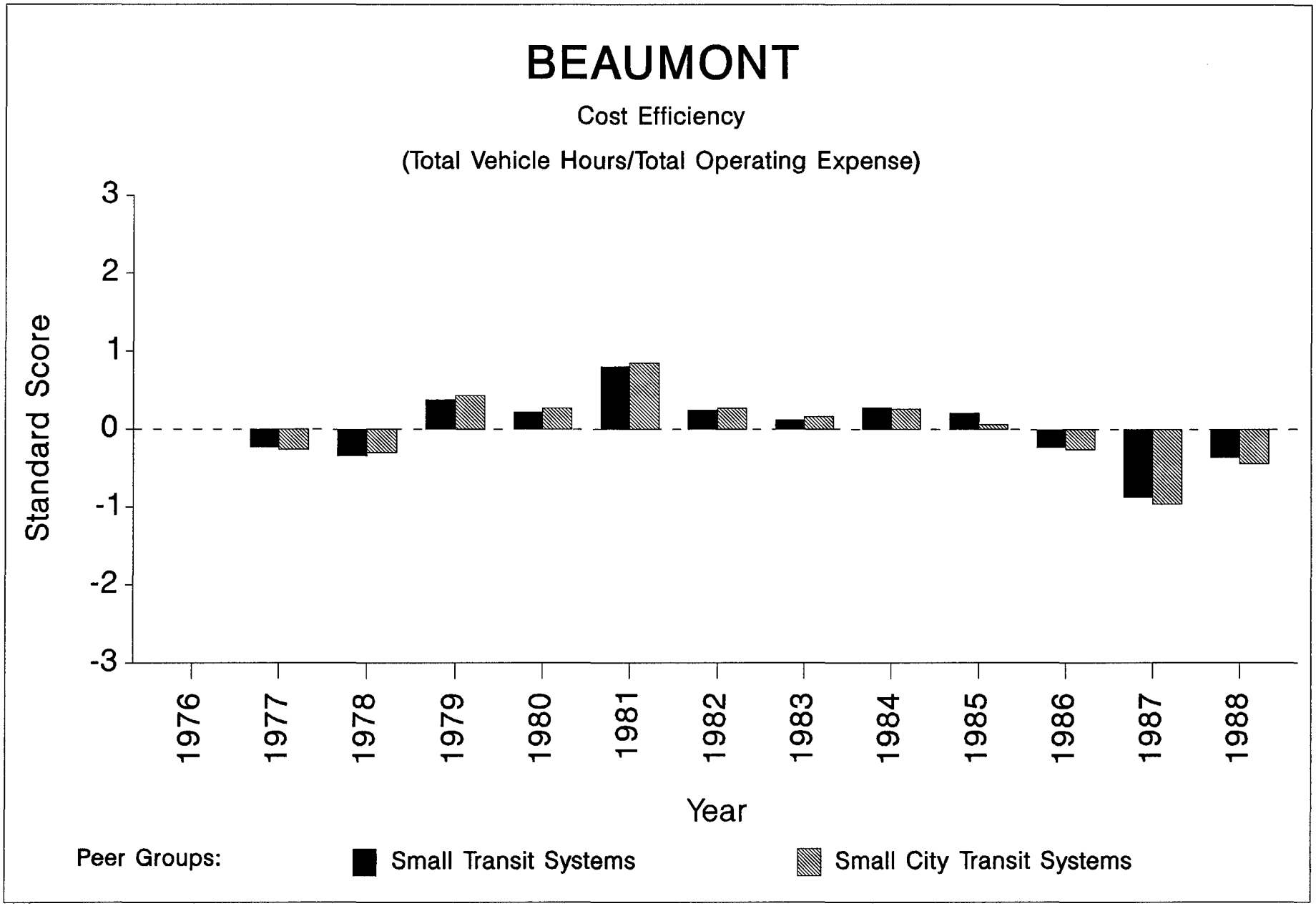

BEAUMONT
Cost Efficiency
(Total Vehicle Hours/Total Operating Expense)
Standard Score
3
2
1
0
-1
-2
-3
1976
1977
1978
1979
1980
1981
1982
1983
1984
1985
1986
1987
1988
Year
Peer Groups:
Small Transit Systems
Small City Transit Systems

Table 23.
Service Effectiveness Performance Profile
(Total Passengers/Total Vehicle Hours)

B E A U M O N T

Peer Group: Small Transit Systems

	1976	1977	1978	1979	1980	1981	1982	1983	1984	1985	1986	1987	1988
Transit Agency Value	—	24.53	23.08	24.61	25.46	24.51	22.46	22.23	22.46	21.63	22.87	23.68	22.01
Peer Group Mean	—	19.20	18.49	20.03	20.72	21.44	19.80	19.75	20.70	19.66	19.82	19.34	19.12
Standard Score	—	.76	.59	.54	.67	.44	.38	.39	.24	.27	.40	.53	.30

Peer Group: Small City Transit Systems

	1976	1977	1978	1979	1980	1981	1982	1983	1984	1985	1986	1987	1988
Transit Agency Value	—	24.53	23.08	24.61	25.46	24.51	22.46	22.23	22.46	21.63	22.87	23.68	22.01
Peer Group Mean	—	20.85	19.69	21.05	22.20	23.10	22.06	20.55	21.69	20.79	20.79	20.23	20.02
Standard Score	—	.45	.41	.40	.39	.16	.04	.26	.10	.11	.26	.41	.21

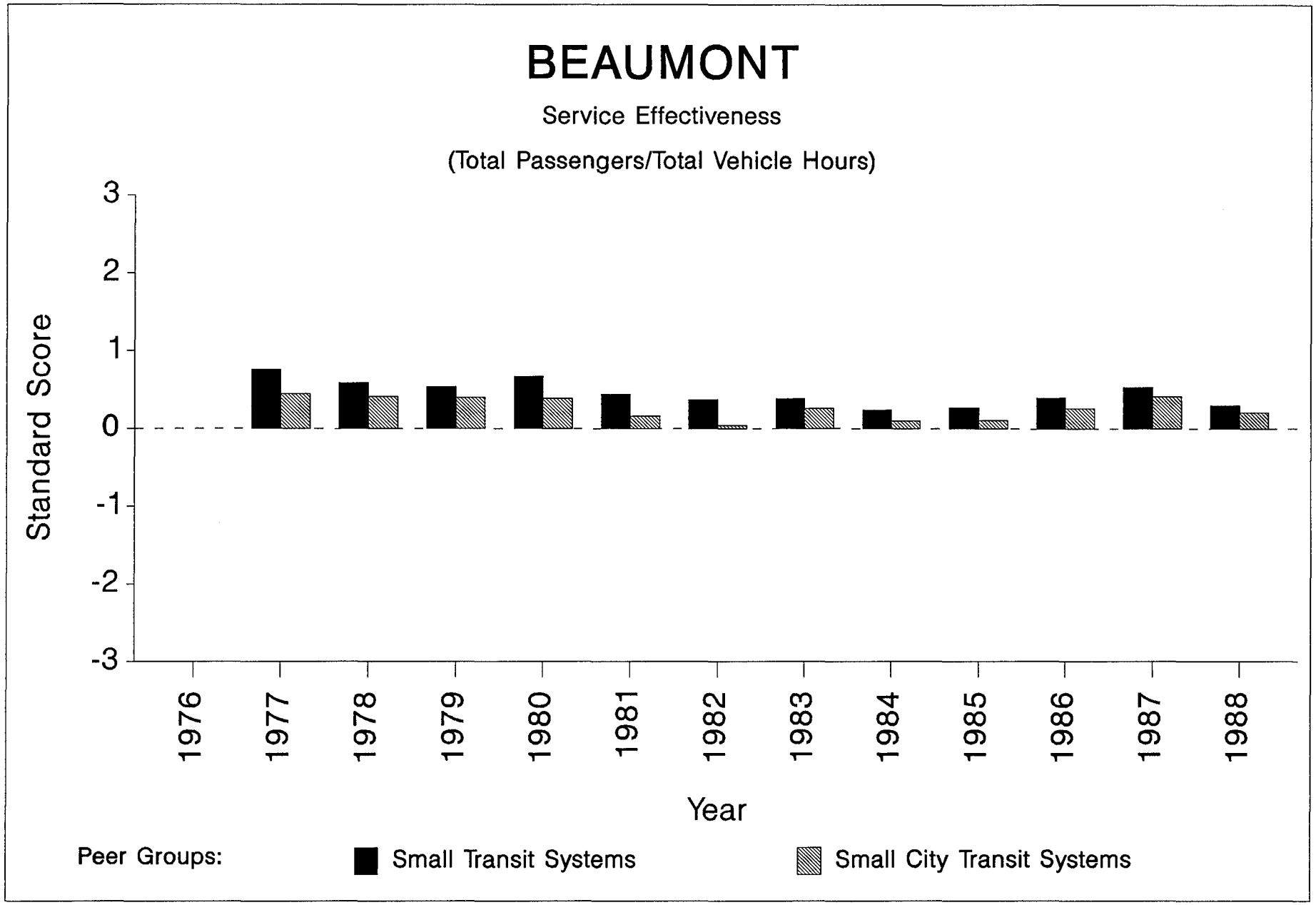

BEAUMONT
Service Effectiveness
(Total Passengers/Total Vehicle Hours)
Standard Score
3
2
1
0
-1
-2
-3
1976
1977
1978
1979
1980
1981
1982
1983
1984
1985
1986
1987
1988
Year
Peer Groups:
Small Transit Systems
Small City Transit Systems

Table 24.
Cost Effectiveness Performance Profile
(Passenger Revenue/Total Operating Expense)

B E A U M O N T

Peer Group: Small Transit Systems

	1976	1977	1978	1979	1980	1981	1982	1983	1984	1985	1986	1987	1988
Transit Agency Value	.40	.43	.40	.39	.32	.35	.39	.30	.31	.28	.27	.25	.24
Peer Group Mean	.51	.48	.39	.34	.34	.33	.33	.33	.33	.30	.29	.27	.27
Standard Score	-.43	-.20	.07	.35	-.09	.15	.37	-.22	-.09	-.11	-.11	-.15	-.20

Peer Group: Small City Transit Systems

	1976	1977	1978	1979	1980	1981	1982	1983	1984	1985	1986	1987	1988
Transit Agency Value	.40	.43	.40	.39	.32	.35	.39	.30	.31	.28	.27	.25	.24
Peer Group Mean	.49	.46	.39	.34	.34	.33	.34	.34	.34	.31	.29	.28	.28
Standard Score	-.38	-.15	.07	.37	-.09	.15	.32	-.27	-.15	-.24	-.18	-.23	-.26

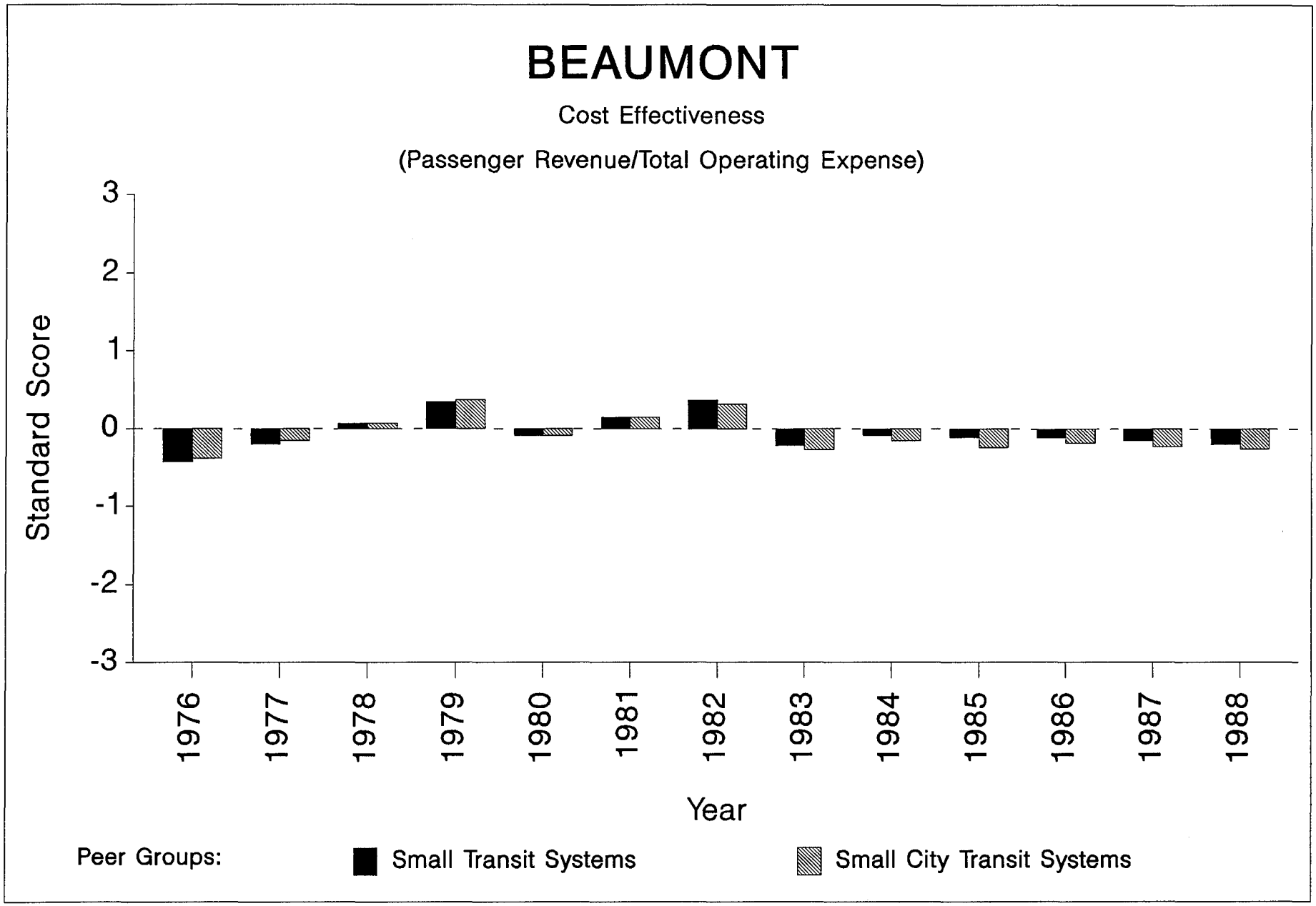

BEAUMONT
Cost Effectiveness
(Passenger Revenue/Total Operating Expense)
Standard Score
3
2
1
0
-1
-2
-3
1976
1977
1978
1979
1980
1981
1982
1983
1984
1985
1986
1987
1988
Year
Peer Groups:
Small Transit Systems
Small City Transit Systems

Table 25.
Labor Efficiency Performance Profile
(Total Vehicle Hours/Average Number of Employees)

B E A U M O N T

Peer Group: Small Transit Systems

	1976	1977	1978	1979	1980	1981	1982	1983	1984	1985	1986	1987	1988
Transit Agency Value	----	.151	.149	.149	.143	.150	.148	.151	.152	.152	.138	.123	.130
Peer Group Mean	----	.131	.140	.129	.125	.122	.131	.122	.123	.124	.122	.116	.119
Standard Score	----	1.22	.35	.52	.66	1.05	.45	1.01	1.04	1.19	.82	.61	.90

Peer Group: Small City Transit Systems

	1976	1977	1978	1979	1980	1981	1982	1983	1984	1985	1986	1987	1988
Transit Agency Value	----	.151	.149	.149	.143	.150	.148	.151	.152	.152	.138	.123	.130
Peer Group Mean	----	.130	.139	.128	.124	.121	.128	.120	.121	.123	.121	.116	.119
Standard Score	----	1.35	.42	.56	.72	1.12	.52	1.10	1.13	1.29	.91	.67	.94

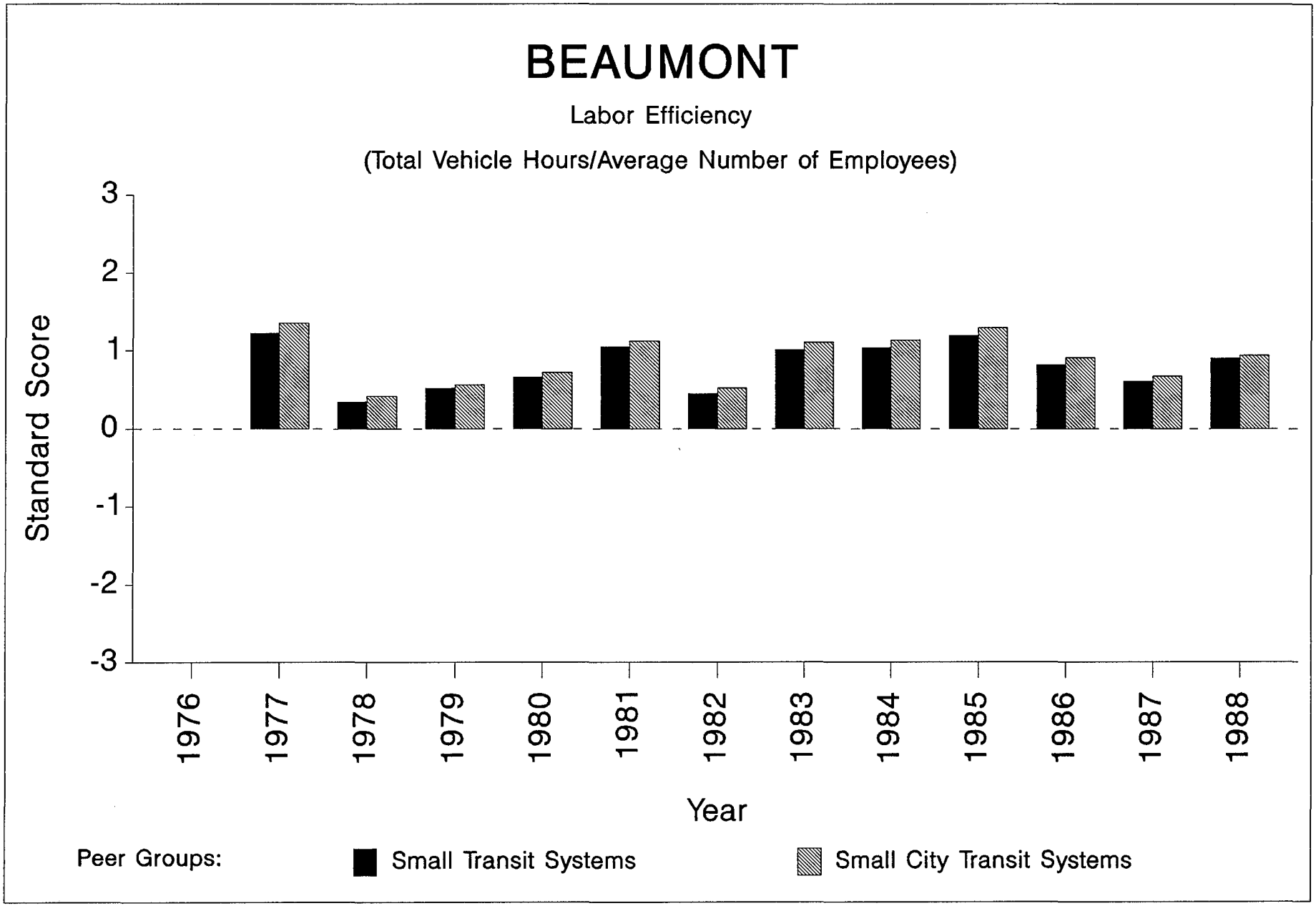

BEAUMONT
Labor Efficiency
(Total Vehicle Hours/Average Number of Employees)
Standard Score
3
2
1
0
-1
-2
-3
1976
1977
1978
1979
1980
1981
1982
1983
1984
1985
1986
1987
1988
Year
Peer Groups:
Small Transit Systems
Small City Transit Systems

Table 26.
Vehicle Efficiency Performance Profile
(Total Vehicle Miles/Average Number of Buses on Regular Routes)

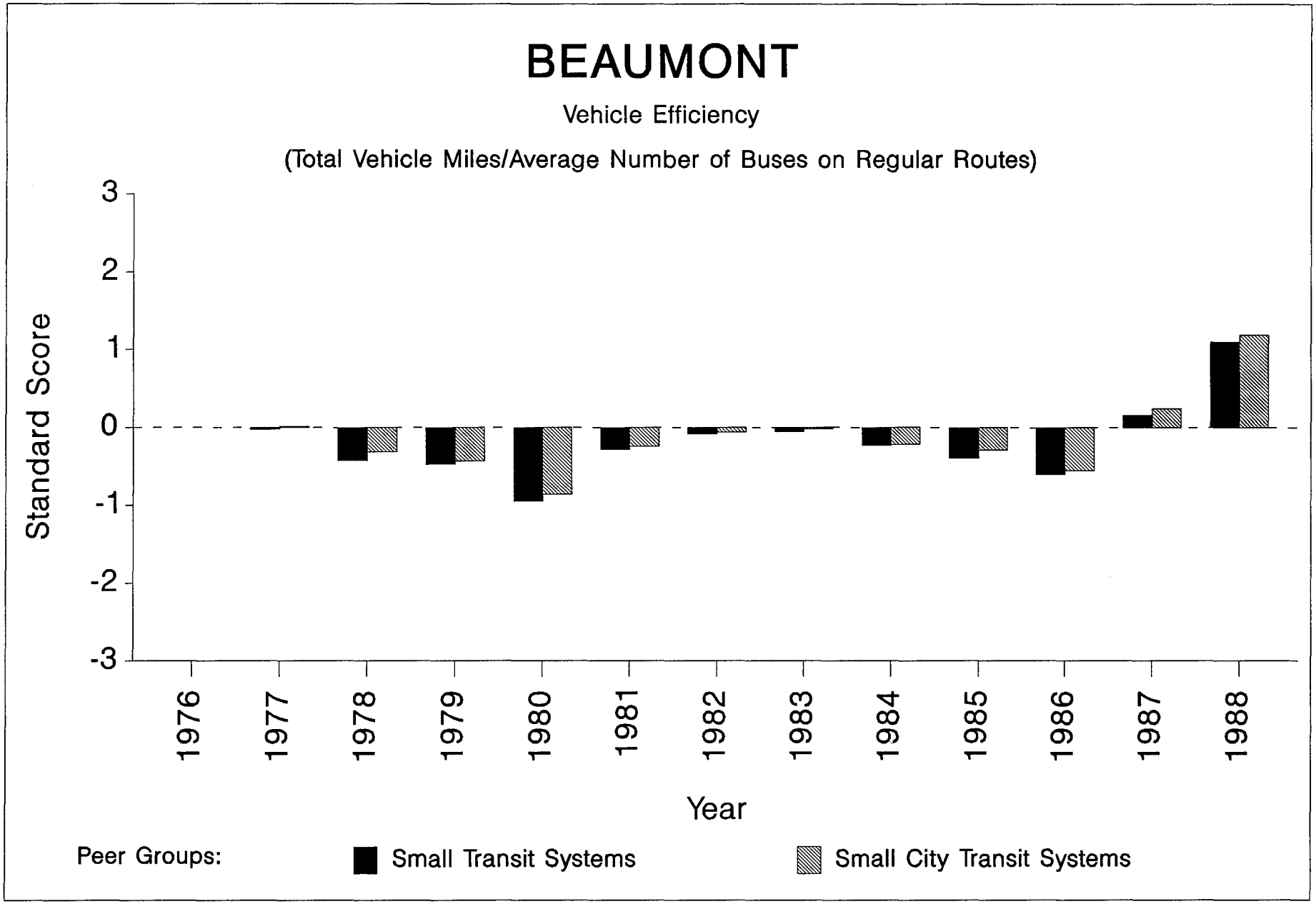
B E A U M O N T

Peer Group: Small Transit Systems

	1976	1977	1978	1979	1980	1981	1982	1983	1984	1985	1986	1987	1988
Transit Agency Value	----	4.20	4.32	4.01	3.85	4.28	4.29	4.42	4.24	4.23	4.10	4.54	5.36
Peer Group Mean	----	4.22	4.66	4.51	4.59	4.51	4.37	4.46	4.45	4.54	4.45	4.44	4.65
Standard Score	----	-.02	-.42	-.47	-.95	-.28	-.08	-.05	-.23	-.39	-.60	.16	1.10

Peer Group: Small City Transit Systems

	1976	1977	1978	1979	1980	1981	1982	1983	1984	1985	1986	1987	1988
Transit Agency Value	----	4.20	4.32	4.01	3.85	4.28	4.29	4.42	4.24	4.23	4.10	4.54	5.36
Peer Group Mean	----	4.19	4.58	4.45	4.52	4.47	4.34	4.43	4.43	4.47	4.41	4.40	4.58
Standard Score	----	.01	-.31	-.43	-.86	-.24	-.06	-.02	-.22	-.29	-.55	.24	1.19


BEAUMONT
Vehicle Efficiency
(Total Vehicle Miles/Average Number of Buses on Regular Routes)
Standard Score
3
2
1
0
-1
-2
-3
1976
1977
1978
1979
1980
1981
1982
1983
1984
1985
1986
1987
1988
Year
Peer Groups:
Small Transit Systems
Small City Transit Systems

BROWNSVILLE

Table 27.
Transit System Statistical Profile

BROWNSVILLE

	1976	1977	1978	1979	1980	1981	1982	1983	1984	1985	1986	1987	1988
Total Passengers	382,655	465,451	801,146	1,041,444	1,367,954	1,820,642	1,762,693	1,581,148	1,706,543	1,826,353	1,909,292	1,669,723	1,633,211
Total Vehicle Miles	274,042	388,603	488,211	503,679	572,111	672,133	698,087	739,106	838,350	918,593	753,537	641,694	676,234
Total Vehicle Hours	-	22,694	43,004	55,718	60,386	64,470	65,100	68,306	68,000	80,346	68,632	69,436	71,070
Average No. Buses on Regular Routes	-	10	12	11	12	14	14	14	14	16	16	15	13
Average No. Employees	-	18	41	63	74	81	85	78	74	77	62	60	58
Total Operating Revenue ($)	158,097	202,420	208,077	429,919	529,772	692,709	847,375	750,853	826,273	853,090	786,493	699,974	763,794
Passenger Revenue ($)	158,097	202,420	152,533	327,358	406,842	531,407	669,398	600,827	722,166	754,827	720,204	634,975	667,210
Total Operating Expense	141,473	202,582	290,598	834,323	1,186,006	1,483,101	1,610,371	1,587,881	1,634,088	1,932,010	1,810,289	1,773,843	2,402,009
Net Public Operating Cost ($)	-	-	82,521	404,404	656,234	790,392	762,996	837,028	807,815	1,078,920	1,023,796	1,073,869	1,638,215
Total Public Capital Cost ($)	-	-	155,151	15,928	1,446,083	-	166,800	8,180	235,890	1,858,516	75,702	405,592	4,427
Total Public Expense ($)	-	-	237,672	420,332	2,102,317	790,392	929,796	845,208	1,043,705	2,937,436	1,099,498	1,479,461	1,642,642

Source: Texas Transit Statistics

Table 28.
Cost Efficiency Performance Profile
(Total Vehicle Hours/Total Operating Expense)

B R O W N S V I L L E

Peer Group: Small Transit Systems

	1976	1977	1978	1979	1980	1981	1982	1983	1984	1985	1986	1987	1988
Transit Agency Value	----	.112	.148	.067	.051	.043	.040	.043	.042	.042	.038	.039	.030
Peer Group Mean	----	.087	.089	.066	.055	.048	.051	.045	.041	.040	.039	.038	.037
Standard Score	----	1.57	2.53	.02	-.41	-.54	-.57	-.20	.04	.22	-.17	.33	-1.40

Peer Group: Small City Transit Systems

	1976	1977	1978	1979	1980	1981	1982	1983	1984	1985	1986	1987	1988
Transit Agency Value	----	.112	.148	.067	.051	.043	.040	.043	.042	.042	.038	.039	.030
Peer Group Mean	----	.087	.088	.066	.055	.048	.051	.045	.042	.041	.039	.038	.037
Standard Score	----	1.67	2.70	.06	-.39	-.57	-.60	-.18	.00	.07	-.20	.27	-1.50

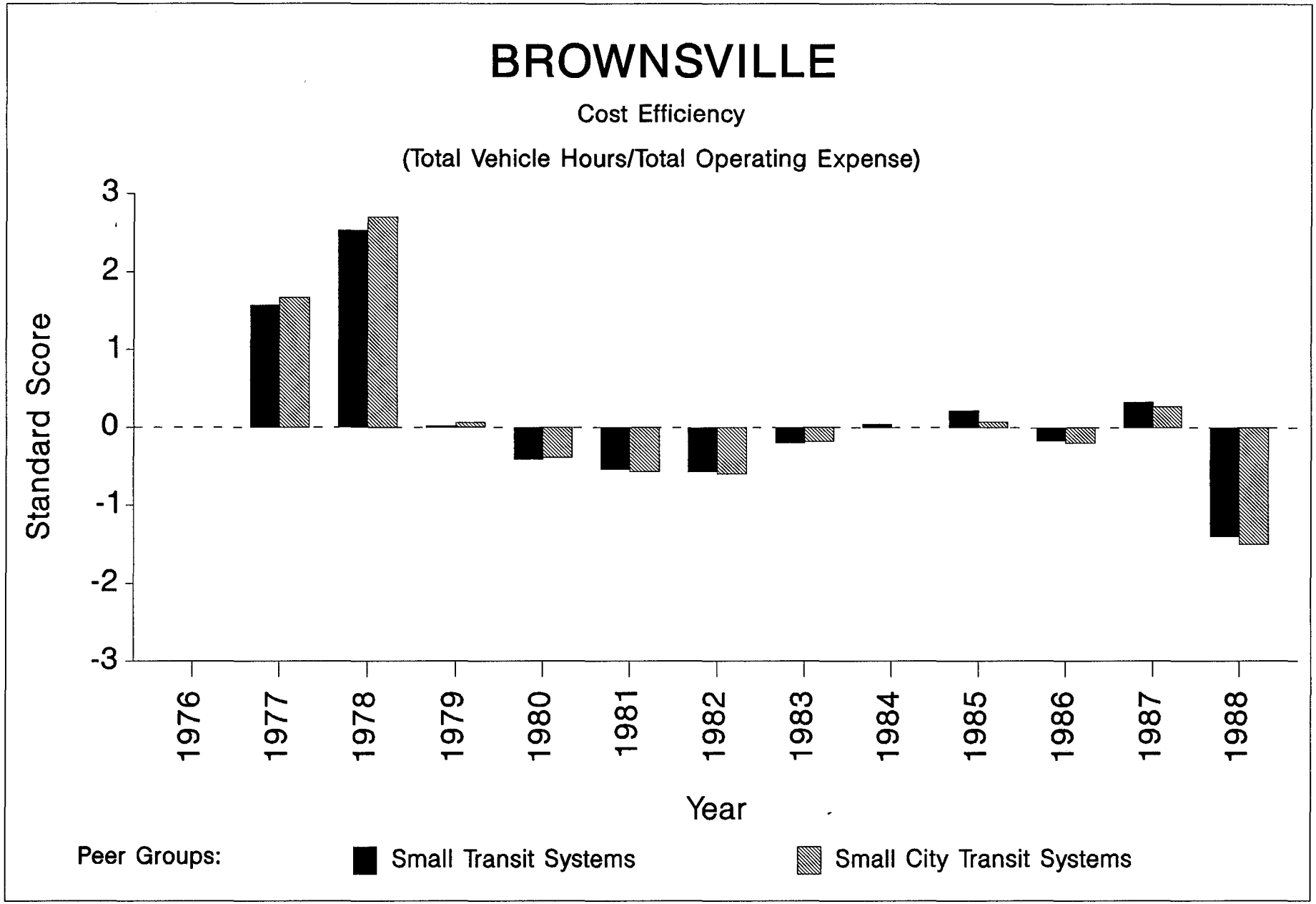

BROWNSVILLE
Cost Efficiency
(Total Vehicle Hours/Total Operating Expense)
Standard Score
3
2
1
0
-1
-2
-3
1976
1977
1978
1979
1980
1981
1982
1983
1984
1985
1986
1987
1988
Year
Peer Groups:
Small Transit Systems
Small City Transit Systems

Table 29.
Service Effectiveness Performance Profile
(Total Passengers/Total Vehicle Hours)

BROWNSVILLE

Peer Group: Small Transit Systems

	1976	1977	1978	1979	1980	1981	1982	1983	1984	1985	1986	1987	1988
Transit Agency Value	—	20.51	18.63	18.69	22.65	28.24	27.08	23.15	25.10	22.73	27.82	24.05	22.98
Peer Group Mean	—	19.20	18.49	20.03	20.72	21.44	19.80	19.75	20.70	19.66	19.82	19.34	19.12
Standard Score	—	.19	.02	-.16	.27	.98	1.04	.54	.61	.42	1.06	.57	.40

Peer Group: Small City Transit Systems

	1976	1977	1978	1979	1980	1981	1982	1983	1984	1985	1986	1987	1988
Transit Agency Value	—	20.51	18.63	18.69	22.65	28.24	27.08	23.15	25.10	22.73	27.82	24.05	22.98
Peer Group Mean	—	20.85	19.69	21.05	22.20	23.10	22.06	20.55	21.69	20.79	20.79	20.23	20.02
Standard Score	—	-.04	-.13	-.27	.06	.60	.50	.40	.45	.25	.89	.46	.31

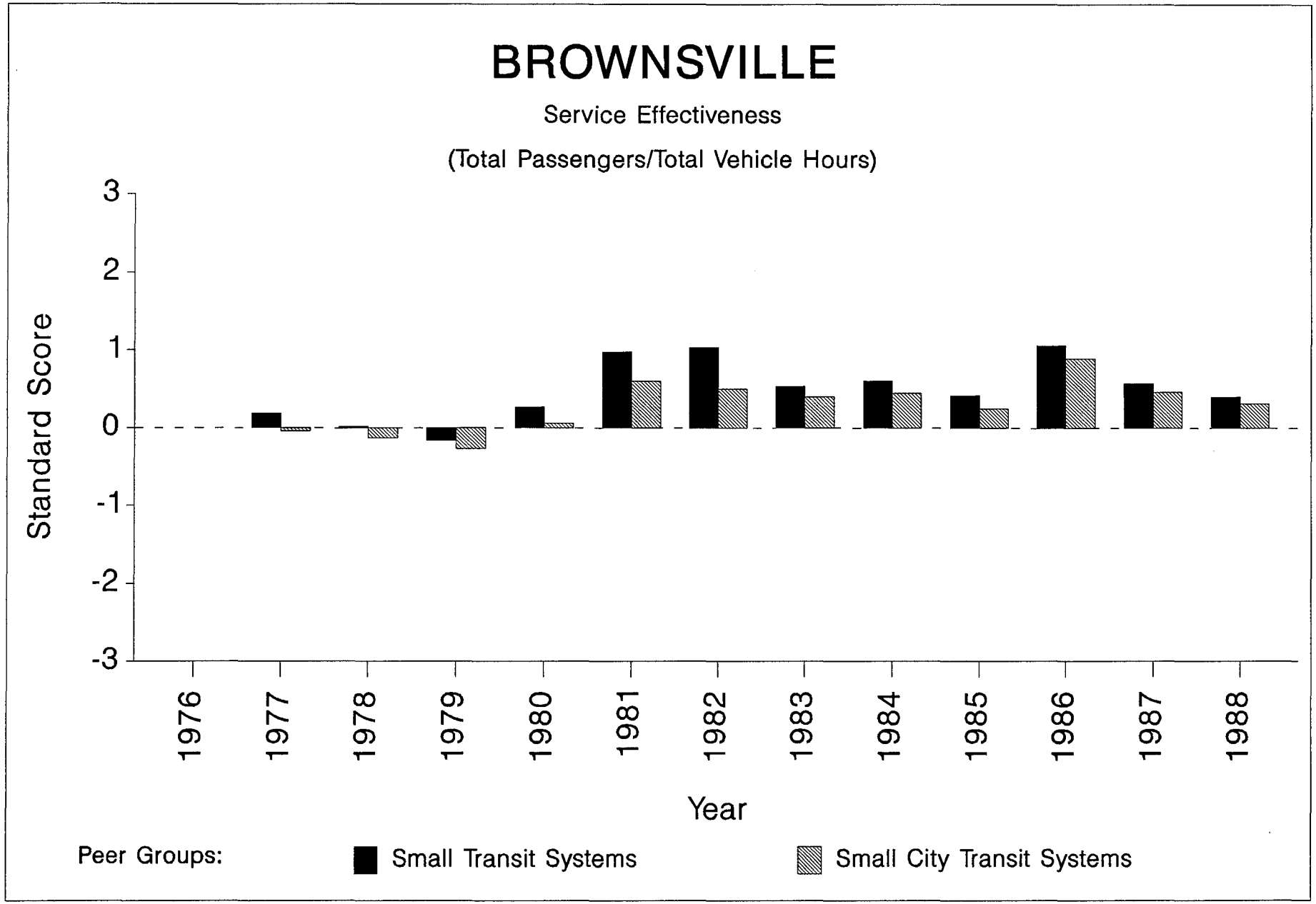

BROWNSVILLE
Service Effectiveness
(Total Passengers/Total Vehicle Hours)
Standard Score
3
2
1
0
-1
-2
-3
1976
1977
1978
1979
1980
1981
1982
1983
1984
1985
1986
1987
1988
Year
Peer Groups:
Small Transit Systems
Small City Transit Systems

Table 30.
Cost Effectiveness Performance Profile
(Passenger Revenue/Total Operating Expense)

BROWNSVILLE

Peer Group: Small Transit Systems

	1976	1977	1978	1979	1980	1981	1982	1983	1984	1985	1986	1987	1988
Transit Agency Value	1.12	1.00	.52	.39	.34	.36	.42	.38	.44	.39	.40	.36	.28
Peer Group Mean	.51	.48	.39	.34	.34	.33	.33	.33	.33	.30	.29	.27	.27
Standard Score	2.29	2.21	.94	.38	.05	.21	.57	.32	.76	.79	.98	.79	.07

Peer Group: Small City Transit Systems

	1976	1977	1978	1979	1980	1981	1982	1983	1984	1985	1986	1987	1988
Transit Agency Value	1.12	1.00	.52	.39	.34	.36	.42	.38	.44	.39	.40	.36	.28
Peer Group Mean	.49	.46	.39	.34	.34	.33	.34	.34	.34	.31	.29	.28	.28
Standard Score	2.45	2.36	1.00	.40	.05	.20	.53	.30	.73	.62	.94	.73	.01

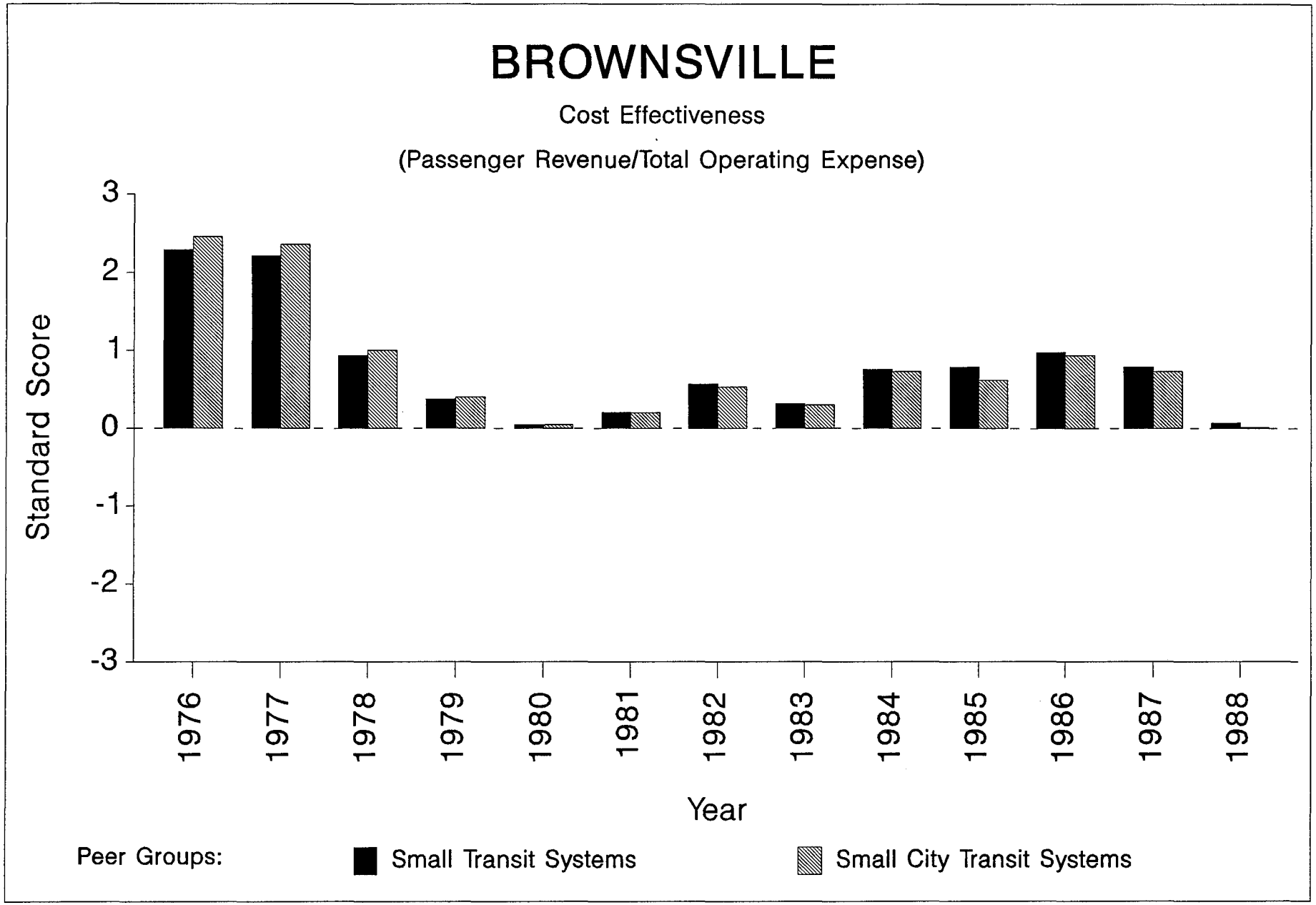

BROWNSVILLE
Cost Effectiveness
(Passenger Revenue/Total Operating Expense)
Standard Score
3
2
1
0
-1
-2
-3
1976
1977
1978
1979
1980
1981
1982
1983
1984
1985
1986
1987
1988
Year
Peer Groups:
Small Transit Systems
Small City Transit Systems

Table 31.
Labor Efficiency Performance Profile
(Total Vehicle Hours/Average Number of Employees)

B R O W N S V I L L E

Peer Group: Small Transit Systems

	1976	1977	1978	1979	1980	1981	1982	1983	1984	1985	1986	1987	1988
Transit Agency Value	----	.126	.105	.088	.082	.080	.077	.088	.092	.104	.111	.116	.123
Peer Group Mean	----	.131	.140	.129	.125	.122	.131	.122	.123	.124	.122	.116	.119
Standard Score	----	-.32	-1.41	-1.05	-1.54	-1.55	-1.42	-1.19	-1.10	-.84	-.59	-.06	.29

Peer Group: Small City Transit Systems

	1976	1977	1978	1979	1980	1981	1982	1983	1984	1985	1986	1987	1988
Transit Agency Value	----	.126	.105	.088	.082	.080	.077	.088	.092	.104	.111	.116	.123
Peer Group Mean	----	.130	.139	.128	.124	.121	.128	.120	.121	.123	.121	.116	.119
Standard Score	----	-.24	-1.41	-1.10	-1.58	-1.61	-1.41	-1.19	-1.09	-.82	-.54	-.04	.29

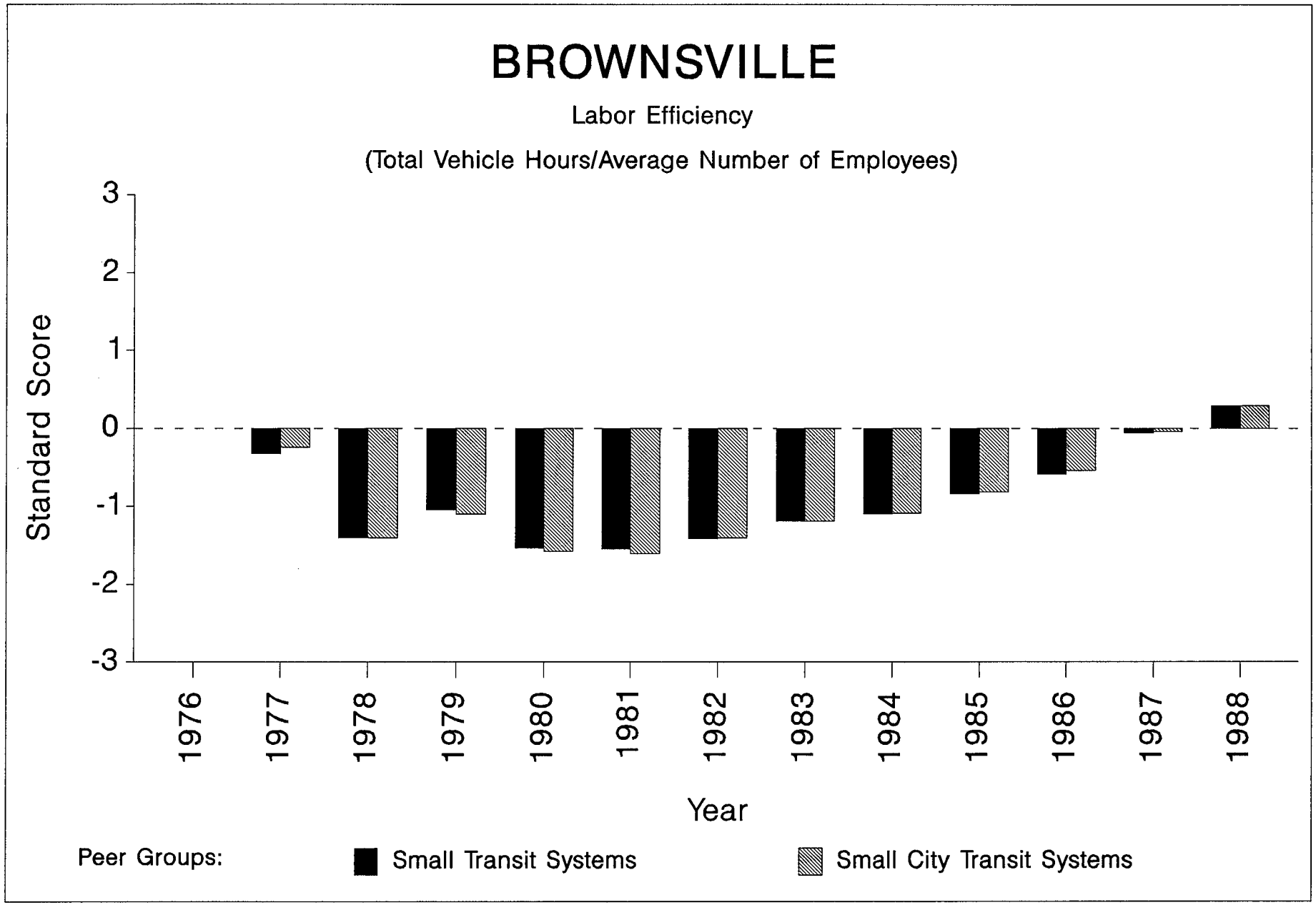

BROWNSVILLE
Labor Efficiency
(Total Vehicle Hours/Average Number of Employees)
Standard Score
3
2
1
0
-1
-2
-3
1976
1977
1978
1979
1980
1981
1982
1983
1984
1985
1986
1987
1988
Year
Peer Groups:
Small Transit Systems
Small City Transit Systems

Table 32.
Vehicle Efficiency Performance Profile
(Total Vehicle Miles/Average Number of Buses on Regular Routes)

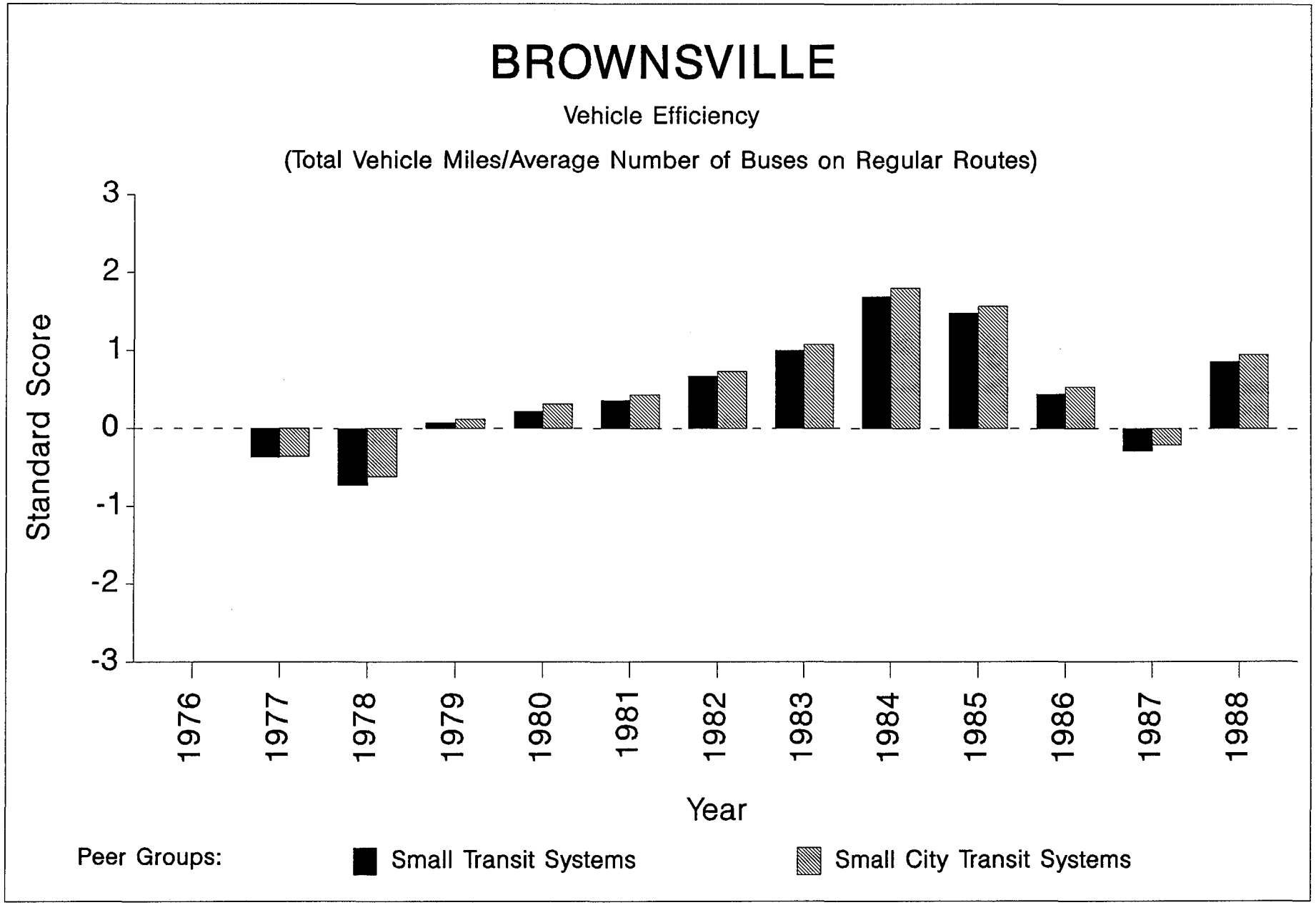
BROWNSVILLE

Peer Group: Small Transit Systems

	1976	1977	1978	1979	1980	1981	1982	1983	1984	1985	1986	1987	1988
Transit Agency Value	----	3.89	4.07	4.58	4.77	4.80	4.99	5.28	5.99	5.74	4.71	4.28	5.20
Peer Group Mean	----	4.22	4.66	4.51	4.59	4.51	4.37	4.46	4.45	4.54	4.45	4.44	4.65
Standard Score	----	-.37	-.73	.07	.22	.36	.67	1.00	1.69	1.48	.44	-.29	.86

Peer Group: Small City Transit Systems

	1976	1977	1978	1979	1980	1981	1982	1983	1984	1985	1986	1987	1988
Transit Agency Value	----	3.89	4.07	4.58	4.77	4.80	4.99	5.28	5.99	5.74	4.71	4.28	5.20
Peer Group Mean	----	4.19	4.58	4.45	4.52	4.47	4.34	4.43	4.43	4.47	4.41	4.40	4.58
Standard Score	----	-.36	-.62	.12	.31	.43	.73	1.08	1.80	1.57	.53	-.21	.95


BROWNSVILLE
Vehicle Efficiency
(Total Vehicle Miles/Average Number of Buses on Regular Routes)
Standard Score
3
2
1
0
-1
-2
-3
1976
1977
1978
1979
1980
1981
1982
1983
1984
1985
1986
1987
1988
Year
Peer Groups:
Small Transit Systems
Small City Transit Systems

