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16. Abstract The intercity bus industry in the United States has been in a decline since the end of World War II. The decline is attributed to the increase in the use of private automobiles and competition for intercity passengers by airlines. Passage of the Bus Regulatory Reform Act in 1982 allowed bus companies to exit from unprofitable routes, resulting in a decrease in the number of places served by intercity buses. Despite the exit from unprofitable routes, bus companies in the United States still have not enjoyed the profitability they had during earlier years. The Intermodal Surface Transportation Efficiency Act of 1991 mandates that states spend a certain portion of their Section 18 (rural transit) funds on intercity bus purposes. This mandate can be waived by the governor of a state if the governor certifies that intercity bus needs in the state are being "adequately met."

An informal telephone survey of nine states known to have active intercity bus programs revealed that the states were planning to use their Section 18(i) funds on instituting vehicle loan programs, providing route operating subsidies, helping with capital costs, placing highway signs, printing intercity bus brochures, and making terminal improvements. Two surveys were performed to elicit the opinions and demographic characteristics of both the Texas general public and intercity bus riders. A survey of bus station characteristics was performed concurrently with the bus rider survey. A final survey solicited comments from representatives of Texas bus companies. Government-owned multimodal transportation facilities was a frequently cited improvement that would serve two purposes: first, they would streamline the transfer from one mode of transportation to another, and second, they would eliminate the reliance the smaller bus companies have on terminal facilities owned or operated by larger companies. Operating subsidies for rural routes and billboards or highway signs advertising intercity bus service were other suggestions mentioned by bus company representatives.

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INTERCITY BUS INDUSTRY IN TEXAS

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IMPLEMENTATION STATEMENT

The information contained in this report will provide information to Texas Department of Transportation (TxDOT) on the current status of the intercity bus industry in Texas. The report provides historical information on both the national and state industry, presents the locations currently with and without an intercity bus stop, and discusses the programs funded in other states. It also reports on findings from surveys that requested attitudes toward and/or characteristics of the industry from the general population (household survey), from bus riders (on-board bus rider survey), and from the bus companies (anonymous mailout survey). The information and data contained in the report provide a definition of the current state of the industry and can be used to assist the department in evaluating Texas' intercity transportation needs.

DISCLAIMER

The contents of this report reflect the views of the authors who are responsible for the facts and accuracy of the data presented herein. The contents do not necessarily reflect the official views or policies of the Texas Department of Transportation or the Federal Highway Administration. This report does not constitute a standard, specification, or regulation. This report is not intended for construction, bidding, or permit purposes. This report was prepared by Kay Fitzpatrick (PA-037730-E), Karen Kuenzer, Torsten Lienau, and Tom Urbanik (TX-42384).

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SUMMARY

The intercity bus industry in the United States has been in a decline since the end of World War II. The decline is attributed to the increase in the use of private automobiles and competition for intercity passengers by airlines. Passage of the Bus Regulatory Reform Act in 1982 allowed bus companies to exit from unprofitable routes, resulting in a decrease in the number of places served by intercity buses. Despite the exit from unprofitable routes, bus companies in the United States still have not enjoyed the profitability they had during earlier years. The Intermodal Surface Transportation Efficiency Act of 1991 mandates that states spend a certain portion of their Section 18 (rural transit) funds on intercity bus purposes. This mandate can be waived by the governor of a state if the governor certifies that intercity bus needs in the state are being "adequately met."

An informal telephone survey of nine states known to have active intercity bus programs revealed that the states were planning to use their Section 18(i) funds on instituting vehicle loan programs, providing route operating subsidies, helping with capital costs, placing highway signs, printing intercity bus brochures, and making terminal improvements. Two surveys were performed to elicit the opinions and demographic characteristics of both the Texas general public and intercity bus riders. A survey of bus station characteristics was performed concurrently with the bus rider survey. A final survey solicited comments from representatives of Texas bus companies. Government-owned multimodal transportation facilities was a frequently cited improvement that would serve two purposes: first, they would streamline the transfer from one mode of transportation to another, and second, they would eliminate the reliance the smaller bus companies have on terminal facilities owned or operated by larger companies. Operating subsidies for rural routes and billboards or highway signs advertising intercity bus service were other suggestions mentioned by bus company representatives.

CHAPTER 1
INTRODUCTION

Intercity bus operations began in the early 1910s and reached their peak during World War II. Since that time the industry has experienced ridership losses, higher operating costs, and in many cases, declining profits. Competition from increased private automobile ownership, from other intercity transportation modes (air and rail), and the decrease in rural population have all contributed to the industry's decline.

The industry was regulated under the Motor Carrier Act of 1935 until 1982, when the Bus Regulatory Reform Act (BRRA) was passed. The BRRA allowed companies to eliminate service to some areas and to independently set regular route or charter rates (when they were not considered predatory or discriminatory relative to other rates). This relief, however, did not reverse the decline of the industry; in fact, bus companies nationwide have in many cases actually become less profitable, and fewer places are being served by the intercity bus.

In response to the continuing decline in intercity bus service, the federal government has now required that a percentage of each state's public transportation funds be spent on a program for the development and support of intercity bus transportation, unless the governor of the state certifies that the intercity bus needs are being "adequately met." This requirement was presented in Section 3023 of the Intermodal Surface Transportation Efficiency Act (ISTEA) of 1991. Many states are proposing to use these funds for intermodal terminals, vehicle leasing programs, highway signs identifying intercity bus stops, operating subsidies, and bus service brochures. Several states' spokespersons anticipate that the funds made available by ISTEA will be of great benefit to both the intercity bus companies and the passengers who use their services.

In order for Texas to determine whether intercity bus needs are currently being adequately met, information on the current status of the industry is needed. The status of the intercity bus industry in Texas was last examined in 1981 (1), which was prior to regulatory reform of the industry. That study concluded that the Texas intercity bus industry was somewhat healthier than the national industry, and that the industry had matured and ridership

levels were stable. The study also concluded that regulatory reform was unlikely to solve the basic problems of a mature industry.

STUDY SCOPE AND OBJECTIVES

The primary intent of this study was to develop information and data that would provide a definition of the current state of the intercity bus industry in Texas. The following objectives were addressed in the study:

1) Update the historical information and trends of the intercity bus industry in the United States and Texas since 1980.

2) Document current and proposed efforts being made to address intercity transportation needs by federal and state governments.

3) Define the characteristics of the existing intercity bus service in Texas.

ORGANIZATION OF REPORT

This report presents information on the intercity bus industry using the following chapters:

1. **INTRODUCTION** -- includes an overview of the intercity bus industry, the list of objectives for the study, and a description of the information included in the report that addresses the study's objectives.
2. **NATIONAL INTERCITY BUS INDUSTRY** -- presents information on the history and trends of the U.S. intercity bus industry.
3. **NATIONAL REGULATIONS** -- presents information on the U.S. regulations or acts that have regulated or influenced the U.S. intercity bus industry.

4. **TEXAS INTERCITY BUS INDUSTRY** -- provides information on the history of the Texas industry, an overview of state regulations, and information on existing bus service in Texas.
5. **OTHER STATES** -- discusses the support other states provided their intercity bus industries prior to ISTEA and programs the states may support with their Section 18(i) funds.
6. **TEXAS INTERCITY BUS HOUSEHOLD SURVEY** -- describes and presents the findings from a survey of the Texas general population.
7. **TEXAS INTERCITY BUS RIDER SURVEY** -- describes and presents the findings from the survey of bus riders.
8. **TEXAS BUS STATION SURVEY** -- includes the findings from a review of the bus stations visited during the bus rider survey.
9. **TEXAS BUS COMPANY SURVEY** -- presents information obtained from a survey of the bus companies operating in Texas.
10. **SUMMARY AND CONCLUSIONS** -- provides a brief review of the issues discussed in this report and presents the conclusions from the study.

REFERENCES -- lists material referenced in the report.

APPENDICES -- contains copies of the survey forms used during the study.

Chapters 2, 3, and 4 provide information for Study Objective 1. They contain the historical information and trends on both the U.S. and Texas bus industries. Current and proposed efforts by other states (Study Objective 2) are discussed in Chapter 5.

The majority of the efforts in this project, as well as the material in this report, was for Study Objective 3, defining the existing intercity bus service characteristics of Texas. Chapter 4 contains information on current bus routes, and which cities and/or counties are served or not served by an intercity bus carrier. Chapters 6 through 9 discuss the findings from four surveys: the household survey that reached predominantly non-bus riders; the bus rider survey that questioned individuals during their bus trips; the bus station survey that recorded the present

conditions of stations visited during the bus rider survey; and the bus company survey that obtained information and insight into the industry and the industry's current situation from those who could be greatly influenced by changes in regulatory and government funding requirements.

CHAPTER 2
NATIONAL INTERCITY BUS INDUSTRY

HISTORY AND DEVELOPMENT

The first reported regular route intercity bus service in the United States began in Minnesota in 1913, when a seven-passenger Hupmobile was used to transport miners between the towns of Hibbing and Alice (2). By 1925, 3,550 companies provided bus service, and by 1926 the number of bus companies peaked at over 4,000 (Figure 1). The decline to 1,800 companies in 1937 is attributed to the outflux of small bus operators during the Depression years. The subsequent rise in the number of companies during World War II was a result of the greater number of passengers generated due to gas rationing and increased military activity (1). That number fell sharply from 1950 to 1975 due to greater use of private automobiles and air travel (1). After 1982, the year of bus regulatory reform, the number of companies rose to

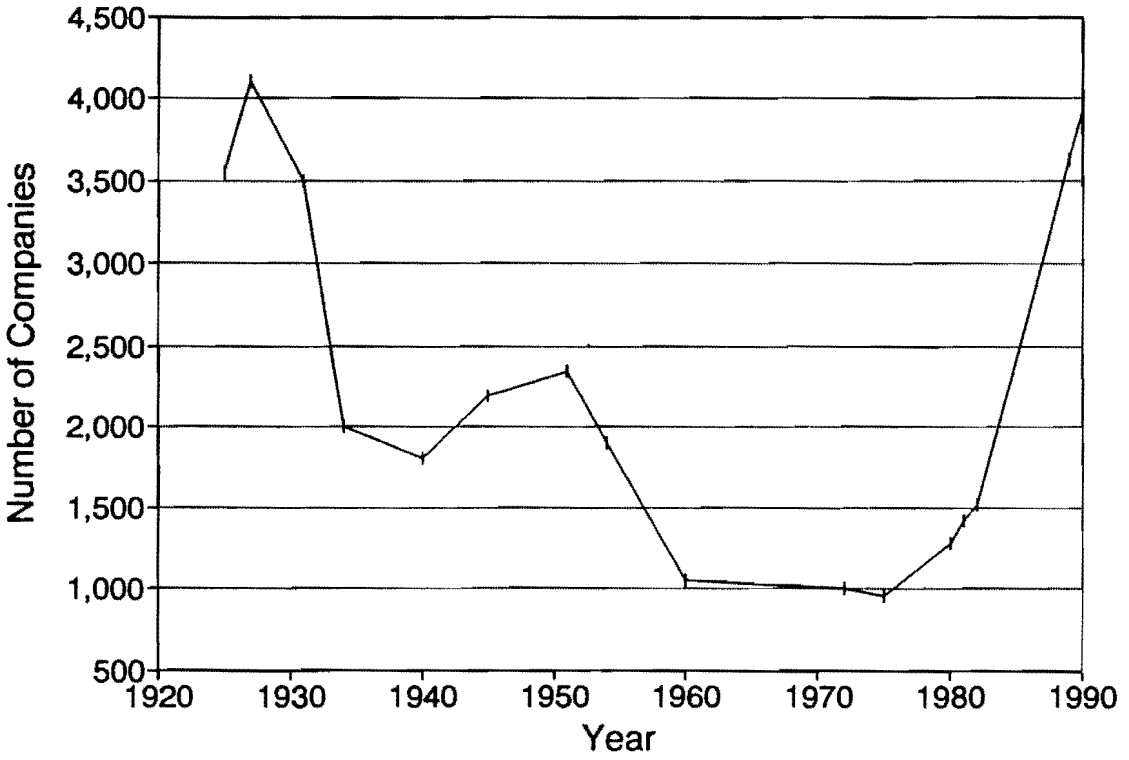


Figure 1. Number of Bus Companies by Year (1,3,4).

record levels. This is probably due to the fact that operators were no longer required to provide regular route service in order to provide charter service. The increase is likely due to charter service providers.

Figure 2 illustrates the number of revenue passengers for the years 1925 to 1990. The number of revenue passengers fluctuated between the years 1925 and 1939 due to the uncertainty caused by the Depression (1). The number of passengers reached a high immediately after World War II due to the increase in travel by military personnel (2). The number dramatically declined during the next fifteen years and has been declining slowly since.

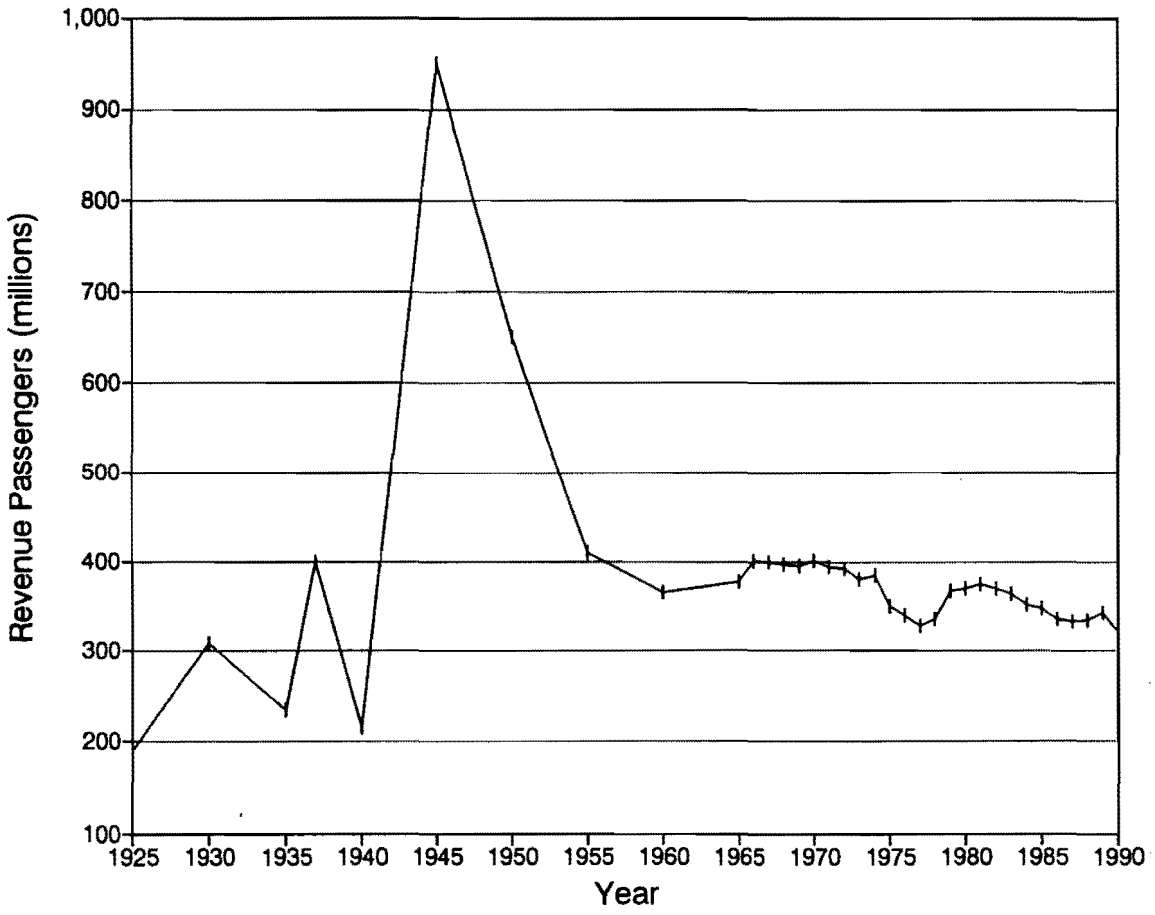


Figure 2. Revenue Passengers by Year (1, 5).

The number of intercity bus passenger-miles as shown in Figure 3 reached a relative maximum after World War II at 27.4 billion (44.1 billion passenger-km). After the elevated post-war activity was over, the number increased through the 1960s and early 1970s because of a longer average trip length (1). The number then remained steady around 26 to 27 billion passenger-miles (41.8 to 43.4 billion passenger-km) per year, and subsequently began dropping after 1982, the year of regulatory reform.

Figure 3. Passenger-Miles (km) by Year (1,5).

NATIONAL TRENDS

Industry Profile

Since 1940, the percentage of passengers carried by rail has dropped nearly 17 percent, from 49 percent in 1940 to 32 percent in 1991 (Figure 4). The percentage of passengers carried by bus has also decreased, dropping 21 percent from 50 percent in 1940 to 29 percent in 1991. Former rail and bus passengers have increasingly been choosing to fly; the percentage of passengers carried by air has risen from 1 percent in 1950 to 39 percent in 1991, surpassing both rail and bus in the year 1985 as the preferred method of intercity travel, excluding the private automobile.

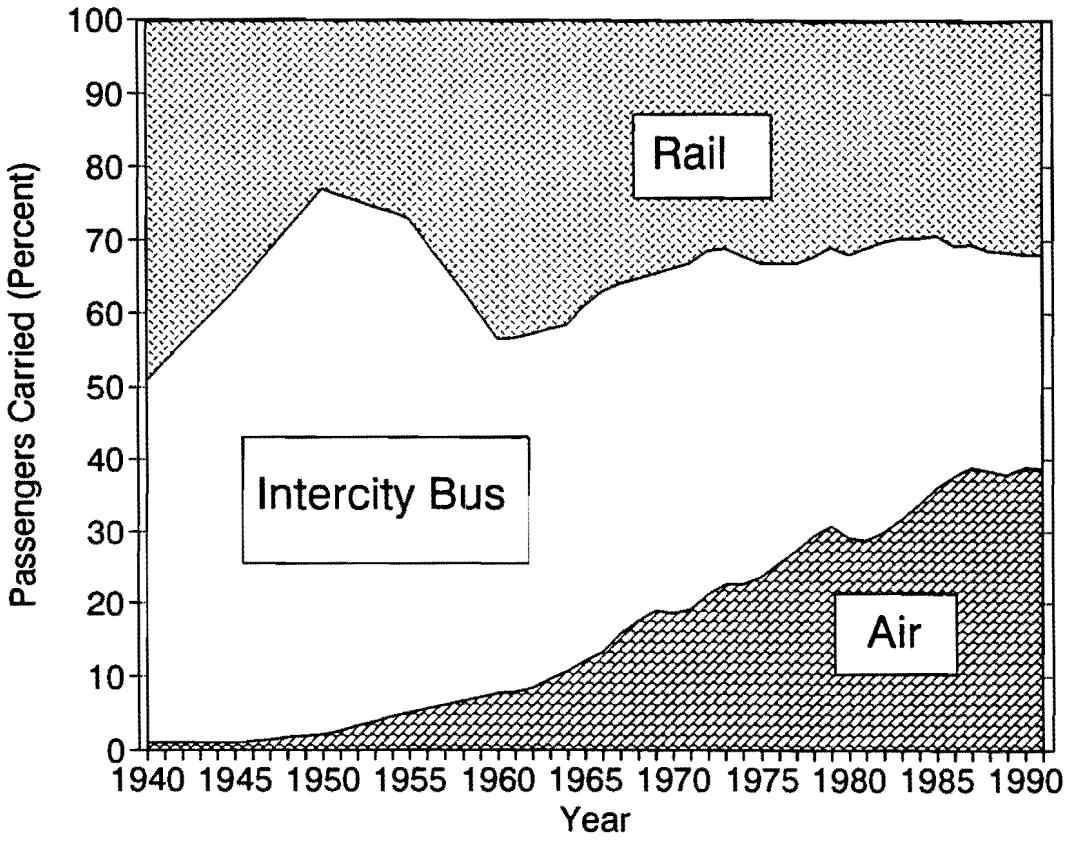


Figure 4. Percent of Passengers Carried by Rail, Intercity Bus, and Air (1,5).