CORPUS CHRISTI

Table 33.
Transit System Statistical Profile

CORPUS CHRISTI

	1976	1977	1978	1979	1980	1981	1982	1983	1984	1985	1986	1987	1988
Total Passengers	1,505,819	1,950,384	1,810,691	1,749,217	1,880,581	1,603,596	1,589,075	1,490,242	1,557,506	1,565,615	1,758,644	3,042,824	2,682,813
Total Vehicle Miles	1,333,819	1,475,713	1,279,983	1,297,796	1,377,939	1,271,899	1,422,308	1,327,697	1,286,664	1,236,739	1,894,864	2,644,915	2,477,438
Total Vehicle Hours	-	92,885	94,353	94,740	99,471	92,713	104,579	100,916	98,037	94,796	134,630	169,190	152,779
Average No. Buses on Regular Routes	-	29	26	26	28	27	30	29	29	27	39	43	43
Average No. Employees	-	82	79	80	91	90	94	97	93	93	153	162	178
Total Operating Revenue ($)	507,783	905,922	1,059,454	1,279,876	1,603,917	1,634,858	1,824,443	1,603,030	1,893,606	876,499	799,843	809,748	722,193
Passenger Revenue ($)	407,884	534,819	562,895	684,234	764,697	740,816	908,820	892,858	946,609	876,499	799,843	809,748	722,193
Total Operating Expense ($)	1,223,726	1,697,440	1,923,037	2,330,934	2,770,374	3,381,029	3,752,919	3,399,337	3,091,111	3,943,521	5,202,648	8,357,838	8,706,320
Net Public Operating Cost ($)	715,988	791,518	863,583	1,051,058	1,166,457	1,746,171	1,928,476	1,796,307	1,197,505	3,067,022	4,402,805	7,548,090	7,984,127
Total Public Capital Cost ($)	910,790	116,008	65,752	39,183	957,976	2,487,300	1,362,200	1,433	410,188	513,316	2,368,852	2,608,336	1,243,917
Total Public Expense ($)	1,626,778	907,526	929,335	1,090,241	2,124,433	4,233,471	3,290,676	1,797,740	1,607,693	3,580,338	6,771,657	10,156,426	9,228,044

Source: Texas Transit Statistics

Table 34.
Cost Efficiency Performance Profile
(Total Vehicle Hours/Total Operating Expense)

CORPUS CHRISTI

Peer Group: Medium-Sized Transit Systems

	1976	1977	1978	1979	1980	1981	1982	1983	1984	1985	1986	1987	1988
Transit Agency Value	—	.055	.049	.041	.036	.027	.028	.030	.032	.024	.026	.020	.018
Peer Group Mean	—	.091	.073	.054	.045	.039	.037	.037	.037	.034	.031	.028	.027
Standard Score	—	-.76	-.94	-1.26	-1.26	-1.35	-1.00	-1.36	-.84	-.87	-.75	-.92	-1.00

Peer Group: Large City Transit Systems

	1976	1977	1978	1979	1980	1981	1982	1983	1984	1985	1986	1987	1988
Transit Agency Value	—	.055	.049	.041	.036	.027	.028	.030	.032	.024	.026	.020	.018
Peer Group Mean	—	.069	.060	.047	.039	.033	.031	.031	.029	.026	.024	.023	.022
Standard Score	—	-.35	-.50	-.64	-.33	-.68	-.37	-.15	.39	-.38	.27	-.50	-.94

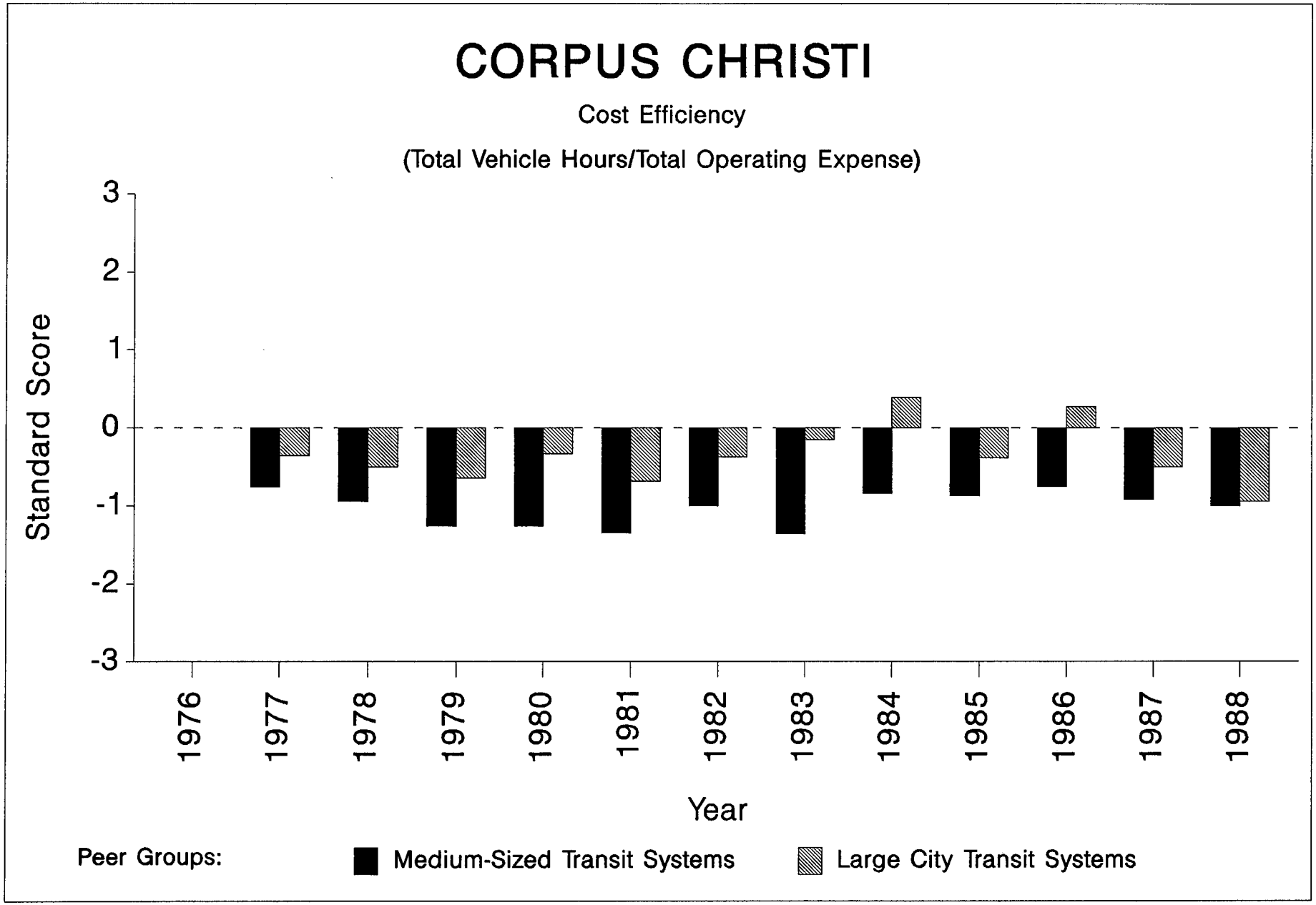

CORPUS CHRISTI
Cost Efficiency
(Total Vehicle Hours/Total Operating Expense)
Standard Score
3
2
1
0
-1
-2
-3
1976
1977
1978
1979
1980
1981
1982
1983
1984
1985
1986
1987
1988
Year
Peer Groups:
Medium-Sized Transit Systems
Large City Transit Systems

Table 35.
Service Effectiveness Performance Profile
(Total Passengers/Total Vehicle Hours)

CORPUS CHRISTI

Peer Group: Medium-Sized Transit Systems

	1976	1977	1978	1979	1980	1981	1982	1983	1984	1985	1986	1987	1988
Transit Agency Value	----	21.00	19.19	18.46	18.91	17.30	15.19	14.77	15.89	16.52	13.06	17.98	17.56
Peer Group Mean	----	24.35	22.64	25.02	27.78	27.38	26.62	22.86	24.20	24.53	22.68	23.79	24.24
Standard Score	----	-.51	-.65	-1.22	-1.15	-1.02	-.89	-1.11	-1.01	-.92	-1.04	-.65	-.76

Peer Group: Large City Transit Systems

	1976	1977	1978	1979	1980	1981	1982	1983	1984	1985	1986	1987	1988
Transit Agency Value	----	21.00	19.19	18.46	18.91	17.30	15.19	14.77	15.89	16.52	13.06	17.98	17.56
Peer Group Mean	----	30.94	26.16	27.54	28.78	27.49	25.65	25.18	25.99	25.35	23.02	23.39	24.54
Standard Score	----	-.92	-1.12	-1.51	-1.57	-1.51	-1.44	-1.36	-1.29	-1.18	-1.33	-.66	-.89

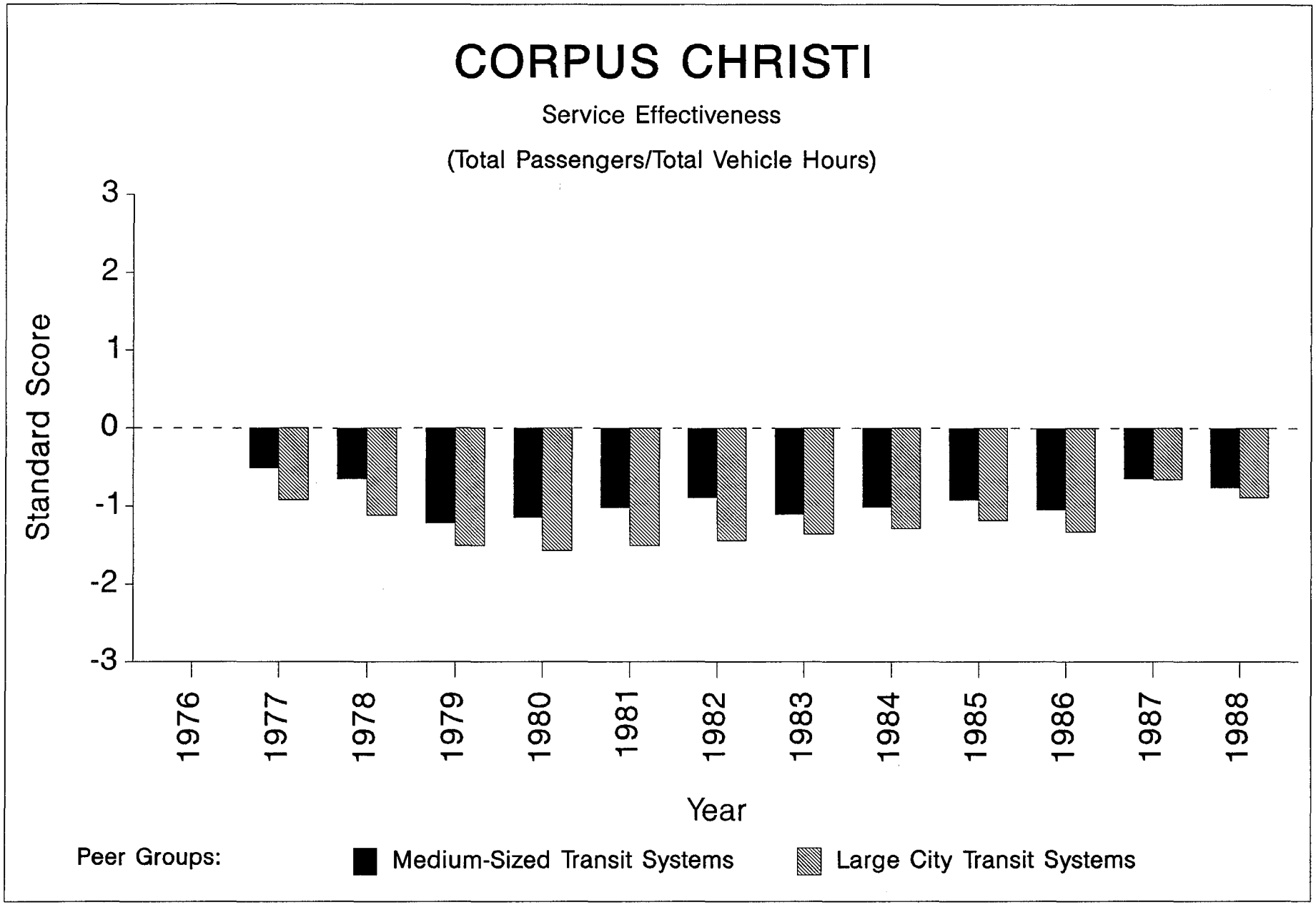

CORPUS CHRISTI
Service Effectiveness
(Total Passengers/Total Vehicle Hours)
Standard Score
3
2
1
0
-1
-2
-3
1976
1977
1978
1979
1980
1981
1982
1983
1984
1985
1986
1987
1988
Year
Peer Groups:
Medium-Sized Transit Systems
Large City Transit Systems

Table 36.
Cost Effectiveness Performance Profile
(Passenger Revenue/Total Operating Expense)

CORPUS CHRISTI

Peer Group: Medium-Sized Transit Systems

	1976	1977	1978	1979	1980	1981	1982	1983	1984	1985	1986	1987	1988
Transit Agency Value	.33	.32	.29	.29	.28	.22	.24	.26	.31	.22	.15	.10	.08
Peer Group Mean	.53	.52	.45	.40	.38	.35	.36	.37	.39	.36	.31	.30	.27
Standard Score	-.63	-.66	-.88	-.80	-.95	-1.32	-1.43	-1.41	-1.37	-1.18	-1.29	-1.20	-1.29

Peer Group: Large City Transit Systems

	1976	1977	1978	1979	1980	1981	1982	1983	1984	1985	1986	1987	1988
Transit Agency Value	.33	.32	.29	.29	.28	.22	.24	.26	.31	.22	.15	.10	.08
Peer Group Mean	.55	.53	.43	.39	.37	.36	.34	.34	.32	.28	.25	.24	.23
Standard Score	-.94	-.92	-.80	-.65	-.80	-1.04	-.82	-.73	-.19	-.81	-.85	-1.06	-1.29

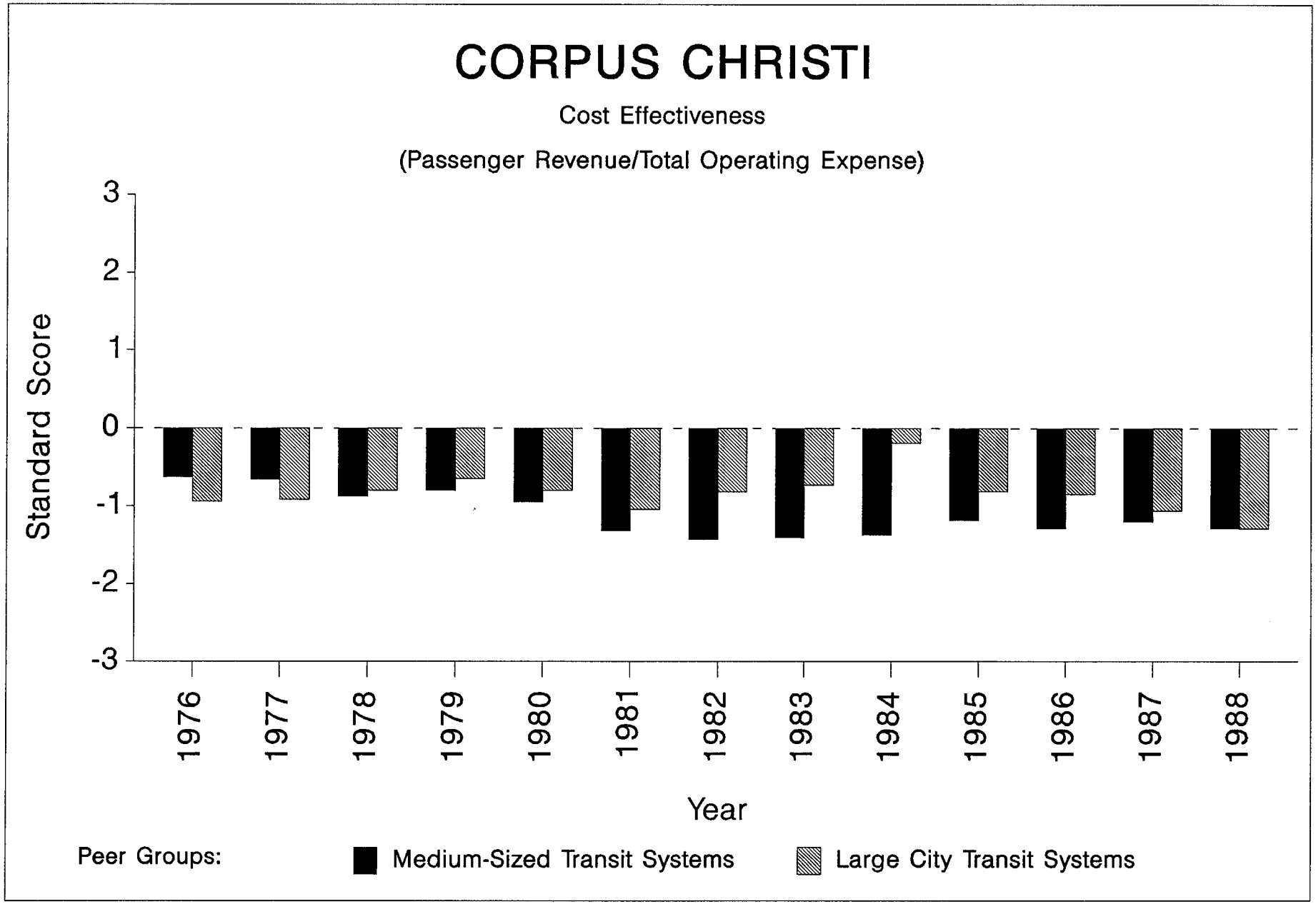

CORPUS CHRISTI
Cost Effectiveness
(Passenger Revenue/Total Operating Expense)
Standard Score
3
2
1
0
-1
-2
-3
1976
1977
1978
1979
1980
1981
1982
1983
1984
1985
1986
1987
1988
Year
Peer Groups:
Medium-Sized Transit Systems
Large City Transit Systems

Table 37.
Labor Efficiency Performance Profile
(Total Vehicle Hours/Average Number of Employees)

CORPUS CHRISTI

Peer Group: Medium-Sized Transit Systems

	1976	1977	1978	1979	1980	1981	1982	1983	1984	1985	1986	1987	1988
Transit Agency Value	----	.113	.119	.118	.109	.103	.111	.104	.105	.102	.088	.104	.086
Peer Group Mean	----	.135	.136	.123	.115	.113	.110	.106	.103	.102	.097	.100	.098
Standard Score	----	-.48	-.56	-.65	-1.09	-1.25	.31	-.27	.56	.00	-1.09	.37	-.76

Peer Group: Large City Transit Systems

	1976	1977	1978	1979	1980	1981	1982	1983	1984	1985	1986	1987	1988
Transit Agency Value	----	.113	.119	.118	.109	.103	.111	.104	.105	.102	.088	.104	.086
Peer Group Mean	----	.118	.126	.117	.110	.108	.107	.105	.102	.098	.097	.101	.101
Standard Score	----	-.13	-.27	.15	-.06	-.53	.47	-.14	.46	.49	-.54	.23	-.81

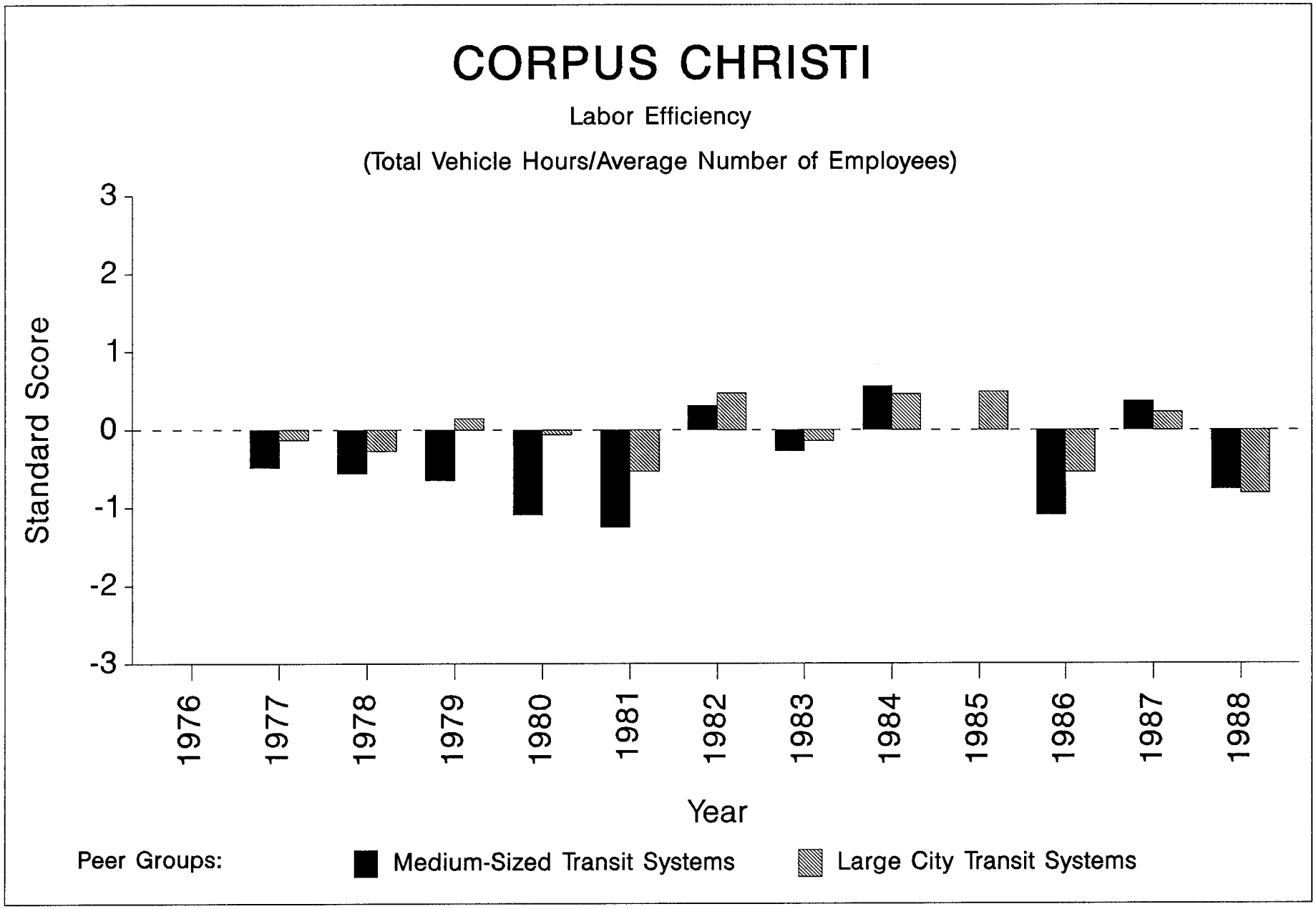

CORPUS CHRISTI
Labor Efficiency
(Total Vehicle Hours/Average Number of Employees)
Standard Score
3
2
1
0
-1
-2
-3
1976
1977
1978
1979
1980
1981
1982
1983
1984
1985
1986
1987
1988
Year
Peer Groups:
Medium-Sized Transit Systems
Large City Transit Systems

Table 38.
Vehicle Efficiency Performance Profile
(Total Vehicle Miles/Average Number of Buses on Regular Routes)

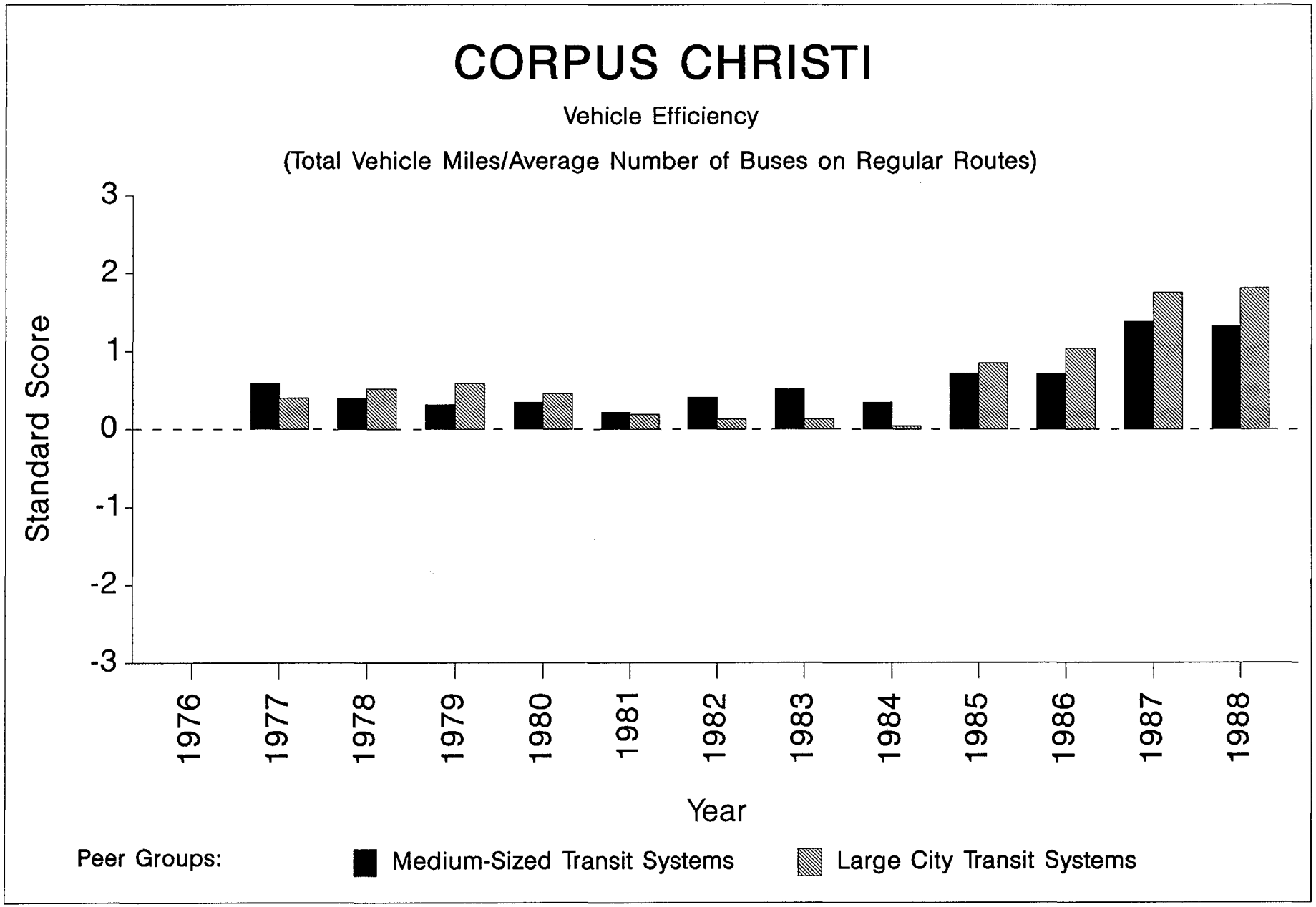
CORPUS CHRISTI

Peer Group: Medium-Sized Transit Systems

	1976	1977	1978	1979	1980	1981	1982	1983	1984	1985	1986	1987	1988
Transit Agency Value	----	5.09	4.92	4.99	4.92	4.71	4.74	4.58	4.44	4.58	4.86	6.15	5.76
Peer Group Mean	----	4.53	4.52	4.62	4.52	4.47	4.39	4.25	4.27	4.20	4.41	4.83	4.62
Standard Score	----	.59	.40	.32	.35	.22	.41	.52	.35	.72	.72	1.38	1.32

Peer Group: Large City Transit Systems

	1976	1977	1978	1979	1980	1981	1982	1983	1984	1985	1986	1987	1988
Transit Agency Value	----	5.09	4.92	4.99	4.92	4.71	4.74	4.58	4.44	4.58	4.86	6.15	5.76
Peer Group Mean	2.85	4.60	4.50	4.46	4.46	4.48	4.57	4.42	4.40	4.09	4.22	4.71	4.57
Standard Score	----	.40	.52	.59	.46	.19	.13	.13	.04	.85	1.04	1.75	1.81


CORPUS CHRISTI
Vehicle Efficiency
(Total Vehicle Miles/Average Number of Buses on Regular Routes)
Standard Score
3
2
1
0
-1
-2
-3
1976
1977
1978
1979
1980
1981
1982
1983
1984
1985
1986
1987
1988
Year
Peer Groups:
Medium-Sized Transit Systems
Large City Transit Systems

DALLAS

Table 39.
Transit System Statistical Profile

	DALLAS												
	1976	**1977**	**1978**	**1979**	**1980**	**1981**	**1982**	**1983**	**1984**	**1985**	**1986**	**1987**	**1988**
Total Passengers	29,344,179	31,451,152	32,918,560	35,815,315	33,692,224	35,366,334	35,144,892	35,955,066	46,265,711	51,302,639	53,613,207	47,803,295	46,266,524
Total Vehicle Miles	12,614,822	12,824,137	13,818,451	14,261,428	13,637,473	14,193,378	14,821,018	15,553,576	19,153,544	26,209,628	33,658,600	32,962,161	32,875,326
Total Vehicle Hours	-	863,620	1,018,623	1,038,971	984,915	1,021,104	1,058,082	1,088,024	1,283,499	1,739,158	2,213,576	2,132,993	2,084,115
Average No. Buses on Regular Routes	-	344	376	385	396	402	430	439	557	830	906	851	865
Average No. Employees	-	847	899	912	917	934	1,022	1,072	1,455	1,768	1,776	1,656	1,586
Total Operating Revenue ($)	10,586,995	11,355,341	13,201,996	16,657,271	17,425,438	20,825,060	23,388,356	23,869,605	21,116,000	34,617,250	42,876,750	45,882,750	51,238,500
Passenger Revenue ($)	10,044,065	10,793,147	12,099,469	15,230,941	15,915,699	19,180,624	21,641,684	22,162,714	17,069,750	23,297,500	25,408,500	27,578,250	28,596,000
Total Operating Expense ($)	16,031,671	17,127,635	19,319,963	24,364,413	29,016,769	33,607,690	38,176,137	43,197,530	60,891,000	88,510,250	112,147,250	111,847,750	110,774,000
Net Public Operating Cost ($)	5,444,676	5,772,294	6,117,967	7,707,142	11,591,331	12,782,630	14,787,781	19,327,925	39,775,000	53,893,000	69,270,500	65,965,000	59,535,500
Total Public Capital Cost ($)	388,030	126,149	5,100,030	1,347,195	11,391,477	13,342,700	4,104,152	30,946,278	24,798,625	56,468,850	57,277,200	44,747,150	96,255,000
Total Public Expense ($)	5,832,706	5,898,443	11,217,997	9,054,337	22,982,808	26,125,330	18,891,933	50,274,203	64,573,625	110,361,850	126,547,700	110,712,150	155,790,500

Source: Texas Transit Statistics and Dallas Area Rapid Transit Authority

Table 40.
Cost Efficiency Performance Profile
(Total Vehicle Hours/Total Operating Expense)

D A L L A S

Peer Group: Large Transit Systems

	1976	1977	1978	1979	1980	1981	1982	1983	1984	1985	1986	1987	1988
Transit Agency Value	—	.050	.053	.043	.034	.030	.028	.025	.021	.020	.020	.019	.019
Peer Group Mean	—	.051	.052	.043	.036	.030	.029	.028	.026	.024	.021	.022	.022
Standard Score	—	-.19	.10	-.10	-.20	-.01	-.11	-.34	-.78	-.77	-.22	-.41	-.54

Peer Group: Large City Transit Systems

	1976	1977	1978	1979	1980	1981	1982	1983	1984	1985	1986	1987	1988
Transit Agency Value	—	.050	.053	.043	.034	.030	.028	.025	.021	.020	.020	.019	.019
Peer Group Mean	—	.069	.060	.047	.039	.033	.031	.031	.029	.026	.024	.023	.022
Standard Score	—	-.46	-.34	-.43	-.55	-.32	-.39	-.80	-1.33	-1.21	-.67	-.74	-.69

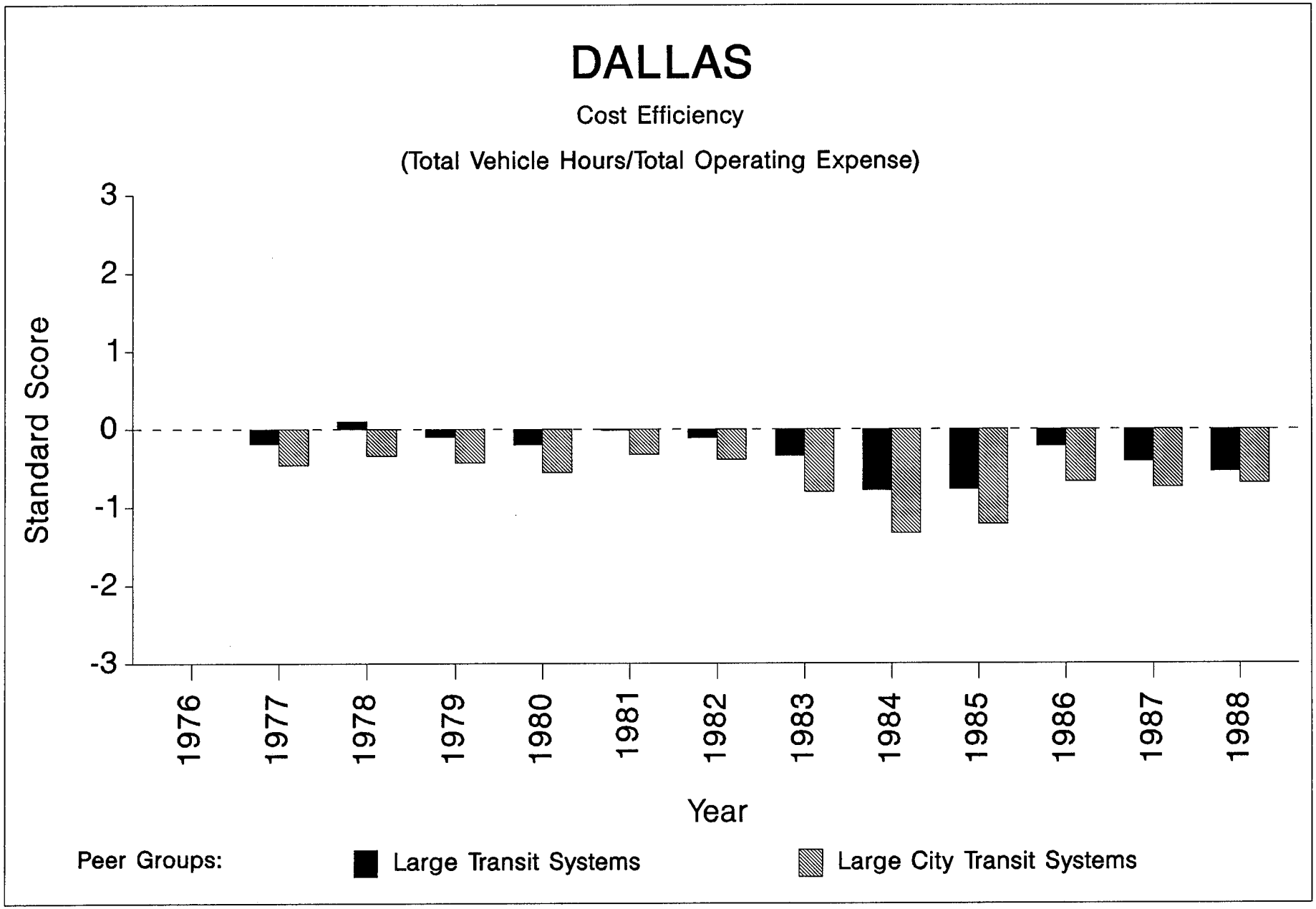

DALLAS
Cost Efficiency
(Total Vehicle Hours/Total Operating Expense)
Standard Score
3
2
1
0
-1
-2
-3
1976
1977
1978
1979
1980
1981
1982
1983
1984
1985
1986
1987
1988
Year
Peer Groups:
Large Transit Systems
Large City Transit Systems

Table 41.
Service Effectiveness Performance Profile
(Total Passengers/Total Vehicle Hours)

D A L L A S

Peer Group: Large Transit Systems

	1976	1977	1978	1979	1980	1981	1982	1983	1984	1985	1986	1987	1988
Transit Agency Value	---	36.42	32.32	34.47	34.21	34.64	33.22	33.05	36.05	29.50	24.22	22.41	22.20
Peer Group Mean	---	38.30	30.76	30.99	31.83	30.67	29.44	28.34	29.18	27.87	25.23	24.43	25.96
Standard Score	---	-.24	.48	.72	.44	.73	.59	.68	1.00	.25	-.16	-.25	-.53

Peer Group: Large City Transit Systems

	1976	1977	1978	1979	1980	1981	1982	1983	1984	1985	1986	1987	1988
Transit Agency Value	---	36.42	32.32	34.47	34.21	34.64	33.22	33.05	36.05	29.50	24.22	22.41	22.20
Peer Group Mean	---	30.94	29.16	27.54	28.78	27.49	25.65	25.18	25.99	25.35	23.02	23.39	24.54
Standard Score	---	.51	.99	1.16	.86	1.06	1.04	1.03	1.28	.56	.16	-.12	-.30

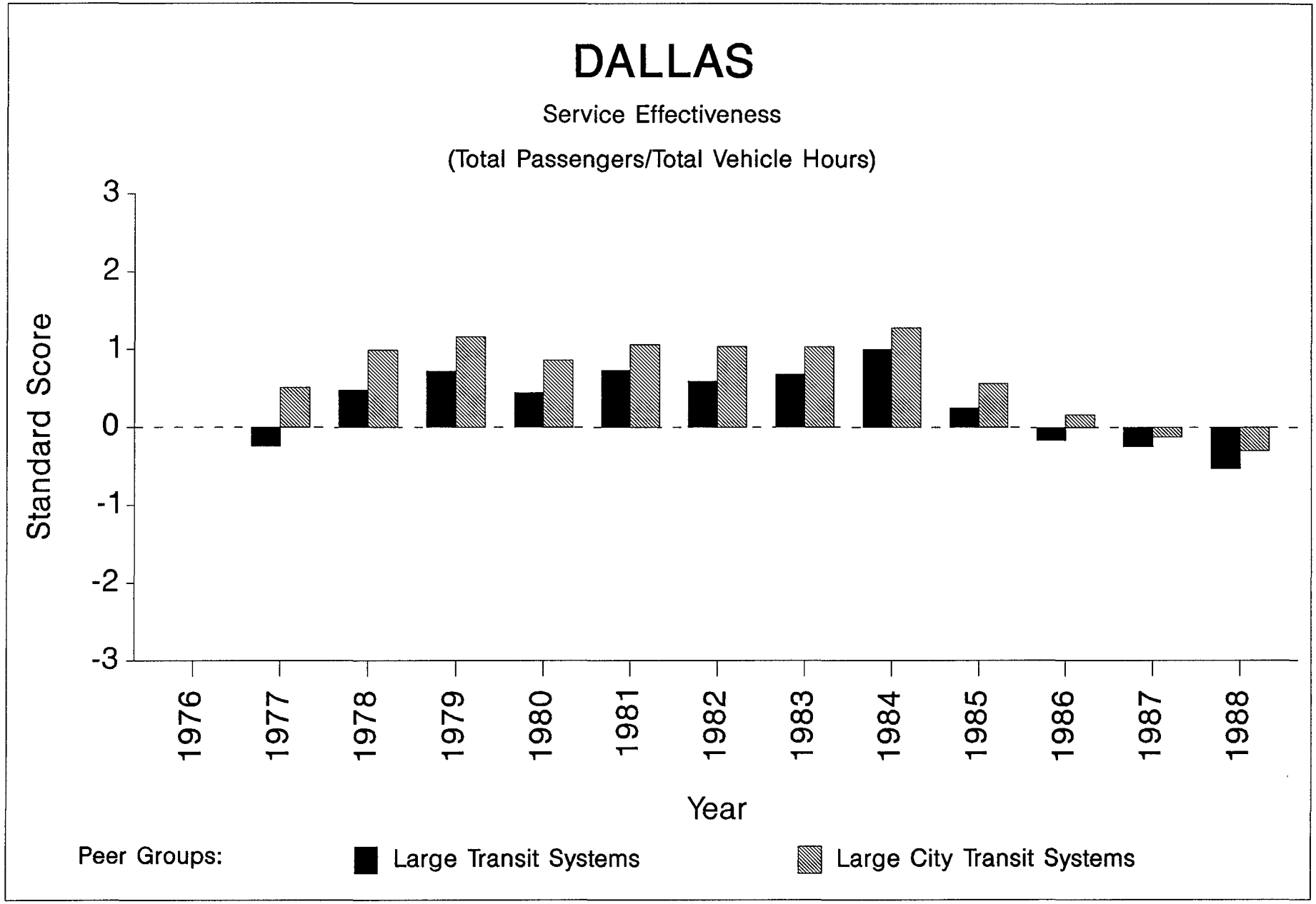

DALLAS
Service Effectiveness
(Total Passengers/Total Vehicle Hours)
Standard Score
3
2
1
0
-1
-2
-3
1976
1977
1978
1979
1980
1981
1982
1983
1984
1985
1986
1987
1988
Year
Peer Groups:
Large Transit Systems
Large City Transit Systems

Table 42.
Cost Effectiveness Performance Profile
(Passenger Revenue/Total Operating Expense)

D A L L A S

Peer Group: Large Transit Systems

	1976	1977	1978	1979	1980	1981	1982	1983	1984	1985	1986	1987	1988
Transit Agency Value	.63	.63	.63	.63	.55	.57	.57	.51	.28	.26	.23	.25	.26
Peer Group Mean	.52	.49	.40	.37	.36	.36	.35	.33	.28	.26	.22	.21	.22
Standard Score	.75	1.08	1.43	1.48	1.39	1.36	1.35	1.37	.11	.12	.06	.39	.42

Peer Group: Large City Transit Systems

	1976	1977	1978	1979	1980	1981	1982	1983	1984	1985	1986	1987	1988
Transit Agency Value	.63	.63	.63	.63	.55	.57	.57	.51	.28	.26	.23	.25	.26
Peer Group Mean	.55	.53	.43	.39	.37	.36	.34	.34	.32	.28	.25	.24	.23
Standard Score	.34	.45	1.15	1.55	1.44	1.64	1.81	1.56	-.52	-.26	-.20	.06	.24

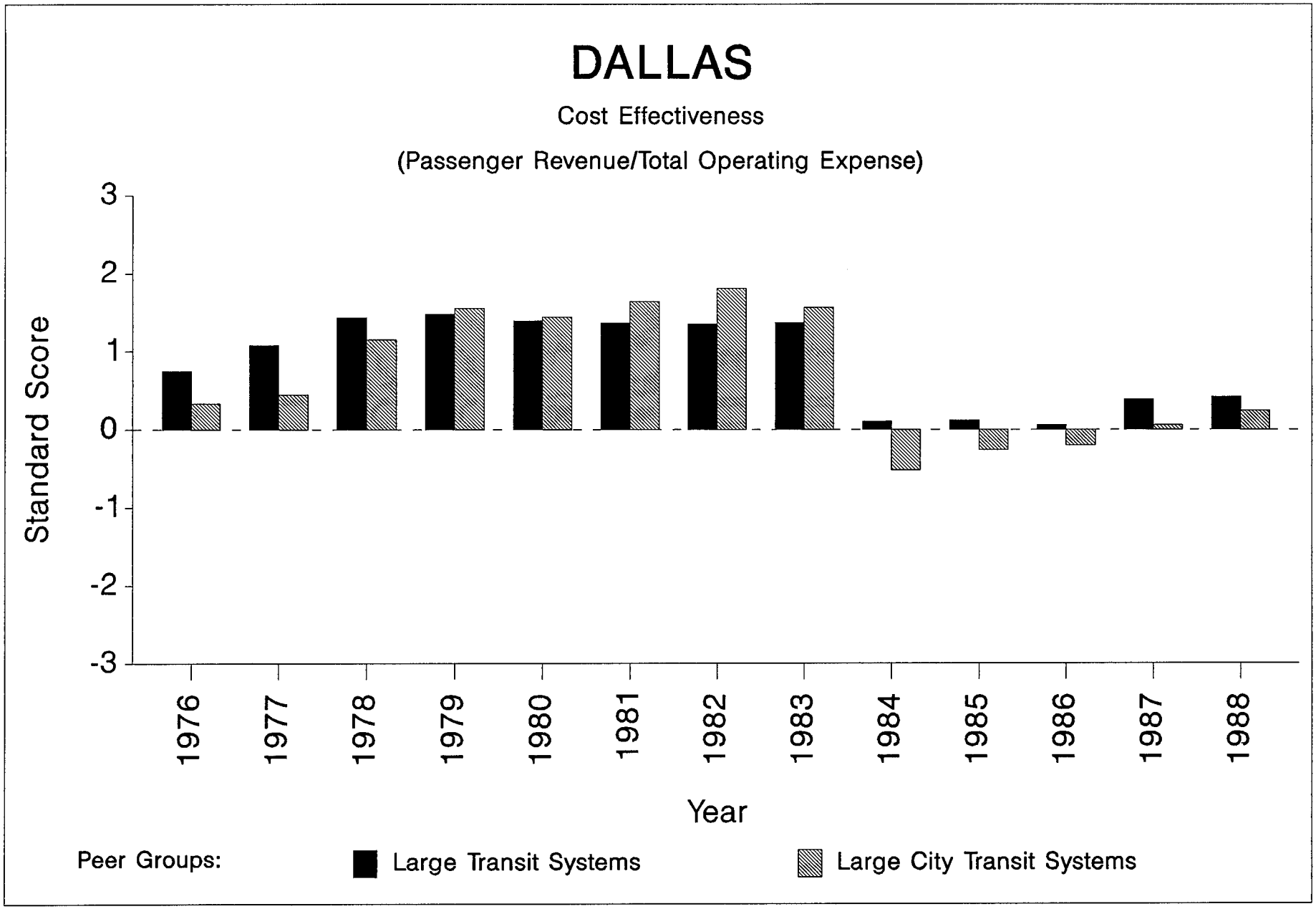

DALLAS
Cost Effectiveness
(Passenger Revenue/Total Operating Expense)
Standard Score
3
2
1
0
-1
-2
-3
1976
1977
1978
1979
1980
1981
1982
1983
1984
1985
1986
1987
1988
Year
Peer Groups:
Large Transit Systems
Large City Transit Systems

Table 43.
Labor Efficiency Performance Profile
(Total Vehicle Hours/Average Number of Employees)

D A L L A S

Peer Group: Large Transit Systems

	1976	1977	1978	1979	1980	1981	1982	1983	1984	1985	1986	1987	1988
Transit Agency Value	----	.102	.113	.114	.107	.109	.104	.101	.088	.098	.125	.129	.131
Peer Group Mean	----	.102	.116	.112	.106	.105	.104	.104	.101	.098	.100	.104	.109
Standard Score	----	.02	-.31	.14	.08	.40	-.05	-.29	-1.18	.03	1.04	1.15	1.01

Peer Group: Large City Transit Systems

	1976	1977	1978	1979	1980	1981	1982	1983	1984	1985	1986	1987	1988
Transit Agency Value	----	.102	.113	.114	.107	.109	.104	.101	.088	.098	.125	.129	.131
Peer Group Mean	----	.118	.126	.117	.110	.108	.107	.105	.102	.098	.097	.101	.101
Standard Score	----	-.44	-.52	-.24	-.21	.15	-.44	-.41	-1.61	.01	1.59	1.67	1.63

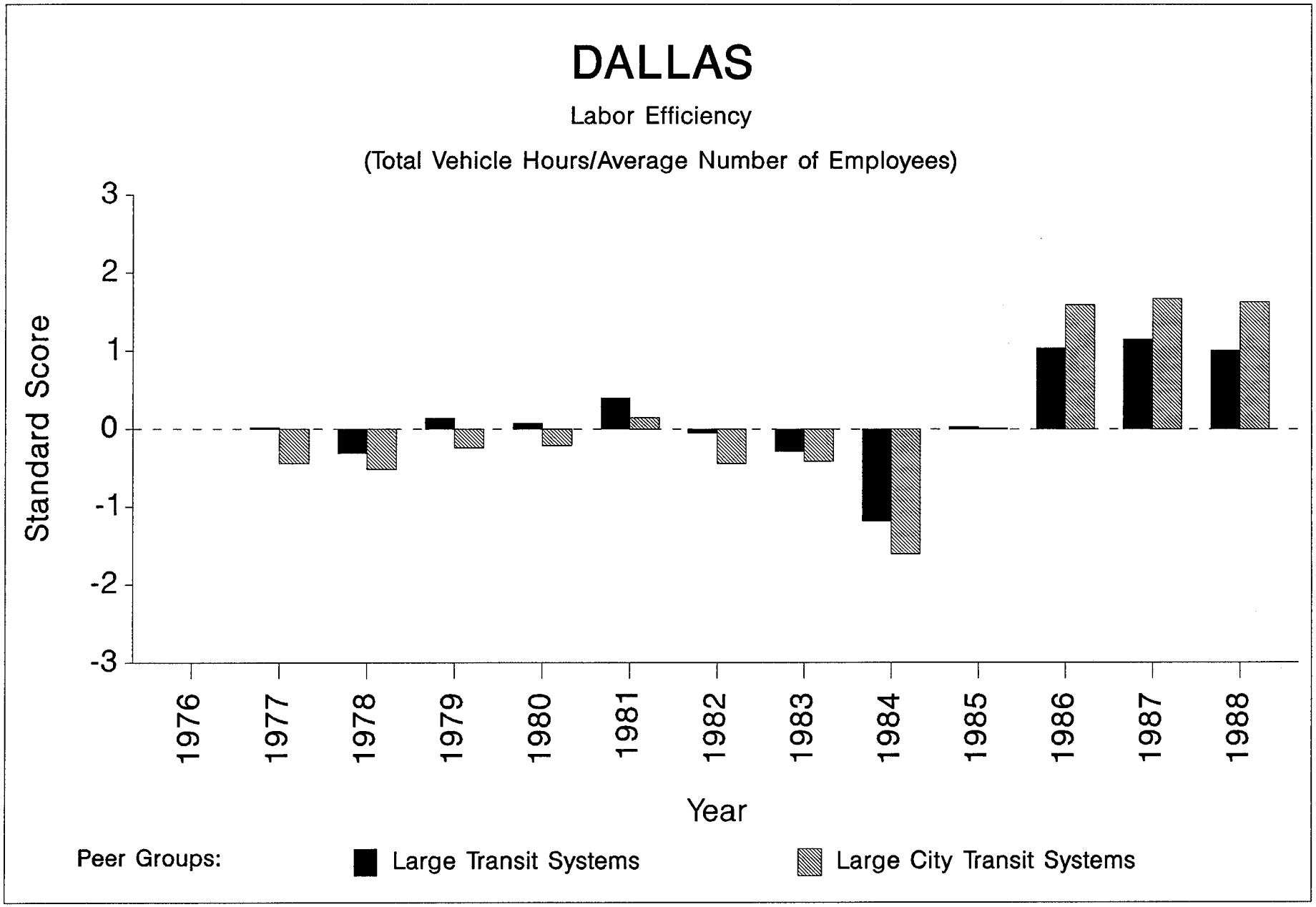

DALLAS
Labor Efficiency
(Total Vehicle Hours/Average Number of Employees)
Standard Score
3
2
1
0
-1
-2
-3
1976
1977
1978
1979
1980
1981
1982
1983
1984
1985
1986
1987
1988
Year
Peer Groups:
Large Transit Systems
Large City Transit Systems

Table 44.
Vehicle Efficiency Performance Profile
(Total Vehicle Miles/Average Number of Buses on Regular Routes)

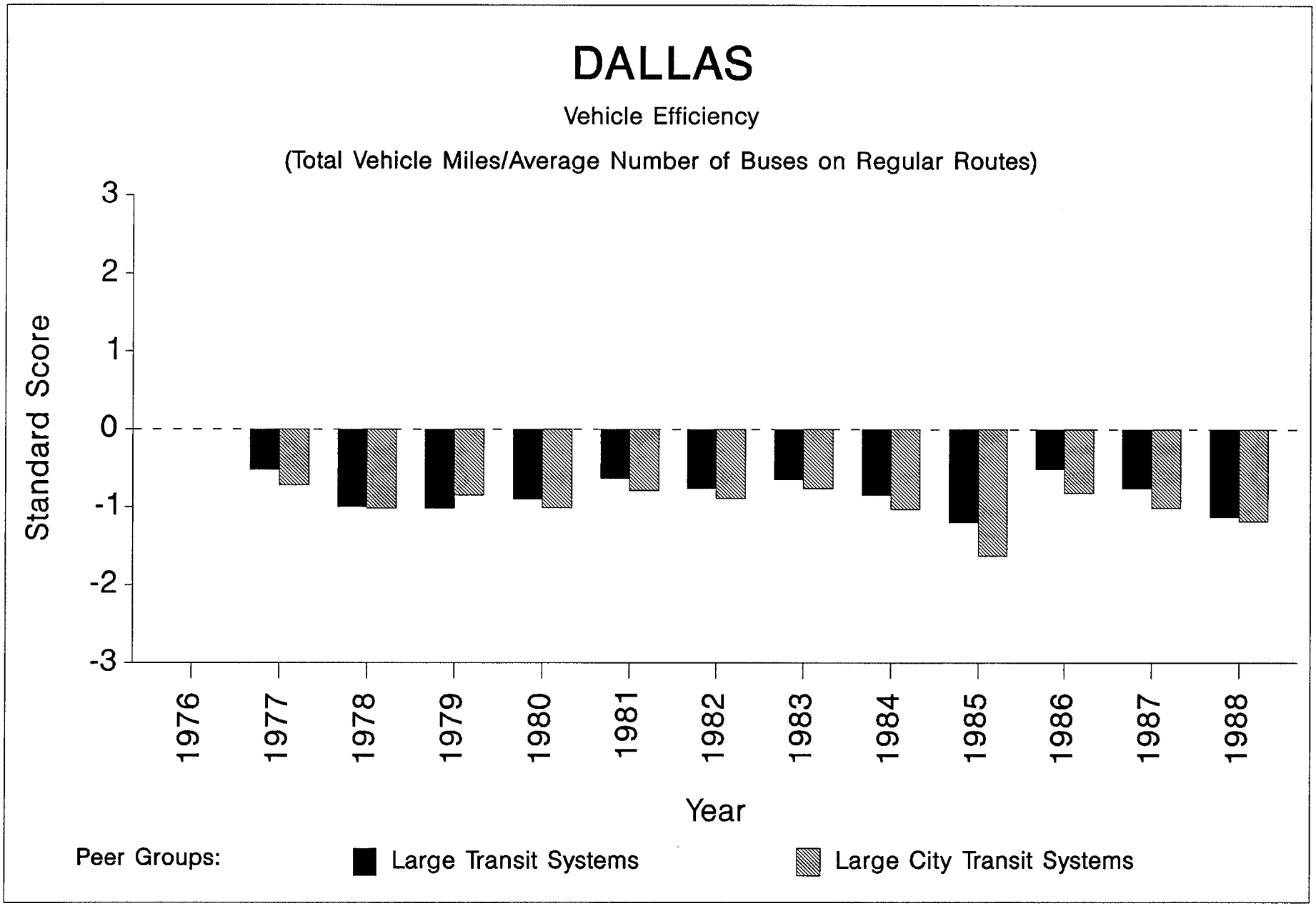
D A L L A S

Peer Group: Large Transit Systems

	1976	1977	1978	1979	1980	1981	1982	1983	1984	1985	1986	1987	1988
Transit Agency Value	----	3.73	3.68	3.70	3.44	3.53	3.45	3.54	3.44	3.16	3.72	3.87	3.80
Peer Group Mean	2.85	4.49	4.31	4.17	4.23	4.39	4.63	4.53	4.48	3.88	3.97	4.40	4.34
Standard Score	----	-.52	-1.00	-1.02	-.90	-.63	-.76	-.65	-.85	-1.20	-.51	-.76	-1.13

Peer Group: Large City Transit Systems

	1976	1977	1978	1979	1980	1981	1982	1983	1984	1985	1986	1987	1988
Transit Agency Value	----	3.73	3.68	3.70	3.44	3.53	3.45	3.54	3.44	3.16	3.72	3.87	3.80
Peer Group Mean	2.85	4.60	4.50	4.46	4.46	4.48	4.57	4.42	4.40	4.09	4.22	4.71	4.57
Standard Score	----	-.72	-1.02	-.85	-1.01	-.79	-.89	-.76	-1.03	-1.63	-.82	-1.01	-1.18


DALLAS
Vehicle Efficiency
(Total Vehicle Miles/Average Number of Buses on Regular Routes)
Standard Score
3
2
1
0
-1
-2
-3
1976
1977
1978
1979
1980
1981
1982
1983
1984
1985
1986
1987
1988
Year
Peer Groups:
Large Transit Systems
Large City Transit Systems

EL PASO

Table 45.
Transit System Statistical Profile

EL PASO

	1976	1977	1978	1979	1980	1981	1982	1983	1984	1985	1986	1987	1988
Total Passengers	9,561,667	8,843,284	8,696,204	8,700,853	9,161,146	9,545,886	8,225,717	8,855,875	9,260,994	9,683,832	9,332,092	8,298,839	9,421,821
Total Vehicle Miles	4,119,120	3,839,350	3,983,601	4,193,082	4,231,380	4,410,165	4,510,224	4,238,192	4,229,164	4,343,462	4,367,649	3,708,514	3,744,436
Total Vehicle Hours	-	442,909	440,198	326,364	302,240	312,926	317,174	300,027	299,213	302,804	303,707	248,766	275,797
Average No. Buses on Regular Routes	-	69	69	69	71	76	84	87	89	92	87	76	78
Average No. Employees	-	220	245	247	247	259	289	308	309	317	319	298	301
Total Operating Revenue ($)	2,710,724	2,725,091	2,875,613	3,021,971	3,143,316	3,369,277	3,847,931	3,596,256	3,784,595	4,072,492	4,313,590	4,627,163	4,837,754
Passenger Revenue ($)	2,692,102	2,724,458	2,875,613	3,021,971	3,143,316	3,295,720	3,733,463	3,491,766	3,749,223	4,031,082	4,270,906	4,569,816	4,687,742
Total Operating Expense ($)	2,722,832	2,769,224	4,064,834	5,171,391	5,986,518	7,144,746	9,455,053	7,994,985	8,339,316	9,618,332	9,998,941	9,426,901	11,344,363
Net Public Operating Cost ($)	-	44,133	1,189,221	2,149,420	2,843,202	3,775,469	5,607,122	4,398,729	4,554,721	5,545,840	5,685,351	4,799,738	6,500,812
Total Public Capital Cost ($)	-	2,227,643	7,415,856	-	-	2,142,800	6,488,115	1,795,334	10,961	246,818	244,324	899,789	817,320
Total Public Expense	-	2,271,776	8,605,077	2,149,420	2,843,202	5,918,269	12,095,237	6,194,063	4,565,682	5,792,658	5,929,675	5,699,527	7,318,132

Source: Texas Transit Statistics

Table 46.
Cost Efficiency Performance Profile
(Total Vehicle Hours/Total Operating Expense)

EL PASO

Peer Group: Medium-Sized Transit Systems

	1976	1977	1978	1979	1980	1981	1982	1983	1984	1985	1986	1987	1988
Transit Agency Value	----	.160	.108	.063	.050	.044	.034	.038	.036	.031	.030	.026	.024
Peer Group Mean	----	.091	.073	.054	.045	.039	.037	.037	.037	.034	.031	.028	.027
Standard Score	----	1.43	1.35	.85	.76	.52	-.39	.19	-.12	-.21	-.06	-.23	-.29

Peer Group: Large City Transit Systems

	1976	1977	1978	1979	1980	1981	1982	1983	1984	1985	1986	1987	1988
Transit Agency Value	----	.160	.108	.063	.050	.044	.034	.038	.036	.031	.030	.026	.024
Peer Group Mean	----	.069	.060	.047	.039	.033	.031	.031	.029	.026	.024	.023	.022
Standard Score	----	2.25	2.09	1.67	1.24	1.31	.42	.97	1.06	1.04	.96	.75	.37

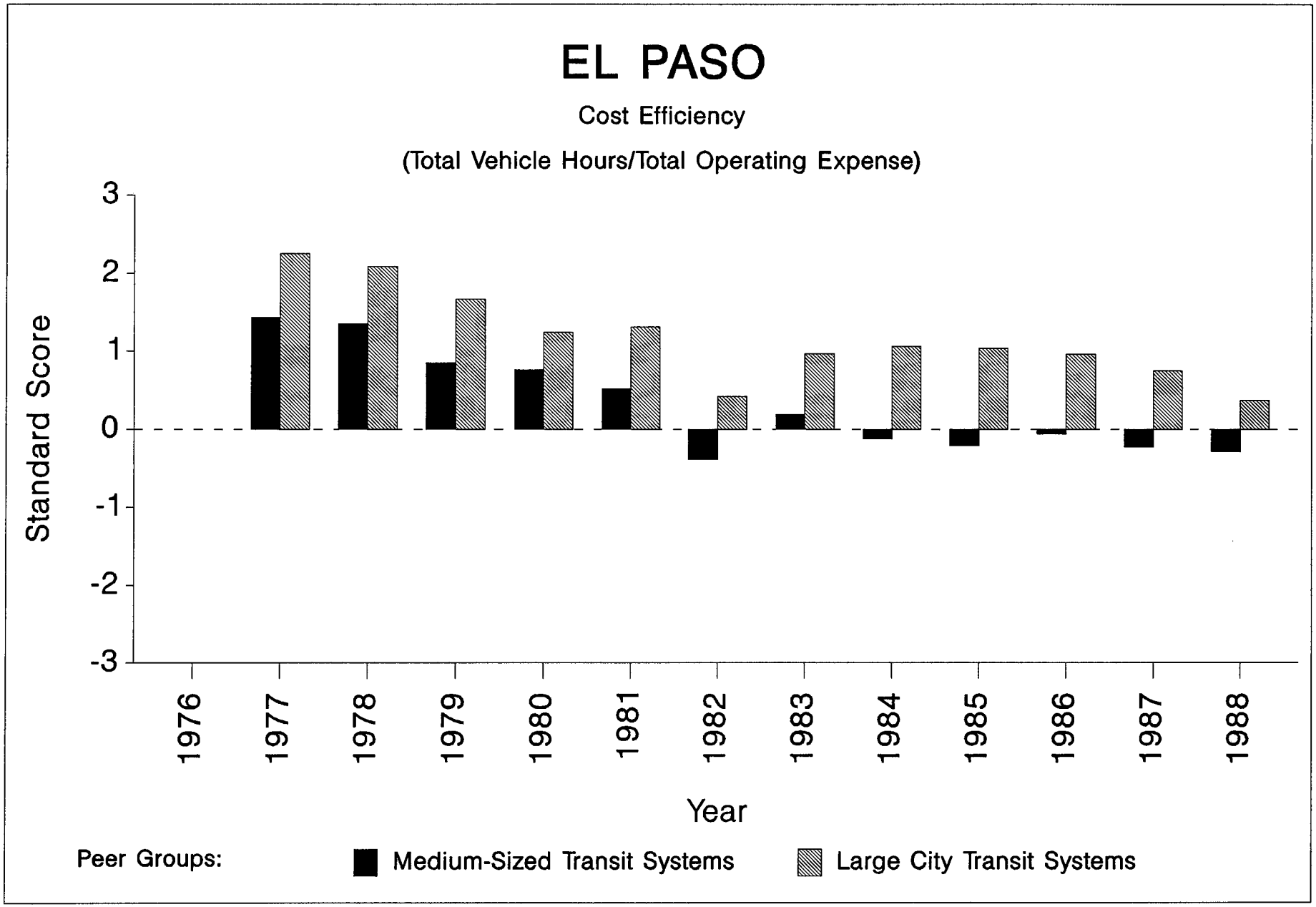

EL PASO
Cost Efficiency
(Total Vehicle Hours/Total Operating Expense)
Standard Score
3
2
1
0
-1
-2
-3
1976
1977
1978
1979
1980
1981
1982
1983
1984
1985
1986
1987
1988
Year
Peer Groups:
Medium-Sized Transit Systems
Large City Transit Systems

Table 47.
Service Effectiveness Performance Profile
(Total Passengers/Total Vehicle Hours)

EL PASO

Peer Group: Medium-Sized Transit Systems

	1976	1977	1978	1979	1980	1981	1982	1983	1984	1985	1986	1987	1988
Transit Agency Value	—	19.97	19.76	26.66	30.31	30.51	25.93	29.52	30.95	31.98	30.73	33.36	34.16
Peer Group Mean	—	24.35	22.64	25.02	27.78	27.38	26.62	22.86	24.20	24.53	22.68	23.79	24.24
Standard Score	—	-.67	-.54	.30	.33	.32	-.05	.91	.82	.86	.87	1.08	1.13

Peer Group: Large City Transit Systems

	1976	1977	1978	1979	1980	1981	1982	1983	1984	1985	1986	1987	1988
Transit Agency Value	—	19.97	19.76	26.66	30.31	30.51	25.93	29.52	30.95	31.98	30.73	33.36	34.16
Peer Group Mean	—	30.94	26.16	27.54	28.78	27.49	25.65	25.18	25.99	25.35	23.02	23.39	24.54
Standard Score	—	-1.02	-1.03	-.15	.24	.45	.04	.57	.63	.89	1.03	1.21	1.23

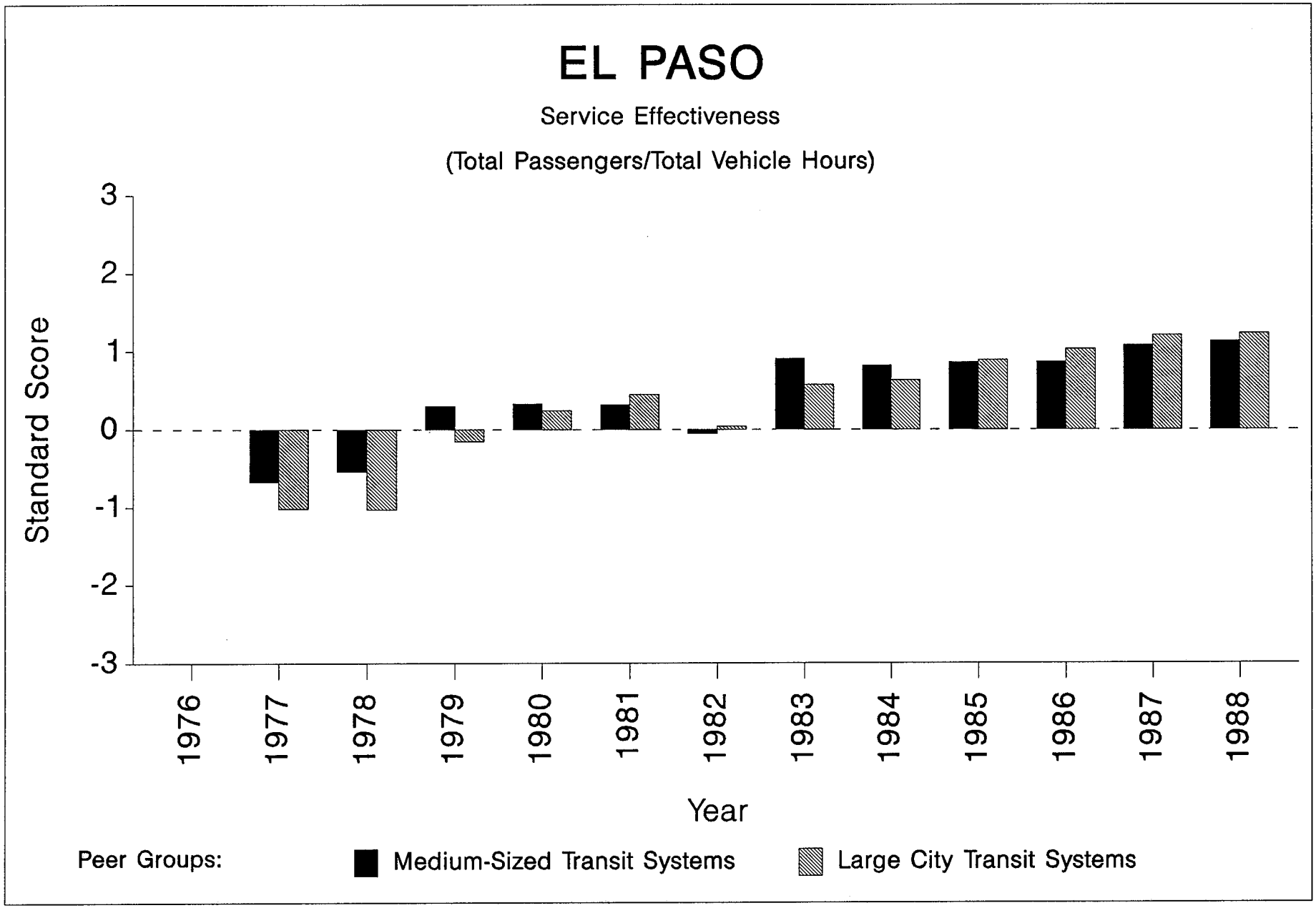

EL PASO
Service Effectiveness
(Total Passengers/Total Vehicle Hours)
Standard Score
3
2
1
0
-1
-2
-3
1976
1977
1978
1979
1980
1981
1982
1983
1984
1985
1986
1987
1988
Year
Peer Groups:
Medium-Sized Transit Systems
Large City Transit Systems

Table 48.
Cost Effectiveness Performance Profile
(Passenger Revenue/Total Operating Expense)

E L P A S O

Peer Group: Medium-Sized Transit Systems

	1976	1977	1978	1979	1980	1981	1982	1983	1984	1985	1986	1987	1988
Transit Agency Value	.99	.98	.71	.58	.53	.46	.39	.44	.45	.42	.43	.48	.41
Peer Group Mean	.53	.52	.45	.40	.38	.35	.36	.37	.39	.36	.31	.30	.27
Standard Score	1.48	1.48	1.44	1.45	1.39	1.10	.46	.95	.94	.54	1.00	1.13	.97

Peer Group: Large City Transit Systems

	1976	1977	1978	1979	1980	1981	1982	1983	1984	1985	1986	1987	1988
Transit Agency Value	.99	.98	.71	.58	.53	.46	.39	.44	.45	.42	.43	.48	.41
Peer Group Mean	.55	.53	.43	.39	.37	.36	.34	.34	.32	.28	.25	.24	.23
Standard Score	1.92	1.98	1.62	1.28	1.25	.81	.42	.87	1.66	1.83	1.59	1.85	1.59

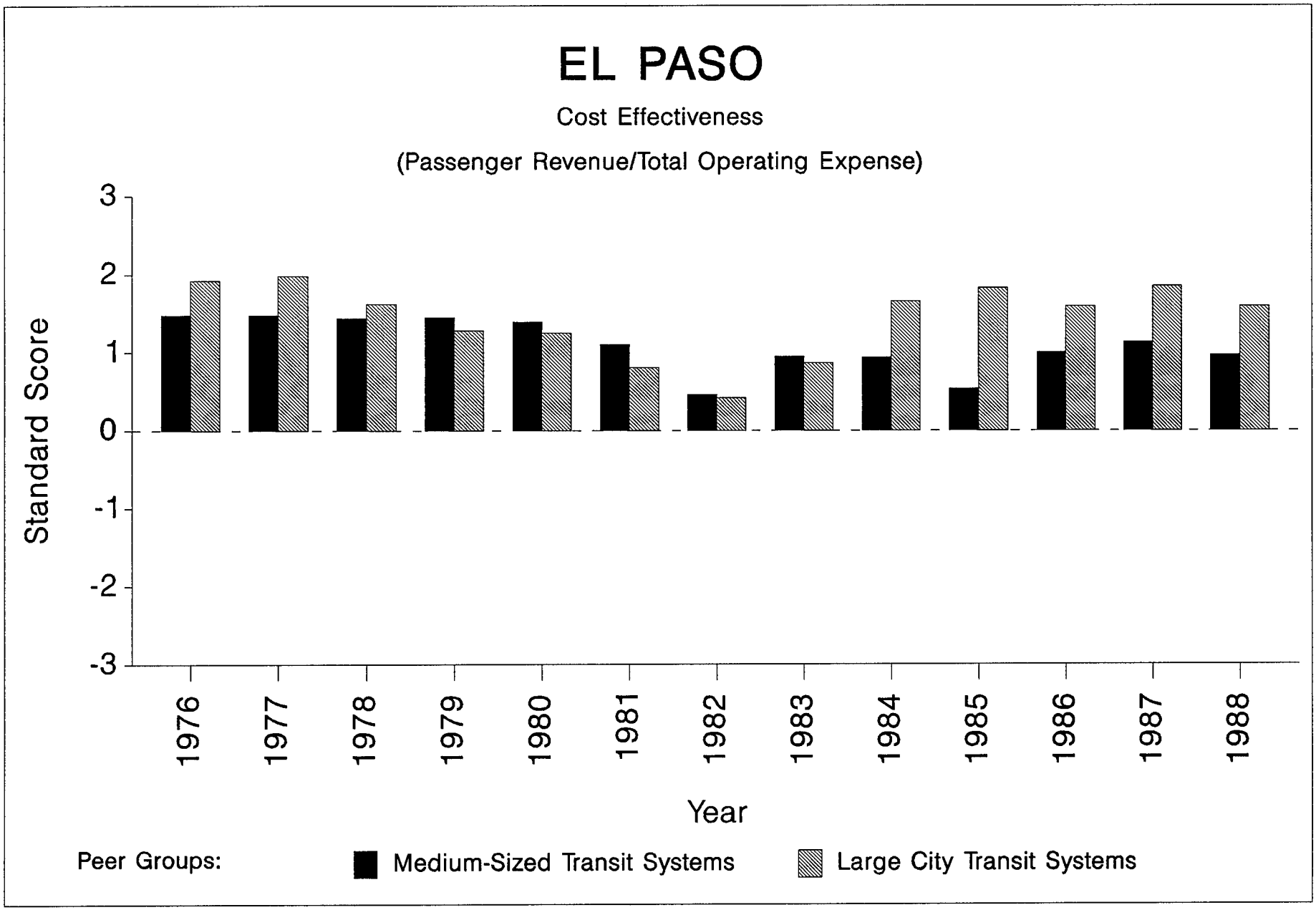

EL PASO
Cost Effectiveness
(Passenger Revenue/Total Operating Expense)
Standard Score
3
2
1
0
-1
-2
-3
1976
1977
1978
1979
1980
1981
1982
1983
1984
1985
1986
1987
1988
Year
Peer Groups:
Medium-Sized Transit Systems
Large City Transit Systems

Table 49.
Labor Efficiency Performance Profile
(Total Vehicle Hours/Average Number of Employees)

EL PASO

Peer Group: Medium-Sized Transit Systems

	1976	1977	1978	1979	1980	1981	1982	1983	1984	1985	1986	1987	1988
Transit Agency Value	----	.201	.180	.132	.122	.121	.110	.097	.097	.096	.095	.083	.092
Peer Group Mean	----	.135	.136	.123	.115	.113	.110	.106	.103	.102	.097	.100	.098
Standard Score	----	1.49	1.49	1.40	1.32	1.09	-.19	-1.04	-1.43	-.91	-.22	-1.31	-.39

Peer Group: Large City Transit Systems

	1976	1977	1978	1979	1980	1981	1982	1983	1984	1985	1986	1987	1988
Transit Agency Value	----	.201	.180	.132	.122	.121	.110	.097	.097	.096	.095	.083	.092
Peer Group Mean	----	.118	.126	.117	.110	.108	.107	.105	.102	.098	.097	.101	.101
Standard Score	----	2.23	2.20	1.35	.99	1.38	.29	-.84	-.57	-.38	-.12	-1.01	-.50

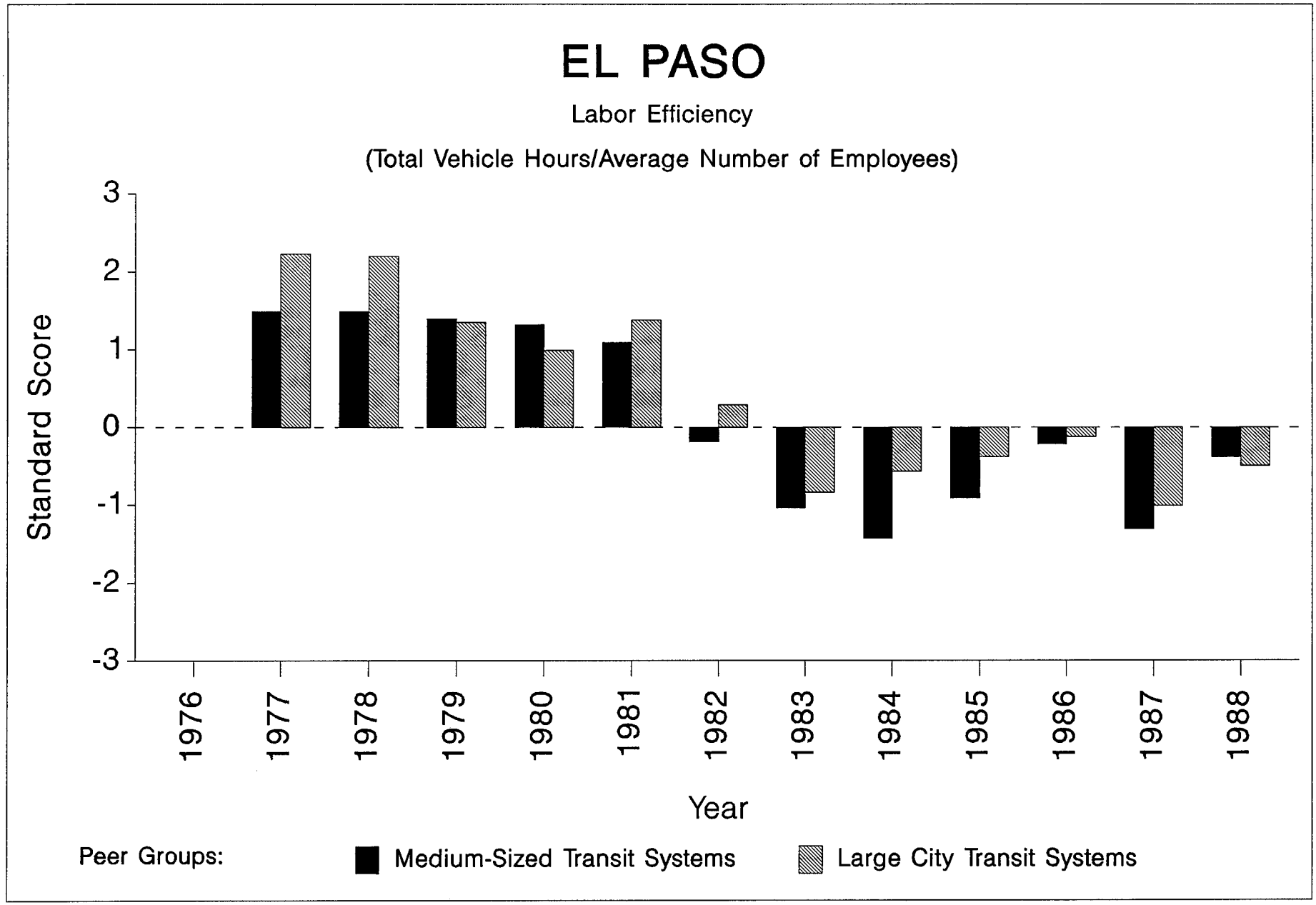

EL PASO
Labor Efficiency
(Total Vehicle Hours/Average Number of Employees)
Standard Score
3
2
1
0
-1
-2
-3
1976
1977
1978
1979
1980
1981
1982
1983
1984
1985
1986
1987
1988
Year
Peer Groups:
Medium-Sized Transit Systems
Large City Transit Systems

Table 50.
Vehicle Efficiency Performance Profile
(Total Vehicle Miles/Average Number of Buses on Regular Routes)

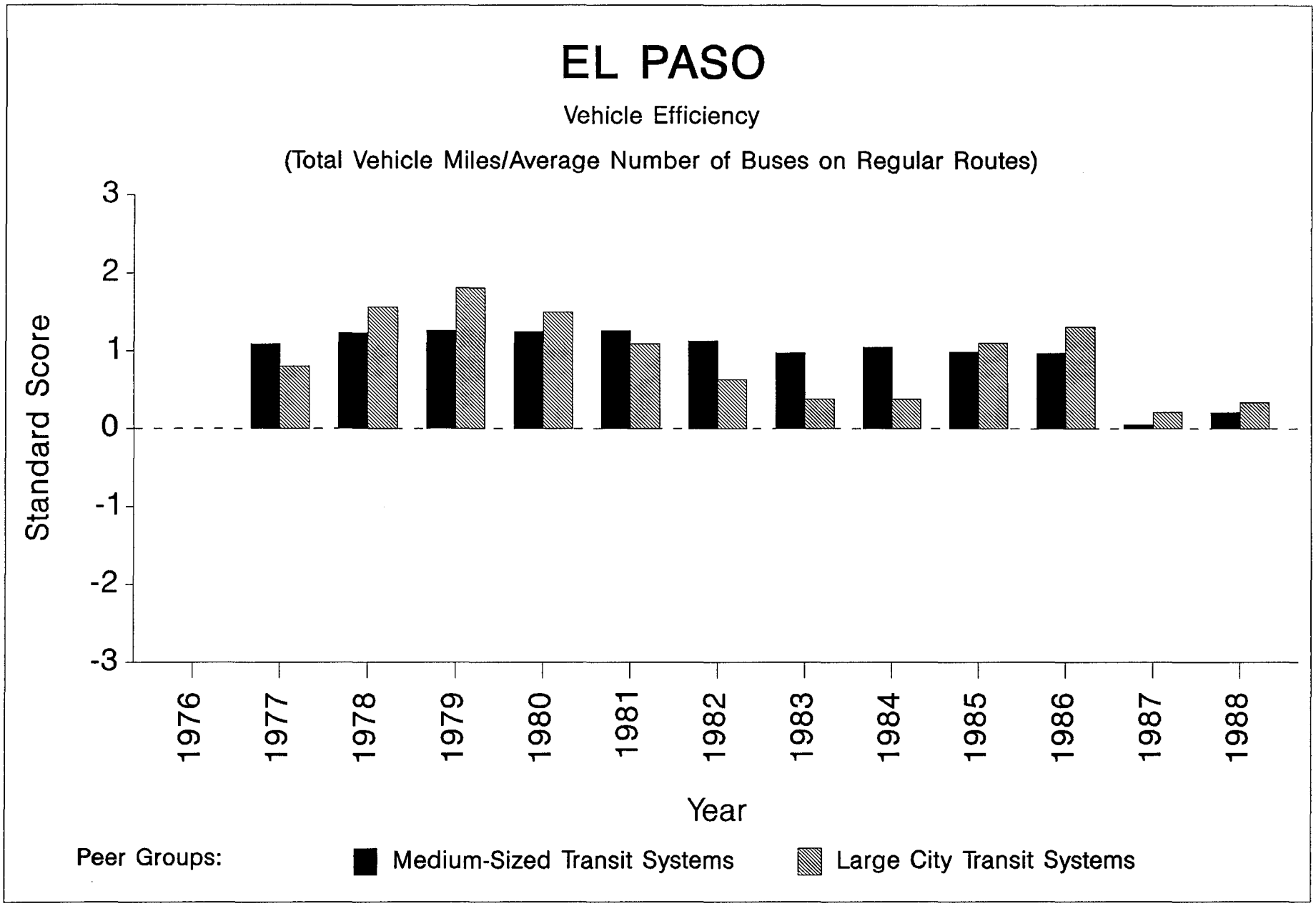
EL PASO

Peer Group: Medium-Sized Transit Systems

	1976	1977	1978	1979	1980	1981	1982	1983	1984	1985	1986	1987	1988
Transit Agency Value	----	5.56	5.77	6.08	5.96	5.80	5.37	4.87	4.75	4.72	5.02	4.88	4.80
Peer Group Mean	----	4.53	4.52	4.62	4.52	4.47	4.39	4.25	4.27	4.20	4.41	4.83	4.62
Standard Score	----	1.09	1.23	1.26	1.25	1.26	1.13	.98	1.05	.99	.98	.05	.21

Peer Group: Large City Transit Systems

	1976	1977	1978	1979	1980	1981	1982	1983	1984	1985	1986	1987	1988
Transit Agency Value	----	5.56	5.77	6.08	5.96	5.80	5.37	4.87	4.75	4.72	5.02	4.88	4.80
Peer Group Mean	2.85	4.60	4.50	4.46	4.46	4.48	4.57	4.42	4.40	4.09	4.22	4.71	4.57
Standard Score	----	.80	1.56	1.81	1.50	1.09	.63	.38	.38	1.10	1.31	.21	.34


EL PASO
Vehicle Efficiency
(Total Vehicle Miles/Average Number of Buses on Regular Routes)
Standard Score
3
2
1
0
-1
-2
-3
1976
1977
1978
1979
1980
1981
1982
1983
1984
1985
1986
1987
1988
Year
Peer Groups:
Medium-Sized Transit Systems
Large City Transit Systems

FORT WORTH

Table 51.
Transit System Statistical Profile

FORT WORTH

	1976	1977	1978	1979	1980	1981	1982	1983	1984	1985	1986	1987	1988
Total Passengers	4,506,969	5,070,943	5,205,118	5,957,961	6,339,043	5,953,789	5,768,771	5,200,488	5,393,768	5,377,947	4,947,252	4,507,907	4,883,583
Total Vehicle Miles	2,949,792	3,040,422	3,089,734	3,147,997	3,169,175	3,409,456	3,420,013	3,336,725	3,703,825	3,854,497	3,866,547	4,064,602	4,059,655
Total Vehicle Hours	-	226,483	246,486	251,540	254,153	270,756	279,714	279,577	293,517	307,275	301,323	306,739	301,419
Average No. Buses on Regular Routes	-	85	86	90	93	103	102	98	101	101	103	94	99
Average No. Employees	-	215	206	214	223	245	246	237	284	312	311	312	325
Total Operating Revenue ($)	1,631,987	2,666,755	2,930,431	3,390,200	4,078,700	4,940,300	5,148,800	5,202,328	6,088,975	6,417,316	7,686,951	10,744,128	7,317,091
Passenger Revenue ($)	1,509,120	1,605,938	1,695,623	1,884,000	2,219,800	2,665,500	2,747,500	2,859,021	3,360,353	3,209,913	3,155,399	2,799,465	2,720,841
Total Operating Expense ($)	3,377,286	3,678,887	4,134,836	4,986,800	5,974,000	7,096,600	7,459,700	7,510,459	8,673,462	10,361,969	11,287,324	11,758,216	11,573,226
Net Public Operating Cost ($)	1,745,299	1,012,132	1,204,405	1,596,600	1,895,300	2,156,300	2,310,900	2,308,131	2,584,487	3,944,653	3,600,373	1,014,088	4,256,135
Total Public Capital Cost ($)	-	454,446	41,731	187,084	-	400,000	586,054	14,376,070	2,215,423	1,852,111	1,132,194	3,101,722	-
Total Public Expense ($)	1,745,299	1,466,578	1,246,136	1,783,684	1,895,300	2,556,300	2,896,954	16,684,201	4,799,910	5,796,764	4,732,567	4,115,810	4,256,135

Source: Texas Transit Statistics

Table 52.
Cost Efficiency Performance Profile
(Total Vehicle Hours/Total Operating Expense)

FORT WORTH

Peer Group: Medium-Sized Transit Systems

	1976	1977	1978	1979	1980	1981	1982	1983	1984	1985	1986	1987	1988
Transit Agency Value	—	.062	.060	.050	.043	.038	.037	.037	.034	.030	.027	.026	.026
Peer Group Mean	—	.091	.073	.054	.045	.039	.037	.037	.037	.034	.031	.028	.027
Standard Score	—	-.62	-.53	-.34	-.34	-.12	.03	.13	-.47	-.37	-.62	-.27	-.10

Peer Group: Large City Transit Systems

	1976	1977	1978	1979	1980	1981	1982	1983	1984	1985	1986	1987	1988
Transit Agency Value	—	.062	.060	.050	.043	.038	.037	.037	.034	.030	.027	.026	.026
Peer Group Mean	—	.069	.060	.047	.039	.033	.031	.031	.029	.026	.024	.023	.022
Standard Score	—	-.18	-.04	.37	.38	.62	.97	.92	.73	.69	.40	.69	.71

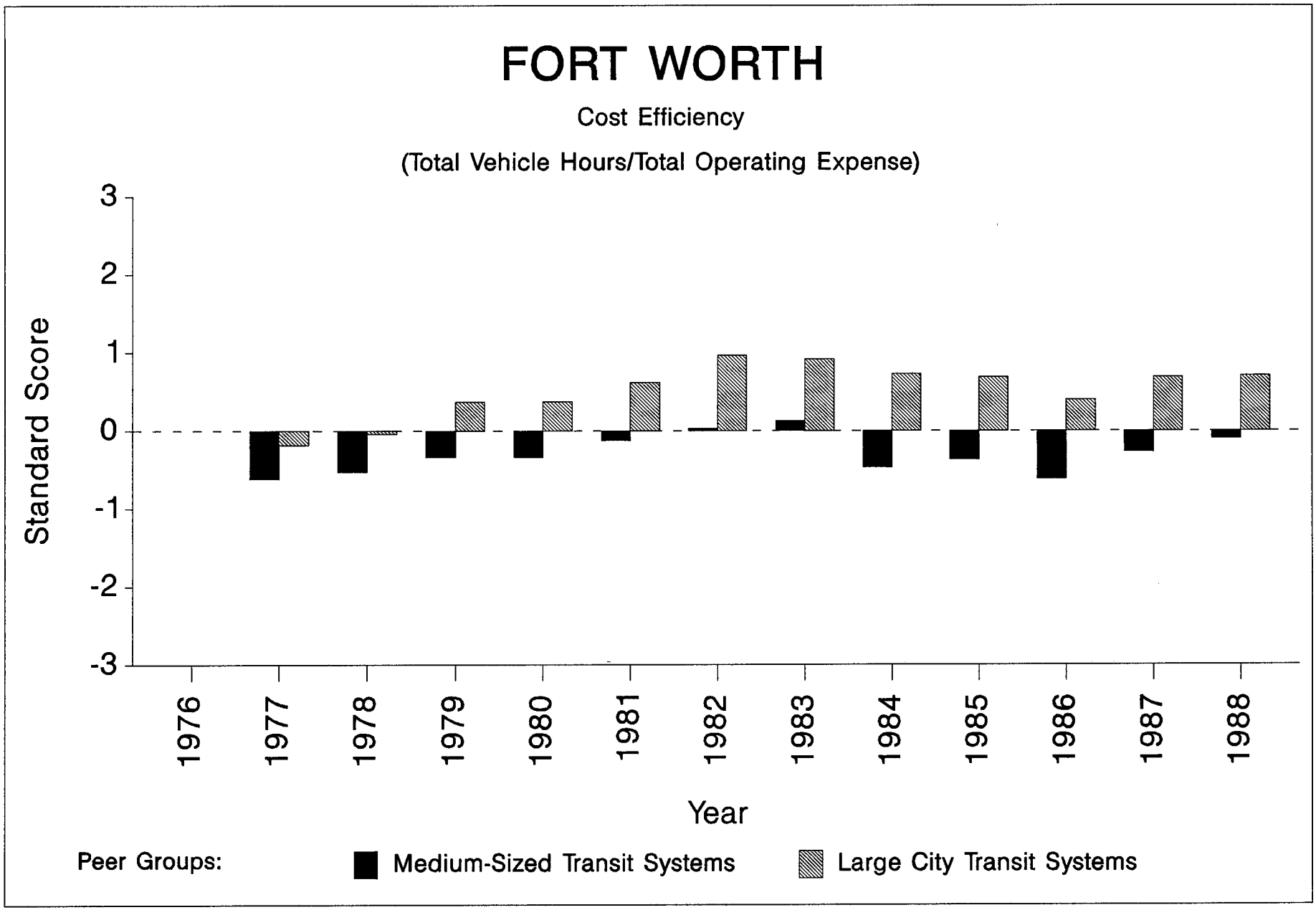

FORT WORTH
Cost Efficiency
(Total Vehicle Hours/Total Operating Expense)
Standard Score
3
2
1
0
-1
-2
-3
1976
1977
1978
1979
1980
1981
1982
1983
1984
1985
1986
1987
1988
Year
Peer Groups:
Medium-Sized Transit Systems
Large City Transit Systems

Table 53.
Service Effectiveness Performance Profile
(Total Passengers/Total Vehicle Hours)

FORT WORTH

Peer Group: Medium-Sized Transit Systems

	1976	1977	1978	1979	1980	1981	1982	1983	1984	1985	1986	1987	1988
Transit Agency Value	---	22.39	21.12	23.69	24.94	21.99	20.62	18.60	18.38	17.50	16.42	14.70	16.20
Peer Group Mean	---	24.35	22.64	25.02	27.78	27.38	26.62	22.86	24.20	24.53	22.68	23.79	24.24
Standard Score	---	-.30	-.29	-.25	-.37	-.55	-.47	-.58	-.71	-.81	-.68	-1.02	-.92

Peer Group: Large City Transit Systems

	1976	1977	1978	1979	1980	1981	1982	1983	1984	1985	1986	1987	1988
Transit Agency Value	---	22.39	21.12	23.69	24.94	21.99	20.62	18.60	18.38	17.50	16.42	14.70	16.20
Peer Group Mean	---	30.94	26.16	27.54	28.78	27.49	25.65	25.18	25.99	25.35	23.02	23.39	24.54
Standard Score	---	-.79	-.81	-.64	-.61	-.82	-.69	-.86	-.97	-1.05	-.88	-1.06	-1.06

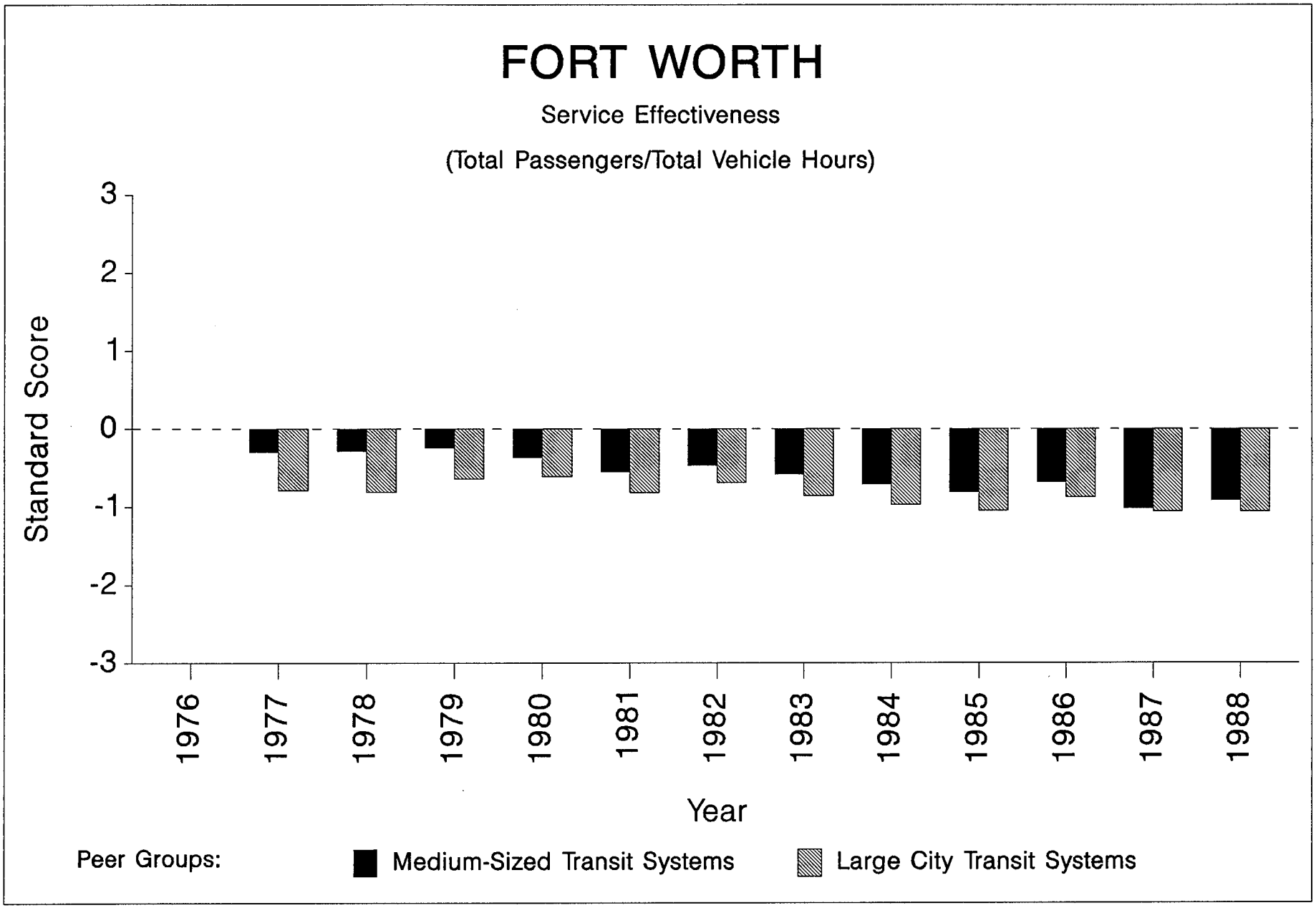

FORT WORTH
Service Effectiveness
(Total Passengers/Total Vehicle Hours)
Standard Score
3
2
1
0
-1
-2
-3
1976
1977
1978
1979
1980
1981
1982
1983
1984
1985
1986
1987
1988
Year
Peer Groups:
Medium-Sized Transit Systems
Large City Transit Systems

Table 54.
Cost Effectiveness Performance Profile
(Passenger Revenue/Total Operating Expense)

FORT WORTH

Peer Group: Medium-Sized Transit Systems

	1976	1977	1978	1979	1980	1981	1982	1983	1984	1985	1986	1987	1988
Transit Agency Value	.45	.44	.41	.38	.37	.38	.37	.38	.39	.31	.28	.24	.24
Peer Group Mean	.53	.52	.45	.40	.38	.35	.36	.37	.39	.36	.31	.30	.27
Standard Score	-.26	-.27	-.22	-.15	-.05	.24	.13	.19	-.06	-.42	-.24	-.35	-.25

Peer Group: Large City Transit Systems

	1976	1977	1978	1979	1980	1981	1982	1983	1984	1985	1986	1987	1988
Transit Agency Value	.45	.44	.41	.38	.37	.38	.37	.38	.39	.31	.28	.24	.24
Peer Group Mean	.55	.53	.43	.39	.37	.36	.34	.34	.32	.28	.25	.24	.23
Standard Score	-.45	-.39	-.12	-.09	-.02	.15	.20	.35	.86	.36	.27	.00	.04

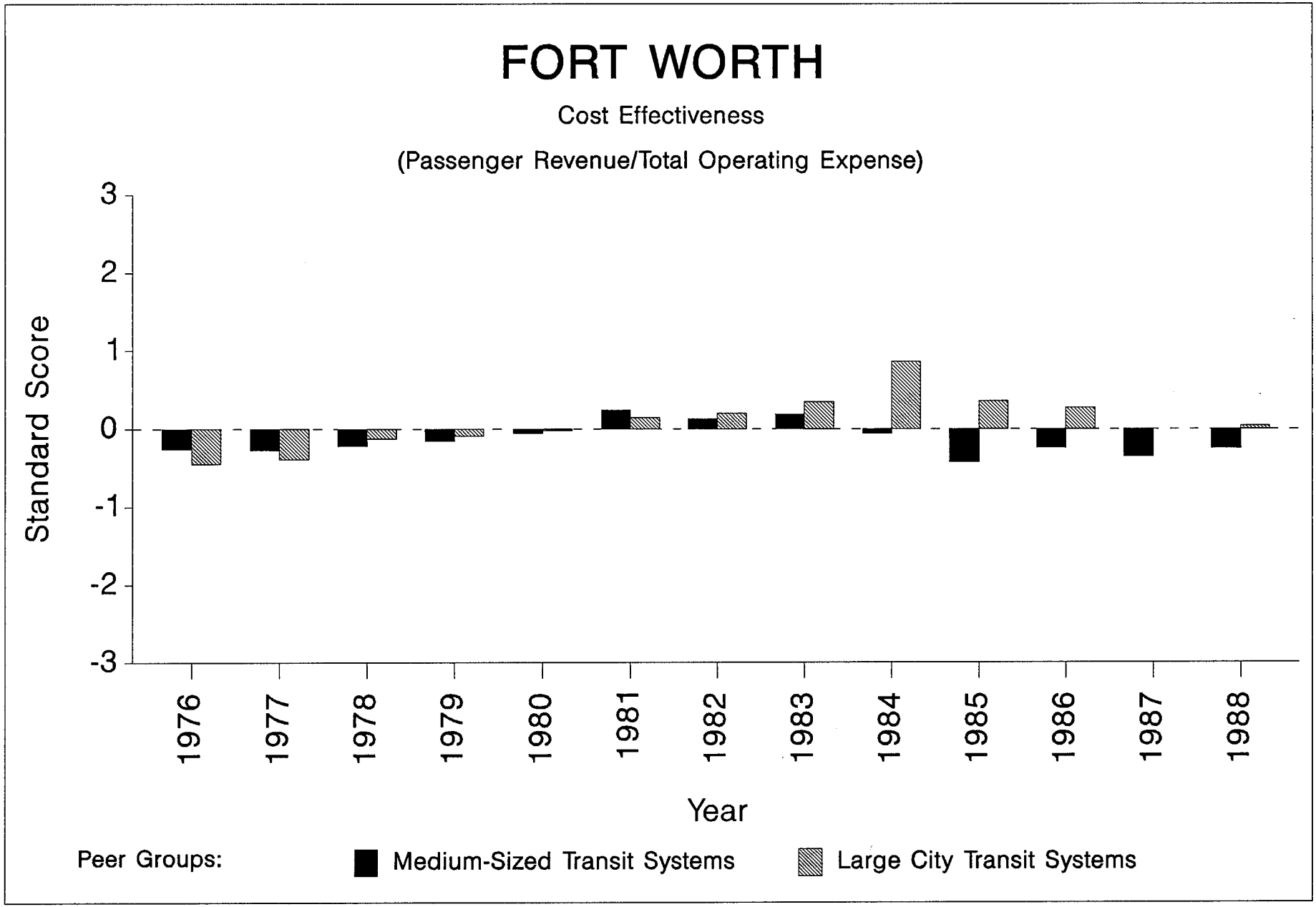

FORT WORTH
Cost Effectiveness
(Passenger Revenue/Total Operating Expense)
Standard Score
3
2
1
0
-1
-2
-3
1976
1977
1978
1979
1980
1981
1982
1983
1984
1985
1986
1987
1988
Year
Peer Groups:
Medium-Sized Transit Systems
Large City Transit Systems

Table 55.
Labor Efficiency Performance Profile
(Total Vehicle Hours/Average Number of Employees)

FORT WORTH

Peer Group: Medium-Sized Transit Systems

	1976	1977	1978	1979	1980	1981	1982	1983	1984	1985	1986	1987	1988
Transit Agency Value	---	.105	.120	.118	.114	.111	.114	.118	.103	.098	.097	.098	.093
Peer Group Mean	---	.135	.136	.123	.115	.113	.110	.106	.103	.102	.097	.100	.098
Standard Score	---	-.66	-.56	-.78	-.23	-.27	1.13	1.35	.08	-.49	-.01	-.12	-.32

Peer Group: Large City Transit Systems

	1976	1977	1978	1979	1980	1981	1982	1983	1984	1985	1986	1987	1988
Transit Agency Value	---	.105	.120	.118	.114	.111	.114	.118	.103	.098	.097	.098	.093
Peer Group Mean	---	.118	.126	.117	.110	.108	.107	.105	.102	.098	.097	.101	.101
Standard Score	---	-.34	-.26	.08	.32	.28	.76	1.33	.21	.02	-.02	-.13	-.44

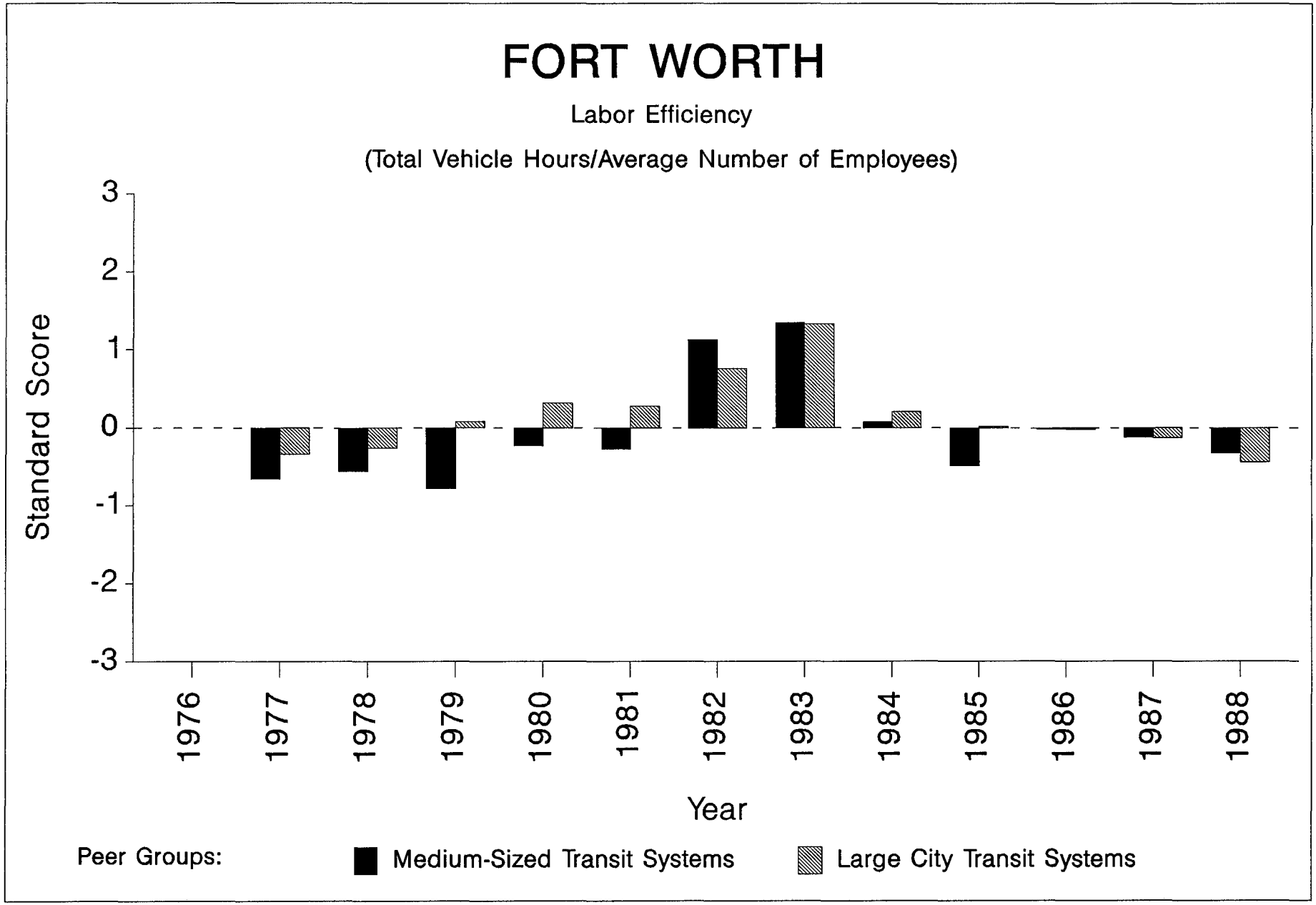

FORT WORTH
Labor Efficiency
(Total Vehicle Hours/Average Number of Employees)
Standard Score
3
2
1
0
-1
-2
-3
1976
1977
1978
1979
1980
1981
1982
1983
1984
1985
1986
1987
1988
Year
Peer Groups:
Medium-Sized Transit Systems
Large City Transit Systems