The number of passenger-miles carried by air surpassed that of both rail and bus in the year 1960, and both rail and bus combined by 1965 (Figure 5). Rail carried 24.8 billion passenger-miles (39.9 billion passenger-km) in 1940 as compared to 13.5 billion (21.7 billion passenger-km) in 1991. Buses carried 10.2 billion passenger-miles (16.4 billion passenger-km) in 1940, and 23.5 billion passenger-miles (37.8 billion passenger-km) in 1991. Only 1.2 billion passenger-miles (1.9 billion passenger-km) were carried by air in 1940, rising to 337.5 billion passenger-miles (543.0 billion passenger-km) in 1991. Average trip length creates these great differences in passenger-miles carried: the average trip length by rail in 1990 was 274 miles (441 km), while the average trip length for bus passengers was 138 miles (222 km) and for air passengers 803 miles (1,292 km) (5).

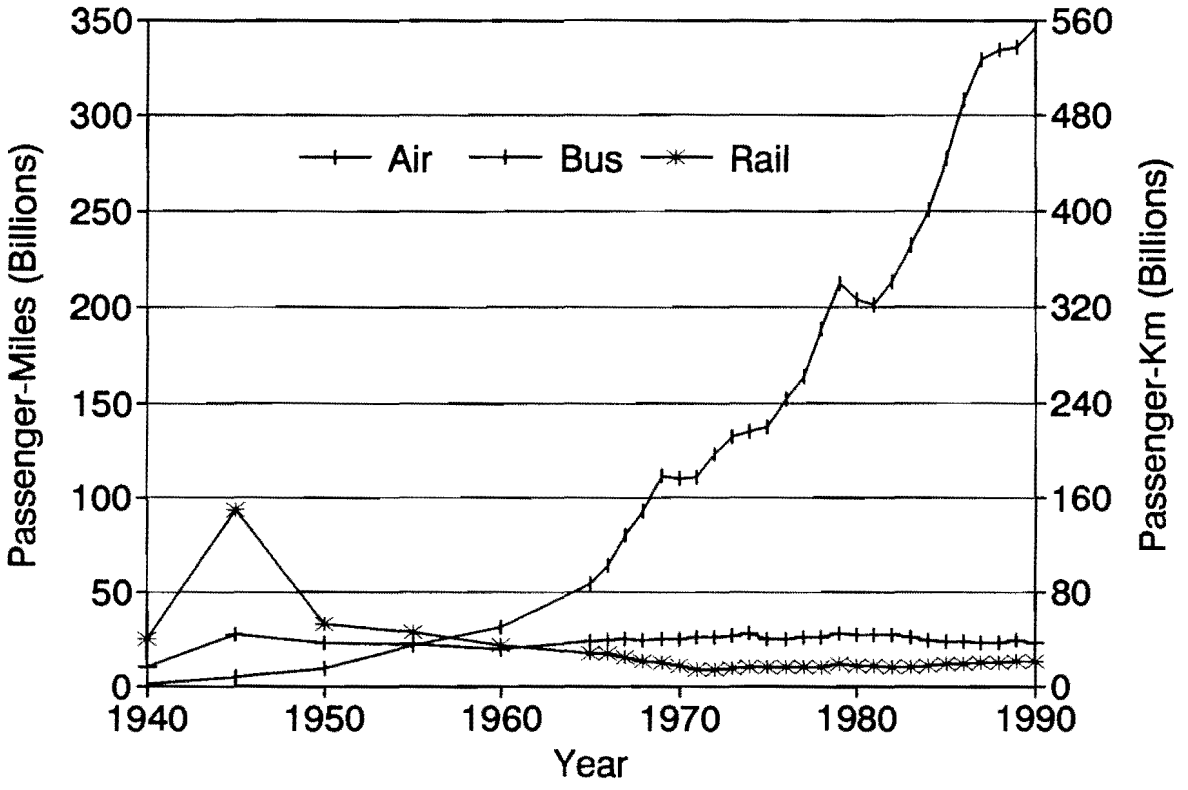


Figure 5. Passenger-Miles (km) for Air, Bus, and Rail Travelers (5).

Perhaps what has become the greatest competitor to all mass transportation modes is the private automobile. The increase in the number of auto owners has surpassed the increase in the nation's population since 1950, when in three years the growth in auto owners was nearly six times the growth in the population (see Table 1). In 1990 the increase in auto owners still nearly doubled the growth in population.

Table 1. Estimated Auto Ownership vs. Population Growth (1, 5).

Year	Auto Ownership (millions)	% Change from Previous Date	Population (millions)	% Change from Previous Date
1947	30.8	-	144.0	-
1950	40.4	31.2	152.3	5.8
1960	61.7	52.0	180.7	18.6
1965	72.3	17.8	194.3	7.5
1970	89.3	23.5	205.1	5.6
1975	106.7	19.5	216.0	5.3
1980	121.7	14.1	227.8	5.5
1985	131.9	8.4	238.5	4.7
1990	143.5	8.8	250.0	4.8

Table 2 shows that the percentage of revenue that Class I carriers received from regular route service decreased until 1975 and has been increasing ever since that time. (Class I carriers are currently defined as those carriers with gross operating revenues over $5 million.) The increase since 1975 is probably explained by the fact that many larger carriers are finding that in the reformed market they cannot compete for charter passengers with smaller carriers (Class II or III) who provide only charter service. The larger carriers are therefore concentrating on their regular route services. The percentage of revenues for package express service (shown as

part of "other" revenues) appears to have diminished greatly since 1985. This might reflect the rise in the use of UPS, Federal Express, and other overnight package services by Americans.

Table 2. Percentage Distribution of Operating Revenues for Class I Carriers (1, 6).

Revenue Category	Percent Distribution of Operating Revenues for Class I Carriers								
	1950	1955	1960	1965	1970	1975	1980	1985	1991
Regular Route	86.1	83.2	76.6	74.6	70.8	67.2	67.7	67.8	80.8
Local/ Suburban	n/a	n/a	5.1	2.2	1.8	1.2	0.7	0.4	0.4
Charter/ Special	3.4	6.2	7.8	10.6	11.1	15.4	14.7	14.5	7.8
Package Express	2.1	4.2	7.0	10.0	14.2	13.8	14.6	-[a]	-
Other	-	-	2.8	2.5	2.1	2.4	2.3	17.3	11.0

[a] Package express service is included as part of "Other"

Table 3 shows that the number of passengers served by Class I carriers has decreased significantly for all types of service. The total number of passengers served by Class I carriers decreased by more than half between the years 1987 and 1991, and by more than two-thirds between the years 1979 and 1991. The largest decreases have been seen in the area of charter service, in which the number of passengers served decreased by more than half between 1989 and 1991, and by nearly 80 percent between the years 1987 and 1991.

Table 3. Passenger Traffic by Type of Service for Class I Carriers (in millions) (1,6).

Year		Passengers (millions) Carried			
		Regular Route	Local	Charter	Total
1975	No.	117.6	13.7	20.9	152.2
	%	77.3	9.0	13.7	100.0
1977	No.	98.9	11.8	14.4	125.1
	%	79.0	9.4	11.6	100.0
1979	No.	103.1	8.7	21.2	133.0
	%	77.5	6.5	16.0	100.0
1981	No.	91.0	4.2	18.3	113.6
	%	80.1	3.7	16.1	100.0
1982	No.	87.7	2.7	21.0	111.3
	%	78.8	2.4	18.8	100.0
1983	No.	75.4	1.3	16.8	93.5
	%	80.6	1.4	18.0	100.0
1985	No.	69.8	1.3	16.8	88.0
	%	79.3	1.5	19.1	100.0
1987	No.	61.2	1.7	21.1	84.0
	%	72.9	2.0	25.1	100.0
1989	No.	43.2	1.5	11.0	55.7
	%	77.6	2.7	19.7	100.0
1991	No.	36.2	1.2	4.1	41.5
	%	87.2	2.9	9.9	100.0

The decreases in the number of passengers served by Class I carriers may be explained by a number of factors. First, the number of passengers served by Class II and Class III carriers is not available, so it is possible that some passengers are choosing to take smaller carriers, instead of choosing another mode altogether. Second, it was shown earlier that the number of passengers flying and taking Amtrak has steadily been increasing, indicating that bus riders are switching to air or rail as their preferred method of travel. Third, as auto ownership has increased, more people are choosing to take their own vehicles on trips. Finally, the threshold annual gross operating revenue to be considered a Class I carrier has increased three times in the last 20 years. In 1975 the threshold value was still only $1 million, while in 1977 the value was raised to $3 million and in 1988 was raised to $5 million. This might mean that as these levels were raised, fewer carriers were considered Class I, (as seen in Table 4) and therefore, fewer passengers were reflected as having taken Class I carriers.

Table 4. Recent Operating Results: Class I Carriers (1,6).

Year	Number of Carriers	Net Operating Income (millions)	Net Income (millions)
1975	85	$61.1	$56.4
1976	81	44.2	38.6
1977	46	45.0	61.8
1978	46	38.4	56.3
1979	46	58.2	73.1
1980	46	81.1	108.7
1981	45	71.9	61.8
1982	50	30.2	30.2
1983	45	-6.8	36.8
1984	43	0.6	-47.3
1985	43	65.4	-52.6
1986	29	35.2	-36.3
1987	32	-1.7	-21.6
1988	21	62.6	-0.2
1989	20	72.3	11.6
1990	21	-82.9	-180.0
1991	21	13.0	161.7

Financial Condition of the Industry

As explained earlier, the threshold value of annual operating revenues to be considered a Class I carrier has been raised three times in the last 20 years. This explains why the number of Class I carriers dropped abruptly from 81 to 46 carriers in 1977 and 32 to 21 carriers in 1988 (Table 4). No general trend is seen in net operating income or net income; however, it should be noted that before 1982 (and the passage of the Bus Regulatory Reform Act), the net income never dropped below $30 million, whereas after 1982, the net income has been negative in 6 of the 9 years for which data were available. The significant loss in net income seen in the year 1990 was due to the losses in income and increases in expenses related to the Greyhound drivers' union strike.

No general trend is seen in the total operating revenues, total operating expenses, or operating ratios (operating expenses divided by operating revenues multiplied by 100) of all Class I carriers in the years 1975 to 1991 (Table 5). It should be noted, however, that before the year 1982 (and the passage of the Bus Regulatory Reform Act), the operating ratio of all Class I carriers never exceeded 96.3. In the ten years after regulatory reform, the annual operating ratio of all Class I carriers exceeded 100.0 four times. The exceedingly high operating ratio shown for the year 1990 is once again due to the expenses involved with the Greyhound drivers' union strike.