Table 56.
Vehicle Efficiency Performance Profile
(Total Vehicle Miles/Average Number of Buses on Regular Routes)

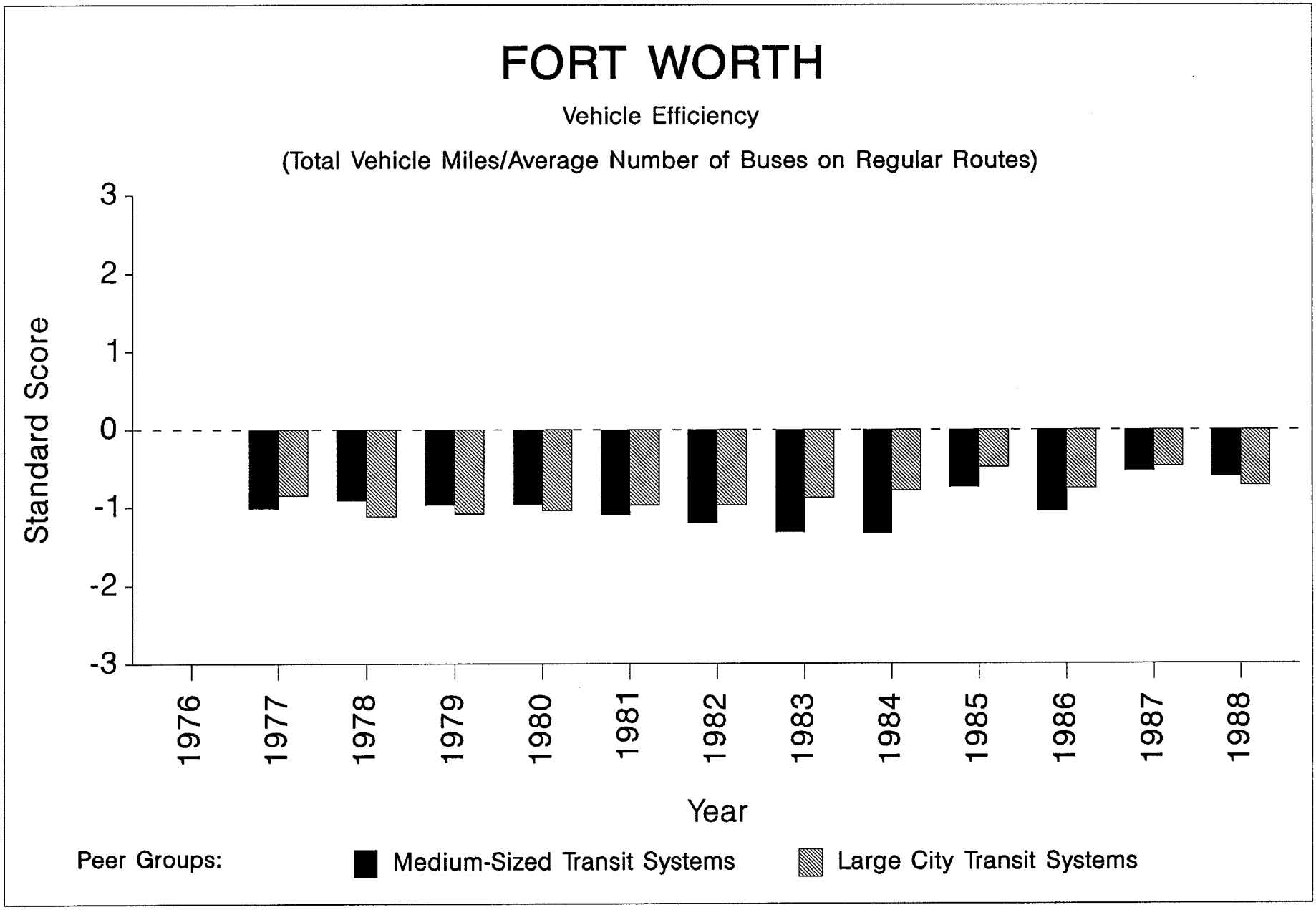
FORT WORTH

Peer Group: Medium-Sized Transit Systems

	1976	1977	1978	1979	1980	1981	1982	1983	1984	1985	1986	1987	1988
Transit Agency Value	----	3.58	3.59	3.50	3.41	3.31	3.35	3.40	3.67	3.82	3.75	4.32	4.10
Peer Group Mean	----	4.53	4.52	4.62	4.52	4.47	4.39	4.25	4.27	4.20	4.41	4.83	4.62
Standard Score	----	-1.01	-.91	-.97	-.96	-1.10	-1.20	-1.32	-1.33	-.74	-1.05	-.53	-.60

Peer Group: Large City Transit Systems

	1976	1977	1978	1979	1980	1981	1982	1983	1984	1985	1986	1987	1988
Transit Agency Value	----	3.58	3.59	3.50	3.41	3.31	3.35	3.40	3.67	3.82	3.75	4.32	4.10
Peer Group Mean	2.85	4.60	4.50	4.46	4.46	4.48	4.57	4.42	4.40	4.09	4.22	4.71	4.57
Standard Score	----	-.85	-1.12	-1.08	-1.04	-.97	-.97	-.88	-.78	-.48	-.75	-.47	-.72


FORT WORTH
Vehicle Efficiency
(Total Vehicle Miles/Average Number of Buses on Regular Routes)
Standard Score
3
2
1
0
-1
-2
-3
1976
1977
1978
1979
1980
1981
1982
1983
1984
1985
1986
1987
1988
Year
Peer Groups:
Medium-Sized Transit Systems
Large City Transit Systems

GALVESTON

Table 57.
Transit System Statistical Profile

GALVESTON

	1976	1977	1978	1979	1980	1981	1982	1983	1984	1985	1986	1987	1988
Total Passengers	1,077,341	1,224,627	1,341,083	1,590,320	1,149,671	1,057,873	963,666	876,159	846,137	665,073	699,873	792,479	835,568
Total Vehicle Miles	514,254	509,862	533,370	536,211	452,058	426,107	433,364	436,758	433,441	379,136	367,873	418,194	412,171
Total Vehicle Hours	-	-	55,007	53,462	49,673	47,640	49,848	45,459	43,115	37,212	32,713	31,921	31,312
Average No. Buses on Regular Routes	-	15	11	11	11	11	11	11	10	8	8	9	9
Average No. Employees	-	54	32	32	32	32	32	32	31	30	29	28	28
Total Operating Revenue ($)	391,526	377,993	371,111	380,227	401,921	422,327	447,882	419,638	392,056	296,123	306,575	320,572	332,954
Passenger Revenue ($)	390,342	376,210	368,641	379,346	401,921	421,461	447,191	418,862	391,798	295,892	297,031	309,634	318,075
Total Operating Expense ($)	594,902	619,160	647,196	755,293	853,108	851,552	942,175	901,704	971,455	919,646	911,262	942,590	901,551
Net Public Operating Cost ($)	203,376	241,167	276,085	375,066	451,187	429,225	494,293	482,066	579,399	623,523	604,687	622,018	568,597
Total Public Capital Cost ($)	45,401	48,016	3,182	21,386	5,090	1,231,661	-	1,510,076	326,324	399,628	552,725	7,138,458	2,705,361
Total Public Expense ($)	248,777	289,183	279,267	396,452	456,277	1,660,886	494,293	1,992,142	905,723	1,023,151	1,157,412	7,760,476	3,273,958

Source: Texas Transit Statistics

Table 58.
Cost Efficiency Performance Profile
(Total Vehicle Hours/Total Operating Expense)

GALVESTON

Peer Group: Small Transit Systems

	1976	1977	1978	1979	1980	1981	1982	1983	1984	1985	1986	1987	1988
Transit Agency Value	---	---	.085	.071	.058	.056	.053	.050	.044	.040	.036	.034	.035
Peer Group Mean	---	.087	.089	.066	.055	.048	.051	.045	.041	.040	.039	.038	.037
Standard Score	---	---	-.17	.34	.27	.94	.09	.58	.36	.04	-.55	-.76	-.38

Peer Group: Small City Transit Systems

	1976	1977	1978	1979	1980	1981	1982	1983	1984	1985	1986	1987	1988
Transit Agency Value	---	---	.085	.071	.058	.056	.053	.050	.044	.040	.036	.034	.035
Peer Group Mean	---	.087	.088	.066	.055	.048	.051	.045	.042	.041	.039	.038	.037
Standard Score	---	---	-.13	.38	.32	.99	.10	.64	.34	-.09	-.60	-.85	-.46

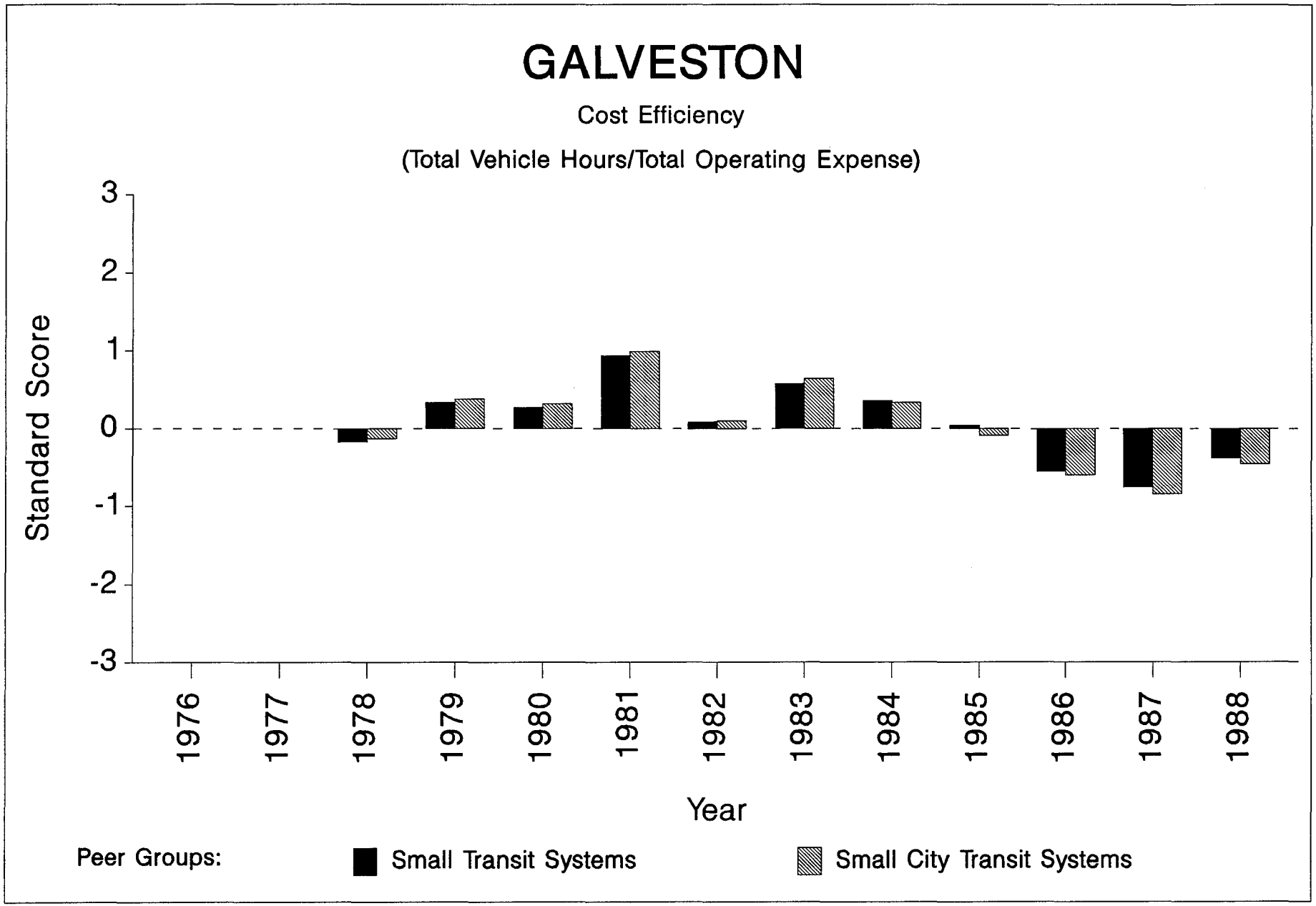

GALVESTON
Cost Efficiency
(Total Vehicle Hours/Total Operating Expense)
Standard Score
3
2
1
0
-1
-2
-3
1976
1977
1978
1979
1980
1981
1982
1983
1984
1985
1986
1987
1988
Year
Peer Groups:
Small Transit Systems
Small City Transit Systems

Table 59.
Service Effectiveness Performance Profile
(Total Passengers/Total Vehicle Hours)

GALVESTON

Peer Group: Small Transit Systems

	1976	1977	1978	1979	1980	1981	1982	1983	1984	1985	1986	1987	1988
Transit Agency Value	—	—	24.38	29.75	23.14	22.21	19.33	19.27	19.63	17.87	21.39	24.83	26.69
Peer Group Mean	—	19.20	18.49	20.03	20.72	21.44	19.80	19.75	20.70	19.66	19.82	19.34	19.12
Standard Score	—	—	.76	1.13	.34	.11	-.07	-.08	-.15	-.24	.21	.67	.79

Peer Group: Small City Transit Systems

	1976	1977	1978	1979	1980	1981	1982	1983	1984	1985	1986	1987	1988
Transit Agency Value	—	—	24.38	29.75	23.14	22.21	19.33	19.27	19.63	17.87	21.39	24.83	26.69
Peer Group Mean	—	20.85	19.69	21.05	22.20	23.10	22.06	20.55	21.69	20.79	20.79	20.23	20.02
Standard Score	—	—	.57	.99	.11	-.10	-.27	-.20	-.27	-.37	.08	.55	.70

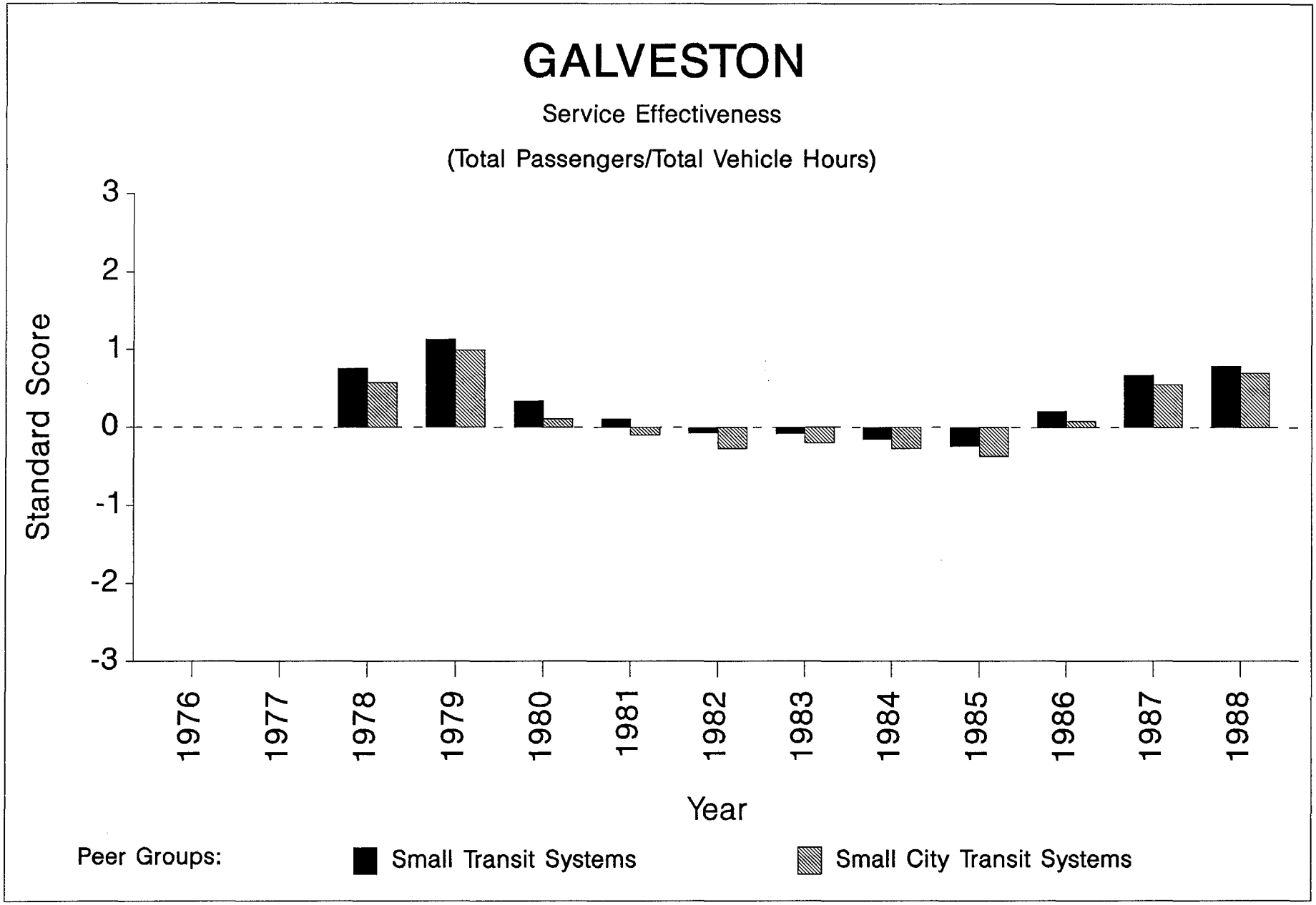

GALVESTON
Service Effectiveness
(Total Passengers/Total Vehicle Hours)
Standard Score
3
2
1
0
-1
-2
-3
1976
1977
1978
1979
1980
1981
1982
1983
1984
1985
1986
1987
1988
Year
Peer Groups:
Small Transit Systems
Small City Transit Systems

Table 60.
Cost Effectiveness Performance Profile
(Passenger Revenue/Total Operating Expense)

G A L V E S T O N

Peer Group: Small Transit Systems

	1976	1977	1978	1979	1980	1981	1982	1983	1984	1985	1986	1987	1988
Transit Agency Value	.66	.61	.57	.50	.47	.49	.47	.46	.40	.32	.33	.33	.35
Peer Group Mean	.51	.48	.39	.34	.34	.33	.33	.33	.33	.30	.29	.27	.27
Standard Score	.55	.56	1.25	1.13	.85	1.07	.98	.91	.51	.21	.35	.53	.62

Peer Group: Small City Transit Systems

	1976	1977	1978	1979	1980	1981	1982	1983	1984	1985	1986	1987	1988
Transit Agency Value	.66	.61	.57	.50	.47	.49	.47	.46	.40	.32	.33	.33	.35
Peer Group Mean	.49	.46	.39	.34	.34	.33	.34	.34	.34	.31	.29	.28	.28
Standard Score	.64	.64	1.33	1.19	.89	1.11	.95	.92	.46	.07	.29	.46	.59

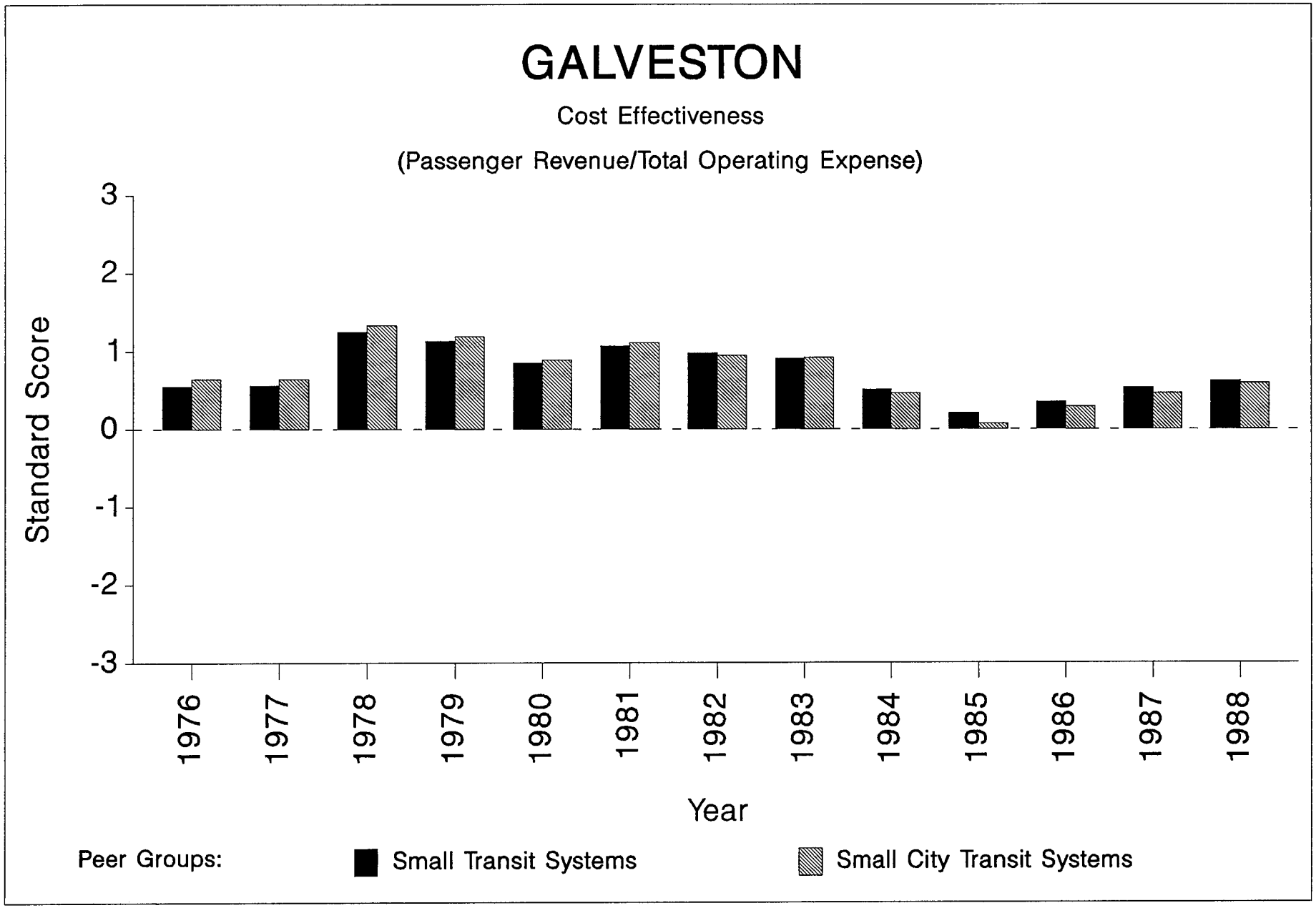

GALVESTON
Cost Effectiveness
(Passenger Revenue/Total Operating Expense)
Standard Score
3
2
1
0
-1
-2
-3
1976
1977
1978
1979
1980
1981
1982
1983
1984
1985
1986
1987
1988
Year
Peer Groups:
Small Transit Systems
Small City Transit Systems

Table 61.
Labor Efficiency Performance Profile
(Total Vehicle Hours/Average Number of Employees)

GALVESTON

Peer Group: Small Transit Systems

	1976	1977	1978	1979	1980	1981	1982	1983	1984	1985	1986	1987	1988
Transit Agency Value	----	----	.172	.167	.155	.149	.156	.142	.139	.124	.113	.114	.112
Peer Group Mean	----	.131	.140	.129	.125	.122	.131	.122	.123	.124	.122	.116	.119
Standard Score	----	----	1.25	1.01	1.08	1.01	.66	.71	.58	.00	-.48	-.21	-.61

Peer Group: Small City Transit Systems

	1976	1977	1978	1979	1980	1981	1982	1983	1984	1985	1986	1987	1988
Transit Agency Value	----	----	.172	.167	.155	.149	.156	.142	.139	.124	.113	.114	.112
Peer Group Mean	----	.130	.139	.128	.124	.121	.128	.120	.121	.123	.121	.116	.119
Standard Score	----	----	1.37	1.07	1.16	1.08	.74	.78	.66	.05	-.42	-.19	-.65

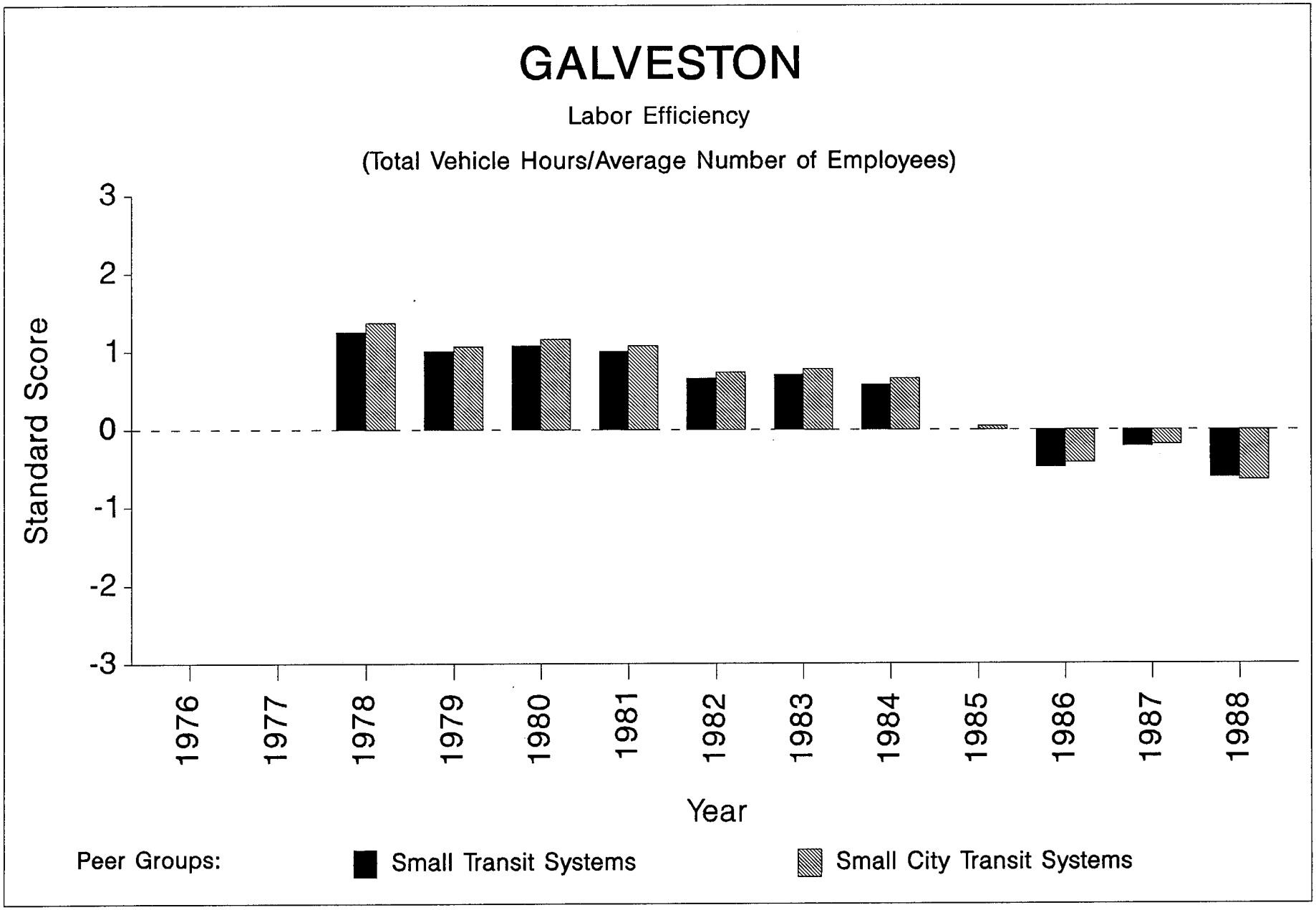

GALVESTON
Labor Efficiency
(Total Vehicle Hours/Average Number of Employees)
Standard Score
3
2
1
0
-1
-2
-3
1976
1977
1978
1979
1980
1981
1982
1983
1984
1985
1986
1987
1988
Year
Peer Groups:
Small Transit Systems
Small City Transit Systems

Table 62.
Vehicle Efficiency Performance Profile
(Total Vehicle Miles/Average Number of Buses on Regular Routes)

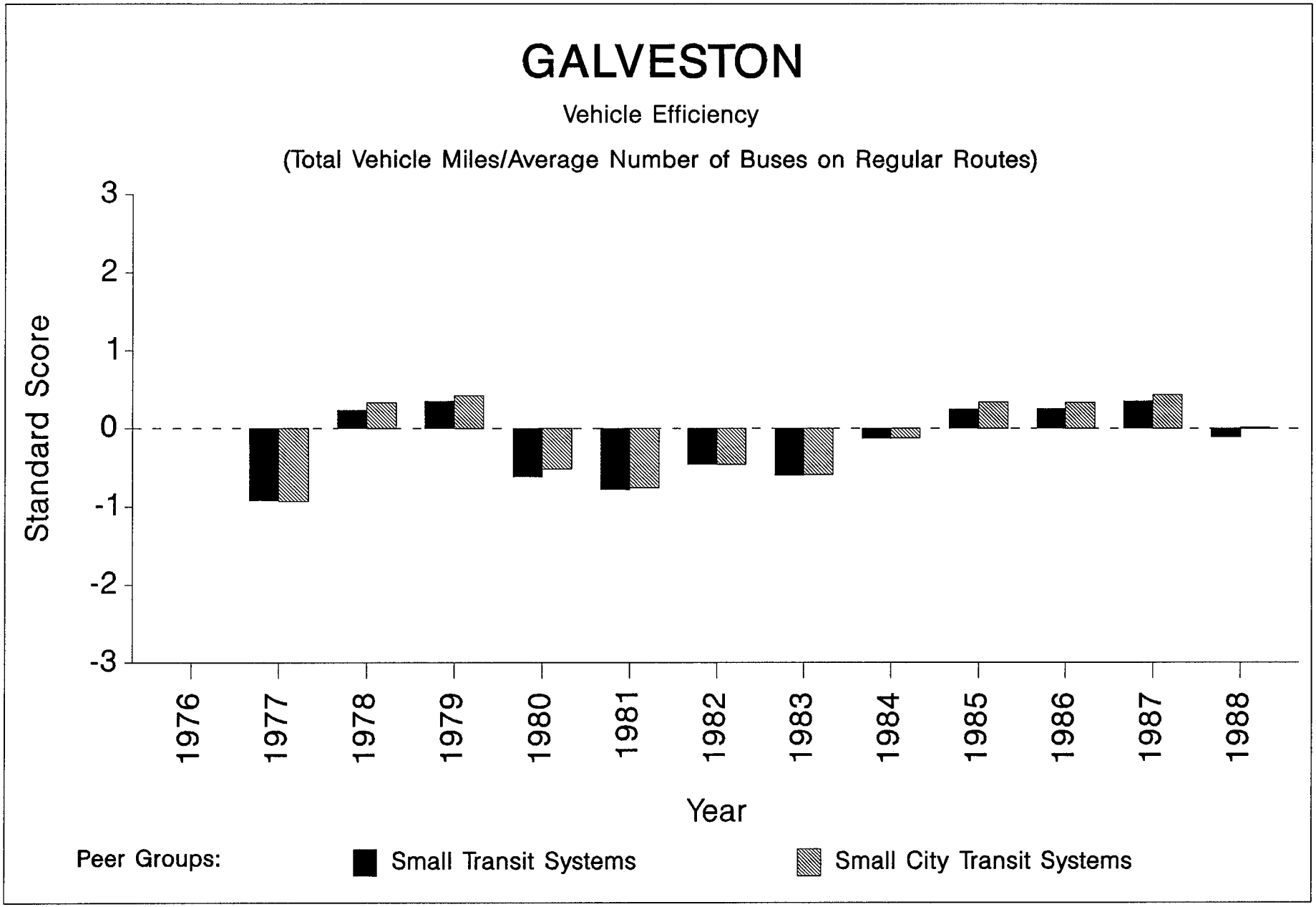
G A L V E S T O N

Peer Group: Small Transit Systems

	1976	1977	1978	1979	1980	1981	1982	1983	1984	1985	1986	1987	1988
Transit Agency Value	---	3.40	4.85	4.87	4.11	3.87	3.94	3.97	4.33	4.74	4.60	4.65	4.58
Peer Group Mean	---	4.22	4.66	4.51	4.59	4.51	4.37	4.46	4.45	4.54	4.45	4.44	4.65
Standard Score	---	-.92	.23	.35	-.62	-.78	-.46	-.60	-.13	.24	.25	.35	-.11

Peer Group: Small City Transit Systems

	1976	1977	1978	1979	1980	1981	1982	1983	1984	1985	1986	1987	1988
Transit Agency Value	---	3.40	4.85	4.87	4.11	3.87	3.94	3.97	4.33	4.74	4.60	4.65	4.58
Peer Group Mean	---	4.19	4.58	4.45	4.52	4.47	4.34	4.43	4.43	4.47	4.41	4.40	4.58
Standard Score	---	-.93	.33	.42	-.52	-.76	-.46	-.59	-.12	.34	.33	.43	.01


GALVESTON
Vehicle Efficiency
(Total Vehicle Miles/Average Number of Buses on Regular Routes)
Standard Score
3
2
1
0
-1
-2
-3
1976
1977
1978
1979
1980
1981
1982
1983
1984
1985
1986
1987
1988
Year
Peer Groups:
Small Transit Systems
Small City Transit Systems

HOUSTON

Table 63.
Transit System Statistical Profile

HOUSTON

	1976	1977	1978	1979	1980	1981	1982	1983	1984	1985	1986	1987	1988
Total Passengers	37,355,400	39,863,600	43,252,180	44,302,068	46,893,496	48,485,831	52,000,843	51,575,771	60,245,097	77,801,419	72,975,822	74,478,531	77,675,547
Total Vehicle Miles	14,783,429	16,136,312	16,908,385	16,261,686	18,484,796	22,469,147	25,869,561	28,800,429	34,623,814	33,285,290	37,087,647	34,171,057	34,720,911
Total Vehicle Hours	-	1,184,991	1,296,594	1,466,589	1,439,021	1,620,511	1,739,496	1,881,332	2,402,823	2,587,924	2,376,877	2,253,535	2,287,015
Average No. Buses on Regular Routes	-	362	371	363	355	355	378	431	562	731	790	659	802
Average No. Employees	-	1,079	1,227	1,550	1,696	1,782	1,941	2,024	2,435	2,802	2,883	2,910	2,880
Total Operating Revenue ($)	11,116,814	11,667,455	13,292,367	13,467,067	16,376,521	18,681,487	20,473,549	37,208,580	58,441,213	67,545,889	71,099,292	33,650,739	35,730,553
Passenger Revenue ($)	10,816,153	11,667,455	13,219,149	13,138,871	15,613,976	18,267,607	19,886,344	21,159,183	28,065,363	31,718,488	34,170,002	31,782,453	34,158,313
Total Operating Expense ($)	20,086,093	25,726,324	36,333,257	44,814,012	64,850,330	86,101,003	104,241,617	102,666,577	118,450,619	138,501,812	139,364,890	134,693,427	139,311,940
Net Public Operating Cost ($)	8,969,279	14,058,869	23,040,890	31,346,945	48,473,809	67,419,516	83,768,068	65,457,997	60,009,406	70,955,923	68,265,598	101,042,688	103,581,387
Total Public Capital Cost ($)	244,063	-	14,935,428	1,371,053	42,803,361	5,196,130	19,282,090	11,243,554	66,610,728	70,510,570	44,176,464	109,291,880	99,680,378
Total Public Expense ($)	9,213,342	14,058,869	37,976,318	32,717,998	91,277,170	72,615,646	103,050,158	76,701,551	126,620,134	141,466,493	112,442,062	210,334,568	203,261,765

Source: Texas Transit Statistics

Table 64.
Cost Efficiency Performance Profile
(Total Vehicle Hours/Total Operating Expense)

HOUSTON

Peer Group: Large Transit Systems

	1976	1977	1978	1979	1980	1981	1982	1983	1984	1985	1986	1987	1988
Transit Agency Value	----	.046	.036	.033	.022	.019	.017	.018	.020	.019	.017	.017	.016
Peer Group Mean	----	.051	.052	.043	.036	.030	.029	.028	.026	.024	.021	.022	.022
Standard Score	----	-.96	-1.38	-1.30	-1.32	-1.40	-1.37	-1.26	-.91	-.93	-.57	-.80	-.92

Peer Group: Large City Transit Systems

	1976	1977	1978	1979	1980	1981	1982	1983	1984	1985	1986	1987	1988
Transit Agency Value	----	.046	.036	.033	.022	.019	.017	.018	.020	.019	.017	.017	.016
Peer Group Mean	----	.069	.060	.047	.039	.033	.031	.031	.029	.026	.024	.023	.022
Standard Score	----	-.56	-1.08	-1.45	-1.81	-1.72	-1.93	-1.78	-1.46	-1.40	-1.08	-1.22	-1.16

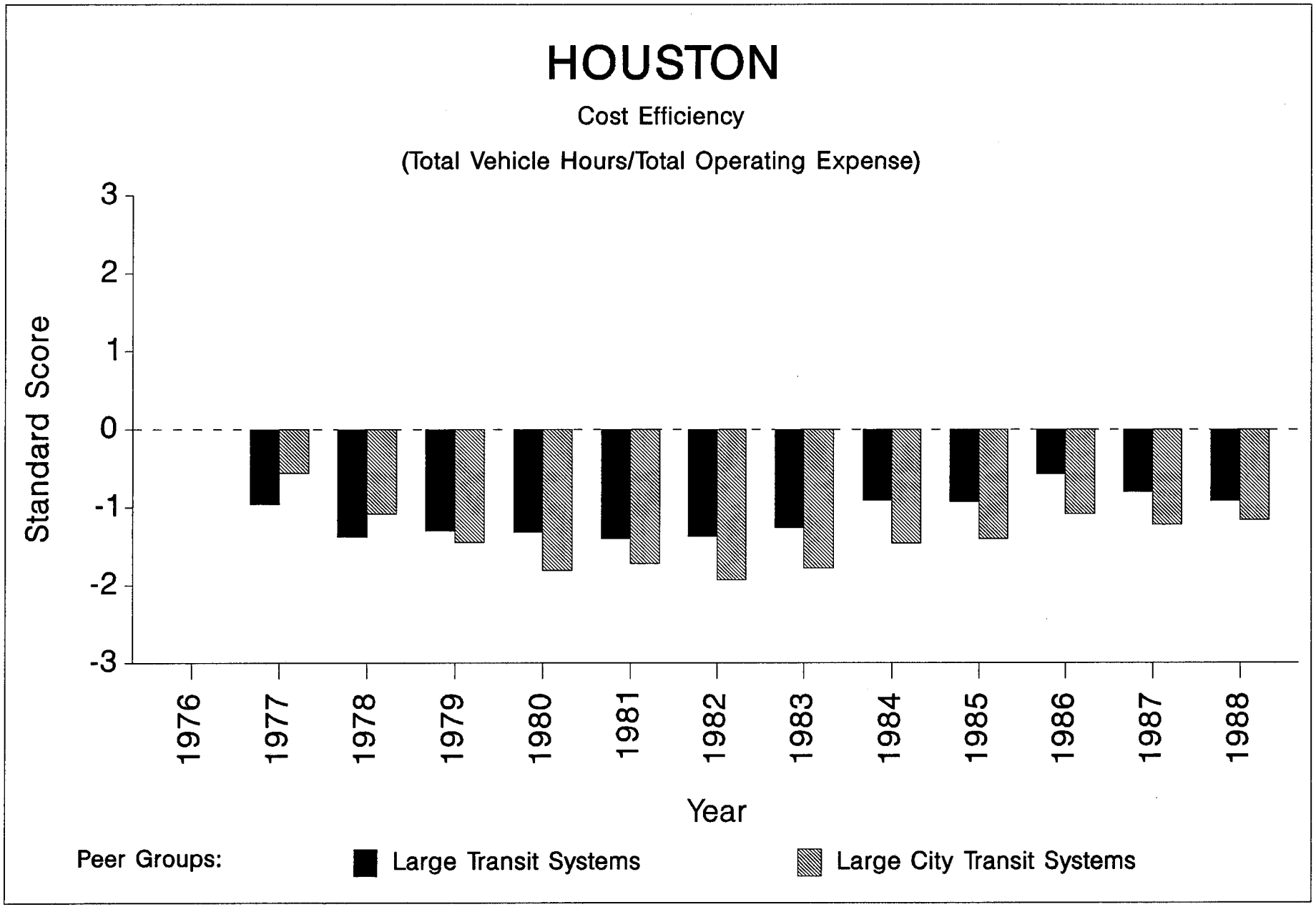

HOUSTON
Cost Efficiency
(Total Vehicle Hours/Total Operating Expense)
Standard Score
3
2
1
0
-1
-2
-3
1976
1977
1978
1979
1980
1981
1982
1983
1984
1985
1986
1987
1988
Year
Peer Groups:
Large Transit Systems
Large City Transit Systems

Table 65.
Service Effectiveness Performance Profile
(Total Passengers/Total Vehicle Hours)

HOUSTON

Peer Group: Large Transit Systems

	1976	1977	1978	1979	1980	1981	1982	1983	1984	1985	1986	1987	1988
Transit Agency Value	—	33.64	33.36	30.21	32.59	29.92	29.89	27.41	25.07	30.06	30.70	33.05	33.96
Peer Group Mean	—	38.30	30.76	30.99	31.83	30.67	29.44	28.34	29.18	27.87	25.23	24.43	25.96
Standard Score	—	-.59	.80	-.16	.14	-.14	.07	-.13	-.60	.34	.88	1.07	1.13

Peer Group: Large City Transit Systems

	1976	1977	1978	1979	1980	1981	1982	1983	1984	1985	1986	1987	1988
Transit Agency Value	—	33.64	33.36	30.21	32.59	29.92	29.89	27.41	25.07	30.06	30.70	33.05	33.96
Peer Group Mean	—	30.94	26.16	27.54	28.78	27.49	25.65	25.18	25.99	25.35	23.02	23.39	24.54
Standard Score	—	.25	1.16	.45	.60	.36	.58	.29	-.12	.63	1.03	1.18	1.20

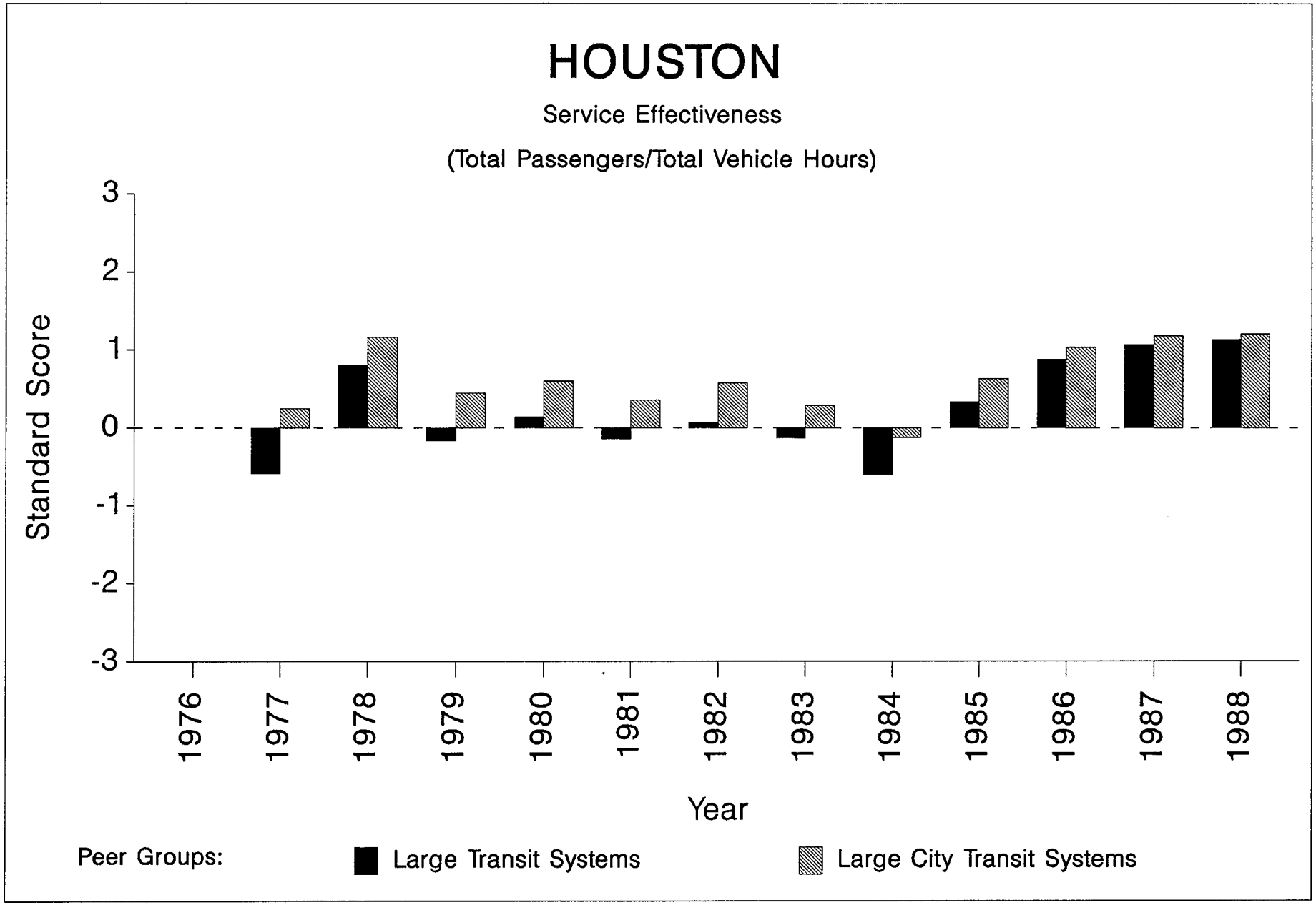

HOUSTON
Service Effectiveness
(Total Passengers/Total Vehicle Hours)
Standard Score
3
2
1
0
-1
-2
-3
1976
1977
1978
1979
1980
1981
1982
1983
1984
1985
1986
1987
1988
Year
Peer Groups:
Large Transit Systems
Large City Transit Systems

Table 66.
Cost Effectiveness Performance Profile
(Passenger Revenue/Total Operating Expense)

HOUSTON

Peer Group: Large Transit Systems

	1976	1977	1978	1979	1980	1981	1982	1983	1984	1985	1986	1987	1988
Transit Agency Value	.54	.45	.36	.29	.24	.21	.19	.21	.24	.23	.25	.24	.25
Peer Group Mean	.52	.49	.40	.37	.36	.36	.35	.33	.28	.26	.22	.21	.22
Standard Score	.13	-.27	-.23	-.46	-.88	-.93	-.99	-.92	-.82	-.55	.24	.27	.27

Peer Group: Large City Transit Systems

	1976	1977	1978	1979	1980	1981	1982	1983	1984	1985	1986	1987	1988
Transit Agency Value	.54	.45	.36	.29	.24	.21	.19	.21	.24	.23	.25	.24	.25
Peer Group Mean	.55	.53	.43	.39	.37	.36	.34	.34	.32	.28	.25	.24	.23
Standard Score	-.05	-.32	-.39	-.65	-1.10	-1.09	-1.24	-1.25	-1.08	-.72	-.03	-.02	.12

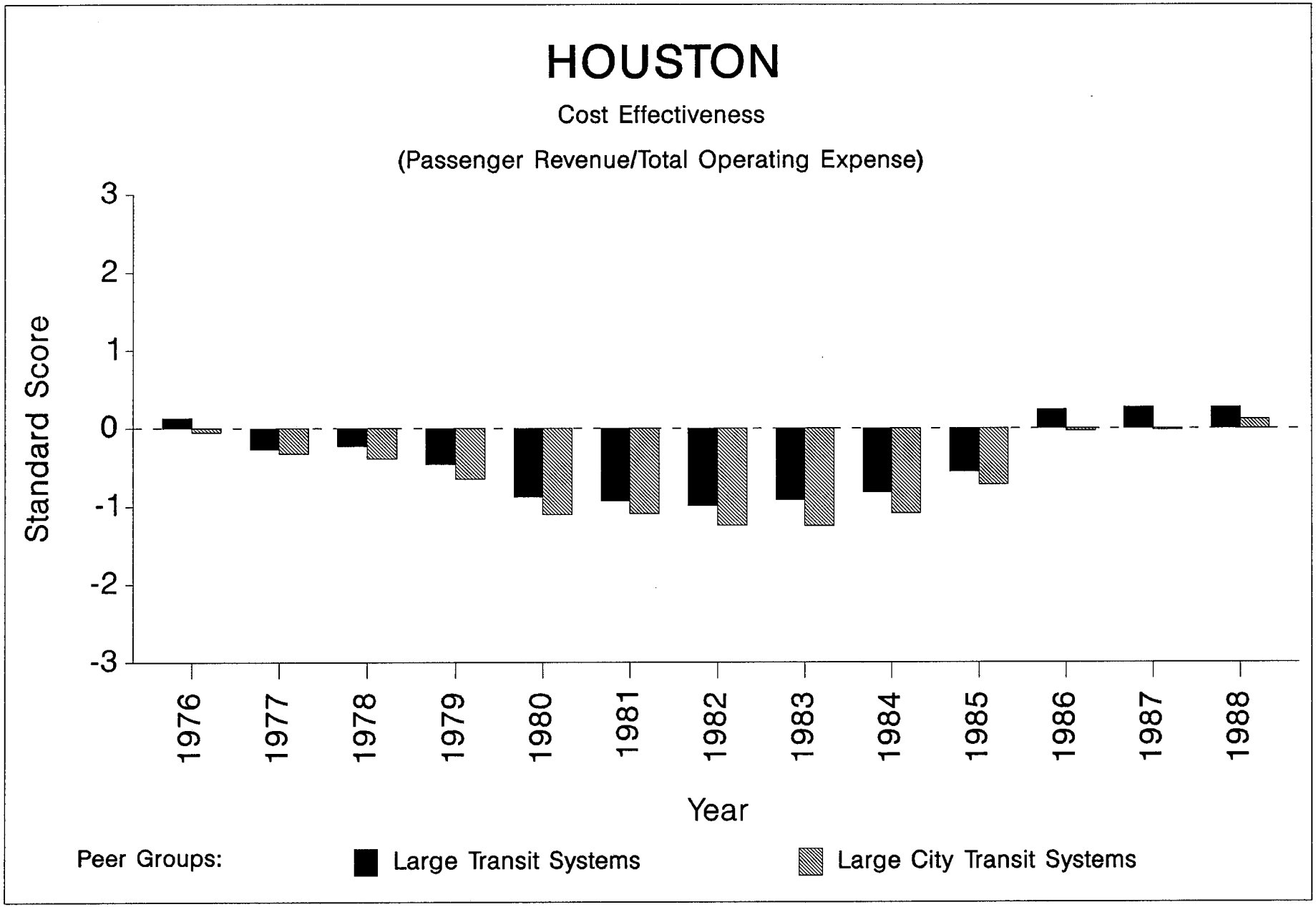

HOUSTON
Cost Effectiveness
(Passenger Revenue/Total Operating Expense)
Standard Score
3
2
1
0
-1
-2
-3
1976
1977
1978
1979
1980
1981
1982
1983
1984
1985
1986
1987
1988
Year
Peer Groups:
Large Transit Systems
Large City Transit Systems

Table 67.
Labor Efficiency Performance Profile
(Total Vehicle Hours/Average Number of Employees)

HOUSTON

Peer Group: Large Transit Systems

	1976	1977	1978	1979	1980	1981	1982	1983	1984	1985	1986	1987	1988
Transit Agency Value	----	.110	.106	.095	.085	.091	.090	.093	.099	.092	.082	.077	.079
Peer Group Mean	----	.102	.116	.112	.106	.105	.104	.104	.101	.098	.100	.104	.109
Standard Score	----	1.16	-1.25	-1.41	-1.40	-1.45	-1.39	-1.13	-.24	-.57	-.76	-1.27	-1.35

Peer Group: Large City Transit Systems

	1976	1977	1978	1979	1980	1981	1982	1983	1984	1985	1986	1987	1988
Transit Agency Value	----	.110	.106	.095	.085	.091	.090	.093	.099	.092	.082	.077	.079
Peer Group Mean	----	.118	.126	.117	.110	.108	.107	.105	.102	.098	.097	.101	.101
Standard Score	----	-.22	-.83	-1.92	-2.03	-1.83	-2.09	-1.31	-.35	-.82	-.86	-1.37	-1.15

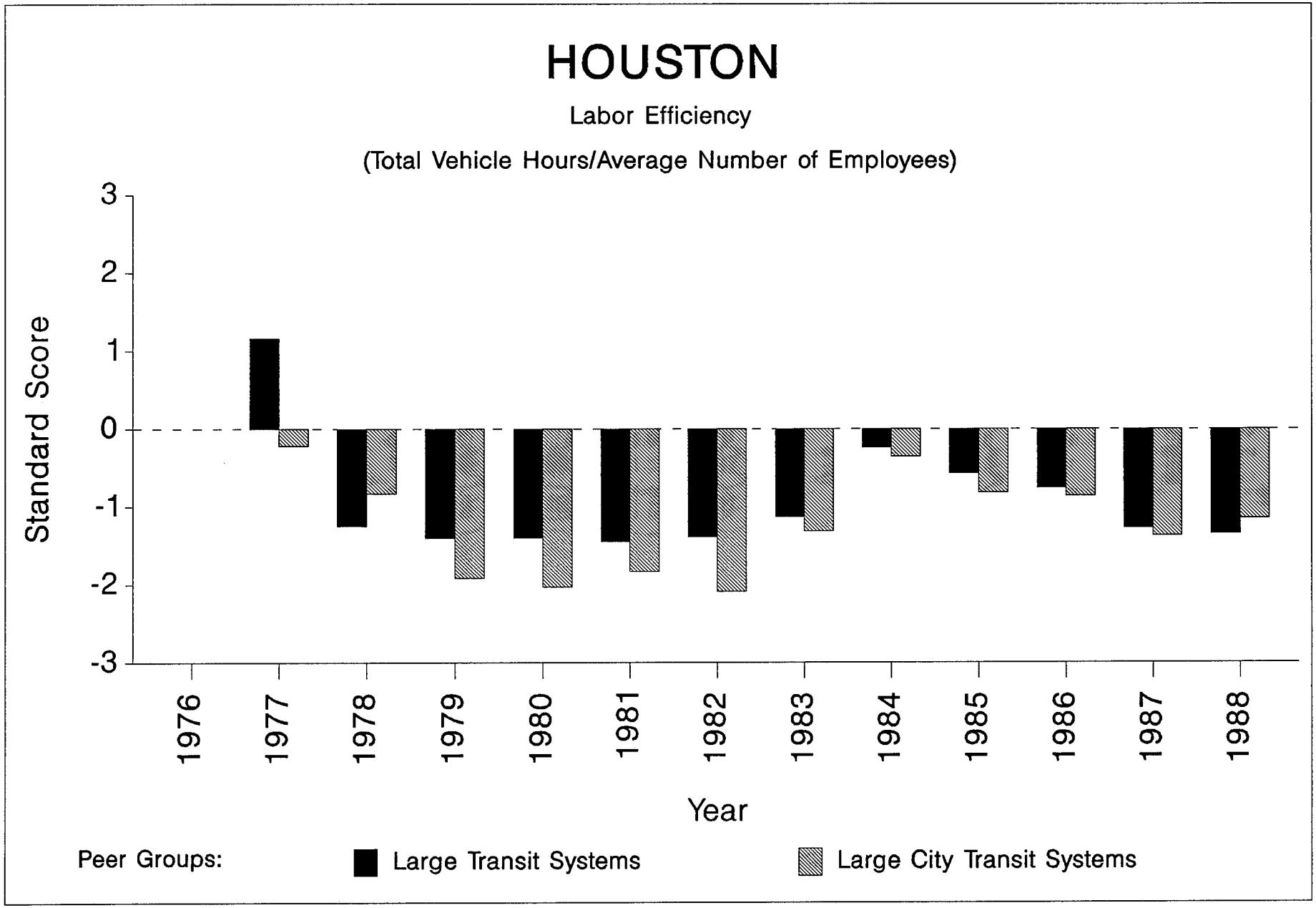

HOUSTON
Labor Efficiency
(Total Vehicle Hours/Average Number of Employees)
Standard Score
3
2
1
0
-1
-2
-3
1976
1977
1978
1979
1980
1981
1982
1983
1984
1985
1986
1987
1988
Year
Peer Groups:
Large Transit Systems
Large City Transit Systems

Table 68.
Vehicle Efficiency Performance Profile
(Total Vehicle Miles/Average Number of Buses on Regular Routes)

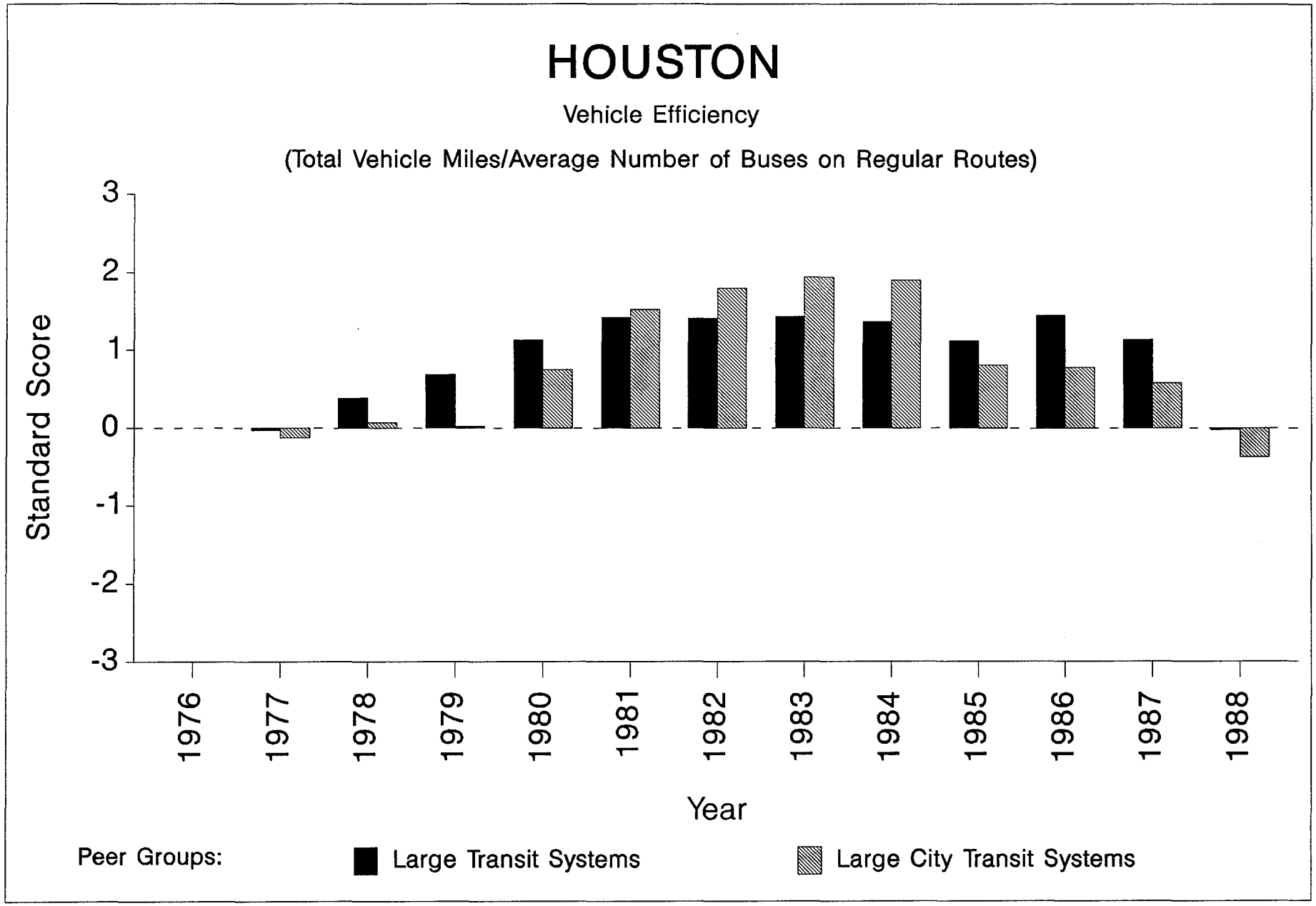
HOUSTON

Peer Group: Large Transit Systems

	1976	1977	1978	1979	1980	1981	1982	1983	1984	1985	1986	1987	1988
Transit Agency Value	—	4.46	4.56	4.48	5.21	6.33	6.84	6.68	6.16	4.55	4.69	5.19	4.33
Peer Group Mean	2.85	4.49	4.31	4.17	4.23	4.39	4.63	4.53	4.48	3.88	3.97	4.40	4.34
Standard Score	—	-.03	.39	.69	1.13	1.42	1.41	1.43	1.37	1.12	1.45	1.14	-.02

Peer Group: Large City Transit Systems

	1976	1977	1978	1979	1980	1981	1982	1983	1984	1985	1986	1987	1988
Transit Agency Value	—	4.46	4.56	4.48	5.21	6.33	6.84	6.68	6.16	4.55	4.69	5.19	4.33
Peer Group Mean	2.85	4.60	4.50	4.46	4.46	4.48	4.57	4.42	4.40	4.09	4.22	4.71	4.57
Standard Score	—	-.12	.07	.02	.75	1.52	1.80	1.94	1.90	.81	.78	.58	-.37


HOUSTON
Vehicle Efficiency
(Total Vehicle Miles/Average Number of Buses on Regular Routes)
Standard Score
3
2
1
0
-1
-2
-3
1976
1977
1978
1979
1980
1981
1982
1983
1984
1985
1986
1987
1988
Year
Peer Groups:
Large Transit Systems
Large City Transit Systems

L A R E D O

Table 69.
Transit System Statistical Profile

	LAREDO												
	1976	**1977**	**1978**	**1979**	**1980**	**1981**	**1982**	**1983**	**1984**	**1985**	**1986**	**1987**	**1988**
Total Passengers	976,026	2,444,796	2,787,304	3,221,301	3,455,233	3,550,225	3,173,147	3,155,122	3,354,940	3,377,342	3,269,239	3,359,259	3,663,348
Total Vehicle Miles	283,127	657,215	734,265	726,623	822,093	921,726	846,163	859,689	859,581	854,384	879,848	897,656	854,913
Total Vehicle Hours	-	72,951	79,901	83,075	92,112	100,595	97,230	92,537	88,830	89,827	93,050	93,543	91,886
Average No. Buses on Regular Routes	-	16	16	16	18	20	20	18	18	18	20	20	21
Average No. Employees	-	58	59	62	66	74	73	69	70	72	79	79	81
Total Operating Revenue ($)	148,607	525,458	600,926	644,684	938,727	1,235,140	1,260,392	1,175,296	1,269,650	1,285,095	1,235,778	1,262,658	1,523,873
Passenger Revenue ($)	148,155	517,360	587,499	622,839	914,476	1,213,510	1,212,902	1,120,179	1,206,046	1,233,904	1,182,037	1,195,402	1,464,431
Total Operating Expense ($)	462,923	965,757	1,032,206	1,096,248	1,369,260	1,811,295	1,952,249	1,786,446	1,832,246	2,202,574	2,304,075	2,321,455	2,429,515
Net Public Operating Cost ($)	314,316	440,299	431,280	451,564	430,533	576,155	691,857	611,150	562,596	917,479	1,068,297	1,058,797	905,642
Total Public Capital Cost ($)	-	-	184,650	71,760	1,560,870	2,258,960	322,069	1,636,805	-	149,128	297,724	439,065	90,877
Total Public Expense ($)	314,316	440,299	615,930	523,324	1,991,403	2,835,115	1,013,926	2,247,955	562,596	1,066,607	1,366,021	1,497,862	996,519

Source: Texas Transit Statistics

Table 70.
Cost Efficiency Performance Profile
(Total Vehicle Hours/Total Operating Expense)

L A R E D O

Peer Group: Small Transit Systems

	1976	1977	1978	1979	1980	1981	1982	1983	1984	1985	1986	1987	1988
Transit Agency Value	----	.076	.077	.076	.067	.056	.050	.052	.048	.041	.040	.040	.038
Peer Group Mean	----	.087	.089	.066	.055	.048	.051	.045	.041	.040	.039	.038	.037
Standard Score	----	-.70	-.50	.73	1.11	.89	-.08	.73	.85	.09	.29	.56	.23

Peer Group: Small City Transit Systems

	1976	1977	1978	1979	1980	1981	1982	1983	1984	1985	1986	1987	1988
Transit Agency Value	----	.076	.077	.076	.067	.056	.050	.052	.048	.041	.040	.040	.038
Peer Group Mean	----	.087	.088	.066	.055	.048	.051	.045	.042	.041	.039	.038	.037
Standard Score	----	-.76	-.47	.79	1.20	.94	-.07	.80	.85	-.05	.29	.51	.17

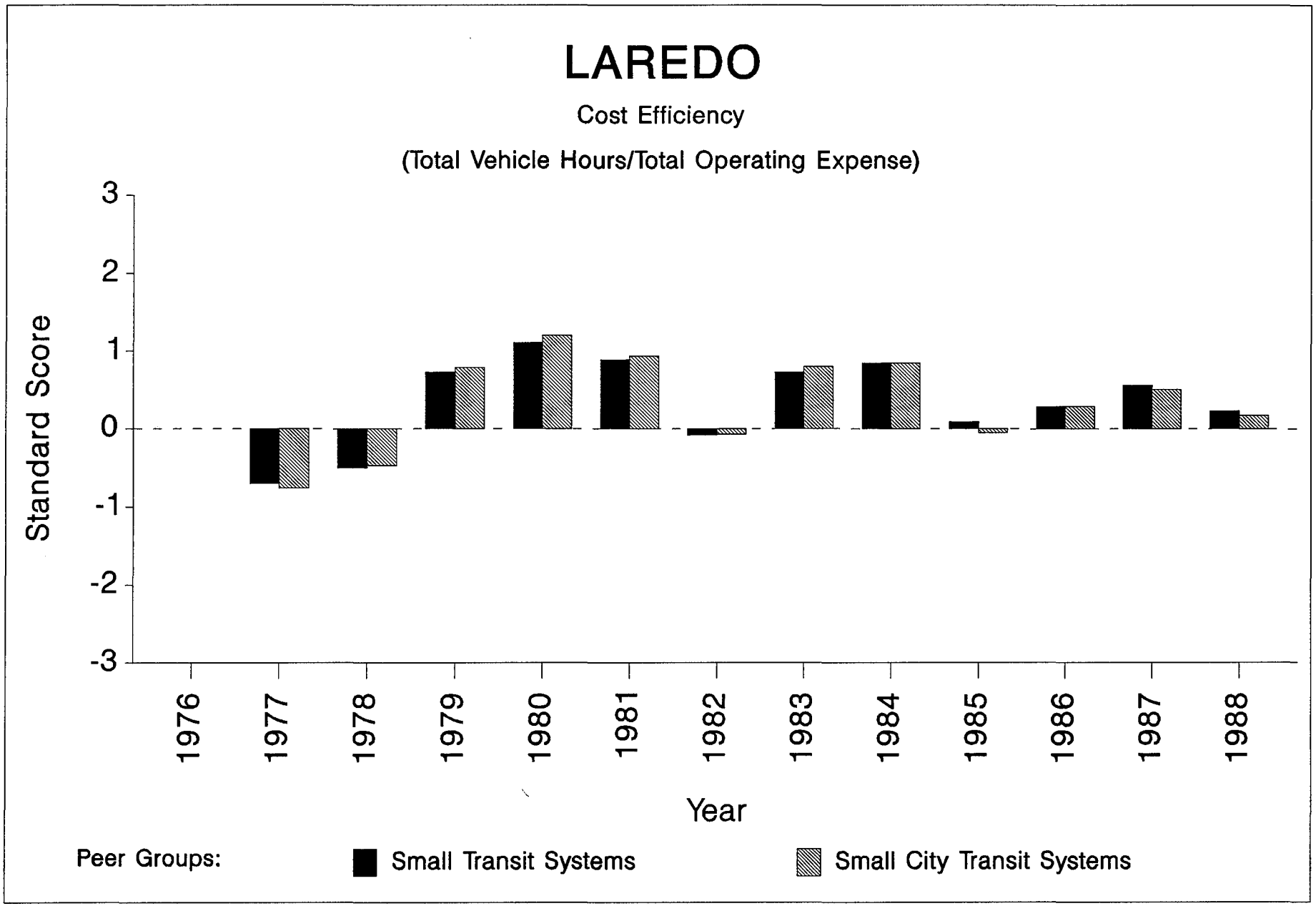

LAREDO
Cost Efficiency
(Total Vehicle Hours/Total Operating Expense)
Standard Score
3
2
1
0
-1
-2
-3
1976
1977
1978
1979
1980
1981
1982
1983
1984
1985
1986
1987
1988
Year
Peer Groups:
Small Transit Systems
Small City Transit Systems

Table 71.
Service Effectiveness Performance Profile
(Total Passengers/Total Vehicle Hours)

L A R E D O

Peer Group: Small Transit Systems

	1976	1977	1978	1979	1980	1981	1982	1983	1984	1985	1986	1987	1988
Transit Agency Value	---	33.51	34.88	38.78	37.51	35.29	32.64	34.10	37.77	37.60	35.13	35.91	39.87
Peer Group Mean	---	19.20	18.49	20.03	20.72	21.44	19.80	19.75	20.70	19.66	19.82	19.34	19.12
Standard Score	---	2.04	2.11	2.19	2.37	2.00	1.83	2.29	2.35	2.45	2.02	2.01	2.17

Peer Group: Small City Transit Systems

	1976	1977	1978	1979	1980	1981	1982	1983	1984	1985	1986	1987	1988
Transit Agency Value	---	33.51	34.88	38.78	37.51	35.29	32.64	34.10	37.77	37.60	35.13	35.91	39.87
Peer Group Mean	---	20.85	19.69	21.05	22.20	23.10	22.06	20.55	21.69	20.79	20.79	20.23	20.02
Standard Score	---	1.54	1.84	2.01	1.84	1.42	1.05	2.08	2.11	2.13	1.82	1.88	2.07

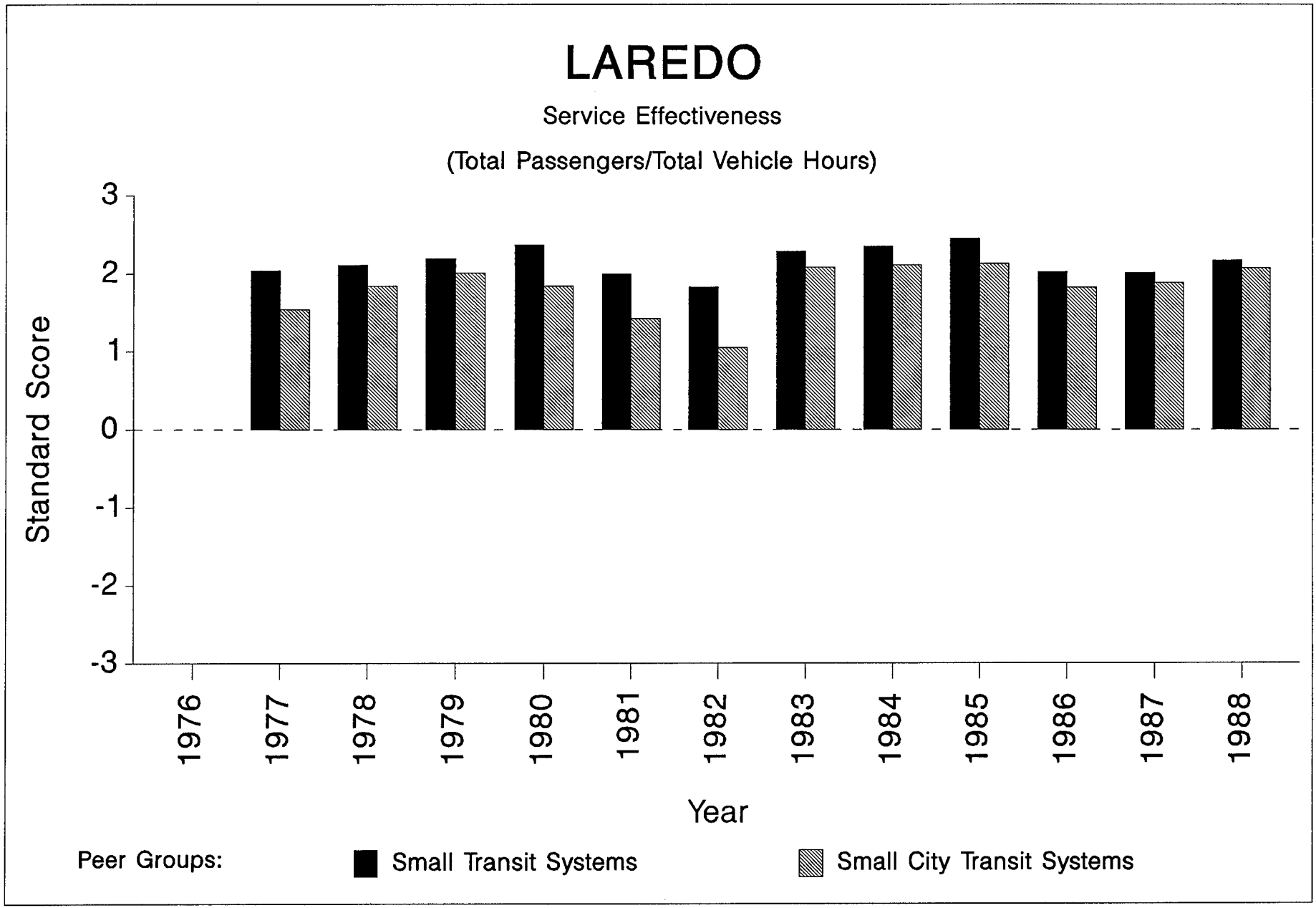

LAREDO
Service Effectiveness
(Total Passengers/Total Vehicle Hours)
Standard Score
3
2
1
0
-1
-2
-3
1976
1977
1978
1979
1980
1981
1982
1983
1984
1985
1986
1987
1988
Year
Peer Groups:
Small Transit Systems
Small City Transit Systems

Table 72.
Cost Effectiveness Performance Profile
(Passenger Revenue/Total Operating Expense)

L A R E D O

Peer Group: Small Transit Systems

	1976	1977	1978	1979	1980	1981	1982	1983	1984	1985	1986	1987	1988
Transit Agency Value	.32	.54	.57	.57	.67	.67	.62	.63	.66	.56	.51	.51	.60
Peer Group Mean	.51	.48	.39	.34	.34	.33	.33	.33	.33	.30	.29	.27	.27
Standard Score	-.72	.25	1.25	1.58	2.07	2.17	2.00	2.04	2.20	2.22	2.00	2.19	2.47

Peer Group: Small City Transit Systems

	1976	1977	1978	1979	1980	1981	1982	1983	1984	1985	1986	1987	1988
Transit Agency Value	.32	.54	.57	.57	.67	.67	.62	.63	.66	.56	.51	.51	.60
Peer Group Mean	.49	.46	.39	.34	.34	.33	.34	.34	.34	.31	.29	.28	.28
Standard Score	-.68	.32	1.33	1.67	2.19	2.27	2.00	2.10	2.21	1.97	1.98	2.14	2.49

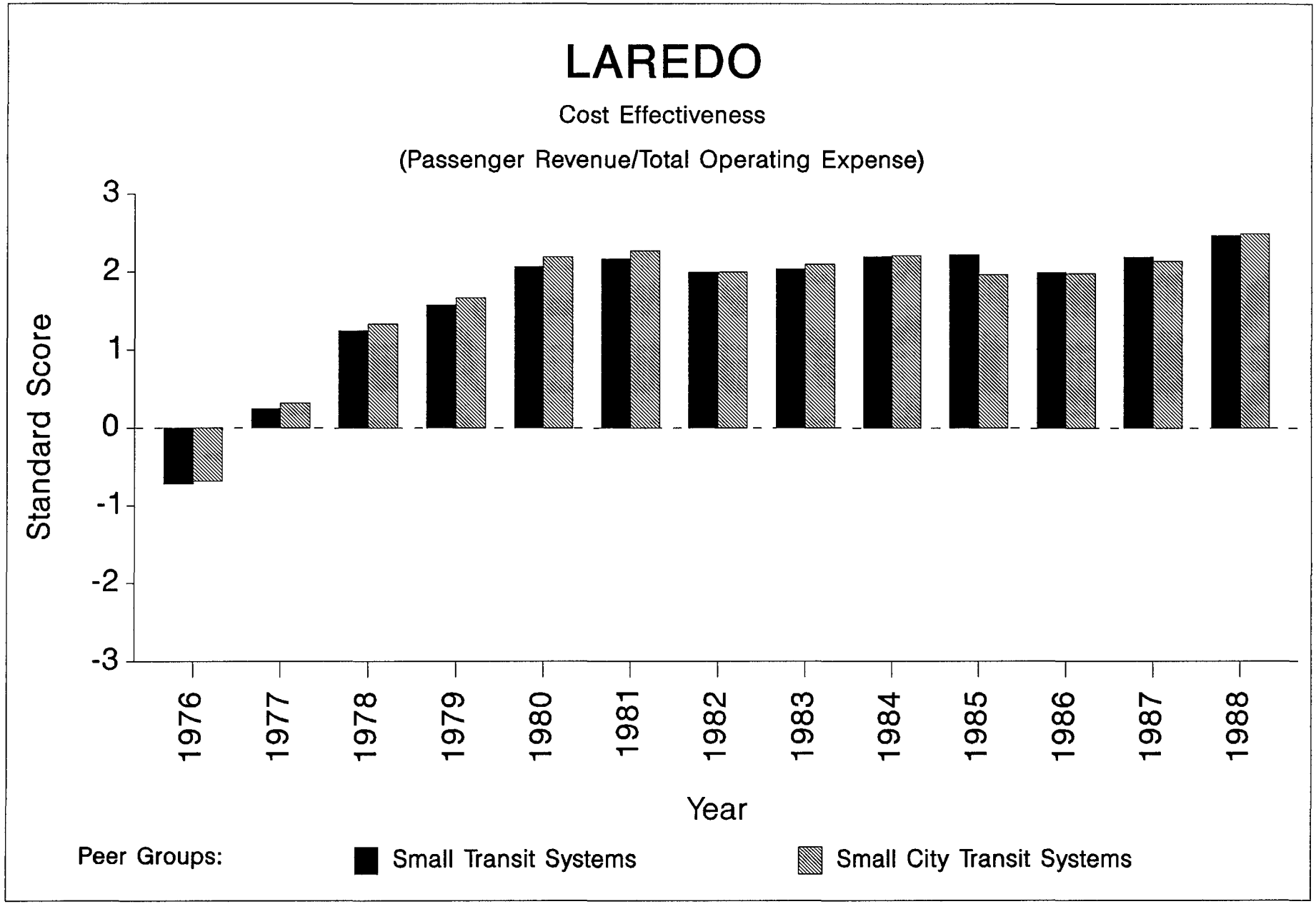

LAREDO
Cost Effectiveness
(Passenger Revenue/Total Operating Expense)
Standard Score
3
2
1
0
-1
-2
-3
1976
1977
1978
1979
1980
1981
1982
1983
1984
1985
1986
1987
1988
Year
Peer Groups:
Small Transit Systems
Small City Transit Systems

Table 73.
Labor Efficiency Performance Profile
(Total Vehicle Hours/Average Number of Employees)

L A R E D O

Peer Group: Small Transit Systems

	1976	1977	1978	1979	1980	1981	1982	1983	1984	1985	1986	1987	1988
Transit Agency Value	----	.126	.135	.134	.140	.136	.133	.134	.127	.125	.118	.118	.113
Peer Group Mean	----	.131	.140	.129	.125	.122	.131	.122	.123	.124	.122	.116	.119
Standard Score	----	-.34	-.20	.14	.52	.53	.07	.43	.14	.03	-.22	.17	-.47

Peer Group: Small City Transit Systems

	1976	1977	1978	1979	1980	1981	1982	1983	1984	1985	1986	1987	1988
Transit Agency Value	----	.126	.135	.134	.140	.136	.133	.134	.127	.125	.118	.118	.113
Peer Group Mean	----	.130	.139	.128	.124	.121	.128	.120	.121	.123	.121	.116	.119
Standard Score	----	-.26	-.14	.16	.58	.58	.13	.50	.21	.08	-.16	.21	-.51

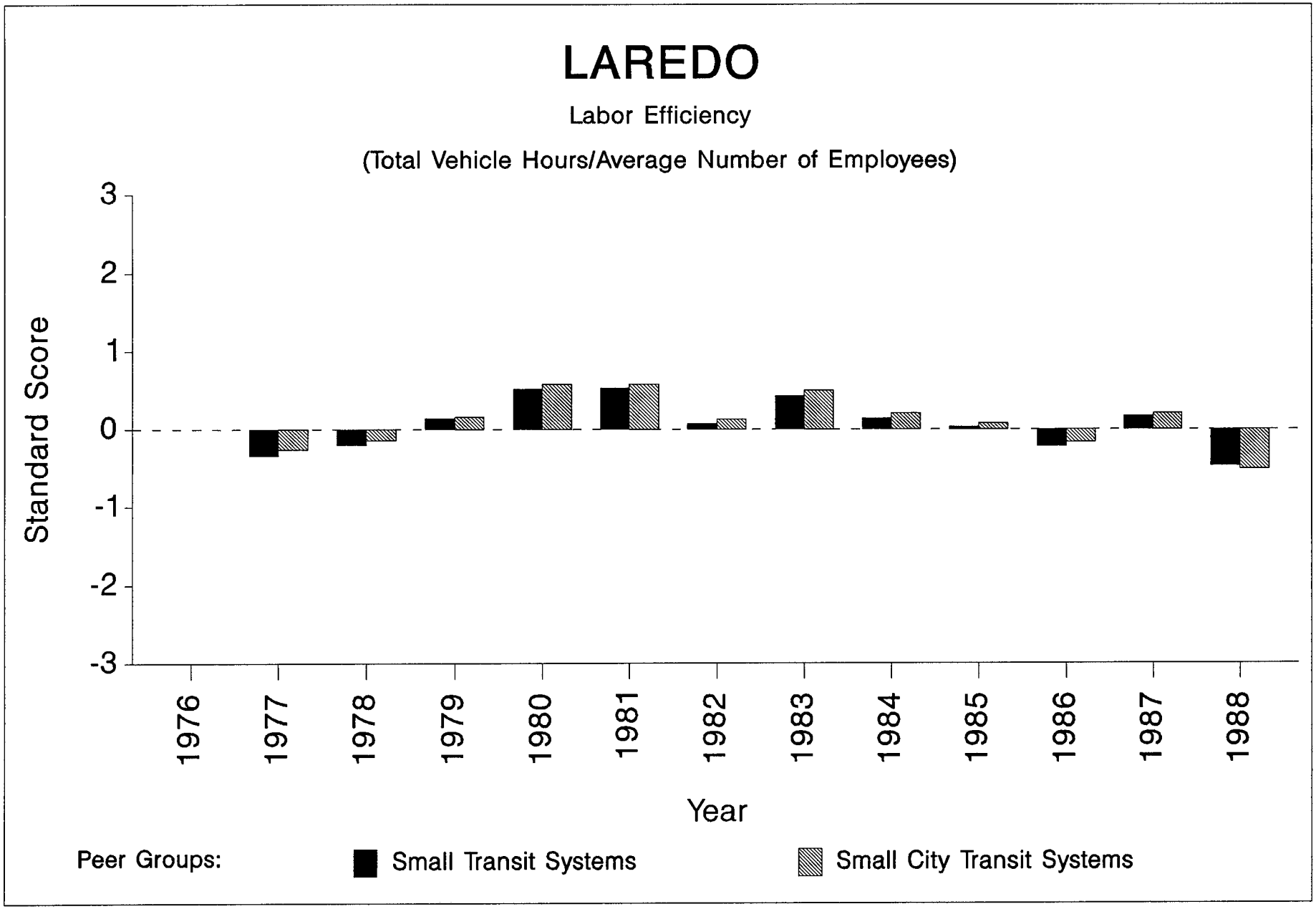

LAREDO
Labor Efficiency
(Total Vehicle Hours/Average Number of Employees)
Standard Score
3
2
1
0
-1
-2
-3
1976
1977
1978
1979
1980
1981
1982
1983
1984
1985
1986
1987
1988
Year
Peer Groups:
Small Transit Systems
Small City Transit Systems

Table 74.
Vehicle Efficiency Performance Profile
(Total Vehicle Miles/Average Number of Buses on Regular Routes)

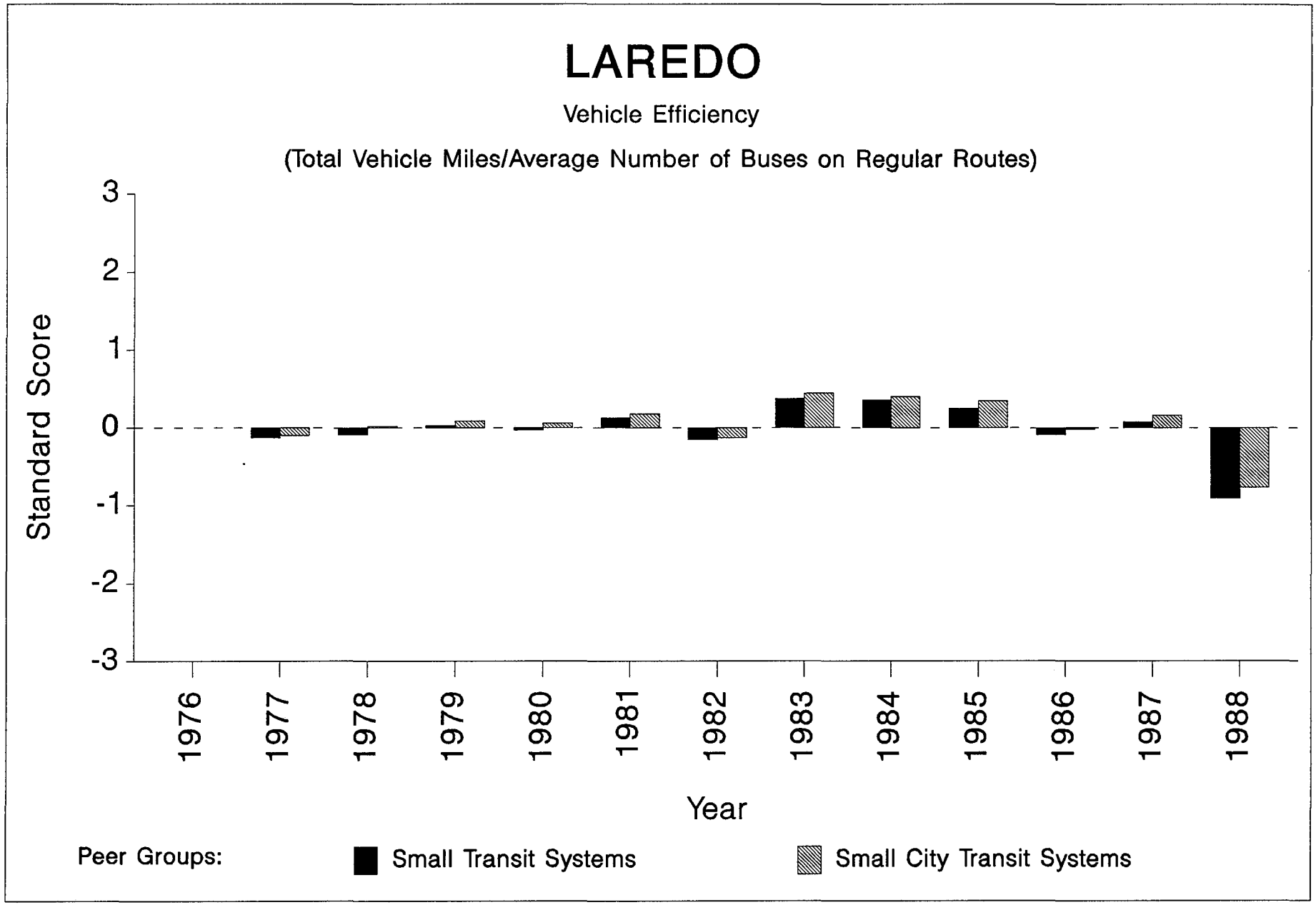
L A R E D O

Peer Group: Small Transit Systems

	1976	1977	1978	1979	1980	1981	1982	1983	1984	1985	1986	1987	1988
Transit Agency Value	----	4.11	4.59	4.54	4.57	4.61	4.23	4.78	4.78	4.75	4.40	4.49	4.07
Peer Group Mean	----	4.22	4.66	4.51	4.59	4.51	4.37	4.46	4.45	4.54	4.45	4.44	4.65
Standard Score	----	-.13	-.09	.03	-.03	.13	-.15	.38	.36	.25	-.09	.08	-.91

Peer Group: Small City Transit Systems

	1976	1977	1978	1979	1980	1981	1982	1983	1984	1985	1986	1987	1988
Transit Agency Value	----	4.11	4.59	4.54	4.57	4.61	4.23	4.78	4.78	4.75	4.40	4.49	4.07
Peer Group Mean	----	4.19	4.58	4.45	4.52	4.47	4.34	4.43	4.43	4.47	4.41	4.40	4.58
Standard Score	----	-.10	.02	.09	.06	.18	-.13	.44	.40	.35	-.02	.16	-.77


LAREDO
Vehicle Efficiency
(Total Vehicle Miles/Average Number of Buses on Regular Routes)
Standard Score
3
2
1
0
-1
-2
-3
1976
1977
1978
1979
1980
1981
1982
1983
1984
1985
1986
1987
1988
Year
Peer Groups:
Small Transit Systems
Small City Transit Systems

L U B B O C K

Table 75.
Transit System Statistical Profile

LUBBOCK

	1976	1977	1978	1979	1980	1981	1982	1983	1984	1985	1986	1987	1988
Total Passengers	2,586,283	2,923,920	2,323,646	2,424,559	2,725,659	2,946,158	3,337,468	2,180,364	2,489,416	2,547,324	2,504,123	2,401,850	2,374,928
Total Vehicle Miles	794,168	1,250,624	985,059	1,015,875	1,021,693	1,018,817	1,022,537	1,033,770	1,145,794	1,107,681	1,160,156	1,188,137	1,146,374
Total Vehicle Hours	-	85,923	76,229	77,491	73,741	74,128	74,600	76,338	78,786	79,328	82,036	82,498	81,840
Average No. Buses on Regular Routes	-	32	26	26	27	25	25	25	27	30	29	30	30
Average No. Employees	-	72	61	63	64	64	70	72	74	71	76	73	68
Total Operating Revenue ($)	319,421	339,688	388,326	413,300	481,798	552,170	636,594	702,549	743,988	758,859	1,242,393	1,355,618	1,174,980
Passenger Revenue ($)	206,398	339,658	387,976	413,282	481,798	545,341	636,594	702,549	743,988	758,859	757,500	732,184	719,868
Total Operating Expense ($)	597,136	970,363	992,681	1,246,036	1,442,064	1,559,562	1,493,346	1,821,672	1,762,205	1,583,841	2,046,841	2,004,749	2,035,618
Net Public Operating Cost ($)	277,715	630,675	604,355	832,736	960,266	1,007,392	856,752	1,119,123	1,018,217	824,982	804,448	649,131	860,638
Total Public Capital Cost ($)	-	698,027	2,083	-	2,648,668	-	2,295,223	34,447	4,325,690	414,214	98,411	35,456	312,253
Total Public Expense ($)	277,715	1,328,702	606,438	832,736	3,608,934	1,007,392	3,151,975	1,153,570	5,343,907	1,239,196	902,859	684,587	1,172,891

Source: Texas Transit Statistics and Citibus

Table 76.
Cost Efficiency Performance Profile
(Total Vehicle Hours/Total Operating Expense)

L U B B O C K

Peer Group: Medium-Sized Transit Systems

	1976	1977	1978	1979	1980	1981	1982	1983	1984	1985	1986	1987	1988
Transit Agency Value	—	.089	.077	.062	.051	.048	.050	.042	.045	.050	.040	.041	.040
Peer Group Mean	—	.091	.073	.054	.045	.039	.037	.037	.037	.034	.031	.028	.027
Standard Score	—	-.05	.13	.76	.85	.95	1.36	1.05	1.43	1.44	1.43	1.42	1.38

Peer Group: Small City Transit Systems

	1976	1977	1978	1979	1980	1981	1982	1983	1984	1985	1986	1987	1988
Transit Agency Value	—	.089	.077	.062	.051	.048	.050	.042	.045	.050	.040	.041	.040
Peer Group Mean	—	.087	.088	.066	.055	.048	.051	.045	.042	.041	.039	.038	.037
Standard Score	—	.11	-.49	-.32	-.37	-.06	-.07	-.31	.38	1.35	.23	.69	.65

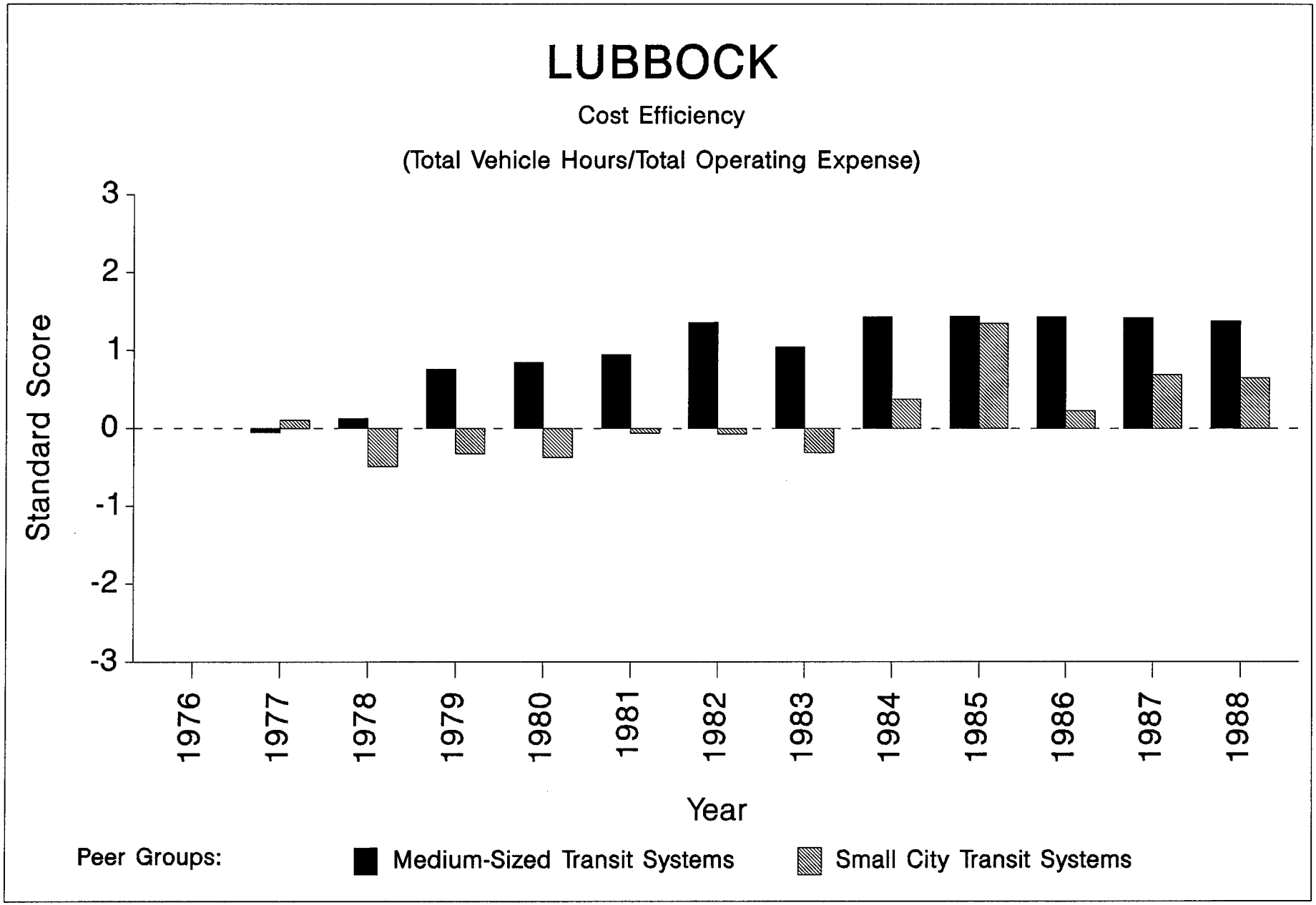

LUBBOCK
Cost Efficiency
(Total Vehicle Hours/Total Operating Expense)
Standard Score
3
2
1
0
-1
-2
-3
1976
1977
1978
1979
1980
1981
1982
1983
1984
1985
1986
1987
1988
Year
Peer Groups:
Medium-Sized Transit Systems
Small City Transit Systems

Table 77.
Service Effectiveness Performance Profile
(Total Passengers/Total Vehicle Hours)

L U B B O C K

Peer Group: Medium-Sized Transit Systems

	1976	1977	1978	1979	1980	1981	1982	1983	1984	1985	1986	1987	1988
Transit Agency Value	—	34.03	30.48	31.29	36.96	39.74	44.74	28.56	31.60	32.11	30.52	29.11	29.02
Peer Group Mean	—	24.35	22.64	25.02	27.78	27.38	26.62	22.86	24.20	24.53	22.68	23.79	24.24
Standard Score	—	1.48	1.48	1.16	1.19	1.25	1.41	.78	.90	.87	.85	.60	.55

Peer Group: Small City Transit Systems

	1976	1977	1978	1979	1980	1981	1982	1983	1984	1985	1986	1987	1988
Transit Agency Value	—	34.03	30.48	31.29	36.96	39.74	44.74	28.56	31.60	32.11	30.52	29.11	29.02
Peer Group Mean	—	20.85	19.69	21.05	22.20	23.10	22.06	20.55	21.69	20.79	20.79	20.23	20.02
Standard Score	—	1.60	1.31	1.16	1.78	1.94	2.26	1.23	1.30	1.43	1.24	1.07	.94

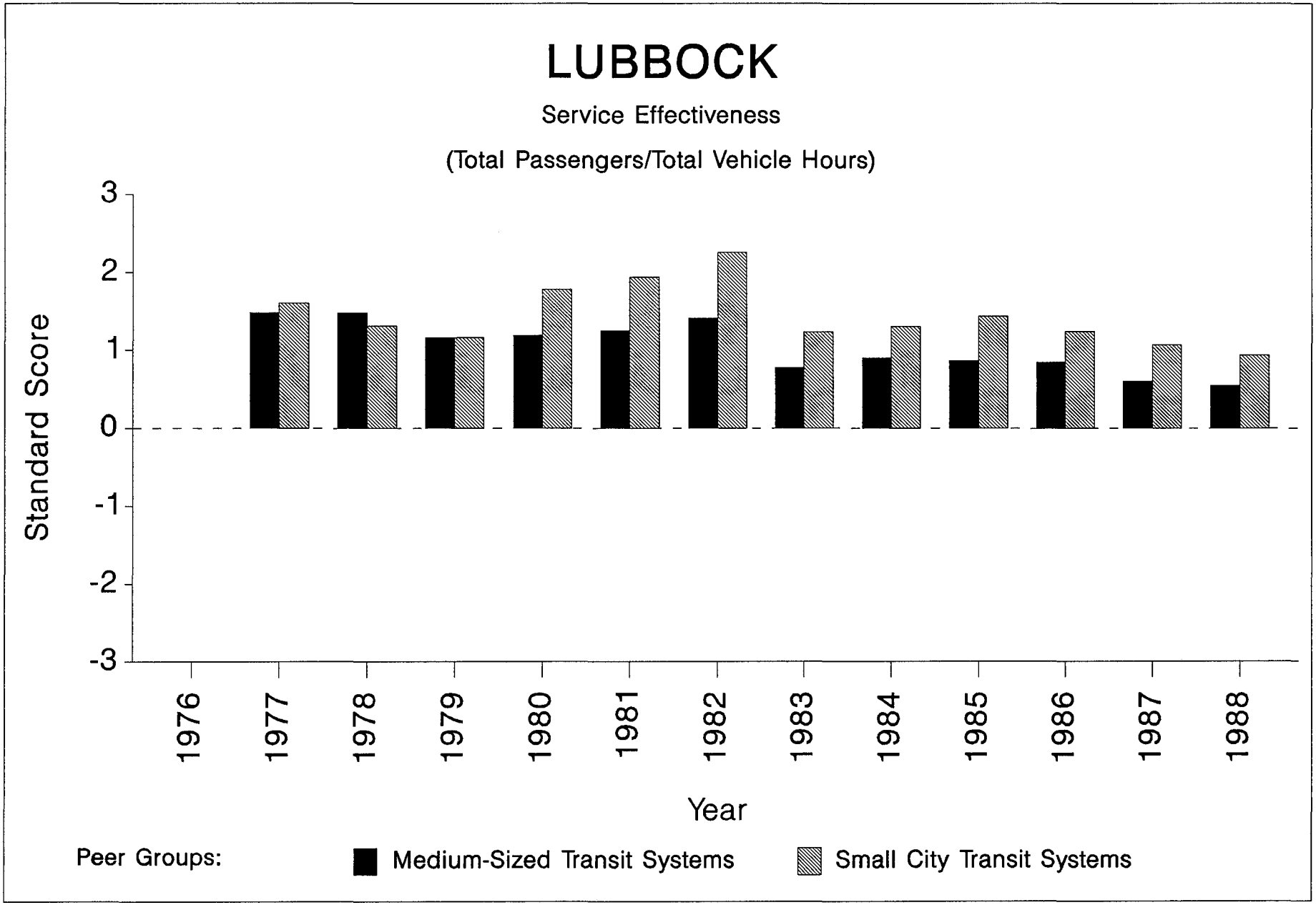

LUBBOCK
Service Effectiveness
(Total Passengers/Total Vehicle Hours)
Standard Score
3
2
1
0
-1
-2
-3
1976
1977
1978
1979
1980
1981
1982
1983
1984
1985
1986
1987
1988
Year
Peer Groups:
Medium-Sized Transit Systems
Small City Transit Systems

Table 78.
Cost Effectiveness Performance Profile
(Passenger Revenue/Total Operating Expense)

L U B B O C K

Peer Group: Medium-Sized Transit Systems

	1976	1977	1978	1979	1980	1981	1982	1983	1984	1985	1986	1987	1988
Transit Agency Value	.35	.35	.39	.33	.33	.35	.43	.39	.42	.48	.37	.37	.35
Peer Group Mean	.53	.52	.45	.40	.38	.35	.36	.37	.39	.36	.31	.30	.27
Standard Score	-.59	-.55	-.33	-.50	-.40	-.02	.85	.26	.50	1.06	.52	.41	.57

Peer Group: Small City Transit Systems

	1976	1977	1978	1979	1980	1981	1982	1983	1984	1985	1986	1987	1988
Transit Agency Value	.35	.35	.39	.33	.33	.35	.43	.39	.42	.48	.37	.37	.35
Peer Group Mean	.49	.46	.39	.34	.34	.33	.34	.34	.34	.31	.29	.28	.28
Standard Score	-.58	-.50	.01	-.04	-.01	.14	.61	.35	.59	1.32	.69	.79	.59