The amount of revenues Class I carriers have received from local and charter service has decreased, whereas the amount of revenues received from regular-route service has increased slightly (Table 6). This reinforces the idea stated earlier that larger carriers are focusing more on providing regular-route service and leaving charter service to smaller carriers. The decrease in revenue in the category "other" also reflects a decline in package service.

Table 5. Carrier Profitability: Class I Carriers (1,6).

Year	Total Operating Revenues (millions)	Total Operating Expenses (millions)	Operating Ratio
1975	$ 954.7	$ 893.2	93.5
1976	997.0	952.1	95.5
1977	982.7	937.7	95.4
1978	1,036.7	998.3	96.3
1979	1,205.2	1,147.0	95.2
1980	1,393.9	1,312.8	94.2
1981	1,453.2	1,381.3	95.0
1982	1,446.7	1,416.5	97.9
1983	1,276.5	1,283.2	100.5
1984	1,254.9	1,254.2	100.0
1985	1,233.1	1,167.6	94.7
1986	1,117.3	1,082.1	96.8
1987	1,078.9	1,080.6	100.2
1988	1,121.7	1,059.1	94.4
1989	1,205.1	1,132.8	94.0
1990	943.3	1,026.2	108.8
1991	980.1	967.0	98.7

Table 6. Revenue Sources of Class I Carriers (in millions) (1,6).

Year	Regular-Route Intercity Service	Local Service	Special/ Charter Service	Total Passenger Revenue	Other (Includes package express)	Total Operating Revenue
1975	641.9	11.7	146.6	800.2	154.5	954.7
1977	649.9	11.1	143.8	804.8	177.9	982.7
1979	795.4	8.8	181.8	986.0	219.2	1,205.2
1981	993.1	6.5	196.0	1,195.6	257.6	1,453.2
1983	827.3	3.7	180.4	1,056.3	220.2	1,276.5
1985	836.1	5.1	178.8	1,020.0	213.1	1,233.1
1987	751.6	5.6	160.4	917.6	161.3	1,078.9
1991	791.5	3.9	76.2	871.6	108.5	980.1
% Increase (Decrease) from 1975 to 1991	23.3	(66.7)	(48.0)	8.9	(29.8)	2.7

Table 7 shows that the total operating expenses for Class I carriers increased steadily until 1982 (the year of regulatory reform) and then decreased steadily thereafter. The reverse was possible because regulatory reform allowed carriers to discontinue their unprofitable routes, which consequently decreased their expenses.

Table 7. Operating Expenses: Class I Carriers (1,6).

Year	Total Operating Expenses (millions)	% Increase (Decrease) from Prior Year	% Increase From 1975
1975	$ 893.2	-	-
1976	952.1	6.59	6.59
1977	937.7	(1.51)	4.98
1978	998.3	6.46	11.77
1979	1,147.0	14.89	28.41
1980	1,312.8	14.45	46.98
1981	1,381.3	5.22	54.65
1982	1,416.5	2.55	58.59
1983	1,283.2	(9.41)	43.66
1984	1,254.2	(2.26)	40.42
1985	1,167.6	(6.90)	30.72
1986	1,082.1	(7.32)	21.15
1987	1,080.6	(0.14)	20.98
1988	1,059.1	(1.99)	18.57
1989	1,132.8	6.96	26.82
1990	1,026.2	(9.41)	14.89
1991	967.0	(5.77)	8.26

Table 8 lists the operating ratio for the ten most profitable Class I carriers for the year 1991. Southeastern Stages and Texas, New Mexico and Oklahoma Coaches, Inc. have operating ratios substantially lower than any of the other companies. Table 8 also lists the operating revenue sources for the ten most profitable Class I carriers. Table 9 lists the operating ratios and operating revenue sources, for the ten least profitable Class I carriers. For most of these carriers, regular route services make up the majority of the revenues.

Table 8. Operating Ratio and Operating Revenue Sources of the Ten Most Profitable Class I Carriers for 1991 (6).

Company	Operating Ratio	Passenger Operating Revenue[a] (Percent)		
		Regular Route	Local	Charter
Southeastern Stages, Inc.	71.7	78.9	0.0	8.9
Texas, New Mexico & Oklahoma Coaches, Inc.	77.3	63.0	0.0	15.2
Vermont Transit Company, Inc.	89.5	52.0	0.0	24.1
Blue Bird Coach Lines, Inc.	90.0	2.2	1.0	91.3
Plymouth & Brockton St. Railway Co.	92.3	48.4	0.0	4.4
Carolina Coach Company	92.5	93.6	0.0	0.5
Peter Pan Bus Lines, Inc.	94.1	42.3	4.7	46.5
Jefferson Lines, Inc.	94.2	45.3	0.0	42.6
Evergreen Trails, Inc.	94.6	18.6	0.0	81.2
DeCamp Bus Lines	94.8	78.7	0.3	19.9
National Average	---	80.8	0.4	7.8

[a] Revenues do not add to 100% as package express service and other revenues are not included.

For half of the ten most profitable Class I carriers for 1991, regular route service provides less than half of their operating revenues, whereas for nine of the ten least profitable Class I carriers (seen in Table 9), regular route service provides for well over half of their revenues. This might indicate that regular route service is less profitable than other services (mainly charter). This theory is challenged by the fact that charter service provides a large portion of the revenues for the least profitable Class I carrier for 1991, Kerrville Bus Company, Inc. (Table 9), and that regular route service makes up a substantial portion of the two most profitable Class I carriers for 1991, Southeastern Stages, Inc., and Texas, New Mexico & Oklahoma Coaches, Inc. (Table 8).

Table 9. Operating Ratio and Operating Revenue Sources of the Ten Least Profitable Class I Carriers for 1991 (6).

Company	Operating Ratio	Passenger Operating Revenue* (Percent)		
		Regular Route	Local	Charter
Kerrville Bus Company, Inc.	100.8	39.2	0.0	46.8
Greyhound Lines, Inc.	100.5	87.7	0.0	0.4
Hudson Transit Lines, Inc.	100.0	79.3	0.0	4.4
Suburban Transit Corporation	99.9	83.0	15.2	1.8
Carl R. Bieber, Inc.	99.8	63.0	0.0	36.9
Capital Bus Company	99.7	76.4	0.0	22.1
Academy Lines, Inc.	99.2	83.8	0.0	16.2
Frank Martz Coach Co.	98.1	52.9	0.0	43.2
Adirondack Transit Lines, Inc.	97.8	77.8	0.0	6.5
Connecticut Limousine Service	97.1	94.3	0.0	3.2
National Average	---	80.8	0.4	7.8

* Revenues do not add to 100% as package express service and other revenues are not included.

CHAPTER 3
NATIONAL REGULATIONS

HISTORY OF NATIONAL REGULATION

Early Regulation

Pennsylvania was the first state to regulate passenger buses, in 1914 (3). By 1930 all states but Delaware had some type of intercity bus regulation (7). The main type of control used by states was the power to grant or deny operating certificates (1). In doing this, states were required to interpret the meaning of the phrase "public convenience and necessity," the criteria for certification as stated in the Code of Fair Competition of the National Association of Motor Bus Operators (1). Generally, states interpreted the phrase by granting certificates if the general public benefitted from the service, rather than just a small group of individuals (1). In certifying operators, existing carriers were given "grandfather rights," meaning that the fact that they were already providing service at the outset of state regulation was enough to merit certification (8). This obviously favored existing carriers and resulted in their protection and stability.

In 1925 state commissions began adopting the policy of regulated monopoly in dealing with the intercity bus industry. This meant that motor carriers of passengers were assumed to be public utilities and were therefore subject to public regulation. Existing carriers were still given priority as long as they provided adequate service. Competing service, however, could also be authorized if an existing carrier was not adequately serving the public interest. As long as carriers provided "adequate service," they were protected from competition and could concentrate on improving their service. The reduction in competitive expenditures also allowed more revenues to be used for company expansion. (1)

Once enough certificates were issued to handle the demand, the only way to acquire operating routes was to buy-out or merge with an existing carrier. This resulted in a period of rapid consolidation between 1926 and 1930 (1). In 1926 the Motor Transit Corporation was organized by Eric Wickman (the man who started the Alice-Hibbing bus route in 1913). The

Motor Transit Corporation developed into a nationwide bus network by purchasing local and regional bus systems and was reorganized to become Greyhound Corporation in 1930 (9).

The years 1925 to 1930 were also characterized by an increasing campaign for federal regulation. This was largely because of the U.S. Supreme Court case *Buck v. Kuykendall* (1925) in which it was determined that state commissions had no authority over carriers operating interstate lines. In other words, carriers could avoid state regulation simply by crossing state lines along their routes. This prompted the Interstate Commerce Commission (ICC) to conduct a study in 1928 in which it determined that regulation of interstate common carriers of passengers should be provided. In 1935 Congress passed the Motor Carrier Act in response to the 1928 ICC study. (1)

The Motor Carrier Act of 1935

Under the Motor Carrier Act, the ICC did not follow the states' policy of regulated monopoly. Instead, it adhered to two different policies (1). The first was to increase competition of existing carriers in order to promote adequate service. The increase in competition was achieved in a number of ways. First, the ICC began certifying additional long-haul carriers on existing routes. Second, an extensive number of certificates were granted to railroad motor bus subsidiaries. Third, after 1942, route extensions were granted to and/or route acquisitions were permitted by Trailways System members. This provided for more continuous routes which would allow them to compete better with bus giant Greyhound. Finally, the requirement for certification was changed from having to serve "public convenience and necessity" to just having to be "in the public interest," something which was thought to be more easily proved. This change was the result of a case involving the granting of a certificate for a long-distance route between New York City and Miami, in which the newly-certified operator was thought to be providing better service between the two cities. The verdict of the case was that providing an additional carrier along that route was "in the public interest," in that the service (1) served a useful purpose and responded to a public demand or need, (2) could not be

provided by the existing carrier along that route, (3) would not endanger or impair the service of the existing carrier, and (4) was not forbidden by the 1935 Motor Carrier Act.

The second policy the ICC was using involved restraint in granting competing certificates, in order to promote better service. This meant that the ICC granted, within certain areas, exclusive operating rights to existing carriers. The general rule in identifying such cases was that competition should be reduced when substantial public benefit would result.