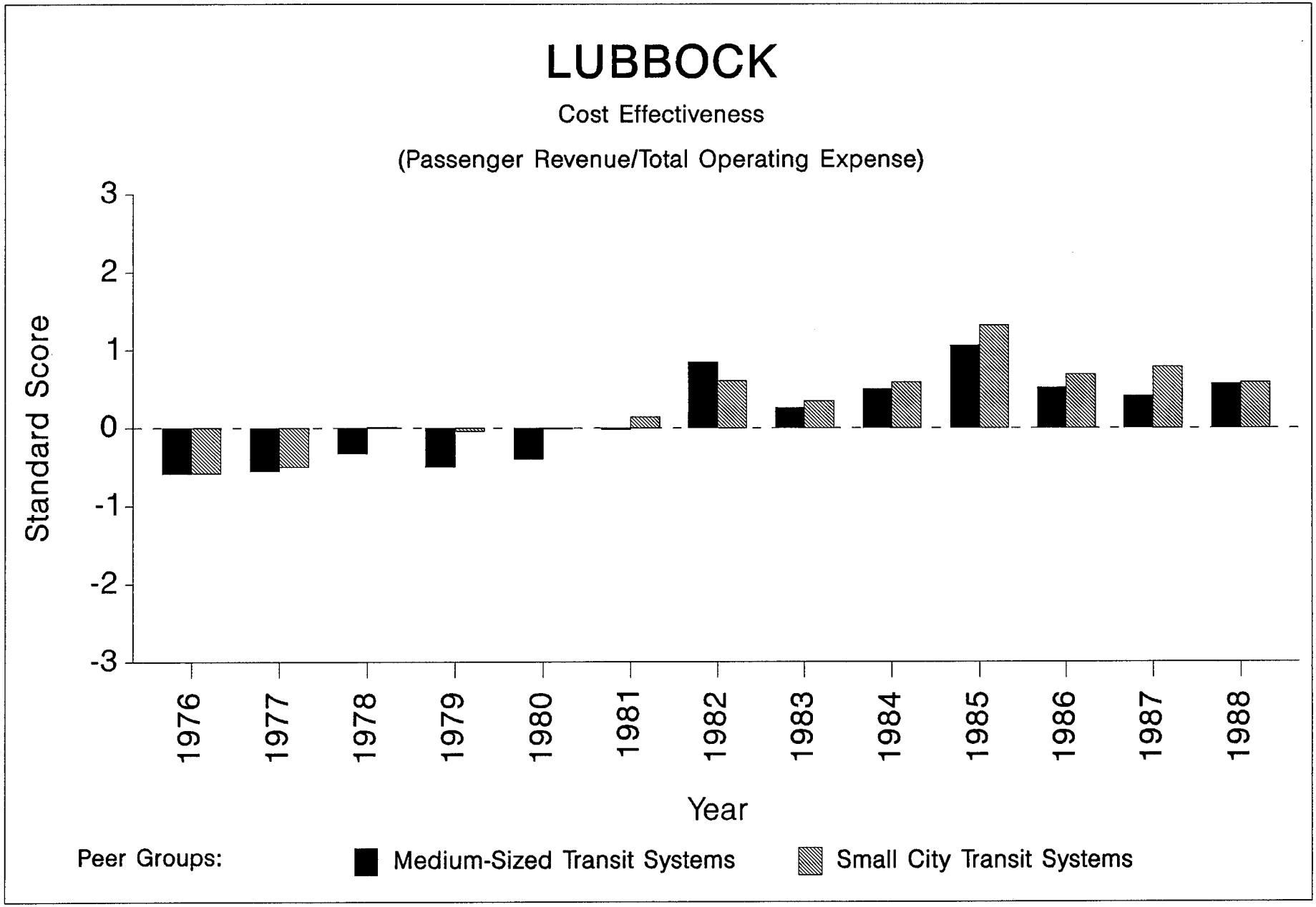

LUBBOCK
Cost Effectiveness
(Passenger Revenue/Total Operating Expense)
Standard Score
3
2
1
0
-1
-2
-3
1976
1977
1978
1979
1980
1981
1982
1983
1984
1985
1986
1987
1988
Year
Peer Groups:
Medium-Sized Transit Systems
Small City Transit Systems

Table 79.
Labor Efficiency Performance Profile
(Total Vehicle Hours/Average Number of Employees)

L U B B O C K

Peer Group: Medium-Sized Transit Systems

	1976	1977	1978	1979	1980	1981	1982	1983	1984	1985	1986	1987	1988
Transit Agency Value	----	.119	.125	.123	.115	.116	.107	.106	.106	.112	.108	.113	.120
Peer Group Mean	----	.135	.136	.123	.115	.113	.110	.106	.103	.102	.097	.100	.098
Standard Score	----	-.35	-.37	.03	.00	.43	-1.26	-.04	.80	1.39	1.33	1.06	1.47

Peer Group: Small City Transit Systems

	1976	1977	1978	1979	1980	1981	1982	1983	1984	1985	1986	1987	1988
Transit Agency Value	----	.119	.125	.123	.115	.116	.107	.106	.106	.112	.108	.113	.120
Peer Group Mean	----	.130	.139	.128	.124	.121	.128	.120	.121	.123	.121	.116	.119
Standard Score	----	-.68	-.58	-.14	-.33	-.20	-.59	-.52	-.55	-.49	-.68	-.29	.10

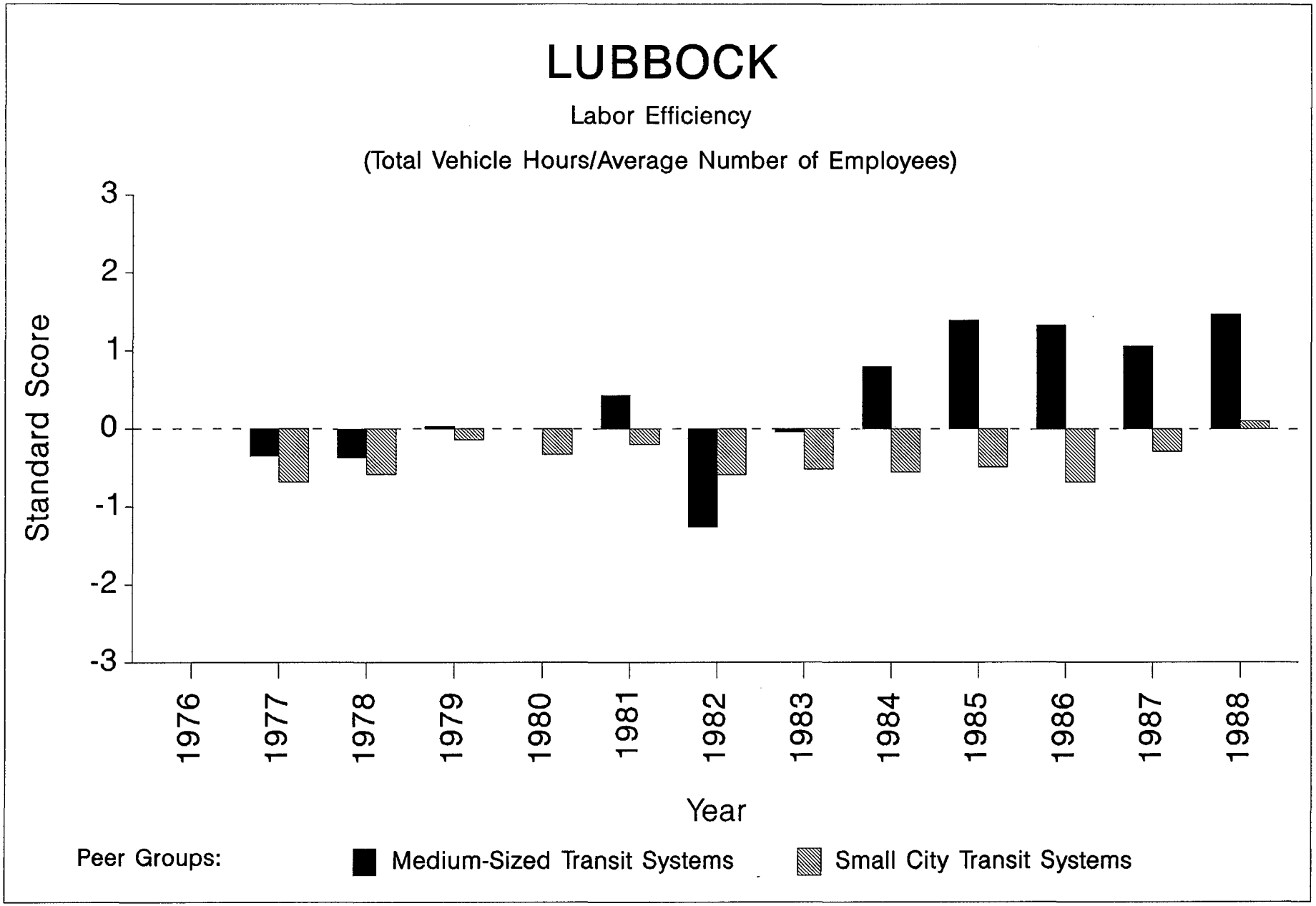

LUBBOCK
Labor Efficiency
(Total Vehicle Hours/Average Number of Employees)
Standard Score
3
2
1
0
-1
-2
-3
1976
1977
1978
1979
1980
1981
1982
1983
1984
1985
1986
1987
1988
Year
Peer Groups:
Medium-Sized Transit Systems
Small City Transit Systems

Table 80.
Vehicle Efficiency Performance Profile
(Total Vehicle Miles/Average Number of Buses on Regular Routes)

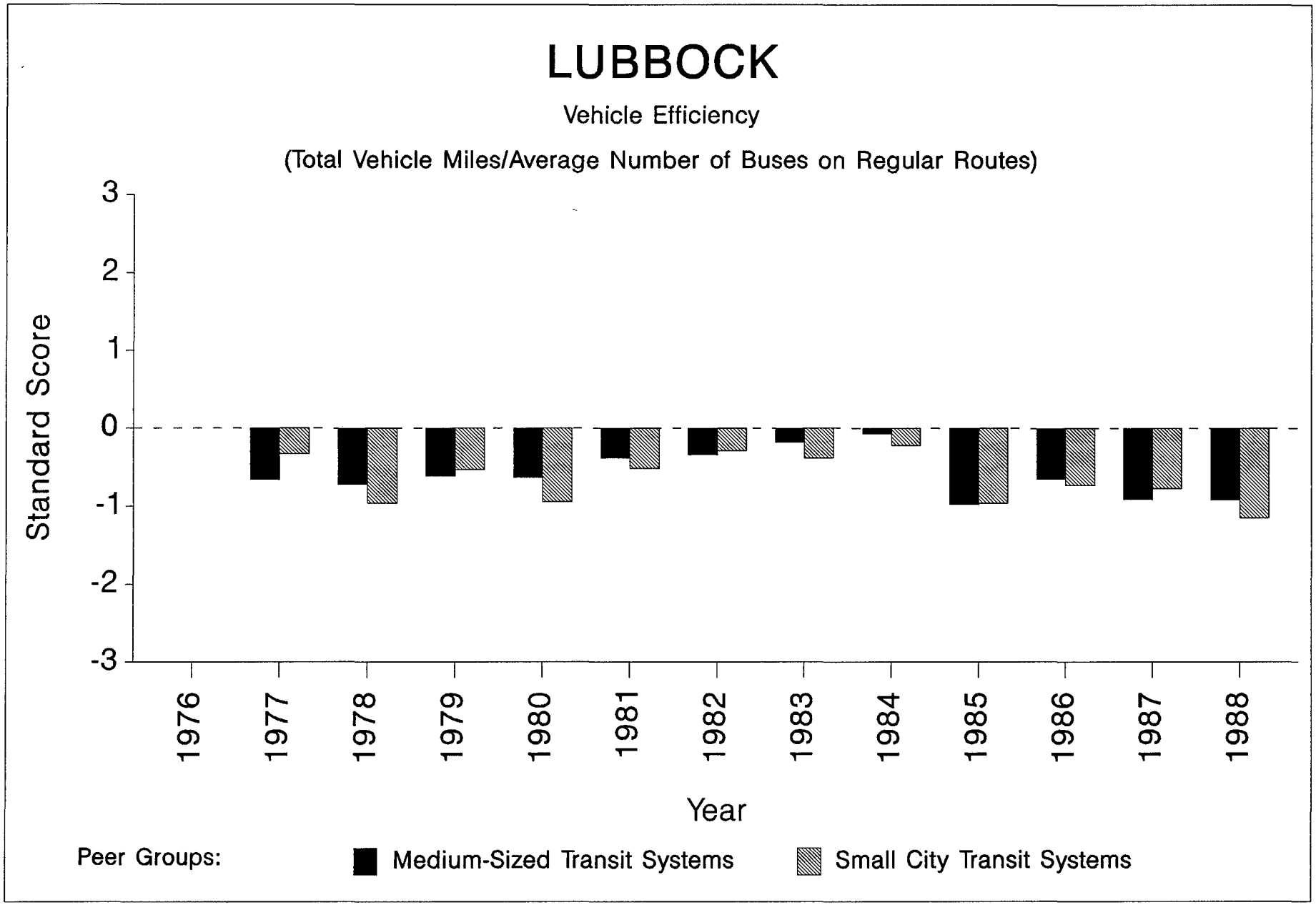
L U B B O C K

Peer Group: Medium-Sized Transit Systems

	1976	1977	1978	1979	1980	1981	1982	1983	1984	1985	1986	1987	1988
Transit Agency Value	----	3.91	3.79	3.91	3.78	4.08	4.09	4.14	4.24	3.69	4.00	3.96	3.82
Peer Group Mean	----	4.53	4.52	4.62	4.52	4.47	4.39	4.25	4.27	4.20	4.41	4.83	4.62
Standard Score	----	-.66	-.72	-.61	-.63	-.38	-.34	-.18	-.07	-.98	-.65	-.91	-.92

Peer Group: Small City Transit Systems

	1976	1977	1978	1979	1980	1981	1982	1983	1984	1985	1986	1987	1988
Transit Agency Value	----	3.91	3.79	3.91	3.78	4.08	4.09	4.14	4.24	3.69	4.00	3.96	3.82
Peer Group Mean	----	4.19	4.58	4.45	4.52	4.47	4.34	4.43	4.43	4.47	4.41	4.40	4.58
Standard Score	----	-.33	-.96	-.53	-.94	-.51	-.29	-.38	-.22	-.96	-.73	-.77	-1.15


LUBBOCK
Vehicle Efficiency
(Total Vehicle Miles/Average Number of Buses on Regular Routes)
Standard Score
3
2
1
0
-1
-2
-3
1976
1977
1978
1979
1980
1981
1982
1983
1984
1985
1986
1987
1988
Year
Peer Groups:
Medium-Sized Transit Systems
Small City Transit Systems

PORT ARTHUR

Table 81.
Transit System Statistical Profile

PORT ARTHUR

	1976	1977	1978	1979	1980	1981	1982	1983	1984	1985	1986	1987	1988
Total Passengers	-	-	-	150,986	280,542	292,595	278,529	273,886	307,164	342,664	317,788	307,694	269,614
Total Vehicle Miles	-	-	-	117,883	197,481	197,986	199,380	199,178	205,561	294,703	291,445	291,514	293,607
Total Vehicle Hours	-	-	-	8,432	14,336	14,266	14,337	14,261	14,714	21,043	20,675	20,666	20,811
Average No. Buses on Regular Routes	-	-	-	4	4	4	4	4	5	6	6	6	6
Average No. Employees	-	-	-	17	18	18	18	18	19	22	21	22	22
Total Operating Revenue ($)	-	-	-	29,531	76,387	96,806	110,776	106,696	140,875	134,693	125,148	123,751	128,829
Passenger Revenue ($)	-	-	-	29,531	76,387	96,806	110,776	106,446	117,637	134,693	125,148	123,427	128,829
Total Operating Expense ($)	-	-	-	249,469	418,307	505,109	630,138	591,886	732,291	757,246	691,076	711,408	672,441
Net Public Operating Cost ($)	-	-	-	219,938	341,920	408,303	519,362	485,190	591,416	622,553	565,928	587,657	543,612
Total Public Capital Cost ($)	-	-	-	636,445	85,319	-	-	531,740	68,762	163,746	529,418	4,625	-
Total Public Expense ($)	-	-	-	856,383	427,239	408,303	519,362	1,016,930	660,178	786,299	1,095,346	592,282	543,612

Note: Port Arthur's Transit System began operation in 1979.
Source: Texas Transit Statistics

Table 82.
Cost Efficiency Performance Profile
(Total Vehicle Hours/Total Operating Expense)

PORT ARTHUR

Peer Group: Small Transit Systems

	1976	1977	1978	1979	1980	1981	1982	1983	1984	1985	1986	1987	1988
Transit Agency Value	---	---	---	.034	.034	.028	.023	.024	.020	.028	.030	.029	.031
Peer Group Mean	---	.087	.089	.066	.055	.048	.051	.045	.041	.040	.039	.038	.037
Standard Score	---	---	---	-2.55	-1.95	-2.34	-1.51	-2.21	-2.51	-1.98	-1.68	-1.75	-1.13

Peer Group: Small City Transit Systems

	1976	1977	1978	1979	1980	1981	1982	1983	1984	1985	1986	1987	1988
Transit Agency Value	---	---	---	.034	.034	.028	.023	.024	.020	.028	.030	.029	.031
Peer Group Mean	---	.087	.088	.066	.055	.048	.051	.045	.042	.041	.039	.038	.037
Standard Score	---	---	---	-2.64	-2.01	-2.47	-1.58	-2.29	-2.66	-2.00	-1.79	-1.86	-1.23

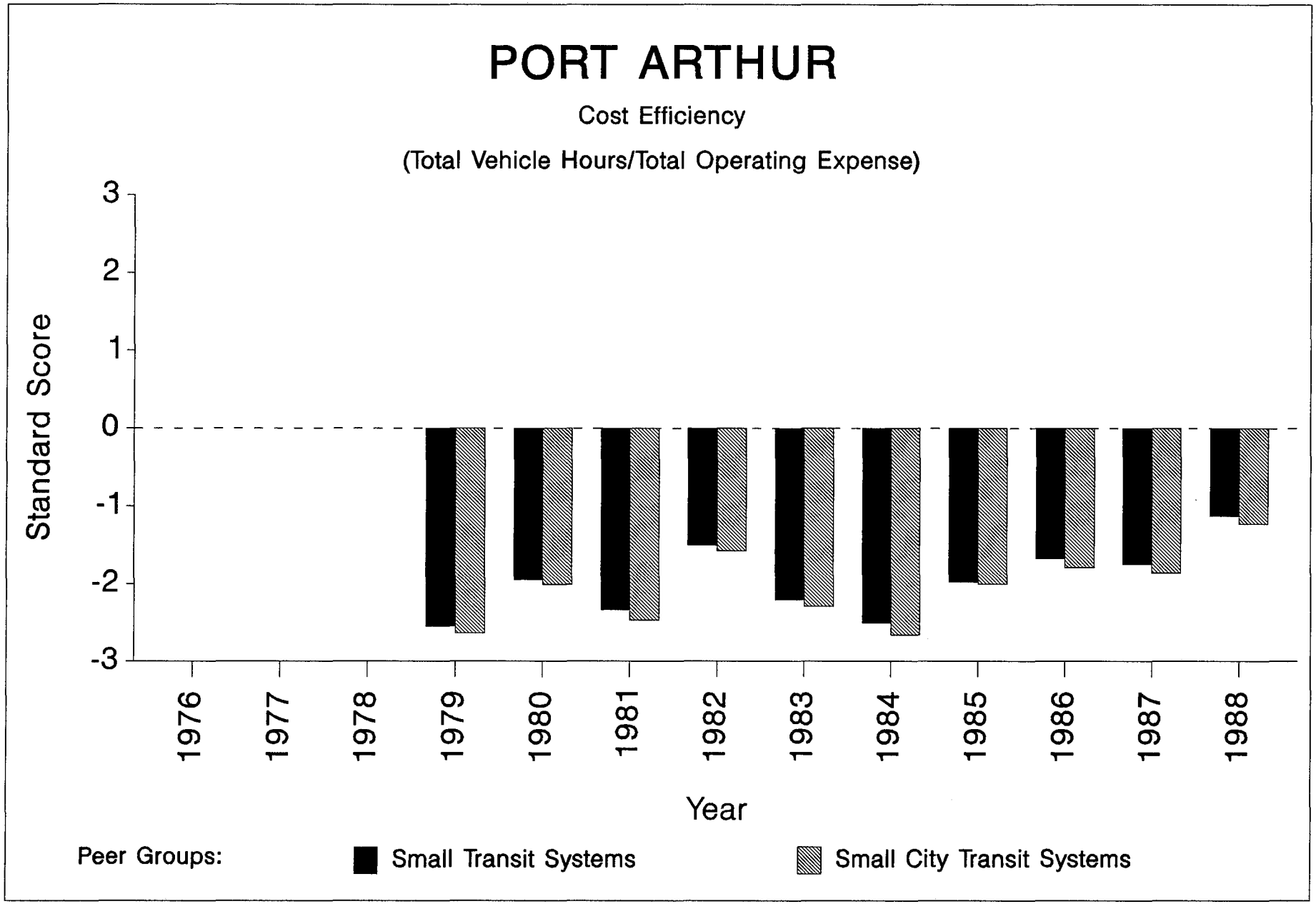

PORT ARTHUR
Cost Efficiency
(Total Vehicle Hours/Total Operating Expense)
Standard Score
3
2
1
0
-1
-2
-3
1976
1977
1978
1979
1980
1981
1982
1983
1984
1985
1986
1987
1988
Year
Peer Groups:
Small Transit Systems
Small City Transit Systems

Table 83.
Service Effectiveness Performance Profile
(Total Passengers/Total Vehicle Hours)

PORT ARTHUR

Peer Group: Small Transit Systems

	1976	1977	1978	1979	1980	1981	1982	1983	1984	1985	1986	1987	1988
Transit Agency Value	—	—	—	17.91	19.57	20.51	19.43	19.21	20.88	16.28	15.37	14.89	12.96
Peer Group Mean	—	19.20	18.49	20.03	20.72	21.44	19.80	19.75	20.70	19.66	19.82	19.34	19.12
Standard Score	—	—	—	-.25	-.16	-.13	-.05	-.09	.02	-.46	-.59	-.54	-.64

Peer Group: Small City Transit Systems

	1976	1977	1978	1979	1980	1981	1982	1983	1984	1985	1986	1987	1988
Transit Agency Value	—	—	—	17.91	19.57	20.51	19.43	19.21	20.88	16.28	15.37	14.89	12.96
Peer Group Mean	—	20.85	19.69	21.05	22.20	23.10	22.06	20.55	21.69	20.79	20.79	20.23	20.02
Standard Score	—	—	—	-.36	-.32	-.30	-.26	-.21	-.11	-.57	-.69	-.64	-.74

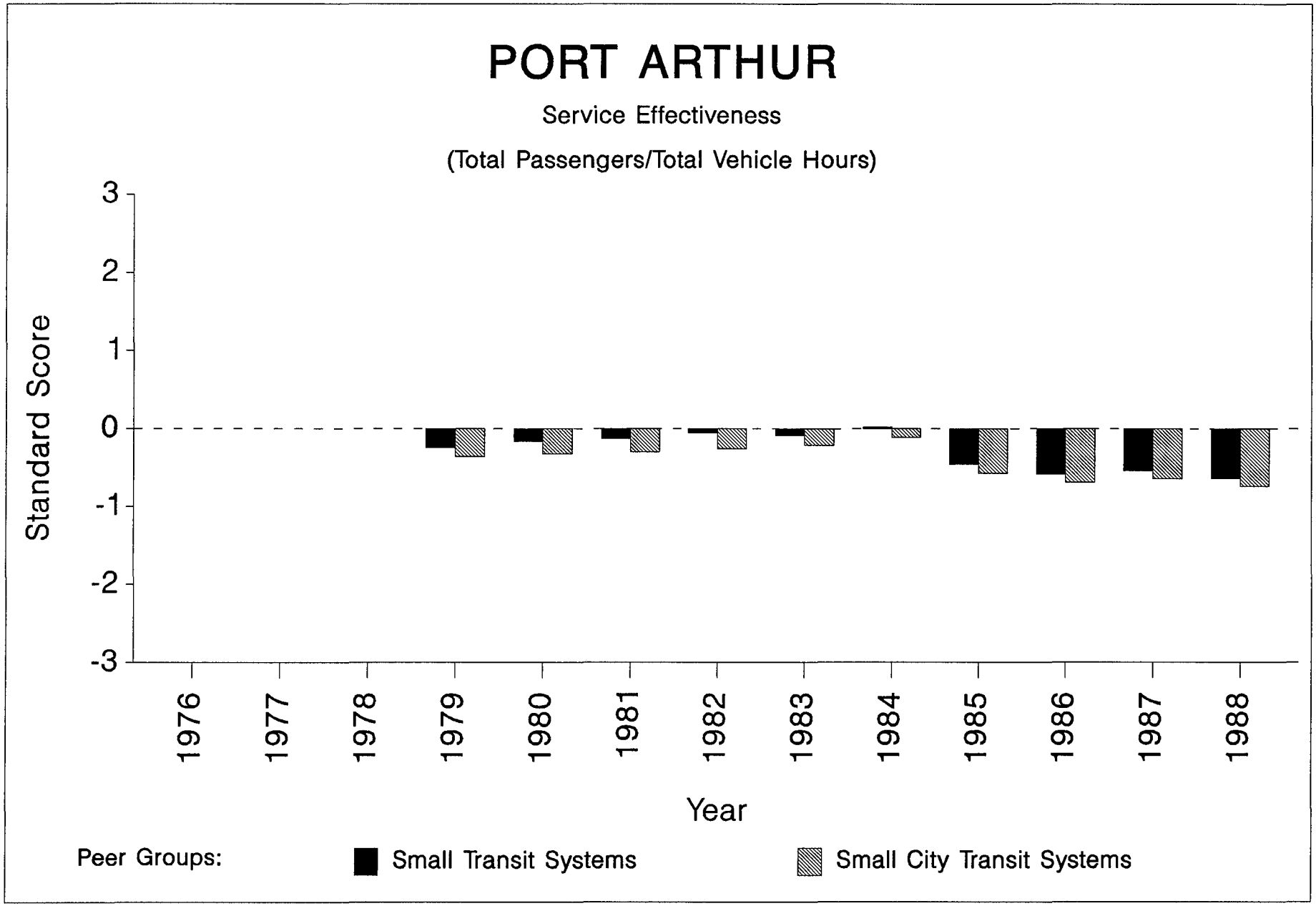

PORT ARTHUR
Service Effectiveness
(Total Passengers/Total Vehicle Hours)
Standard Score
3
2
1
0
-1
-2
-3
1976
1977
1978
1979
1980
1981
1982
1983
1984
1985
1986
1987
1988
Year
Peer Groups:
Small Transit Systems
Small City Transit Systems

Table 84.
Cost Effectiveness Performance Profile
(Passenger Revenue/Total Operating Expense)

PORT ARTHUR

Peer Group: Small Transit Systems

	1976	1977	1978	1979	1980	1981	1982	1983	1984	1985	1986	1987	1988
Transit Agency Value	---	---	---	.12	.18	.19	.18	.18	.16	.18	.18	.17	.19
Peer Group Mean	.51	.48	.39	.34	.34	.33	.33	.33	.33	.30	.29	.27	.27
Standard Score	---	---	---	-1.49	-.95	-.85	-1.09	-1.05	-1.11	-1.00	-.92	-.84	-.57

Peer Group: Small City Transit Systems

	1976	1977	1978	1979	1980	1981	1982	1983	1984	1985	1986	1987	1988
Transit Agency Value	---	---	---	.12	.18	.19	.18	.18	.16	.18	.18	.17	.19
Peer Group Mean	.49	.46	.39	.34	.34	.33	.34	.34	.34	.31	.29	.28	.28
Standard Score	---	---	---	-1.57	-1.00	-.91	-1.18	-1.14	-1.20	-1.08	-1.01	-.93	-.64

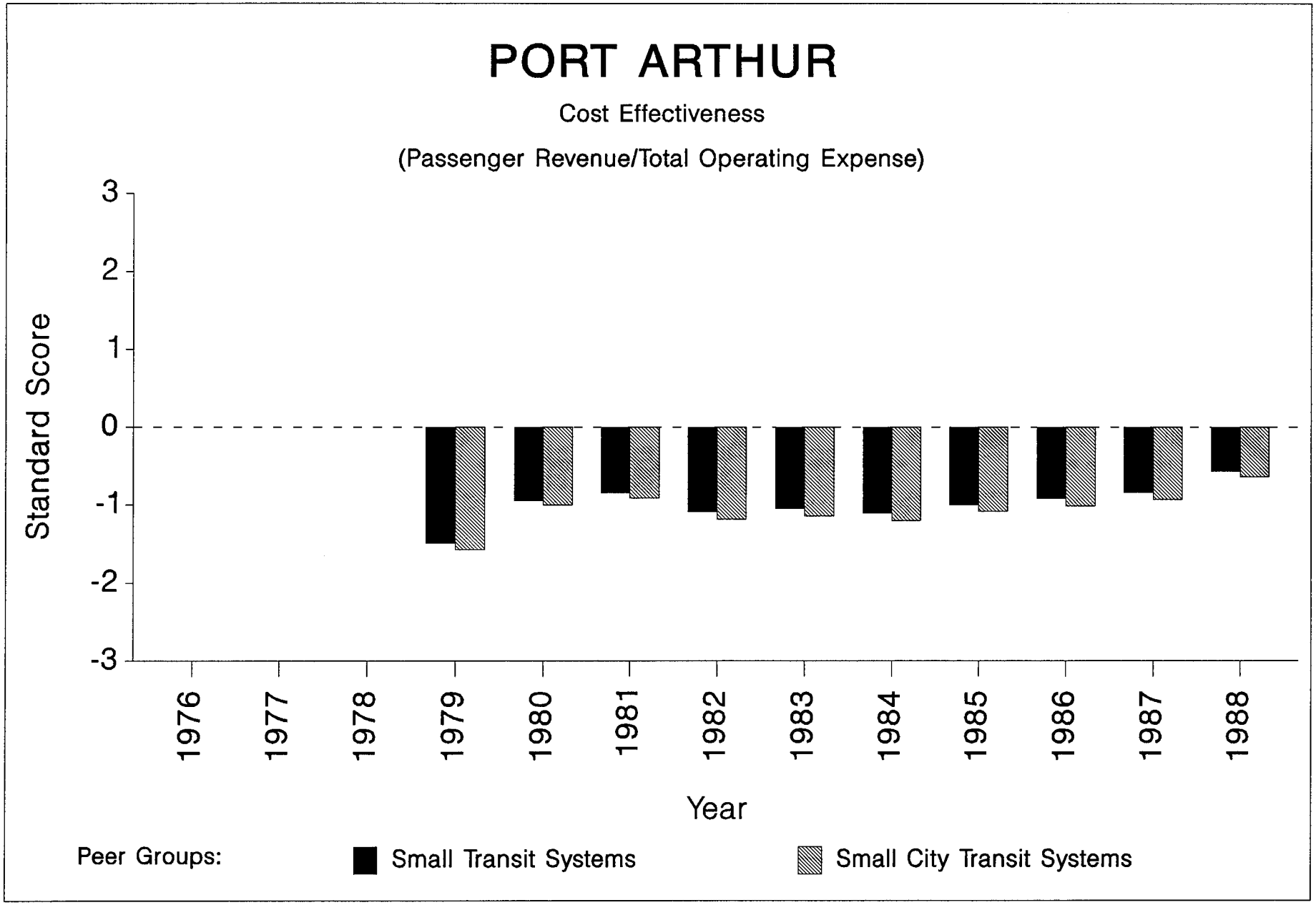

PORT ARTHUR
Cost Effectiveness
(Passenger Revenue/Total Operating Expense)
Standard Score
3
2
1
0
-1
-2
-3
1976
1977
1978
1979
1980
1981
1982
1983
1984
1985
1986
1987
1988
Year
Peer Groups:
Small Transit Systems
Small City Transit Systems

Table 85.
Labor Efficiency Performance Profile
(Total Vehicle Hours/Average Number of Employees)

PORT ARTHUR

Peer Group: Small Transit Systems

	1976	1977	1978	1979	1980	1981	1982	1983	1984	1985	1986	1987	1988
Transit Agency Value	----	----	----	.050	.080	.079	.080	.079	.077	.096	.098	.094	.095
Peer Group Mean	----	.131	.140	.129	.125	.122	.131	.122	.123	.124	.122	.116	.119
Standard Score	----	----	----	-2.07	-1.61	-1.57	-1.34	-1.48	-1.62	-1.21	-1.22	-1.97	-2.05

Peer Group: Small City Transit Systems

	1976	1977	1978	1979	1980	1981	1982	1983	1984	1985	1986	1987	1988
Transit Agency Value	----	----	----	.050	.080	.079	.080	.079	.077	.096	.098	.094	.095
Peer Group Mean	----	.130	.139	.128	.124	.121	.128	.120	.121	.123	.121	.116	.119
Standard Score	----	----	----	-2.17	-1.65	-1.63	-1.32	-1.49	-1.62	-1.21	-1.18	-2.03	-2.17

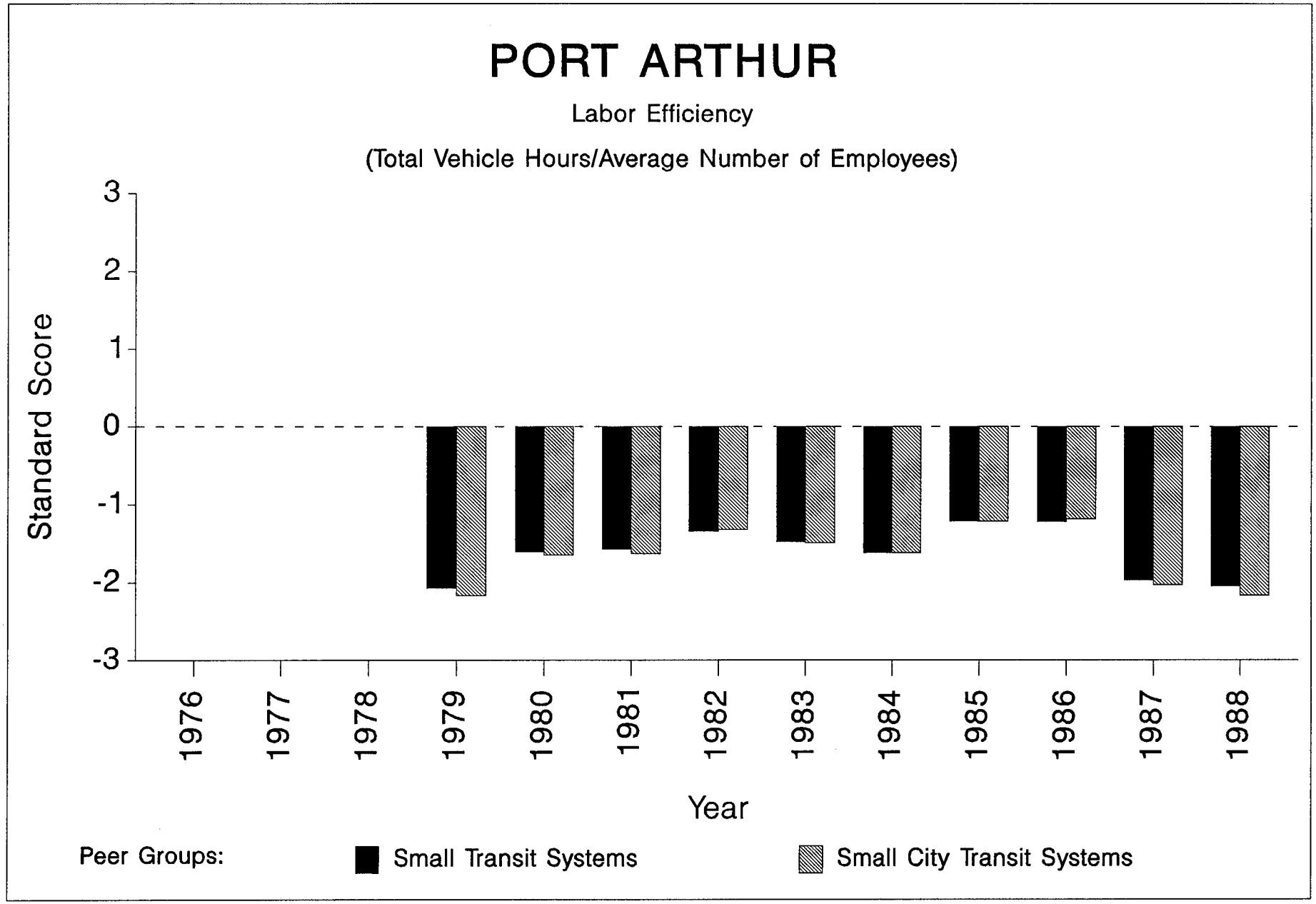

PORT ARTHUR
Labor Efficiency
(Total Vehicle Hours/Average Number of Employees)
Standard Score
3
2
1
0
-1
-2
-3
1976
1977
1978
1979
1980
1981
1982
1983
1984
1985
1986
1987
1988
Year
Peer Groups:
Small Transit Systems
Small City Transit Systems

Table 86.
Vehicle Efficiency Performance Profile
(Total Vehicle Miles/Average Number of Buses on Regular Routes)

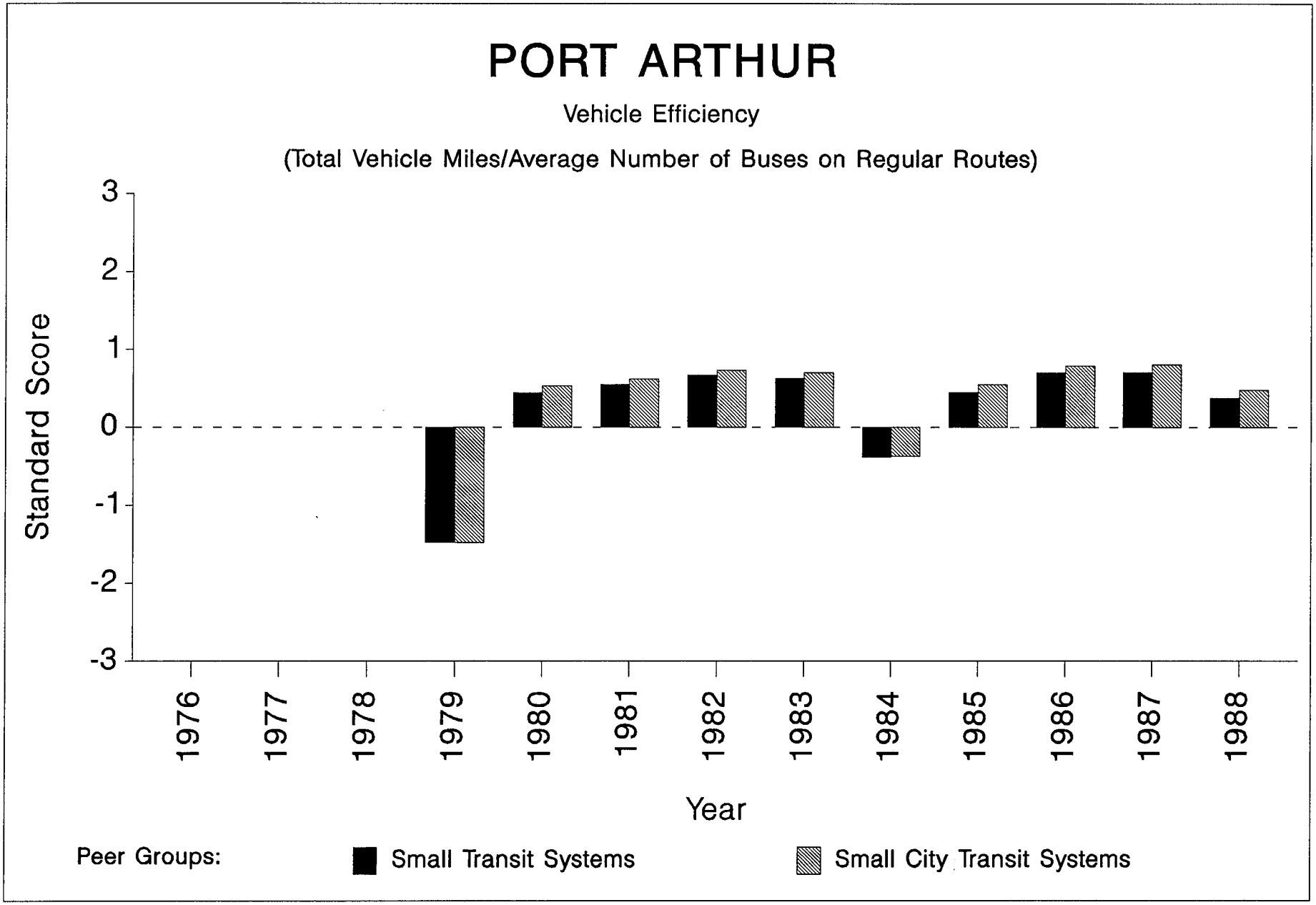
PORT ARTHUR

Peer Group: Small Transit Systems

	1976	1977	1978	1979	1980	1981	1982	1983	1984	1985	1986	1987	1988
Transit Agency Value	---	---	---	2.95	4.94	4.95	4.98	4.98	4.11	4.91	4.86	4.86	4.89
Peer Group Mean	---	4.22	4.66	4.51	4.59	4.51	4.37	4.46	4.45	4.54	4.45	4.44	4.65
Standard Score	---	---	---	-1.48	.44	.55	.67	.63	-.38	.45	.70	.71	.38

Peer Group: Small City Transit Systems

	1976	1977	1978	1979	1980	1981	1982	1983	1984	1985	1986	1987	1988
Transit Agency Value	---	---	---	2.95	4.94	4.95	4.98	4.98	4.11	4.91	4.86	4.86	4.89
Peer Group Mean	---	4.19	4.58	4.45	4.52	4.47	4.34	4.43	4.43	4.47	4.41	4.40	4.58
Standard Score	---	---	---	-1.48	.53	.62	.73	.70	-.37	.55	.79	.81	.48


PORT ARTHUR
Vehicle Efficiency
(Total Vehicle Miles/Average Number of Buses on Regular Routes)
Standard Score
3
2
1
0
-1
-2
-3
1976
1977
1978
1979
1980
1981
1982
1983
1984
1985
1986
1987
1988
Year
Peer Groups:
Small Transit Systems
Small City Transit Systems

SAN ANGELO

Table 87.
Transit System Statistical Profile

SAN ANGELO

	1976	1977	1978	1979	1980	1981	1982	1983	1984	1985	1986	1987	1988
Total Passengers	196,871	268,075	281,801	305,469	332,761	401,595	449,655	436,050	449,930	434,692	363,398	223,352	223,327
Total Vehicle Miles	241,508	256,381	272,549	267,535	258,383	291,758	333,637	327,728	313,718	311,148	305,025	250,027	254,128
Total Vehicle Hours	-	18,905	19,680	19,391	19,365	18,603	21,408	22,272	22,545	22,295	21,624	17,902	17,994
Average No. Buses on Regular Routes	-	7	5	5	5	5	6	6	6	6	6	5	5
Average No. Employees	-	12	11	11	13	12	13	13	13	13	13	13	13
Total Operating Revenue ($)	47,235	61,783	53,731	61,887	63,205	81,348	103,413	97,627	108,008	100,422	95,198	74,751	75,124
Passenger Revenue ($)	47,235	51,472	52,324	61,009	59,520	77,423	100,415	94,900	99,837	99,869	94,621	74,330	75,124
Total Operating Expense ($)	132,554	188,243	203,263	257,536	348,947	368,673	417,721	441,935	490,430	475,154	512,005	445,385	485,526
Net Public Operating Cost ($)	85,319	126,460	149,532	195,649	285,742	287,325	314,308	344,308	382,422	374,732	416,807	370,634	410,402
Total Public Capital Cost ($)	-	-	-	-	-	308,000	217,377	1,003	25,485	210,946	-	-	-
Total Public Expense ($)	85,319	126,460	149,532	195,649	285,742	595,325	531,685	345,311	407,907	585,678	416,807	370,634	410,402

Source: Texas Transit Statistics

Table 88.
Cost Efficiency Performance Profile
(Total Vehicle Hours/Total Operating Expense)

SAN ANGELO

Peer Group: Small Transit Systems

	1976	1977	1978	1979	1980	1981	1982	1983	1984	1985	1986	1987	1988
Transit Agency Value	—	.100	.097	.075	.055	.050	.051	.050	.046	.047	.042	.040	.037
Peer Group Mean	—	.087	.089	.066	.055	.048	.051	.045	.041	.040	.039	.038	.037
Standard Score	—	.85	.33	.69	.02	.29	.00	.58	.55	1.07	.64	.54	.08

Peer Group: Small City Transit Systems

	1976	1977	1978	1979	1980	1981	1982	1983	1984	1985	1986	1987	1988
Transit Agency Value	—	.100	.097	.075	.055	.050	.051	.050	.046	.047	.042	.040	.037
Peer Group Mean	—	.087	.088	.066	.055	.048	.051	.045	.042	.041	.039	.038	.037
Standard Score	—	.90	.40	.75	.05	.31	.01	.64	.54	.88	.65	.49	.01

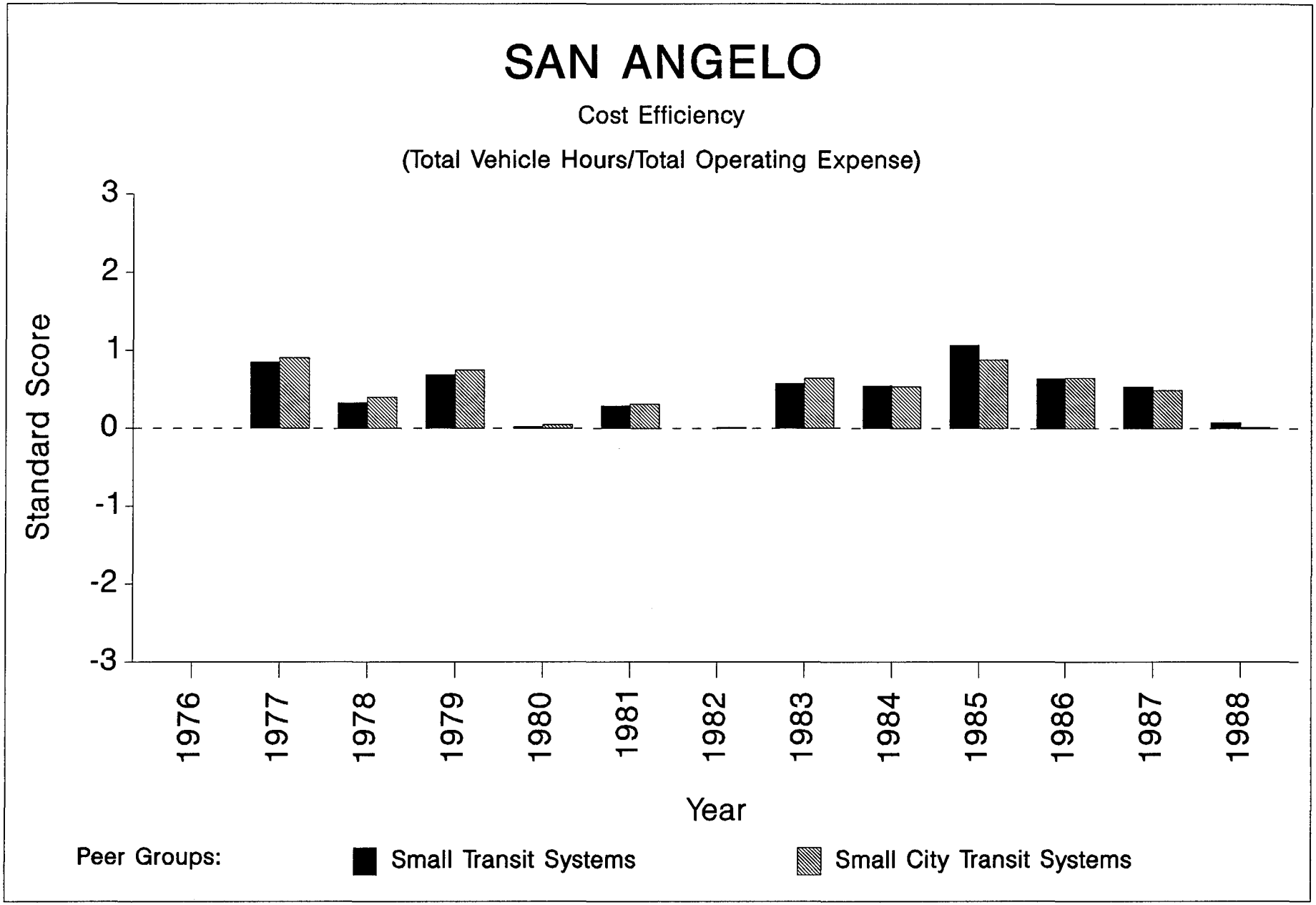

SAN ANGELO
Cost Efficiency
(Total Vehicle Hours/Total Operating Expense)
Standard Score
3
2
1
0
-1
-2
-3
1976
1977
1978
1979
1980
1981
1982
1983
1984
1985
1986
1987
1988
Year
Peer Groups:
Small Transit Systems
Small City Transit Systems

Table 89.
Service Effectiveness Performance Profile
(Total Passengers/Total Vehicle Hours)

SAN ANGELO

Peer Group: Small Transit Systems

	1976	1977	1978	1979	1980	1981	1982	1983	1984	1985	1986	1987	1988
Transit Agency Value	—	14.18	14.32	15.75	17.18	21.59	21.00	19.58	19.96	19.50	16.81	12.48	12.41
Peer Group Mean	—	19.20	18.49	20.03	20.72	21.44	19.80	19.75	20.70	19.66	19.82	19.34	19.12
Standard Score	—	-.72	-.54	-.50	-.50	.02	.17	-.03	-.10	-.02	-.40	-.83	-.70

Peer Group: Small City Transit Systems

	1976	1977	1978	1979	1980	1981	1982	1983	1984	1985	1986	1987	1988
Transit Agency Value	—	14.18	14.32	15.75	17.18	21.59	21.00	19.58	19.96	19.50	16.81	12.48	12.41
Peer Group Mean	—	20.85	19.69	21.05	22.20	23.10	22.06	20.55	21.69	20.79	20.79	20.23	20.02
Standard Score	—	-.81	-.65	-.60	-.60	-.18	-.11	-.15	-.23	-.16	-.51	-.93	-.80

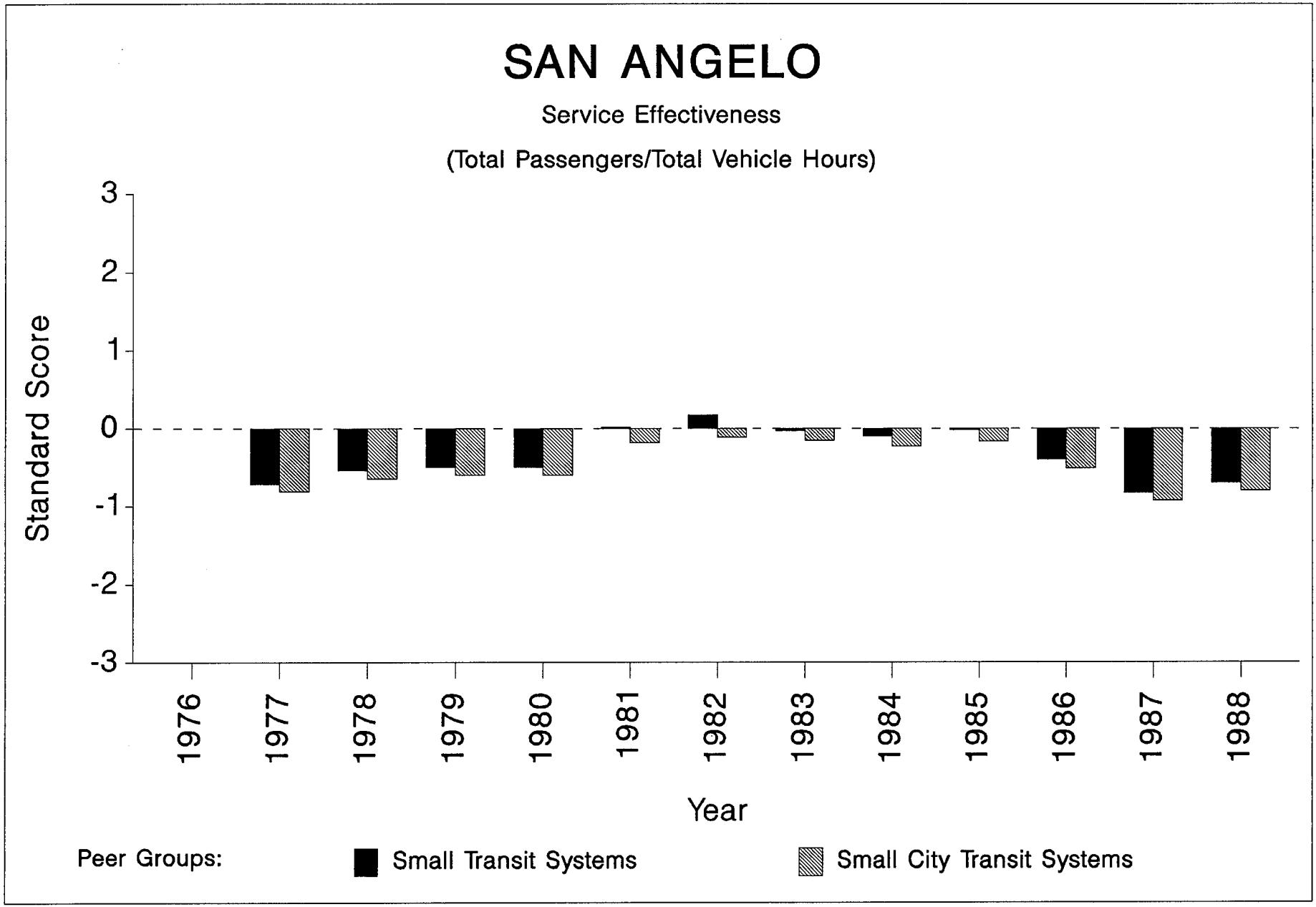

SAN ANGELO
Service Effectiveness
(Total Passengers/Total Vehicle Hours)
Standard Score
3
2
1
0
-1
-2
-3
1976
1977
1978
1979
1980
1981
1982
1983
1984
1985
1986
1987
1988
Year
Peer Groups:
Small Transit Systems
Small City Transit Systems

Table 90.
Cost Effectiveness Performance Profile
(Passenger Revenue/Total Operating Expense)