The Motor Carrier Act gave the ICC a considerable amount of control over the fares charged by intercity bus operators. Under the Act, fares had to be "nondiscriminatory, just and reasonable, set at the lowest level consistent with providing service, and published in tariffs." Carriers were required to file tariffs with the ICC at least thirty days in advance of their effective date so that the public would have adequate notice. The ICC had the power to set maximum, minimum, or actual rates if an operator's rate was deemed unlawful. The ICC also set a threshold operating ratio, below which operators were considered profitable and not in need of increased revenues.

The Motor Carrier Act did not prescribe that schedule changes must be filed with the ICC. Service did, however, have to be adequate and reasonably continuous in order for an operator to keep its certificate.

The Motor Carrier Act also gave the ICC authority over package express and charter service. Movement of passengers and packages was allowed in the same vehicle, although package express service was to be secondary to passenger transport. Package express service could only be certified when "public convenience and necessity" were proved by the operator. Before 1967, regular route certification allowed with it charter service as long as the charter originated within the carrier's regular route operating territory. After 1967, however, an operator once again had to prove that "public convenience and necessity" demanded the service before it could be certified to run charters.

After the passage of the Motor Carrier Act, some states continued to follow the policy of regulated monopoly, while others followed the federal lead and encouraged regulated competition. In the cases of regulated competition, existing carriers continued to enjoy protection because an existing operator had the opportunity to provide additional service before competing certificates were issued, and also because an existing operator had the opportunity to show just cause why a competing certificate should not be issued.

The Bus Regulatory Reform Act of 1982

The Bus Regulatory Reform Act (BRRA) became law on September 20, 1982, and aimed to revamp the intercity bus industry by easing entrance to and exit from bus routes and by allowing more latitude in ratemaking (10). The act is also significant in that it provides for preemption of state regulation by federal regulation as directed by the Interstate Commerce Commission (11). The following outlines the major points of the BRRA.

Easing of Entry. Under the BRRA, an applicant for new service no longer has the burden of proving that 1) public convenience and necessity require the new service, 2) existing carriers will be unjustifiably harmed, or 3) the public needs or demands the service (10). Carriers are also allowed to provide special or charter transportation of passengers and regular route service in the same vehicle at the same time (10).

Easing of Exit. Farris and Daniel explain that if an interstate carrier has petitioned the proper state authorities to discontinue intrastate service and the request has been wholly or partly denied, or has not been finally acted upon within 120 days after the carrier's request, the carrier may petition the ICC for such permission (10).

Ratemaking Flexibility. The Interstate Commerce Commission called for rate changes to be phased in according to a "zone of rate freedom" (10). This allowed for a 10 percent increase or 20 percent decrease in fares in the first year after the implementation of the BRRA,

a 15 percent increase or 25 percent decrease in the second year, and a 20 percent increase or 30 percent decrease in the third year (10). After November 19, 1985 (exactly three years after the BRRA's enactment), the ICC would have no authority to regulate independently-set regular route or charter rates which were not considered predatory or discriminatory relative to other rates (10).

The Intermodal Surface Transportation Efficiency Act of 1991

The Intermodal Surface Transportation Efficiency Act of 1991 (ISTEA) specifically addresses the needs of the intercity bus industry in the apportionment of Section 18 funds. Section 18 funds are to be used for public transportation projects in nonurbanized areas (by definition, any area outside an urbanized area), and are apportioned to the states by a formula based on the ratio of the nonurbanized population of each state to the nonurbanized population of all the states. The funds are distributed among the following: capital projects (not intercity), bus support equipment to comply with the Americans with Disabilities Act or the Clean Air Act, operating assistance (not intercity), program administration and reserve, rural transit assistance, and intercity bus projects.

Eligible support activities for the bus industry include planning and marketing for intercity bus transportation, capital grants for intercity bus shelters, joint-use stops and depots, operating grants through purchase-of-service agreements, user-side subsidies and demonstration projects, and coordination of rural connections between small transit operators and intercity bus carriers. Such expenditures would help in attaining the intended goals of the intercity bus "set-aside" monies: supporting the connection between nonurbanized areas and the larger regional or national system of intercity bus service, supporting services to meet the intercity travel needs of residents in nonurbanized areas, and supporting the infrastructure of the intercity bus network through planning and marketing assistance and capital investment in facilities.

The ISTEA states that no less than 5 percent of a state's Section 18 funds must be expended on the intercity bus industry in the year 1992, 10 percent in the year 1993, and 15 percent in 1994 and the years thereafter. A state, however, is not required to comply with these expenditures in any year its governor certifies that the intercity bus needs of the state are being "adequately met." Section 18 authorizes over $122 million to be spent on intercity bus service over the next five years as shown in Table 10. The amount actually received by states will depend upon the amount appropriated by Congress. In 1992, Congress appropriated only $66.13 million for Section 18, and the present 1993 budget request asks for only $86 million (12).

Table 10. Authorized Section 18 Funding Set-Aside for Intercity Bus Service (12).

Fiscal Year	Total Section 18 Authorization (millions)	Authorized Section 18(i) Set-Aside for Intercity Bus Service (millions)
1992	$ 106.0	$ 5.3
1993	151.6	15.2
1994	153.8	23.1
1995	153.8	23.1
1996	153.8	23.1
1997	217.7	32.7
Total	$ 936.8	$ 122.3

EFFECTS OF THE BUS REGULATORY REFORM ACT ON THE U. S. INTERCITY BUS INDUSTRY

The Bus Industry Prior to the Bus Regulatory Reform Act of 1982

Passenger Profile. Fravel's study of the intercity bus passenger compiled findings from the 1977 Census of Transportation National Travel Survey, the 1977 Nationwide Personal Transportation Survey (NPTS), and numerous state studies into a profile of the typical bus passenger (13). The 1977 National Travel Survey showed that the typical intercity bus passenger

had a lower median income, was more likely to be African-American or of Spanish origin, and was more likely to be female than a passenger of any other transportation mode (14). The percentage of bus passengers living in areas of population 50,000 or less was 30.25 percent (13). Bus passengers tended to be young or old, with 50 percent under the age of 25 and 13.36 percent over the age of 65 (13). Visiting friends or relatives and traveling for entertainment or sightseeing were the most often cited reasons for travel on intercity bus (13). The 1977 NPTS showed that of 2,411 bus trips in a sample, only 72 were more than 30 miles (48 km) long (14). Persons over the age of 60 were more frequently using automobiles and less frequently using the bus (13). Persons living in incorporated areas were more likely to take the bus than persons living in unincorporated areas. Many of the state surveys inquired about driver's licenses, and of those surveyed, about two-thirds of the passengers did have them (13). Also asked in the state surveys was whether or not passengers had an automobile available to take their trips. Only 30 to 52.5 percent of those surveyed did (13). Furthermore, a private automobile was used an average of 60.7 percent of the time for transportation to and from the bus station (13).

The Decline. Although the decline of the intercity bus industry has often been attributed directly to the 1982 BRRA, the industry had actually been in a state of decline since the early 1950s (12). One way in which the industry had declined was in the number of locations it served. In 1968, 16,800 locations were provided with bus service (12). This number decreased to 15,035 locations by 1977 (15), and to 11,820 locations by 1982 (12). The decline was also reflected in the operating ratios of the largest bus firms, which increased from 88.3 in 1968 to 95.0 in 1981 (1,6).

A number of factors were responsible for the bus industry's pre-reform decline. Rising incomes between 1969 and 1982 contributed to a tremendous growth in automobile registrations, resulting in more people having access to a private vehicle with which to take their trips (16). Moreover, the nation's highway system was rapidly improving, which allowed people to feel safer driving their own vehicles long distances (12). A population shift from rural areas to urban areas was occurring as well, indicating that a larger number of people had access to the

larger city airports and train stations (12). The industry also faced increased competition from both air and rail: airline deregulation in 1978 yielded lower fares and greater air travel demand (12), while the formation of Amtrak in 1971 added competition for intercity passengers (12). The rapid deterioration of the intercity bus industry from the 1950s through the 1970s prompted the creation of the BRRA as an attempt to reverse its downward trend.

The Bus Industry Since the BRRA

Passenger Profile. Kuehne and Hollandsworth published a study in 1986 in which they compared the profiles of Michigan bus passengers in 1977 and 1985, to assess the impact of the BRRA on intercity bus users (17). They found the 1985 passengers to be slightly older and wealthier, to have a higher number of operating vehicles per household, and to have made fewer intercity bus trips during the past year than the 1977 passengers. In terms of occupation, fewer passengers were unemployed, and more passengers were college students in 1985. Females continued to make up the majority of bus passengers.

User Ratings. Kuehne and Hollandsworth also surveyed passenger opinions of the intercity bus industry (17). Generally, passengers were satisfied with employee courtesy, bus condition, schedule information, and schedule adherence. Passengers were generally dissatisfied with frequency of bus service and condition and location of bus terminals.

Number of Routes. Oster and Zorn published a paper in 1986 in which they outlined their findings from a study of regulatory change in twelve states (18). The study found that while it took seven years (from 1975 to 1982) to decrease the number of communities with bus service 21 percent, it only took two years after the passage of the Bus Act to decrease this number another 20 percent. In the United States as a whole, the industry saw a decline from 11,820 locations receiving service in 1982 to fewer than 6,000 locations receiving service in 1991 (12). Sixty percent of communities losing service in the twelve state study had only flag-stop service or fewer than an average of two departures per day, while 40 percent of

communities losing service had 14 or more weekly regular stop departures (18). The populations of communities losing service were extremely small: 86 percent of stops losing service in the seven years prior to the BRRA served communities with populations under 2,500, as did 82 percent of the stops losing service in the two years after the BRRA (18).

The 20 percent decrease in communities served over the two years after the BRRA was actually seen as a 16 percent decrease in the year immediately following the act, and a four percent decrease in the second year following (18). Oster and Zorn speculate that this indicates that carriers immediately dropped communities they had long wanted to release (but could not because of regulation), and then continued to release communities at a pace similar to that before the BRRA (18).

Causes of Decline Since the BRRA

The United States General Accounting Office lists the major causes for the financial decline of the bus industry as the shrinkage of rural populations, increased private automobile ownership, and increased competition from Amtrak and the deregulated airline industry (12). It should be noted that these were the same factors receiving the blame for the financial decline in the industry long before the passage of the BRRA in 1982. This suggests that while the BRRA may rightly be charged with the decline in the number of communities served by intercity bus, it cannot be used as the reason for the industry's financial demise.