SAN ANGELO

Peer Group: Small Transit Systems

	1976	1977	1978	1979	1980	1981	1982	1983	1984	1985	1986	1987	1988
Transit Agency Value	.36	.27	.26	.24	.17	.21	.24	.21	.20	.21	.18	.17	.15
Peer Group Mean	.51	.48	.39	.34	.34	.33	.33	.33	.33	.30	.29	.27	.27
Standard Score	-.58	-.85	-.92	-.68	-1.03	-.73	-.64	-.81	-.82	-.73	-.89	-.90	-.84

Peer Group: Small City Transit Systems

	1976	1977	1978	1979	1980	1981	1982	1983	1984	1985	1986	1987	1988
Transit Agency Value	.36	.27	.26	.24	.17	.21	.24	.21	.20	.21	.18	.17	.15
Peer Group Mean	.49	.46	.39	.34	.34	.33	.34	.34	.34	.31	.29	.28	.28
Standard Score	-.54	-.84	-.97	-.72	-1.08	-.78	-.72	-.88	-.91	-.82	-.98	-.99	-.92

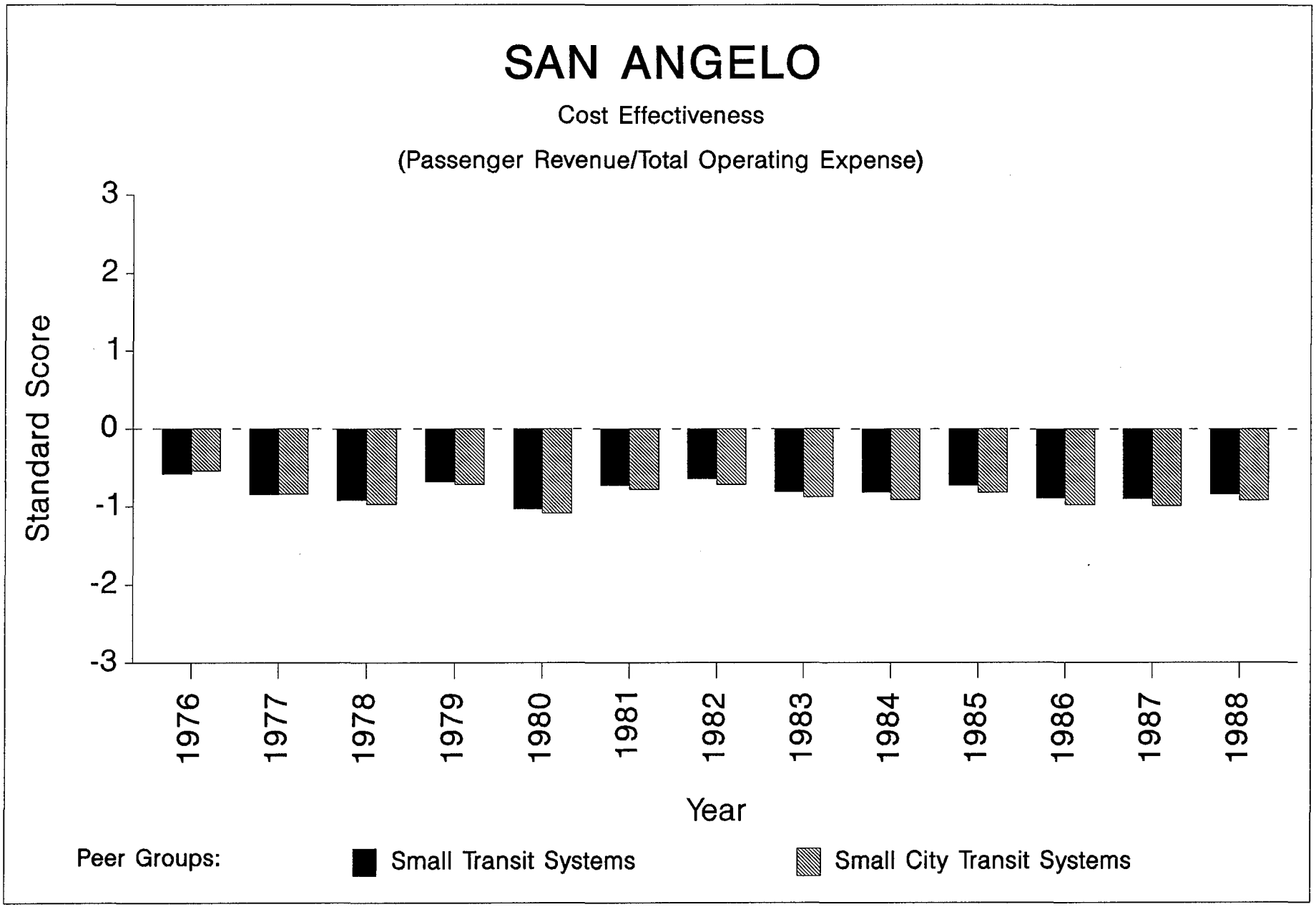

SAN ANGELO
Cost Effectiveness
(Passenger Revenue/Total Operating Expense)
Standard Score
3
2
1
0
-1
-2
-3
1976
1977
1978
1979
1980
1981
1982
1983
1984
1985
1986
1987
1988
Year
Peer Groups:
Small Transit Systems
Small City Transit Systems

Table 91.
Labor Efficiency Performance Profile
(Total Vehicle Hours/Average Number of Employees)

SAN ANGELO

Peer Group: Small Transit Systems

	1976	1977	1978	1979	1980	1981	1982	1983	1984	1985	1986	1987	1988
Transit Agency Value	—	.158	.179	.176	.149	.155	.165	.171	.173	.171	.166	.138	.138
Peer Group Mean	—	.131	.140	.129	.125	.122	.131	.122	.123	.124	.122	.116	.119
Standard Score	—	1.65	1.53	1.25	.85	1.24	.89	1.72	1.80	2.02	2.28	1.86	1.62

Peer Group: Small City Transit Systems

	1976	1977	1978	1979	1980	1981	1982	1983	1984	1985	1986	1987	1988
Transit Agency Value	—	.158	.179	.176	.149	.155	.165	.171	.173	.171	.166	.138	.138
Peer Group Mean	—	.130	.139	.128	.124	.121	.128	.120	.121	.123	.121	.116	.119
Standard Score	—	1.79	1.66	1.33	.93	1.32	.98	1.84	1.92	2.15	2.41	1.98	1.70

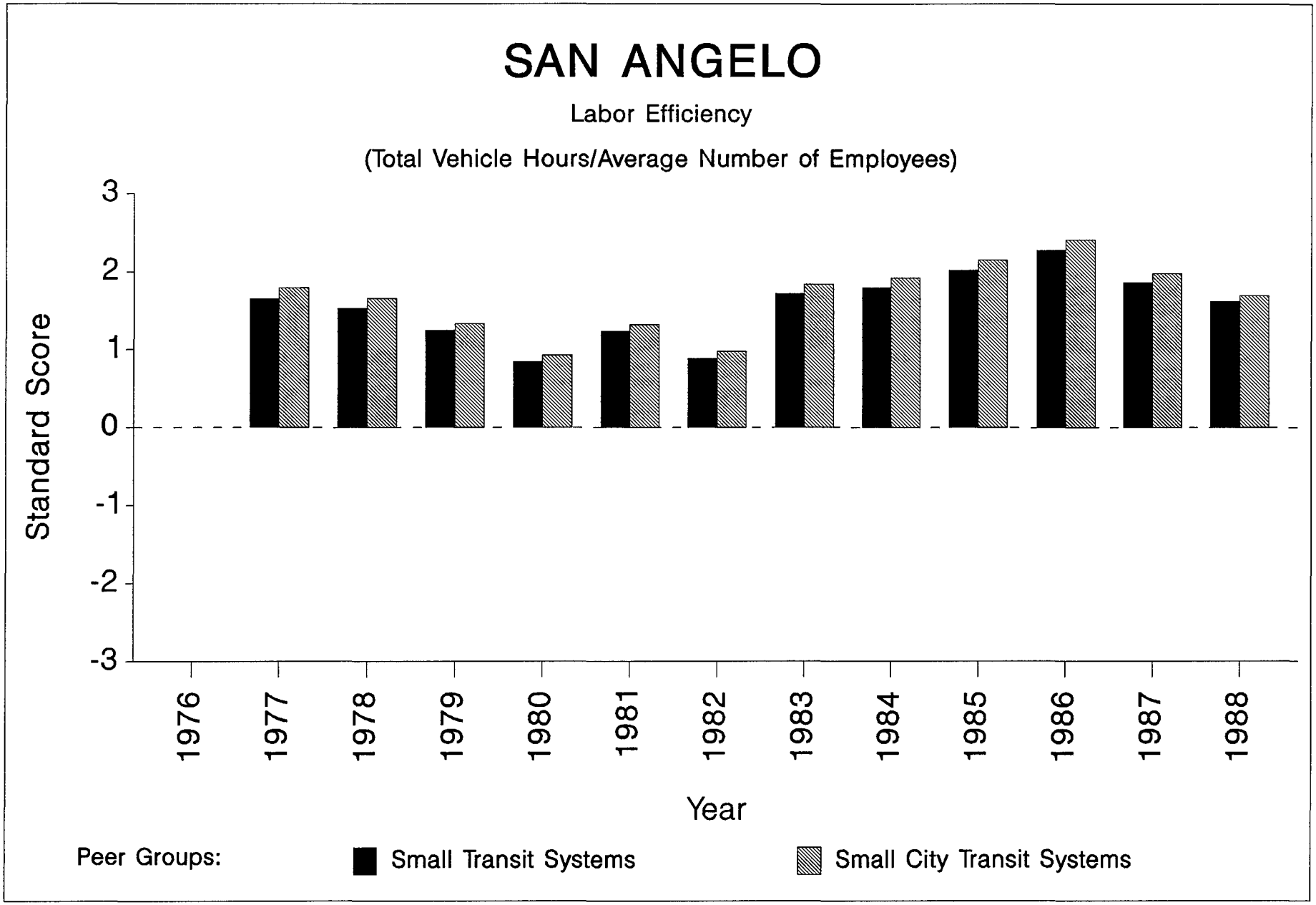

SAN ANGELO
Labor Efficiency
(Total Vehicle Hours/Average Number of Employees)
Standard Score
3
2
1
0
-1
-2
-3
1976
1977
1978
1979
1980
1981
1982
1983
1984
1985
1986
1987
1988
Year
Peer Groups:
Small Transit Systems
Small City Transit Systems

Table 92.
Vehicle Efficiency Performance Profile
(Total Vehicle Miles/Average Number of Buses on Regular Routes)

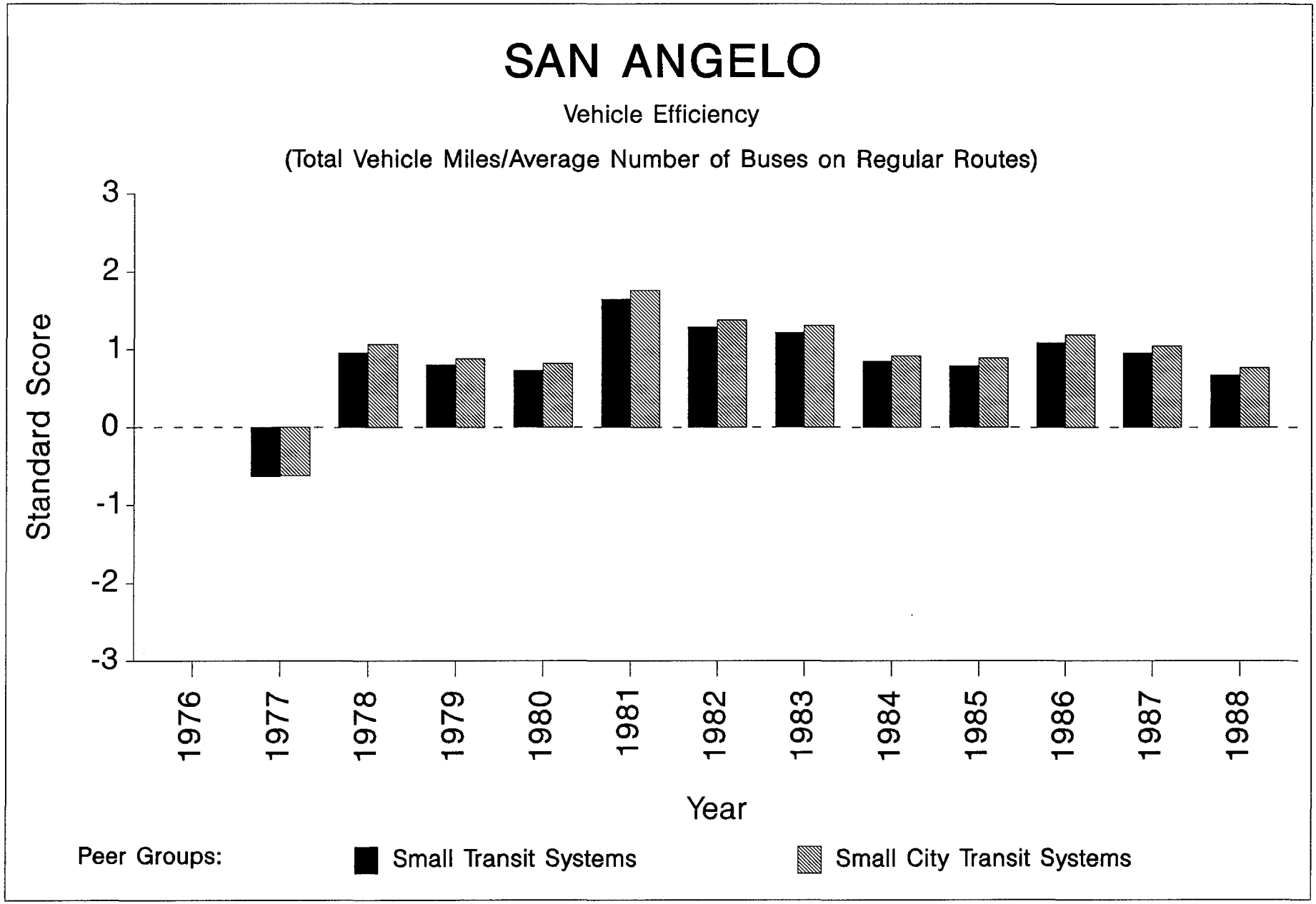
SAN ANGELO

Peer Group: Small Transit Systems

	1976	1977	1978	1979	1980	1981	1982	1983	1984	1985	1986	1987	1988
Transit Agency Value	----	3.66	5.45	5.35	5.17	5.84	5.56	5.46	5.23	5.19	5.08	5.00	5.08
Peer Group Mean	----	4.22	4.66	4.51	4.59	4.51	4.37	4.46	4.45	4.54	4.45	4.44	4.65
Standard Score	----	-.63	.96	.80	.73	1.65	1.29	1.22	.85	.79	1.09	.96	.67

Peer Group: Small City Transit Systems

	1976	1977	1978	1979	1980	1981	1982	1983	1984	1985	1986	1987	1988
Transit Agency Value	----	3.66	5.45	5.35	5.17	5.84	5.56	5.46	5.23	5.19	5.08	5.00	5.08
Peer Group Mean	----	4.19	4.58	4.45	4.52	4.47	4.34	4.43	4.43	4.47	4.41	4.40	4.58
Standard Score	----	-.62	1.07	.88	.82	1.76	1.38	1.31	.92	.89	1.19	1.05	.77


SAN ANGELO
Vehicle Efficiency
(Total Vehicle Miles/Average Number of Buses on Regular Routes)
Standard Score
3
2
1
0
-1
-2
-3
1976
1977
1978
1979
1980
1981
1982
1983
1984
1985
1986
1987
1988
Year
Peer Groups:
Small Transit Systems
Small City Transit Systems

SAN ANTONIO

Table 93.
Transit System Statistical Profile

SAN ANTONIO

	1976	1977	1978	1979	1980	1981	1982	1983	1984	1985	1986	1987	1988
Total Passengers	27,515,172	28,078,283	31,371,380	35,800,138	37,899,279	36,788,542	36,911,551	36,990,033	39,086,908	38,307,252	36,305,407	35,450,377	39,926,434
Total Vehicle Miles	7,364,024	8,466,719	13,563,610	14,278,936	14,653,420	14,782,313	15,209,471	15,419,202	16,579,025	16,709,482	18,028,321	18,463,972	20,040,468
Total Vehicle Hours	-	562,520	1,002,097	1,028,497	1,040,939	1,054,851	1,071,541	1,089,272	1,152,679	1,148,254	1,247,834	1,263,508	1,356,766
Average No. Buses on Regular Routes	258	262	346	370	413	442	423	448	446	455	462	490	470
Average No. Employees	608	605	808	886	931	981	972	928	1,002	1,025	1,078	1,161	1,251
Total Operating Revenue ($)	6,204,876	8,836,538	7,311,834	7,396,186	9,528,767	13,882,419	14,555,696	13,976,654	16,889,902	17,504,418	18,524,114	17,989,745	20,310,679
Passenger Revenue ($)	5,998,402	6,145,480	6,498,663	7,174,878	8,934,799	11,240,609	11,429,533	11,217,756	11,936,879	12,294,750	12,457,402	11,798,831	12,748,540
Total Operating Expense ($)	9,976,603	11,254,343	18,348,113	22,414,414	24,529,753	30,237,565	31,432,322	33,180,696	35,180,650	37,709,789	38,099,101	41,617,137	44,008,523
Net Public Operating Cost ($)	3,771,727	2,417,805	10,036,279	15,018,228	15,000,986	16,355,146	16,876,626	19,204,042	18,290,748	20,205,371	19,574,987	23,627,392	23,697,844
Total Public Capital Cost ($)	-	-	4,539,527	1,730,703	18,556,180	1,239,138	571,705	3,925,498	17,090,589	5,222,503	10,166,385	11,283,944	6,471,717
Total Public Expense ($)	3,771,727	2,417,805	15,575,806	16,748,931	33,557,166	17,594,284	17,448,331	23,129,540	35,381,337	25,427,874	29,741,372	34,911,336	30,169,561

Source: Texas Transit Statistics and Via Metropolitan Transit Authority

Table 94.
Cost Efficiency Performance Profile
(Total Vehicle Hours/Total Operating Expense)

SAN ANTONIO

Peer Group: Large Transit Systems

	1976	1977	1978	1979	1980	1981	1982	1983	1984	1985	1986	1987	1988
Transit Agency Value	—	.050	.055	.046	.042	.035	.034	.033	.033	.030	.033	.030	.031
Peer Group Mean	—	.051	.052	.043	.036	.030	.029	.028	.026	.024	.021	.022	.022
Standard Score	—	-.26	.26	.29	.61	.53	.62	.68	1.09	1.05	1.47	1.46	1.36

Peer Group: Large City Transit Systems

	1976	1977	1978	1979	1980	1981	1982	1983	1984	1985	1986	1987	1988
Transit Agency Value	—	.050	.055	.046	.042	.035	.034	.033	.033	.030	.033	.030	.031
Peer Group Mean	—	.069	.060	.047	.039	.033	.031	.031	.029	.026	.024	.023	.022
Standard Score	—	-.47	-.26	-.10	.37	.22	.50	.30	.55	.85	1.33	1.55	1.63

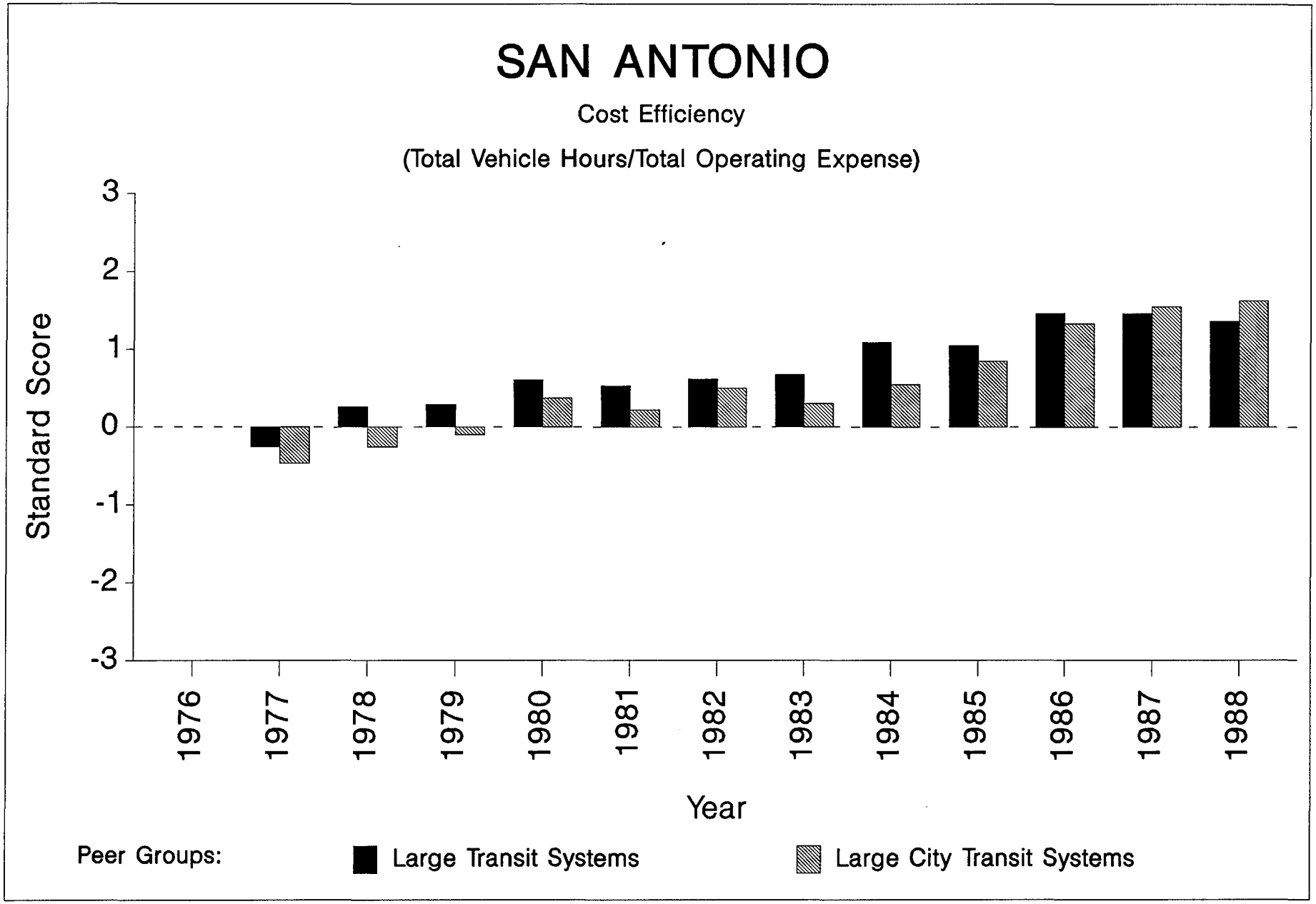

SAN ANTONIO
Cost Efficiency
(Total Vehicle Hours/Total Operating Expense)
Standard Score
3
2
1
0
-1
-2
-3
1976
1977
1978
1979
1980
1981
1982
1983
1984
1985
1986
1987
1988
Year
Peer Groups:
Large Transit Systems
Large City Transit Systems

Table 95.
Service Effectiveness Performance Profile
(Total Passengers/Total Vehicle Hours)

SAN ANTONIO

Peer Group: Large Transit Systems

	1976	1977	1978	1979	1980	1981	1982	1983	1984	1985	1986	1987	1988
Transit Agency Value	----	49.92	31.31	34.81	36.41	34.88	34.45	33.96	33.91	33.36	29.09	28.06	29.43
Peer Group Mean	----	38.30	30.76	30.99	31.83	30.67	29.44	28.34	29.18	27.87	25.23	24.43	25.96
Standard Score	----	1.48	.17	.79	.85	.77	.78	.81	.69	.85	.62	.45	.49

Peer Group: Large City Transit Systems

	1976	1977	1978	1979	1980	1981	1982	1983	1984	1985	1986	1987	1988
Transit Agency Value	----	49.92	31.31	34.81	36.41	34.88	34.45	33.96	33.91	33.36	29.09	28.06	29.43
Peer Group Mean	----	30.94	26.16	27.54	28.78	27.49	25.65	25.18	25.99	25.35	23.02	23.39	24.54
Standard Score	----	1.76	.83	1.21	1.21	1.09	1.21	1.14	1.01	1.07	.81	.57	.62

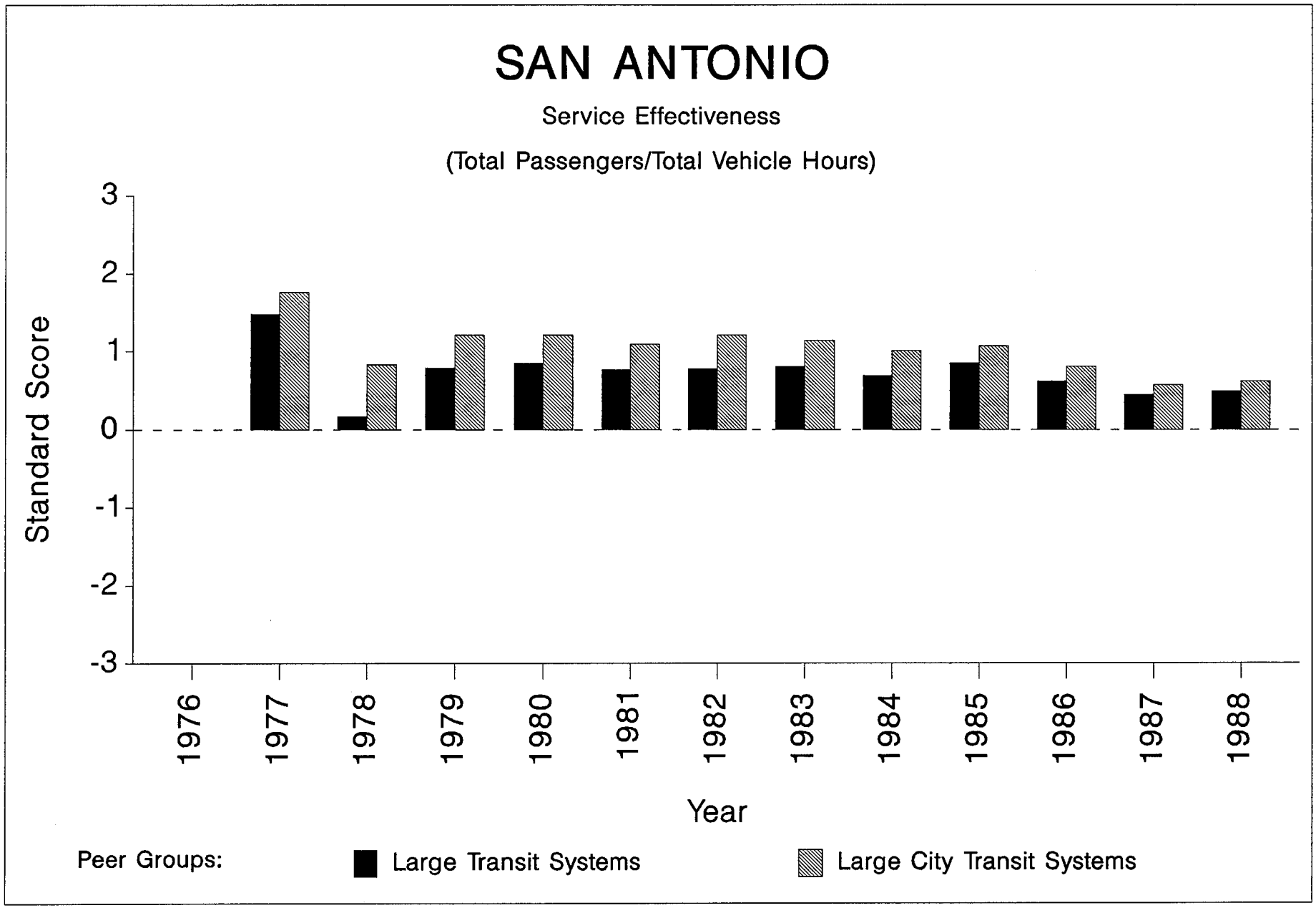

SAN ANTONIO
Service Effectiveness
(Total Passengers/Total Vehicle Hours)
Standard Score
3
2
1
0
-1
-2
-3
1976
1977
1978
1979
1980
1981
1982
1983
1984
1985
1986
1987
1988
Year
Peer Groups:
Large Transit Systems
Large City Transit Systems

Table 96.
Cost Effectiveness Performance Profile
(Farebox Revenue/Total Operating Expense)

SAN ANTONIO

Peer Group: Large Transit Systems

	1976	1977	1978	1979	1980	1981	1982	1983	1984	1985	1986	1987	1988
Transit Agency Value	.60	.55	.35	.32	.36	.37	.36	.34	.34	.33	.33	.28	.29
Peer Group Mean	.52	.49	.40	.37	.36	.36	.35	.33	.28	.26	.22	.21	.22
Standard Score	.57	.44	-.29	-.30	.03	.09	.09	.07	1.37	1.35	1.05	.81	.78

Peer Group: Large City Transit Systems

	1976	1977	1978	1979	1980	1981	1982	1983	1984	1985	1986	1987	1988
Transit Agency Value	.60	.55	.35	.32	.36	.37	.36	.34	.34	.33	.33	.28	.29
Peer Group Mean	.55	.53	.43	.39	.37	.36	.34	.34	.32	.28	.25	.24	.23
Standard Score	.22	.08	-.44	-.47	-.08	.13	.16	-.04	.24	.58	.69	.34	.51

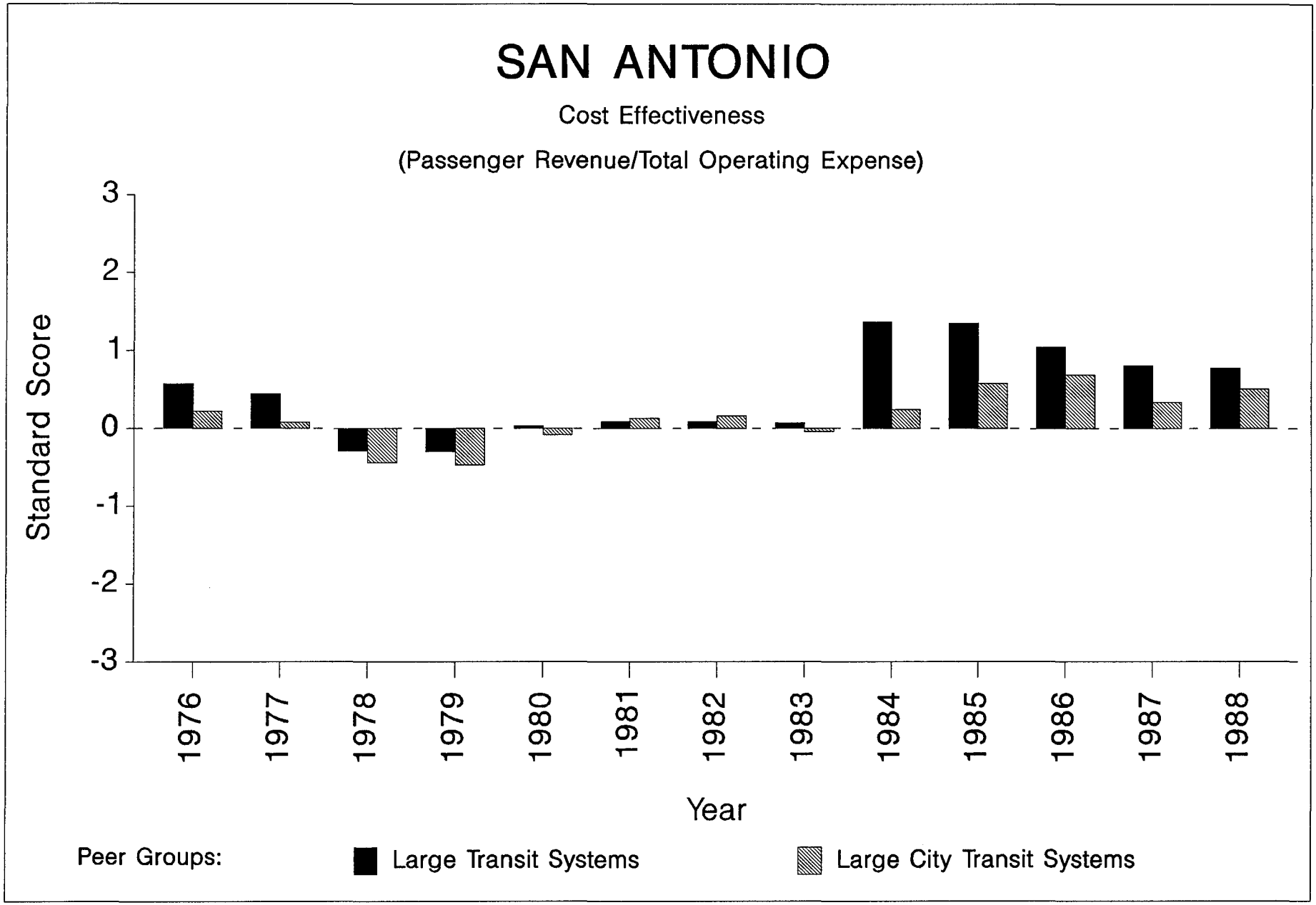

SAN ANTONIO
Cost Effectiveness
(Passenger Revenue/Total Operating Expense)
Standard Score
3
2
1
0
-1
-2
-3
1976
1977
1978
1979
1980
1981
1982
1983
1984
1985
1986
1987
1988
Year
Peer Groups:
Large Transit Systems
Large City Transit Systems

Table 97.
Labor Efficiency Performance Profile
(Total Vehicle Hours/Average Number of Employees)

SAN ANTONIO

Peer Group: Large Transit Systems

	1976	1977	1978	1979	1980	1981	1982	1983	1984	1985	1986	1987	1988
Transit Agency Value	----	.093	.124	.116	.112	.108	.110	.117	.115	.112	.116	.109	.108
Peer Group Mean	----	.102	.116	.112	.106	.105	.104	.104	.101	.098	.100	.104	.109
Standard Score	----	-1.28	1.01	.32	.37	.22	.60	1.27	1.23	1.40	.66	.21	-.03

Peer Group: Large City Transit Systems

	1976	1977	1978	1979	1980	1981	1982	1983	1984	1985	1986	1987	1988
Transit Agency Value	----	.093	.124	.116	.112	.108	.110	.117	.115	.112	.116	.109	.108
Peer Group Mean	----	.118	.126	.117	.110	.108	.107	.105	.102	.098	.097	.101	.101
Standard Score	----	-.68	-.08	-.05	.14	-.05	.35	1.27	1.62	1.87	1.08	.49	.40

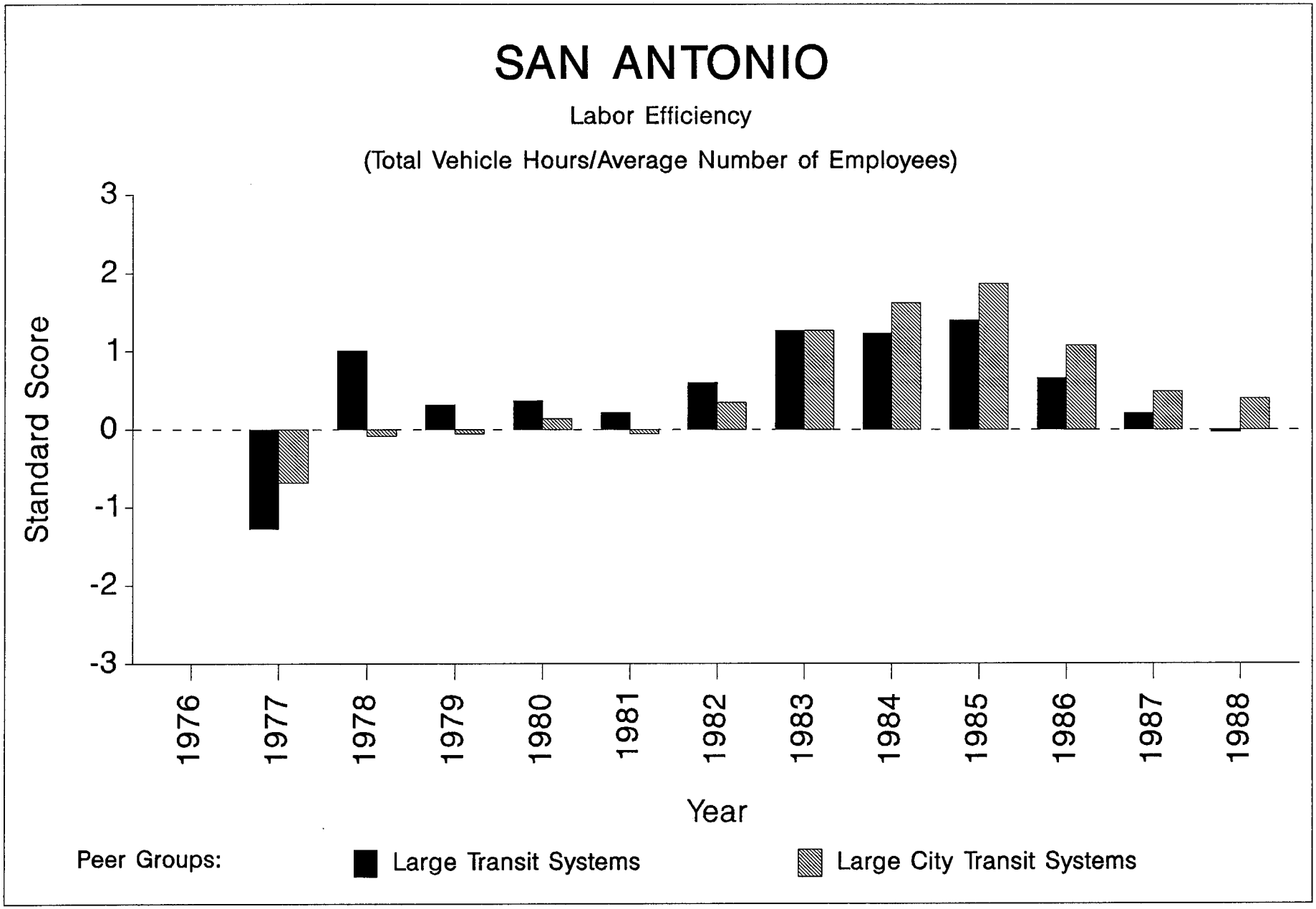

SAN ANTONIO
Labor Efficiency
(Total Vehicle Hours/Average Number of Employees)
Standard Score
3
2
1
0
-1
-2
-3
1976
1977
1978
1979
1980
1981
1982
1983
1984
1985
1986
1987
1988
Year
Peer Groups:
Large Transit Systems
Large City Transit Systems

Table 98.
Vehicle Efficiency Performance Profile
(Total Vehicle Miles/Average Number of Buses on Regular Routes)

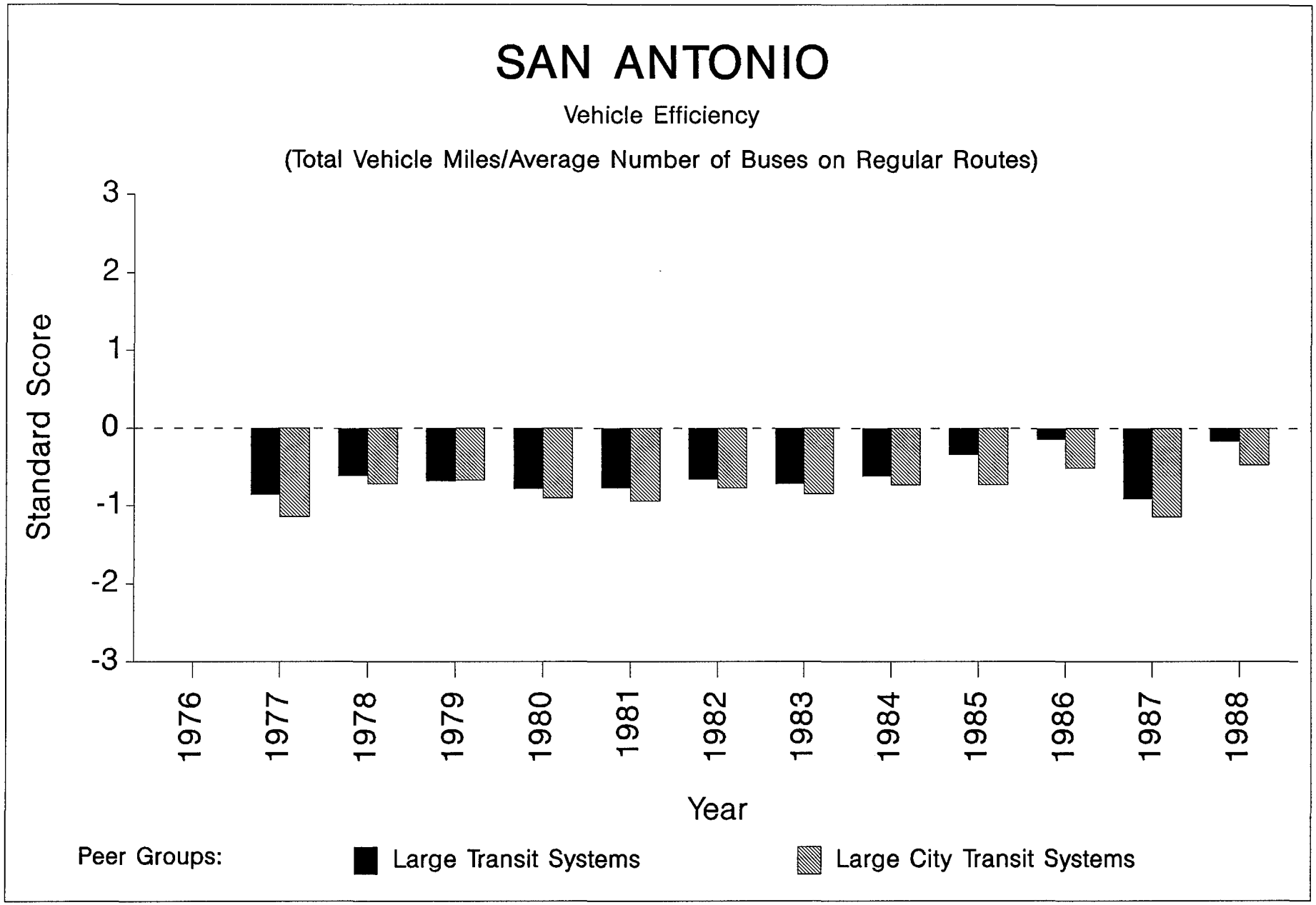
SAN ANTONIO

Peer Group: Large Transit Systems

	1976	1977	1978	1979	1980	1981	1982	1983	1984	1985	1986	1987	1988
Transit Agency Value	2.85	3.23	3.92	3.86	3.55	3.34	3.60	3.44	3.72	3.67	3.90	3.77	4.26
Peer Group Mean	2.85	4.49	4.31	4.17	4.23	4.39	4.63	4.53	4.48	3.88	3.97	4.40	4.34
Standard Score	----	-.86	-.61	-.68	-.78	-.77	-.66	-.72	-.62	-.34	-.14	-.91	-.16

Peer Group: Large City Transit Systems

	1976	1977	1978	1979	1980	1981	1982	1983	1984	1985	1986	1987	1988
Transit Agency Value	2.85	3.23	3.92	3.86	3.55	3.34	3.60	3.44	3.72	3.67	3.90	3.77	4.26
Peer Group Mean	2.85	4.60	4.50	4.46	4.46	4.48	4.57	4.42	4.40	4.09	4.22	4.71	4.57
Standard Score	----	-1.14	-.72	-.67	-.90	-.94	-.77	-.85	-.73	-.73	-.51	-1.14	-.47


SAN ANTONIO
Vehicle Efficiency
(Total Vehicle Miles/Average Number of Buses on Regular Routes)
Standard Score
3
2
1
0
-1
-2
-3
1976
1977
1978
1979
1980
1981
1982
1983
1984
1985
1986
1987
1988
Year
Peer Groups:
Large Transit Systems
Large City Transit Systems

W A C O

Table 99.
Transit System Statistical Profile

WACO

	1976	1977	1978	1979	1980	1981	1982	1983	1984	1985	1986	1987	1988
Total Passengers	714,974	650,679	566,372	593,847	636,234	627,385	585,142	581,202	599,682	609,746	621,566	613,537	610,347
Total Vehicle Miles	480,395	458,389	482,161	474,214	476,287	441,357	347,476	350,848	351,248	350,085	347,022	335,859	331,411
Total Vehicle Hours	-	34,273	39,140	37,973	38,805	35,947	30,006	30,232	30,025	29,785	29,438	27,921	27,905
Average No. Buses on Regular Routes	-	11	13	14	13	13	10	10	10	10	10	10	9
Average No. Employees	-	32	35	33	35	32	30	30	29	30	28	26	24
Total Operating Revenue ($)	245,383	213,809	196,818	213,335	264,977	218,421	254,777	234,683	225,482	250,475	217,789	204,736	197,429
Passenger Revenue ($)	244,460	208,583	195,377	213,335	264,977	218,421	228,722	234,683	225,482	224,581	217,789	204,736	197,429
Total Operating Expense ($)	403,716	548,708	556,414	684,893	723,604	797,472	792,293	829,871	848,310	944,617	849,560	843,723	846,919
Net Public Operating Cost ($)	158,333	334,899	359,596	471,558	458,627	579,051	537,516	595,188	622,828	694,142	631,771	638,987	649,490
Total Public Capital Cost ($)	-	-	26,456	38,763	376,322	1,615,825	1,397,708	146,044	11,606	-	-	191,552	211,406
Total Public Expense ($)	158,333	334,899	386,052	510,321	834,949	2,194,876	1,935,224	741,232	634,434	694,142	631,771	830,539	860,896

Source: Texas Transit Statistics

Table 100.
Cost Efficiency Performance Profile
(Total Vehicle Hours/Total Operating Expense)

W A C O

Peer Group: Small Transit Systems

	1976	1977	1978	1979	1980	1981	1982	1983	1984	1985	1986	1987	1988
Transit Agency Value	----	.062	.070	.055	.054	.045	.038	.036	.035	.032	.035	.033	.033
Peer Group Mean	----	.087	.089	.066	.055	.048	.051	.045	.041	.040	.039	.038	.037
Standard Score	----	-1.51	-.80	-.86	-.16	-.35	-.71	-.90	-.70	-1.38	-.79	-.92	-.73

Peer Group: Small City Transit Systems

	1976	1977	1978	1979	1980	1981	1982	1983	1984	1985	1986	1987	1988
Transit Agency Value	----	.062	.070	.055	.054	.045	.038	.036	.035	.032	.035	.033	.033
Peer Group Mean	----	.087	.088	.066	.055	.048	.051	.045	.042	.041	.039	.038	.037
Standard Score	----	-1.63	-.78	-.87	-.13	-.36	-.74	-.92	-.77	-1.44	-.85	-1.01	-.82

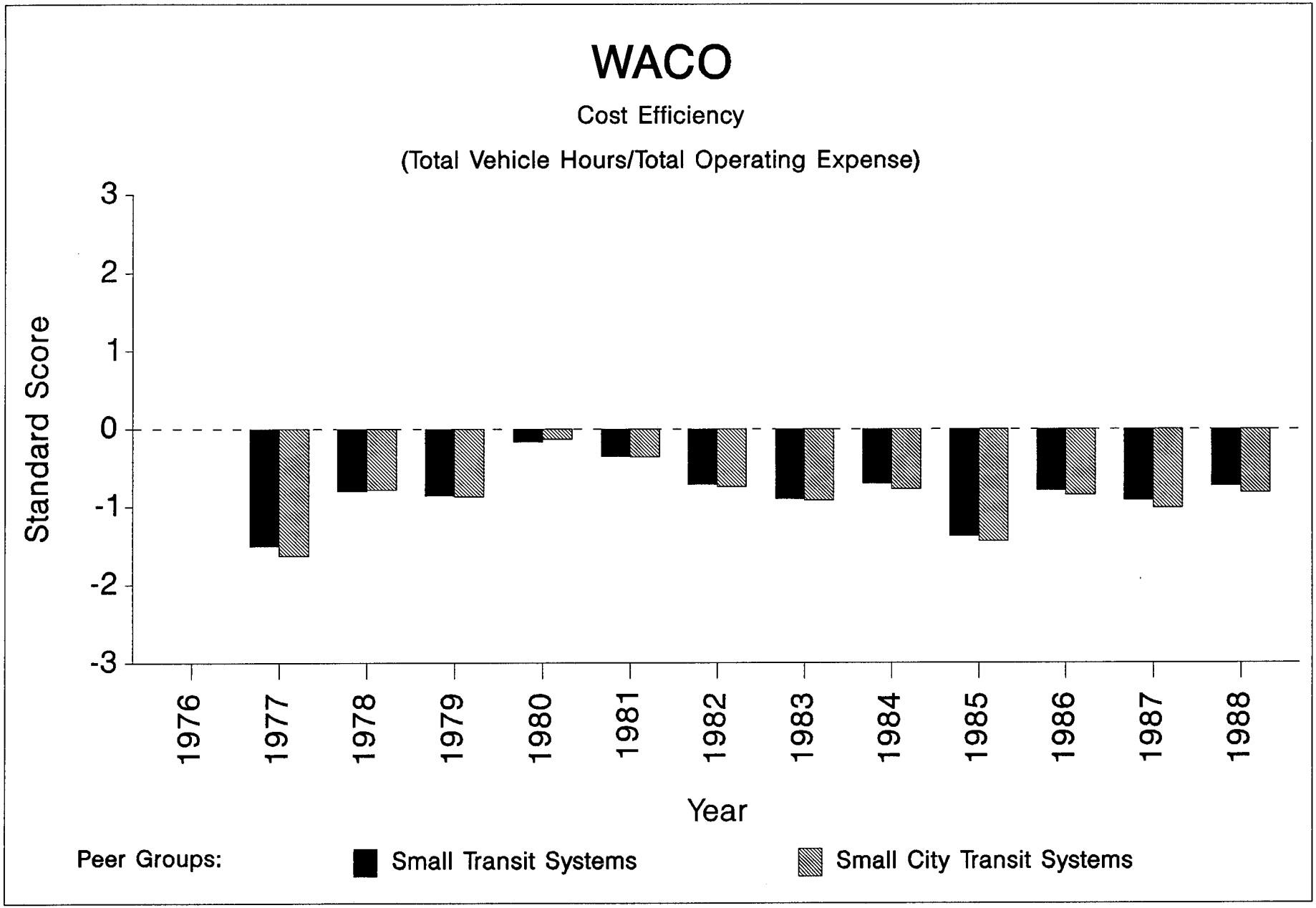

WACO
Cost Efficiency
(Total Vehicle Hours/Total Operating Expense)
Standard Score
3
2
1
0
-1
-2
-3
1976
1977
1978
1979
1980
1981
1982
1983
1984
1985
1986
1987
1988
Year
Peer Groups:
Small Transit Systems
Small City Transit Systems

Table 101.
Service Effectiveness Performance Profile
(Total Passengers/Total Vehicle Hours)

W A C O

Peer Group: Small Transit Systems

	1976	1977	1978	1979	1980	1981	1982	1983	1984	1985	1986	1987	1988
Transit Agency Value	—	18.99	14.47	15.64	16.40	17.45	19.50	19.22	19.97	20.47	21.11	21.97	21.87
Peer Group Mean	—	19.20	18.49	20.03	20.72	21.44	19.80	19.75	20.70	19.66	19.82	19.34	19.12
Standard Score	—	-.03	-.52	-.51	-.61	-.58	-.04	-.08	-.10	.11	.17	.32	.29

Peer Group: Small City Transit Systems

	1976	1977	1978	1979	1980	1981	1982	1983	1984	1985	1986	1987	1988
Transit Agency Value	—	18.99	14.47	15.64	16.40	17.45	19.50	19.22	19.97	20.47	21.11	21.97	21.87
Peer Group Mean	—	20.85	19.69	21.05	22.20	23.10	22.06	20.55	21.69	20.79	20.79	20.23	20.02
Standard Score	—	-.23	-.63	-.61	-.70	-.66	-.26	-.20	-.23	-.04	.04	.21	.19

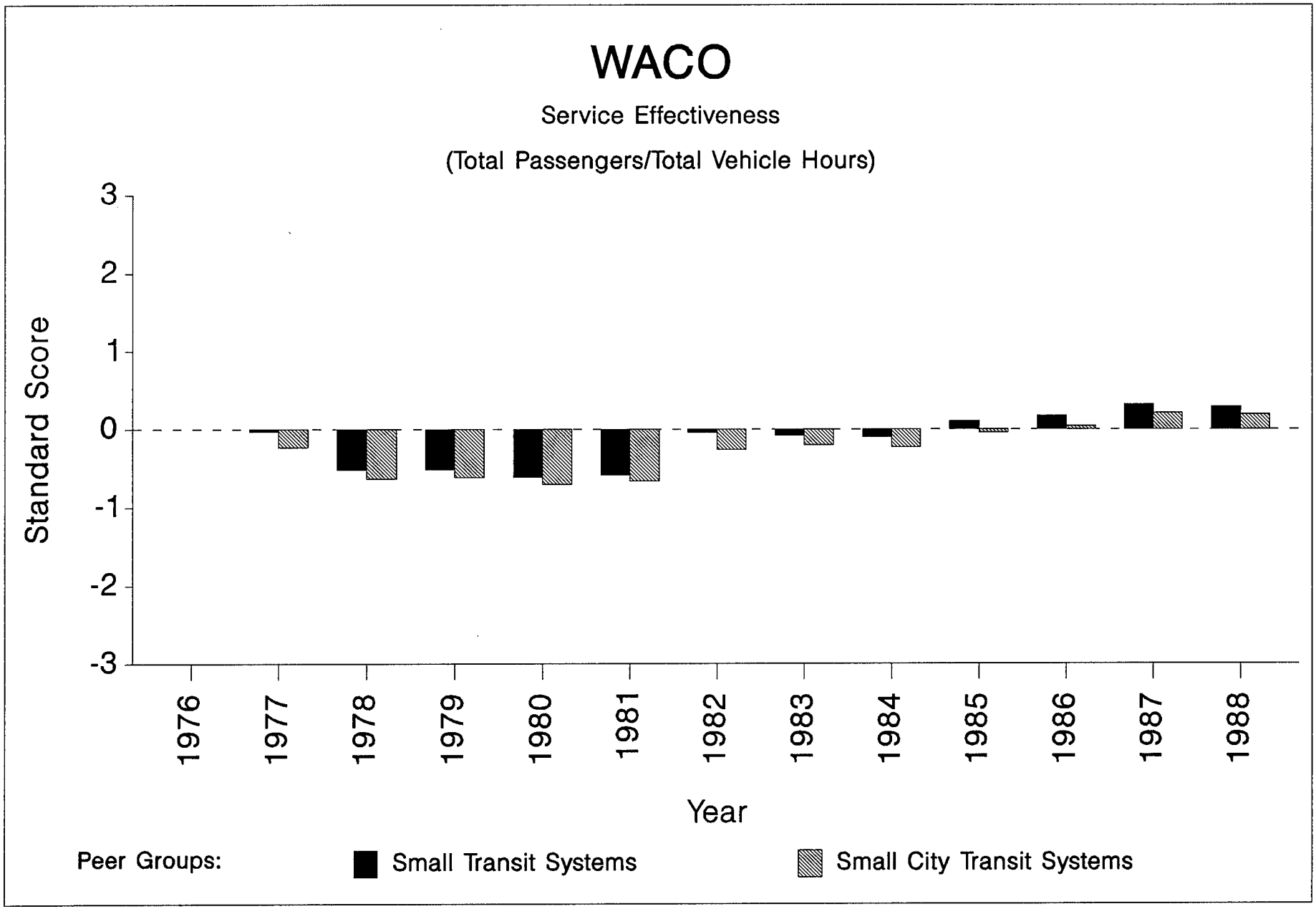

WACO
Service Effectiveness
(Total Passengers/Total Vehicle Hours)
Standard Score
3
2
1
0
-1
-2
-3
1976
1977
1978
1979
1980
1981
1982
1983
1984
1985
1986
1987
1988
Year
Peer Groups:
Small Transit Systems
Small City Transit Systems

Table 102.
Cost Effectiveness Performance Profile
(Passenger Revenue/Total Operating Expense)

W A C O

Peer Group: Small Transit Systems

	1976	1977	1978	1979	1980	1981	1982	1983	1984	1985	1986	1987	1988
Transit Agency Value	.61	.38	.35	.31	.37	.27	.29	.28	.27	.24	.26	.24	.23
Peer Group Mean	.51	.48	.39	.34	.34	.33	.33	.33	.33	.30	.29	.27	.27
Standard Score	.36	-.40	-.27	-.18	.19	-.33	-.31	-.34	-.41	-.50	-.26	-.23	-.26

Peer Group: Small City Transit Systems

	1976	1977	1978	1979	1980	1981	1982	1983	1984	1985	1986	1987	1988
Transit Agency Value	.61	.38	.35	.31	.37	.27	.29	.28	.27	.24	.26	.24	.23
Peer Group Mean	.49	.46	.39	.34	.34	.33	.34	.34	.34	.31	.29	.28	.28
Standard Score	.44	-.37	-.28	-.18	.20	-.36	-.38	-.39	-.48	-.60	-.34	-.31	-.33

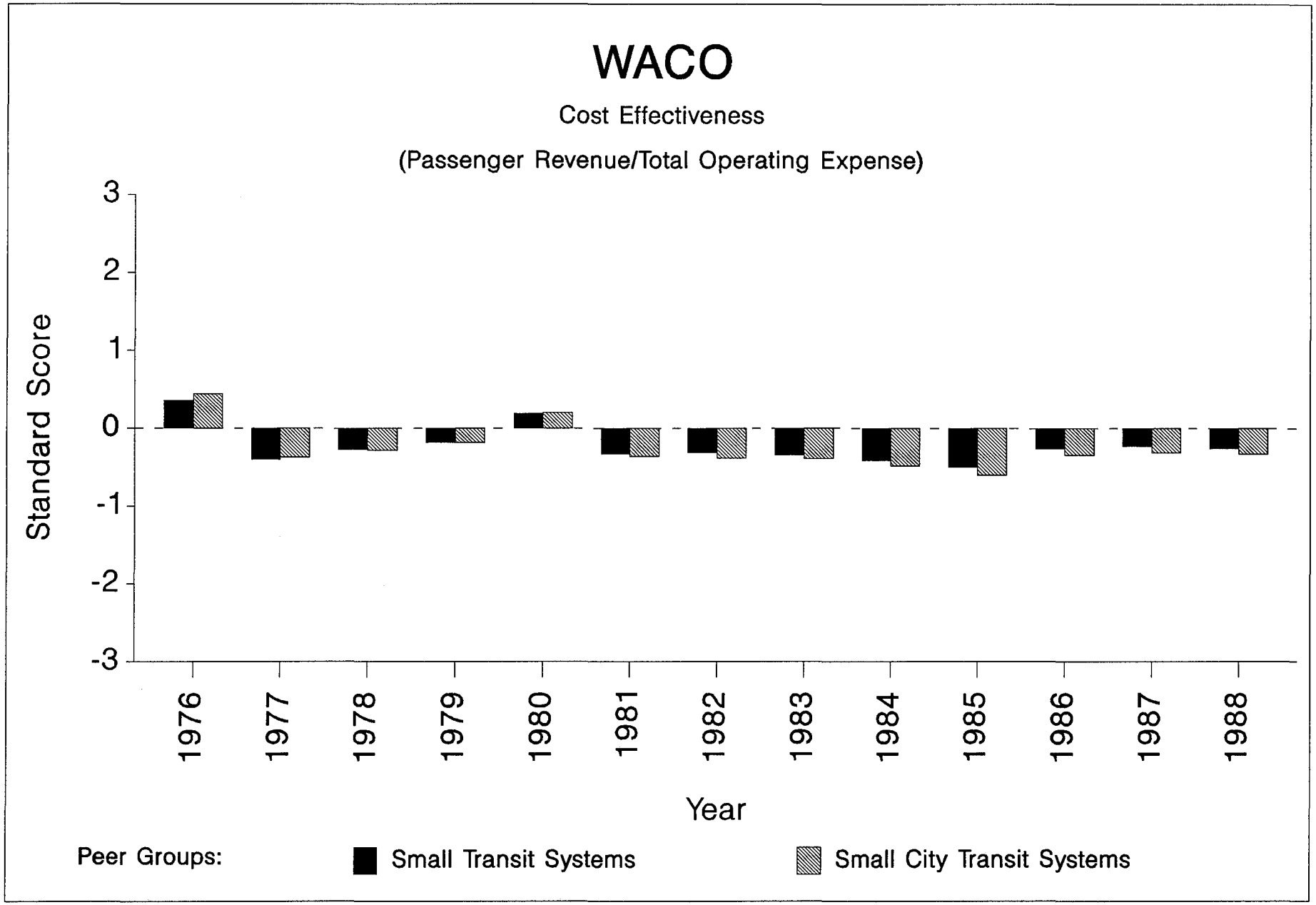

WACO
Cost Effectiveness
(Passenger Revenue/Total Operating Expense)
Standard Score
3
2
1
0
-1
-2
-3
1976
1977
1978
1979
1980
1981
1982
1983
1984
1985
1986
1987
1988
Year
Peer Groups:
Small Transit Systems
Small City Transit Systems

Table 103.
Labor Efficiency Performance Profile
(Total Vehicle Hours/Average Number of Employees)

W A C O

Peer Group: Small Transit Systems

	1976	1977	1978	1979	1980	1981	1982	1983	1984	1985	1986	1987	1988
Transit Agency Value	----	.107	.112	.115	.111	.112	.100	.101	.104	.099	.105	.107	.116
Peer Group Mean	----	.131	.140	.129	.125	.122	.131	.122	.123	.124	.122	.116	.119
Standard Score	----	-1.50	-1.14	-.36	-.50	-.34	-.80	-.73	-.69	-1.05	-.87	-.79	-.24

Peer Group: Small City Transit Systems

	1976	1977	1978	1979	1980	1981	1982	1983	1984	1985	1986	1987	1988
Transit Agency Value	----	.107	.112	.115	.111	.112	.100	.101	.104	.099	.105	.107	.116
Peer Group Mean	----	.130	.139	.128	.124	.121	.128	.120	.121	.123	.121	.116	.119
Standard Score	----	-1.47	-1.12	-.36	-.49	-.34	-.77	-.71	-.66	-1.05	-.83	-.80	-.26

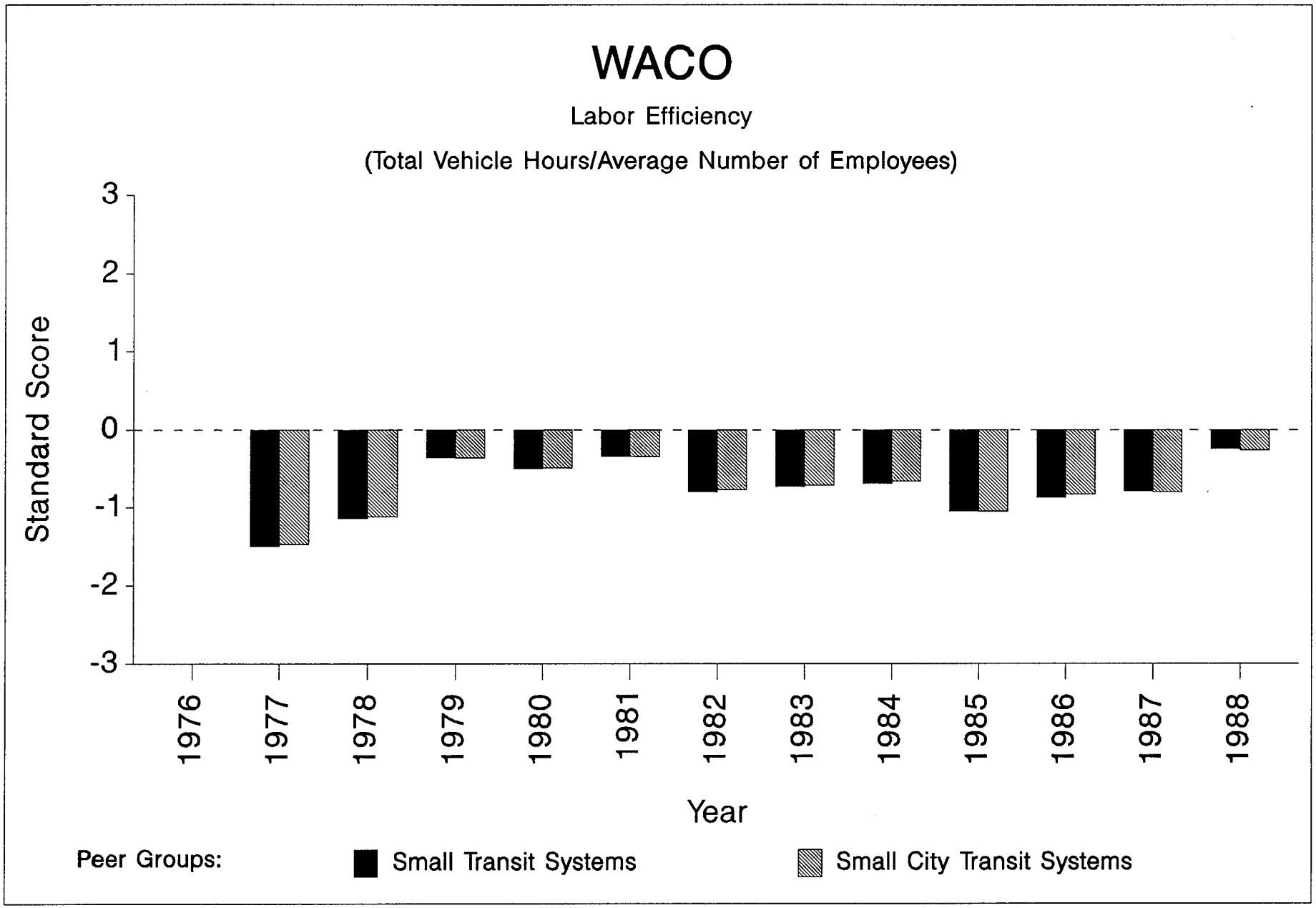

WACO
Labor Efficiency
(Total Vehicle Hours/Average Number of Employees)
Standard Score
3
2
1
0
-1
-2
-3
1976
1977
1978
1979
1980
1981
1982
1983
1984
1985
1986
1987
1988
Year
Peer Groups:
Small Transit Systems
Small City Transit Systems

Table 104.
Vehicle Efficiency Performance Profile
(Total Vehicle Miles/Average Number of Buses on Regular Routes)

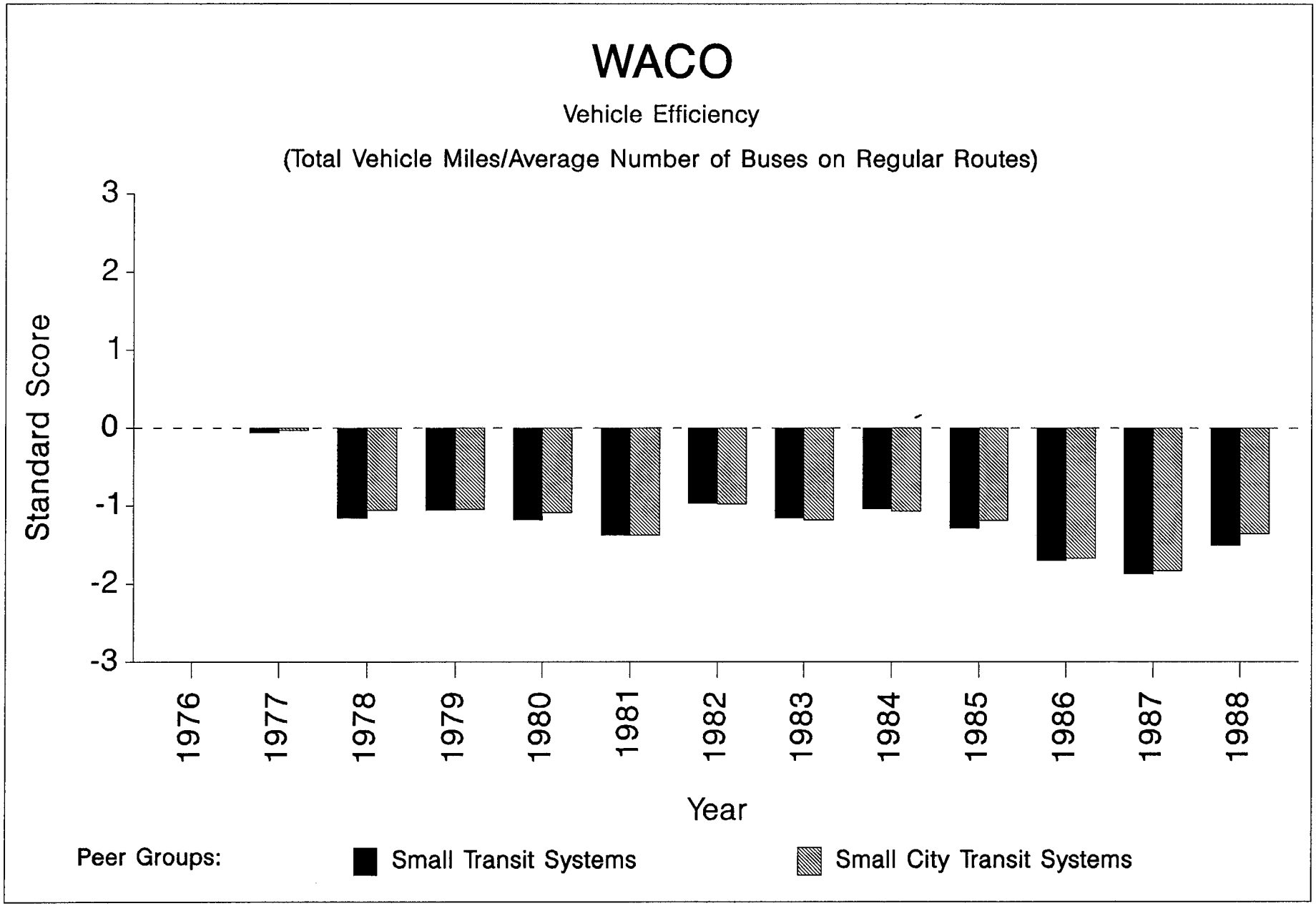
W A C O

Peer Group: Small Transit Systems

	1976	1977	1978	1979	1980	1981	1982	1983	1984	1985	1986	1987	1988
Transit Agency Value	—	4.17	3.71	3.39	3.66	3.40	3.47	3.51	3.51	3.50	3.47	3.36	3.68
Peer Group Mean	—	4.22	4.66	4.51	4.59	4.51	4.37	4.46	4.45	4.54	4.45	4.44	4.65
Standard Score	—	-.06	-1.16	-1.06	-1.18	-1.38	-.97	-1.16	-1.04	-1.29	-1.70	-1.87	-1.51

Peer Group: Small City Transit Systems

	1976	1977	1978	1979	1980	1981	1982	1983	1984	1985	1986	1987	1988
Transit Agency Value	—	4.17	3.71	3.39	3.66	3.40	3.47	3.51	3.51	3.50	3.47	3.36	3.68
Peer Group Mean	—	4.19	4.58	4.45	4.52	4.47	4.34	4.43	4.43	4.47	4.41	4.40	4.58
Standard Score	—	-.03	-1.06	-1.05	-1.09	-1.38	-.98	-1.18	-1.07	-1.19	-1.67	-1.83	-1.36


WACO
Vehicle Efficiency
(Total Vehicle Miles/Average Number of Buses on Regular Routes)
Standard Score
3
2
1
0
-1
-2
-3
1976
1977
1978
1979
1980
1981
1982
1983
1984
1985
1986
1987
1988
Year
Peer Groups:
Small Transit Systems
Small City Transit Systems

WICHITA FALLS

Table 105.
Transit System Statistical Profile

WICHITA FALLS

	1976	1977	1978	1979	1980	1981	1982	1983	1984	1985	1986	1987	1988
Total Passengers	308,583	285,886	257,901	273,697	309,038	273,035	279,846	231,956	218,114	209,784	192,030	167,084	159,677
Total Vehicle Miles	291,010	284,615	291,765	277,483	291,095	284,219	273,326	298,506	281,271	274,723	277,831	296,166	295,703
Total Vehicle Hours	-	20,559	20,989	20,163	20,957	20,303	35,425	20,442	19,376	19,315	19,902	19,968	20,505
Average No. Buses on Regular Routes	-	8	8	8	8	8	10	9	9	8	7	8	8
Average No. Employees	-	16	17	17	17	17	18	17	16	16	16	16	16
Total Operating Revenue ($)	111,836	122,526	113,356	115,929	129,328	114,068	113,525	163,022	156,135	156,790	154,829	141,913	140,950
Passenger Revenue ($)	108,578	120,268	110,578	113,235	126,415	111,672	113,525	163,022	156,135	156,790	154,829	141,913	140,950
Total Operating Expense ($)	202,351	221,323	271,584	278,095	356,989	373,629	369,918	385,089	439,005	427,370	444,091	471,342	464,006
Net Public Operating Cost ($)	90,515	98,797	158,228	162,166	227,661	259,561	256,393	222,067	282,870	270,580	289,262	329,429	323,056
Total Public Capital Cost ($)	-	-	-	-	-	616,228	185,992	-	-	-	450,081	-	-
Total Public Expense ($)	90,515	98,797	158,228	162,166	227,661	875,789	442,385	222,067	282,870	270,580	739,343	329,429	323,056

Source: Texas Transit Statistics

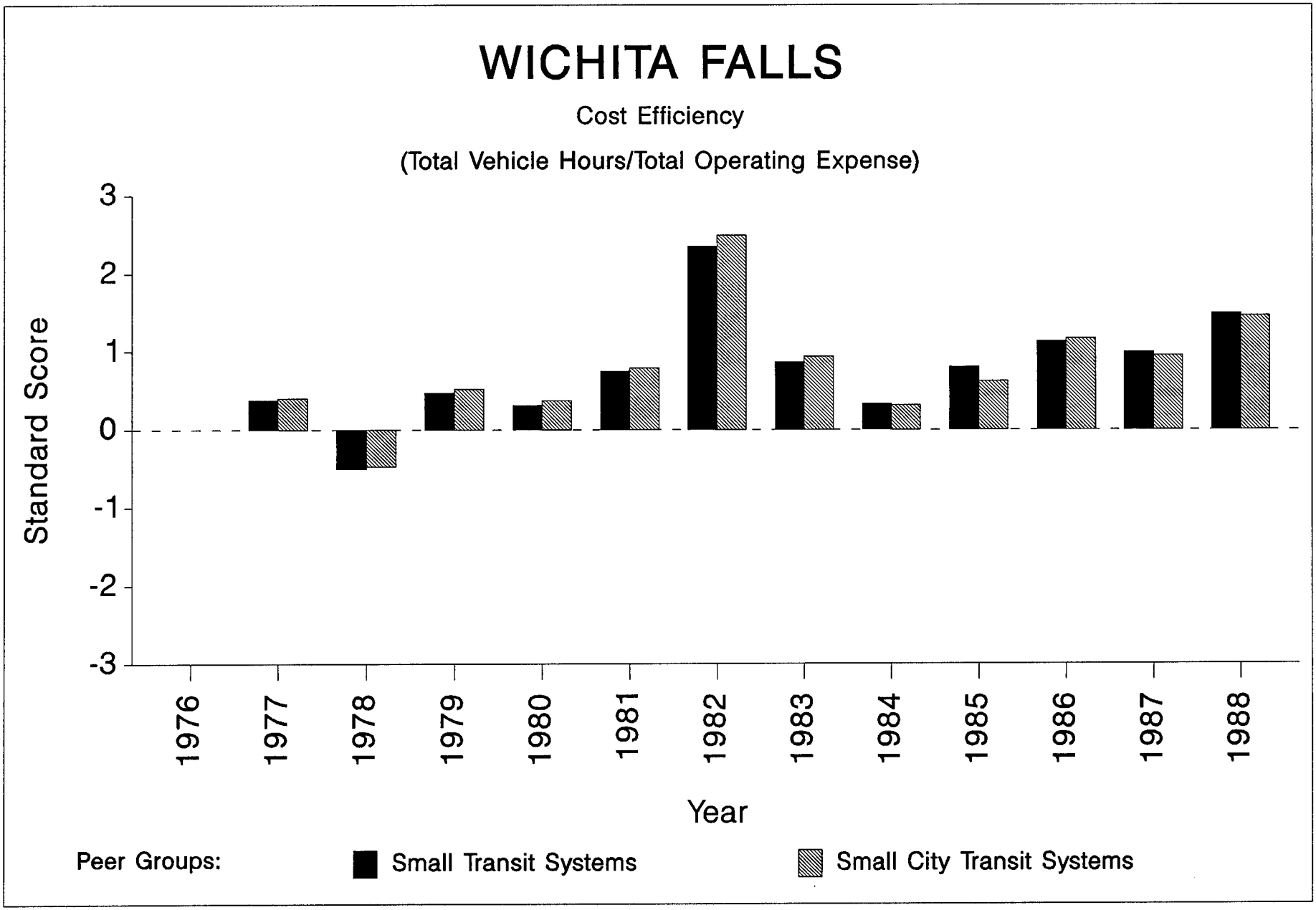

WICHITA FALLS
Cost Efficiency
(Total Vehicle Hours/Total Operating Expense)
Standard Score
3
2
1
0
-1
-2
-3
1976
1977
1978
1979
1980
1981
1982
1983
1984
1985
1986
1987
1988
Year
Peer Groups:
Small Transit Systems
Small City Transit Systems

Table 107.
Service Effectiveness Performance Profile
(Total Passengers/Total Vehicle Hours)

WICHITA FALLS

Peer Group: Small Transit Systems

	1976	1977	1978	1979	1980	1981	1982	1983	1984	1985	1986	1987	1988
Transit Agency Value	----	13.91	12.29	13.57	14.75	13.45	7.90	11.35	11.26	10.86	9.65	8.37	7.79
Peer Group Mean	----	19.20	18.49	20.03	20.72	21.44	19.80	19.75	20.70	19.66	19.82	19.34	19.12
Standard Score	----	-.75	-.80	-.75	-.84	-1.16	-1.70	-1.34	-1.30	-1.20	-1.34	-1.33	-1.18

Peer Group: Small City Transit Systems

	1976	1977	1978	1979	1980	1981	1982	1983	1984	1985	1986	1987	1988
Transit Agency Value	----	13.91	12.29	13.57	14.75	13.45	7.90	11.35	11.26	10.86	9.65	8.37	7.79
Peer Group Mean	----	20.85	19.69	21.05	22.20	23.10	22.06	20.55	21.69	20.79	20.79	20.23	20.02
Standard Score	----	-.85	-.90	-.85	-.90	-1.13	-1.41	-1.41	-1.37	-1.26	-1.41	-1.42	-1.28

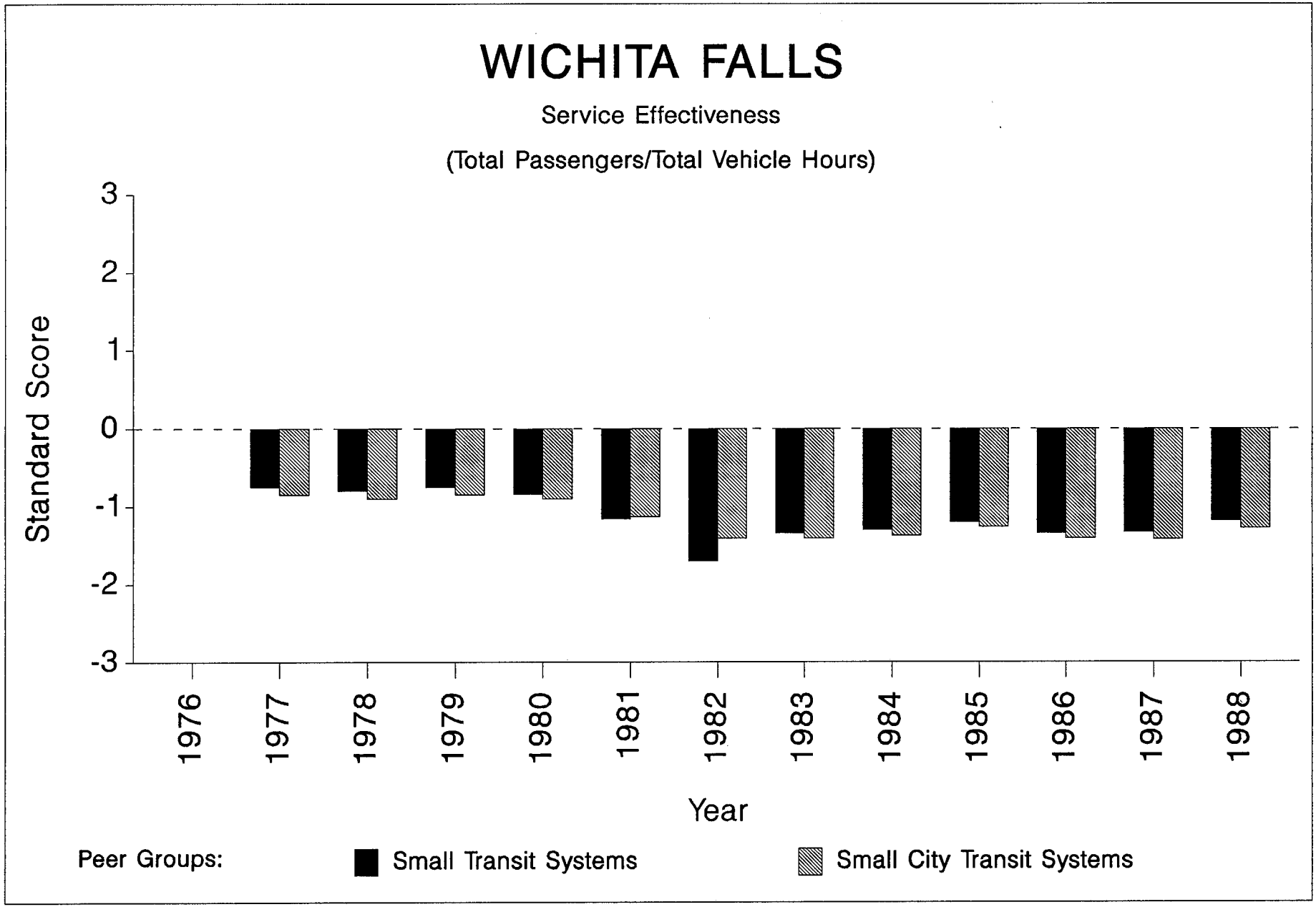

WICHITA FALLS
Service Effectiveness
(Total Passengers/Total Vehicle Hours)
Standard Score
3
2
1
0
-1
-2
-3
1976
1977
1978
1979
1980
1981
1982
1983
1984
1985
1986
1987
1988
Year
Peer Groups:
Small Transit Systems
Small City Transit Systems

Table 108.
Cost Effectiveness Performance Profile
(Passenger Revenue/Total Operating Expense)

WICHITA FALLS

Peer Group: Small Transit Systems

	1976	1977	1978	1979	1980	1981	1982	1983	1984	1985	1986	1987	1988
Transit Agency Value	.54	.54	.41	.41	.35	.30	.31	.42	.36	.37	.35	.30	.30
Peer Group Mean	.51	.48	.39	.34	.34	.33	.33	.33	.33	.30	.29	.27	.27
Standard Score	.10	.29	.12	.48	.12	-.17	-.18	.63	.19	.59	.55	.29	.26

Peer Group: Small City Transit Systems

	1976	1977	1978	1979	1980	1981	1982	1983	1984	1985	1986	1987	1988
Transit Agency Value	.54	.54	.41	.41	.35	.30	.31	.42	.36	.37	.35	.30	.30
Peer Group Mean	.49	.46	.39	.34	.34	.33	.34	.34	.34	.31	.29	.28	.28
Standard Score	.17	.35	.13	.51	.12	-.19	-.25	.62	.14	.43	.50	.22	.21

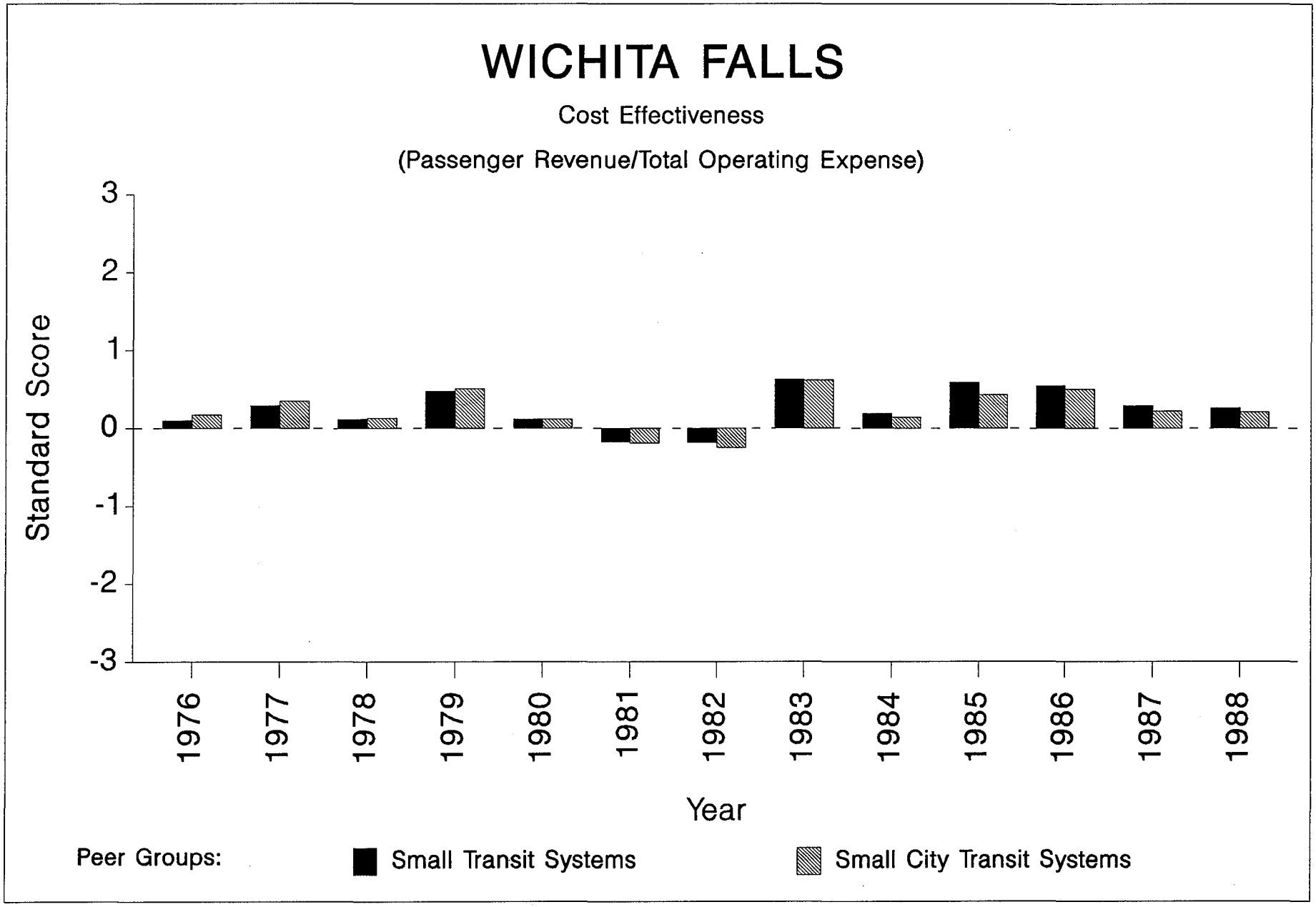

WICHITA FALLS
Cost Effectiveness
(Passenger Revenue/Total Operating Expense)
Standard Score
3
2
1
0
-1
-2
-3
1976
1977
1978
1979
1980
1981
1982
1983
1984
1985
1986
1987
1988
Year
Peer Groups:
Small Transit Systems
Small City Transit Systems

Table 109.
Labor Efficiency Performance Profile
(Total Vehicle Hours/Average Number of Employees)

WICHITA FALLS

Peer Group: Small Transit Systems

	1976	1977	1978	1979	1980	1981	1982	1983	1984	1985	1986	1987	1988
Transit Agency Value	----	.128	.123	.119	.123	.119	.197	.120	.121	.121	.124	.125	.128
Peer Group Mean	----	.131	.140	.129	.125	.122	.131	.122	.123	.124	.122	.116	.119
Standard Score	----	-.17	-.67	-.26	-.06	-.08	1.74	-.06	-.06	-.14	.12	.73	.76

Peer Group: Small City Transit Systems

	1976	1977	1978	1979	1980	1981	1982	1983	1984	1985	1986	1987	1988
Transit Agency Value	----	.128	.123	.119	.123	.119	.197	.120	.121	.121	.124	.125	.128
Peer Group Mean	----	.130	.139	.128	.124	.121	.128	.120	.121	.123	.121	.116	.119
Standard Score	----	-.09	-.64	-.26	-.03	-.06	1.85	-.01	-.01	-.10	.19	.80	.79

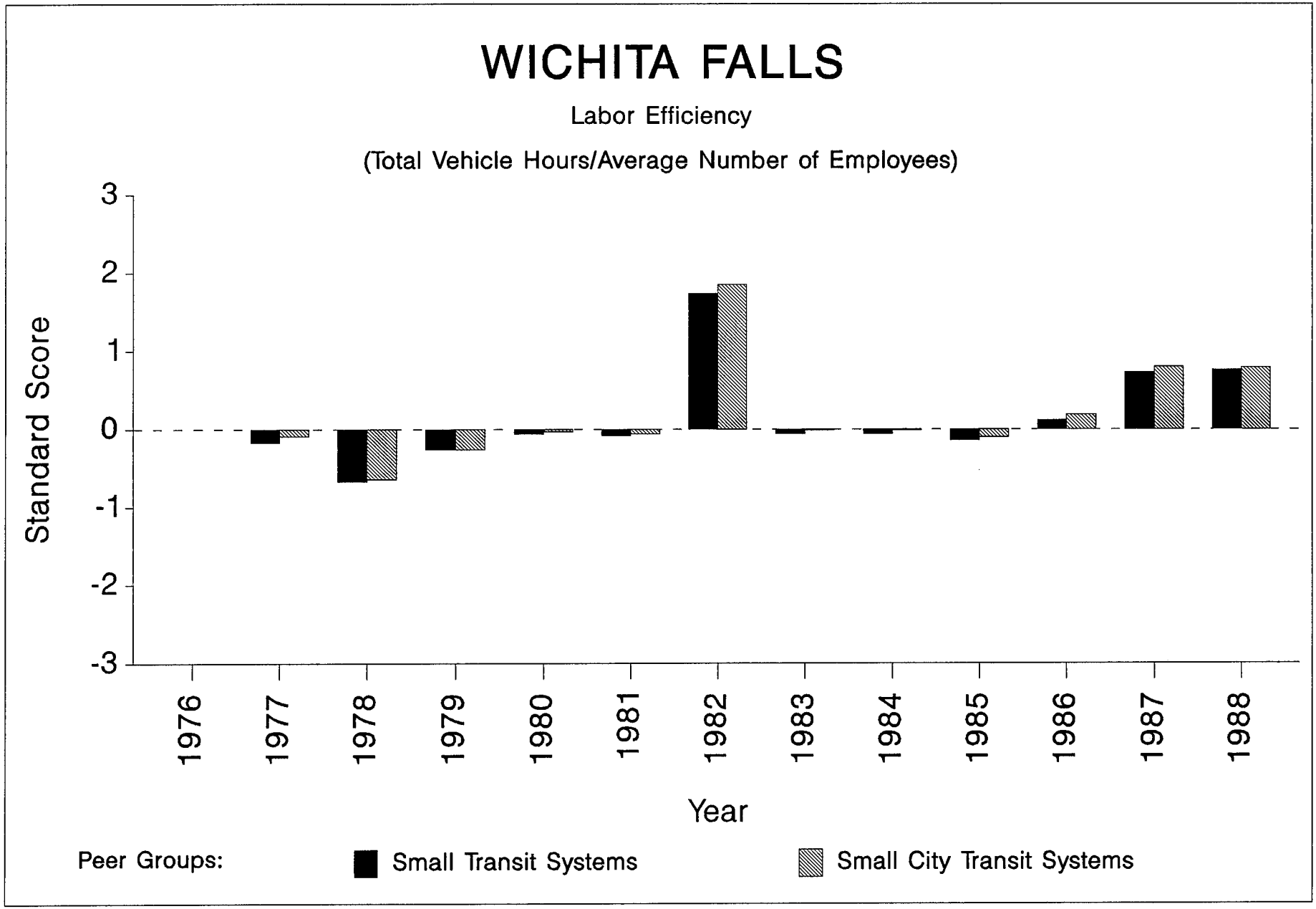

WICHITA FALLS
Labor Efficiency
(Total Vehicle Hours/Average Number of Employees)
Standard Score
3
2
1
0
-1
-2
-3
1976
1977
1978
1979
1980
1981
1982
1983
1984
1985
1986
1987
1988
Year
Peer Groups:
Small Transit Systems
Small City Transit Systems

Table 110.
Vehicle Efficiency Performance Profile
(Total Vehicle Miles/Average Number of Buses on Regular Routes)

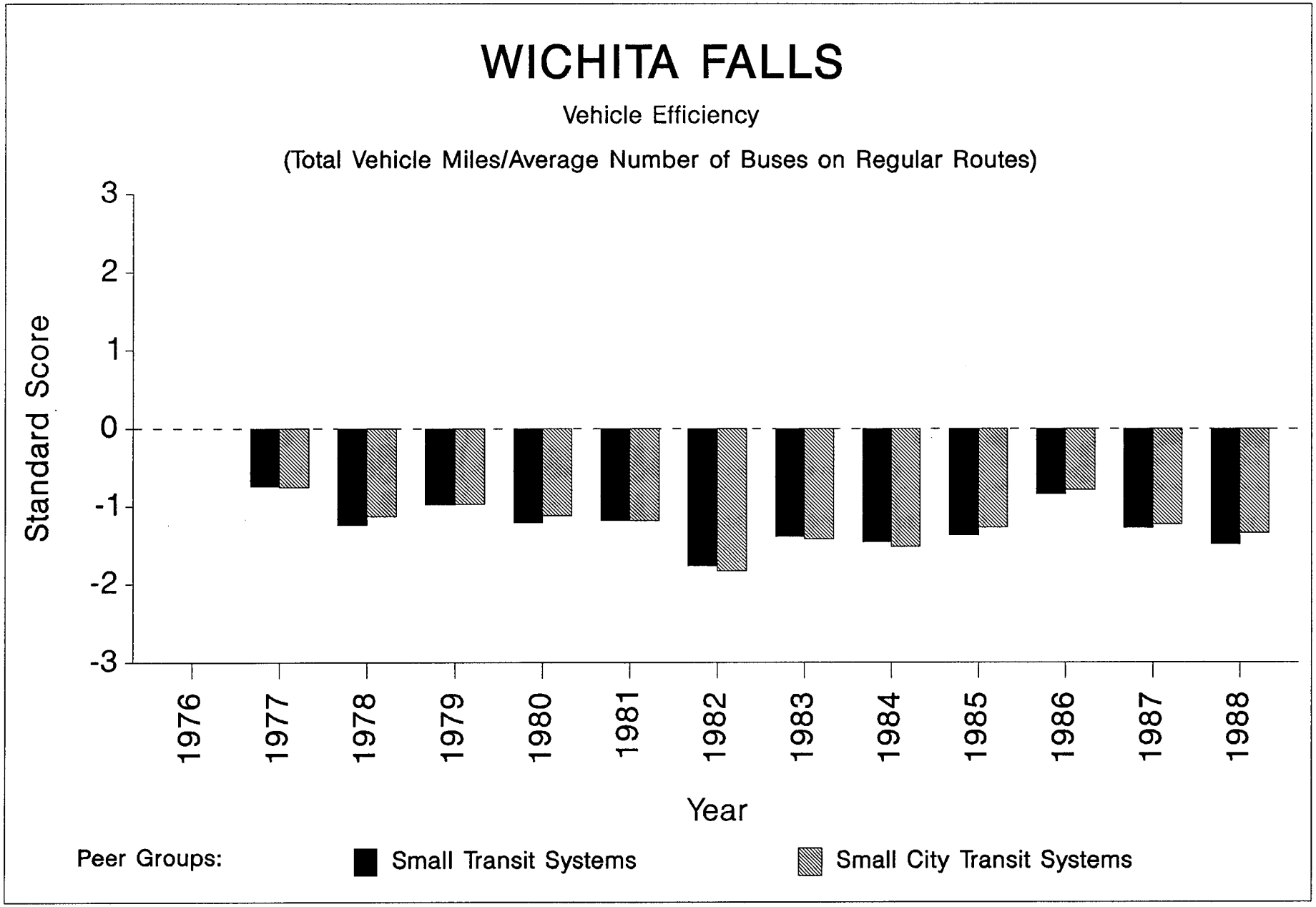
WICHITA FALLS

Peer Group: Small Transit Systems

	1976	1977	1978	1979	1980	1981	1982	1983	1984	1985	1986	1987	1988
Transit Agency Value	----	3.56	3.65	3.47	3.64	3.55	2.73	3.32	3.13	3.43	3.97	3.70	3.70
Peer Group Mean	----	4.22	4.66	4.51	4.59	4.51	4.37	4.46	4.45	4.54	4.45	4.44	4.65
Standard Score	----	-.74	-1.24	-.98	-1.21	-1.18	-1.77	-1.39	-1.46	-1.37	-.84	-1.28	-1.49

Peer Group: Small City Transit Systems

	1976	1977	1978	1979	1980	1981	1982	1983	1984	1985	1986	1987	1988
Transit Agency Value	----	3.56	3.65	3.47	3.64	3.55	2.73	3.32	3.13	3.43	3.97	3.70	3.70
Peer Group Mean	----	4.19	4.58	4.45	4.52	4.47	4.34	4.43	4.43	4.47	4.41	4.40	4.58
Standard Score	----	-.75	-1.13	-.97	-1.12	-1.18	-1.83	-1.42	-1.52	-1.27	-.78	-1.23	-1.34


WICHITA FALLS
Vehicle Efficiency
(Total Vehicle Miles/Average Number of Buses on Regular Routes)
Standard Score
3
2
1
0
-1
-2
-3
1976
1977
1978
1979
1980
1981
1982
1983
1984
1985
1986
1987
1988
Year
Peer Groups:
Small Transit Systems
Small City Transit Systems

CHAPTER 4
RECOMMENDATIONS

As indicated in the previous chapter, sufficient data are available from the published Texas Transit Statistics to develop transit profiles in five different performance categories (cost efficiency, service effectiveness, cost effectiveness, labor efficiency, and vehicle efficiency). At the present time, there is not sufficient data to calculate a system's performance in the areas of maintenance efficiency and safety. Therefore, in order to improve the data base and thus the transit profiles, it is recommended that D-11 begin collecting the data necessary to evaluate these items. Beginning in January 1990, it is suggested that transit operators be requested to report figures on maintenance expense and collision accidents. With this information, the following two measures of maintenance efficiency and safety can be calculated:

$$\text{Maintenance Efficiency} = \frac{\text{Total Vehicle Miles}}{\text{Total Maintenance Expense}}$$

$$\text{Safety} = \frac{\text{Total Vehicle Miles}}{\text{Total Collision Accidents}}$$

Transit agencies are currently reporting figures on maintenance expense and collision accidents to other sources (UMTA and APTA), so including these items on the monthly reporting forms sent out by D-11 would not necessitate any additional data collection efforts on the part of the transit agencies. It is further recommended that the SDHPT begin reporting the data on maintenance employees it is presently collecting in order that one additional measure of maintenance efficiency can be calculated:

$$\text{Maintenance Efficiency} = \frac{\text{Total Vehicle Miles}}{\text{Average Number of Maintenance Employees}}$$

This will enable more rounded and complete transit profiles to be developed in subsequent years.

The transit profiles could also be expanded to include measures of service quality, such as on-time performance and service reliability, as these represent very important dimensions of transit performance.

In addition, the State may also want to consider establishing additional peer groups for the purpose of comparing transit system performance. For example, Census data (number of vehicles per household, number of households below poverty level, and population density) might be used in conjunction with the Texas Transit Statistics in determining additional peer groupings. Transit systems operating in border cities (with high transit dependency) might also be compared separately from transit systems operating in other parts of the state; transit systems serving single cities might be compared separately from transit system operations which are regional in scope.

It has further been suggested that consideration should be given to categorizing systems by type of service provided. In this way, transit systems providing predominately fixed-route service would be compared separately from those which provide a large share of paratransit or demand responsive service. Yet another idea for the large transit systems is to separate data by major type of service categories. These categories include: 1) local; 2) express/park-and-ride (suburban); 3) paratransit (demand responsive); and 4) charter. The reason for this is that the very different performance characteristics of each type of service type can become obscured or distorted when mixed together. It should be noted, however, that implementation of this idea would create additional data reporting requirements for the large operators (several of which feel they already have too many).

In addition to the graphic representations of individual transit agency standard scores, graphs similar to that shown in Figure 2 could also be developed to summarize peer group performance. As shown in Figure 2, the actual transit agency values (for Austin, Dallas, Houston and San Antonio) are plotted along with the average (mean) for the peer group (large transit systems). This graph summarizes: 1) how a particular agency compares

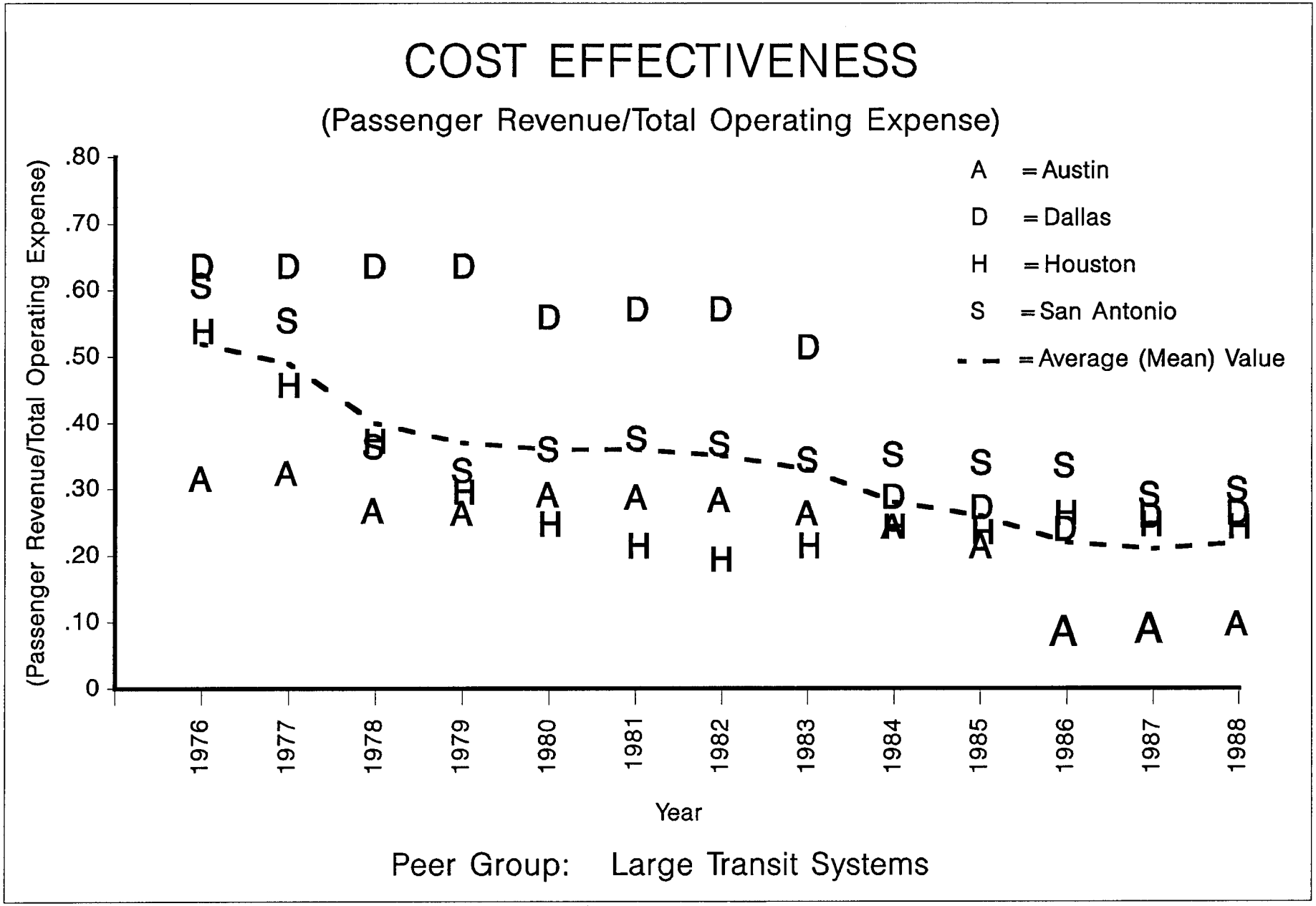

COST EFFECTIVENESS
(Passenger Revenue/Total Operating Expense)
(Passenger Revenue/Total Operating Expense)
.80
.70
.60
.50
.40
.30
.20
.10
0
A = Austin
D = Dallas
H = Houston
S = San Antonio
= Average (Mean) Value
1976
1977
1978
1979
1980
1981
1982
1983
1984
1985
1986
1987
1988
Year
Peer Group: Large Transit Systems

Figure 2.

to others within the peer group; 2) how it compares to the average for the group; and 3) historical trends in performance.

In summary, the transit profiles developed as part of this study should help transit and planning agencies to monitor trends and identify strengths and weaknesses in various areas of overall transit system performance. Agencies can use this information to help establish goals or minimum levels of performance and a timetable for achieving these levels of performance.

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2. de la Rocha, Olivia; Mary E. Brenner; and Gordon J. Fielding. The Irvine Performance Evaluation Method: An Instructional Manual for Use in Conducting Internal Evaluations of Transit Performance. Irvine, California: June 1984.

3. Fielding, Gordon J. and Lee Hansen. Determinants of Superior Performance in Public Transit. Irvine, California: August, 1987.

APPENDIX
TEXAS TRANSIT SYSTEM ADDRESS LIST
JANUARY 1990

ABILENE:

Debbie Ruggles
General Manager
Abilene Transit System
1189 South 2nd St.
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(915) 676-6403

AMARILLO:

Wayne Pelton
Manager
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