Positive Results of the BRRA

Although the downfall in the intercity bus industry in recent years has often been attributed to the BRRA, the act has actually precipitated a number of beneficial changes in the structure and quality of bus service. Vellenga, Schrock, and Peterson cite some of these changes which are listed below (11):

- Bus lines have been simulating the routes of commuter airlines in acting as feeders for major carriers at large airports; this has attracted a ridership including individuals with higher incomes, more business travelers, and a higher percentage of middle-aged riders.
- Airlines have cooperated with bus lines in providing connecting bus service between major airports and smaller outlying communities. In some cases the bus leg of the trip has even been given a "flight number" on the route schedule.
- Bus companies have defined their "affinity" markets: senior citizens, students, military personnel, and minorities. By targeting their market, advertising expenses may be used more wisely.
- Bus lines are advertising their submarkets such as airport express and charter service.
- A simplified rate structure based on miles travelled has been produced.
- An unregulated, rationalized route structure has been produced.
- Greyhound has offered its unprofitable routes to be picked up as franchises, in hopes that the routes might be profitable under a smaller carrier.
- Greyhound is actively marketing its driver training and maintenance services to other carriers. These services were previously for internal company use only.
- Greyhound has added van service to transport passengers in smaller communities to nearby bus terminals.

CHAPTER 4
TEXAS INTERCITY BUS INDUSTRY

HISTORY AND REGULATION OF INTERCITY BUS SERVICE IN TEXAS

Rhodes narrates the history of the intercity bus industry in Texas in his book *Intercity Bus Lines of the Southwest: A Photographic History* (8). Intercity bus travel in Texas began in October of 1907 when W. B. Chenoweth drove from Colorado City, Texas, into Snyder, Texas in his self-designed "motor driven stage coach." By 1927, the industry had grown to consist of hundreds of operators of passenger cars seating about ten passengers, approximately fifty cars seating up to fifteen passengers, and about twenty-five vehicles seating up to thirty passengers (1). Rhodes indicates that many of the smaller operators left the industry during the Depression, while the larger bus companies merged and consolidated during this time (8). With the large number of military bases in the state, World War II brought more business to Texas bus companies than they could handle. Unfortunately the operators did not enjoy this same demand for bus transportation after the war was over, and many operations were sold or abandoned. Rhodes laments that the decline in demand for bus service following the war began what became a trend in the Texas intercity bus industry.

The history of the Kerrville Bus Company well represents the history of the intercity bus industry in Texas. Three operators--Union Bus Lines, Mr. J. L. Powers, and Hal and Charlie Peterson--were serving the San Antonio to Kerrville route in 1927. The Petersons formed Kerrville Bus Company in 1928. Kerrville purchased and leased operating authorities from competitors, including those of Union Bus Lines and Powers, between the years 1927 and 1970, with most of the authorities being procured between the years 1930 and 1939. A significant event occurred in 1950, when through service from Houston to El Paso was instituted by linking the services of Southwestern Greyhound and Kerrville. In 1970, Kerrville requested that its 39 separate operating authorities be consolidated into one (1).

Rhodes also describes the regulatory issues facing Texas bus operators (8). The rise in the number of small bus operators in Texas in the 1920s brought with it the need for regulation--

to insure safety for passengers and to protect legitimate carriers from competition from "wildcatters," vehicle owners who unsafely overfilled their cars with passengers and charged lower fares. In 1927, the Beck Bus Law became effective, giving the Motor Transportation Division of the Railroad Commission of Texas authority over Texas bus lines. The law required bus companies to provide insurance for passengers, passenger property, and employees. Furthermore, it gave the Railroad Commission of Texas the authority to regulate fares, schedules, and routes, and required the filing of annual reports (1). In 1935, the U.S. Congress passed the Motor Carrier Act, which gave the ICC control over interstate bus operations. Because Texas operators had already been under the control of the Railroad Commission of Texas, Rhodes cites that the Motor Carrier Act did little to affect bus operations in Texas.

TEXAS INTERCITY BUS OPERATING TRENDS

Time series trends for the Texas bus industry are extremely limited. The 1927 to 1952 editions of the *Texas Almanac* included data available from Railroad Commission annual reports. A comparison of the Texas passenger data to national data revealed similar trends, with Texas representing approximately 10 percent of the U.S. ridership (1). In 1952, the Railroad Commission stopped summarizing the annual operating reports. It currently maintains only the most recent five years of annual reports for Texas operators. Older reports are destroyed. Also, while the annual reports formerly compiled data on number of passengers served, this figure is no longer reported by bus companies to the Railroad Commission.

Table 11 displays the data that were available regarding the operating statistics of companies serving the state of Texas from the previous Texas report (1) and from the Railroad Commission files (19). Following is a list of the 13 operators whose data were obtained from the Railroad Commission for this report.

- All American Travel
- American Arrow Companies, Inc.
- Central Texas Trailways
- Classic Coaches
- Concho Coaches

- Greyhound Lines, Inc.
- Jefferson Lines, Inc.
- Kerrville Bus Company, Inc.
- Sierra Stage Coaches, Inc.
- Sun Set Stages, Inc.
- Texas Bus Lines
- TNM&O Coaches, Inc.
- Valley Transit, Inc.

Table 11. Operating Statistics for Texas Operators With Operating Revenues Less Than $50 Million (1,19).

Year	Number of Operators Reporting	Total Operating Revenues ($)	Total Operating Expenses ($)	Operating Ratio	Bus Miles[a]	Passengers
1974	n/a	19,196,890	17,150,582	89.3	17,855,659	6,197,750
1975	n/a	20,257,707	17,747,362	87.6	17,782,262	5,914,458
1976	n/a	21,738,148	18,623,341	85.7	17,533,241	5,557,182
1977	n/a	24,397,681	20,821,602	85.3	16,963,735	5,091,689
1978	n/a	26,939,791	22,859,146	84.9	16,635,275	4,872,419
1979	n/a	32,945,633	28,233,116	85.7	17,562,466	5,179,830
1980	n/a	39,792,050	33,988.783	85.4	18,615,021	5,574,464
1987	8	25,218,613	23,408,868	92.8	17,810,821	n/a
1988	11	55,096,989	49,689,039	90.2	20,429,500	n/a
1989	11	79,544,538	76,942,692	96.7	20,455,111	n/a
1990	11	70,988,365	69,437,596	97.8	23,485,344	n/a
1991	12	95,533,787	89,883,042	94.1	26,440,821	n/a

[a] Conversion factor: 1 mile = 1.609 kilometers.

Note: Data for 1975-1980 exclude Trailways and Greyhound. Data for 1987-1991 exclude Greyhound. 1980 figures include some estimates. Bus miles for years 1987-1991 represent intrastate miles.

Because the number of companies reporting and the value of the dollar have changed over the past 18 years, the operating revenues, operating expenses, and bus miles are not directly comparable. The operating ratio statistic, however, is a ratio of expenses to revenues. For this reason, the operating ratios of the reporting companies may be compared over the years to provide an indication of the profitability of bus companies operating in Texas. The data for the years 1975, 1977, and 1979 (all years before the passage of the Bus Regulatory Reform Act) show that operating ratios were substantially lower--ranging from 85.3 to 87.6--than the operating ratios for the years following regulatory reform, which ranged from 90.2 to 97.8. Nevertheless, the operating ratios have remained below 100.0 in the years 1987 to 1991, signifying that the bus companies were still profitable after regulatory reform.

Another statistic available regarding Texas intercity bus service is the number of points in Texas served by the intercity bus. These data were found in previous issues of *Russell's Official National Motor Coach Guide, Part 3 Map Supplement*, and are shown in Table 12.

Table 12. Number of Points in Texas Served by Intercity Bus (20).

Year	Number of Points Served in Texas
1970	1,106
1975	1,099
1979	1,050
1980	946
1981	911
1982	908
1983	854
1985	808
1987	737
1990	756
1992	596

Table 12 shows that the number of places served by the intercity bus in Texas has decreased by almost half between 1970 and 1992. While most of these losses were due to the ease in exiting made allowable by the Bus Regulatory Reform Act of 1982, the data show that losses in service were occurring even before 1982. The biggest loss in service occurred between the years 1990 and 1992. This was most likely an outcome of Greyhound's massive restructuring effort during this time (21).

TEXAS INTERCITY BUS ROUTES

Figure 6 shows the current route structure of intercity bus carriers in Texas. The routes shown were generated from bus schedules in the December 1992 issue of the *Russell's Bus Guide*. As a comparison of how the structure has changed since the last study of bus service in Texas (1), the map of bus routes in 1980 is shown in Figure 7. A comparison of the two figures supports the findings in Table 12 -- fewer routes and locations are being served in 1993 than in 1980. While the western, panhandle and southern routes seemed to have undergone little change, most of the route deletions took place in the area between Dallas/Fort Worth, San Antonio, and Houston. For example, Waco, in 1980, had eight routes entering and/or leaving the city, whereas in 1993, routes were reduced to four entering and/or leaving the city. There were very few route additions over the thirteen year period.

Maps of the bus carrier routes for 1993 by region (south, west, and east) are shown in Figures 8, 9, and 10. These maps illustrate the locations of route duplication in the state. Little duplication was witnessed in 1980, except between Dallas to El Paso, and San Antonio to Brownsville. In 1993, route duplications remained limited, with a few more than in 1980. The Dallas to El Paso route is no longer duplicated in 1993. Much of the route duplication seems to be concentrated in the south, from San Antonio to Laredo, McAllen, and Brownsville, and from Houston through Victoria to McAllen and Brownsville. Greyhound and Valley Transit are the competing carriers in the south. In the west, duplication occurs between Fort Stockton and San Antonio, with the competing carriers being Greyhound and Kerrville. As in 1980, some

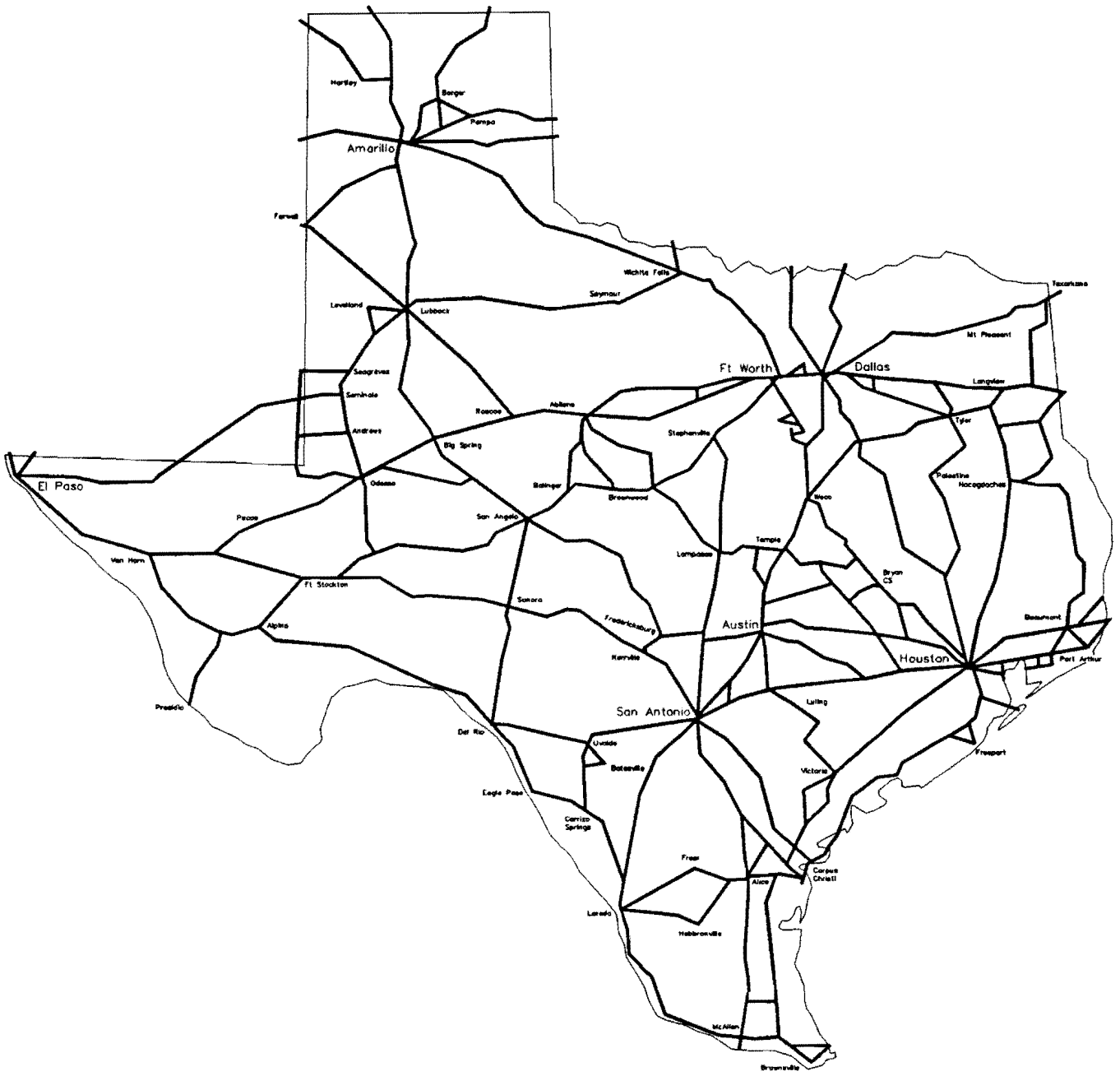


Figure 6. 1993 Texas Bus Routes.

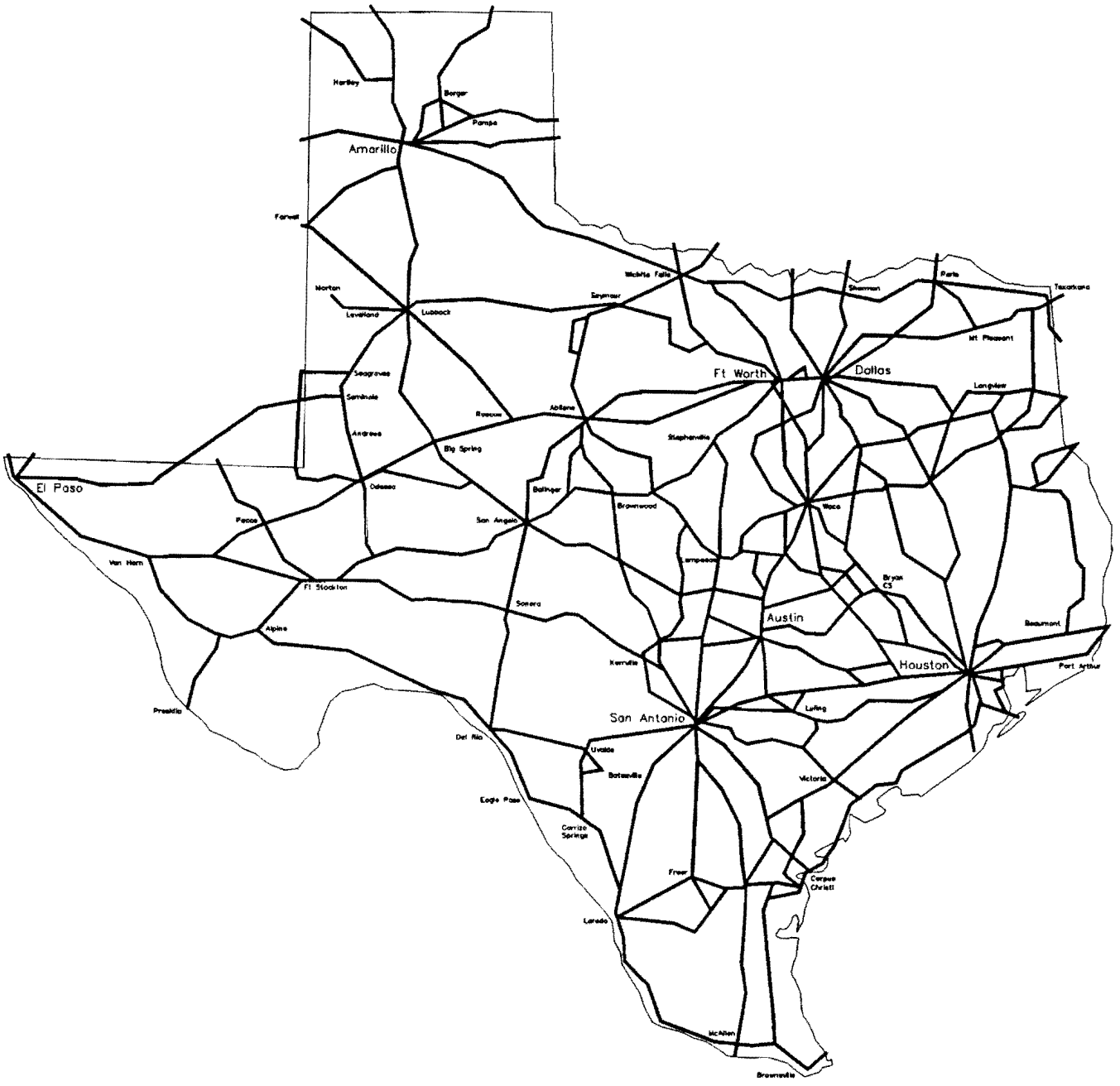


Figure 7. 1980 Texas Bus Routes.

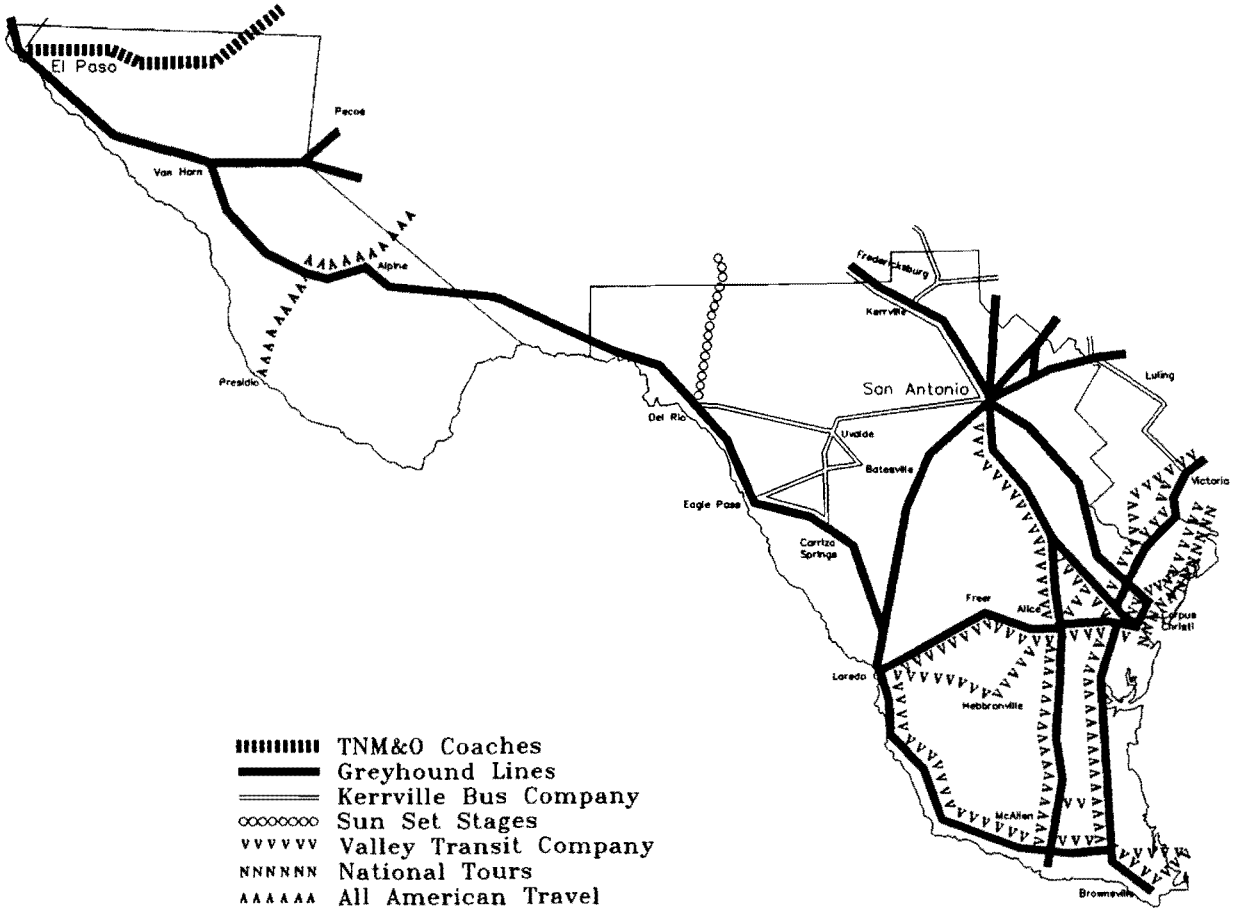


Figure 8. Bus Routes in South Texas.

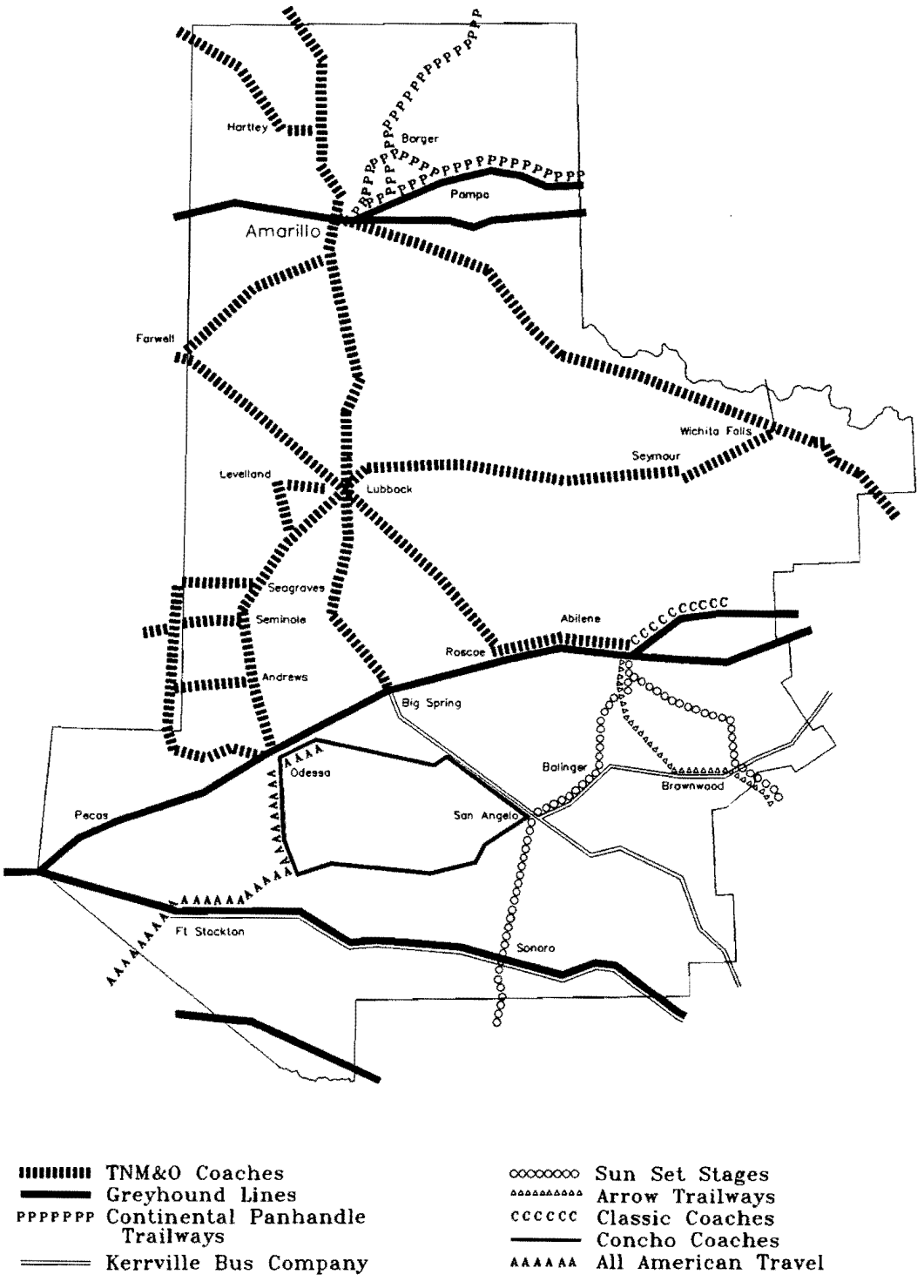


Figure 9. Bus Routes in West Texas.

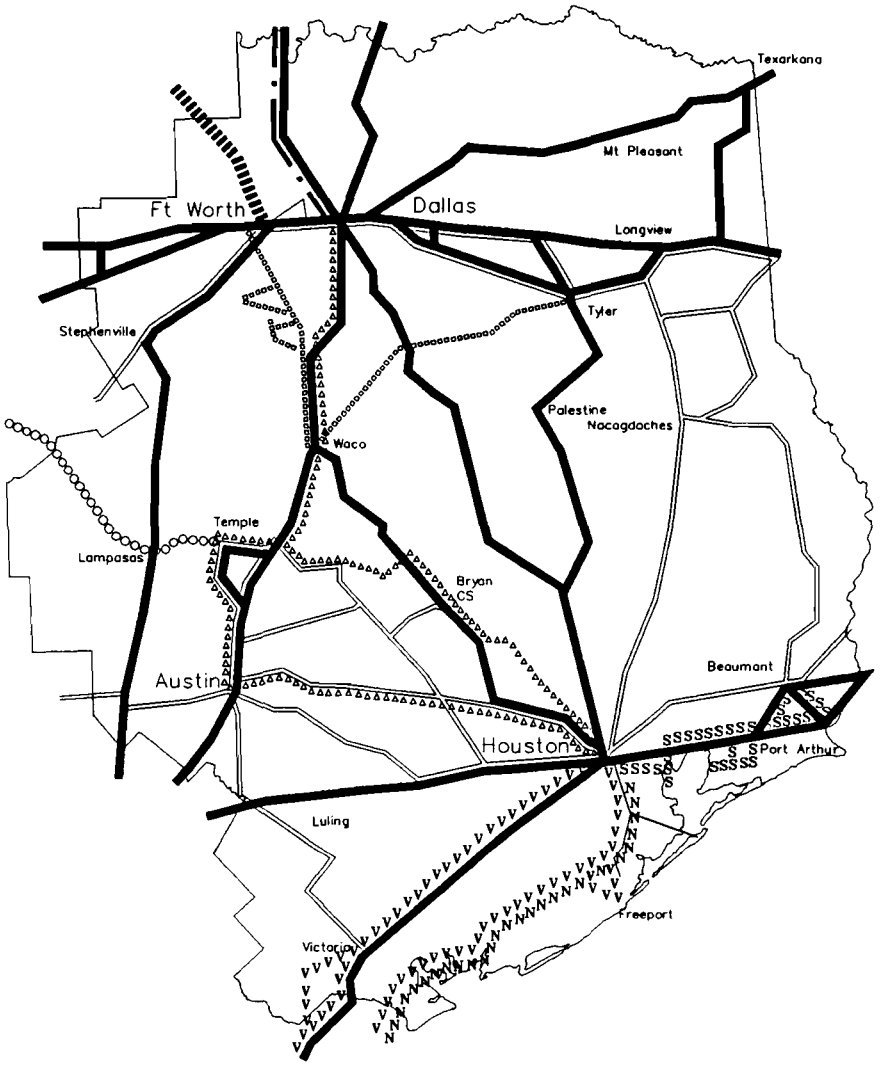


Figure 10. Bus Routes in East Texas.

other shorter route duplications exist, especially in the east, but for the most part, bus carriers that service the same cities travel different routes.

COVERAGE AREA OF TEXAS INTERCITY BUS SERVICE

While Figure 6 provides an overview of where buses are operating in Texas, it does not indicate specific points that do not have bus service. To obtain that information, the December 1992 issue of *Russell's Bus Guide* was reviewed to determine which places listed on the state map were without full or flag service. Some of the places identified without service are very close to places that do have service. For example, College Station was identified as not having service, but it is only a few miles from Bryan which does have service. To determine which cities and towns are without access to intercity bus service, a "reasonable distance" to travel to reach a station needed to be selected. Ten miles (16 km) was the distance chosen.

A circular see-through sticker was centered over places with intercity bus service as determined from *Russell's Bus Guide*. The radius of each circle represented approximately ten miles (16 km). Once all places with service were covered, any Texas city or town not covered by one of the circles was identified and listed. These places were then sorted by their 1990 populations. The locations with populations of over 5,000 are listed in order of descending population in Table 13. Figure 11 shows the locations of these places.

Table 13 also lists the ranks of all locations by descending distance to nearest intercity bus service and by descending population-miles to nearest intercity bus service. For example, while De Soto, Texas has the largest population of any Texas city or town outside a ten-mile (16 km) radius of intercity bus service, persons in Paris, Texas have the farthest distance to travel to the nearest intercity bus stop in Sulphur Springs, and the combination of a high population and a long distance to intercity bus service also give Paris, Texas the highest rank according to population-distance criteria.

The problem of having to travel a long distance to reach intercity bus service is alleviated in some areas by the service of metropolitan transit authorities, municipal transit systems, or rural transit systems. Metropolitan transit authorities generally operate fixed route service, while rural transit systems are generally demand-responsive, and municipal transit systems operate in both ways. Figure 12 shows the service areas of the rural transit providers in Texas. Table 14 lists the places from Table 13 which are served by public transit. The transit service could take the passenger to the nearest bus station listed in Table 13 unless the transit system does not service the county in which the *nearest* intercity bus station is located. In this case, the nearest place in the serviced county area is listed, along with the distance to that bus station.

Table 13. Places With Populations Greater Than 5,000 Further Than Ten Miles (16 km) From Intercity Bus Service.

City/Town	County	1990 Pop.	Nearest Service	Miles to go[a]	Rank by Distance	Rank by Pop-Mi
De Soto	Dallas	30,544	Dallas	12	18	3
Grapevine	Tarrant-Dallas	29,202	Lewisville	11	21	5
Paris	Lamar	24,669	Sulphur Springs	38	1	1
Socorro	El Paso	22,995	El Paso	15	12	4
Lancaster	Dallas	22,117	Dallas	13	15	8
Cedar Hill	Dallas-Ellis	19,976	Grand Prairie	23	6	2
Keller	Tarrant	13,683	Fort Worth	15	9	9
Universal City	Bexar	13,057	San Antonio	15	11	10
Gatesville	Coryell	11,492	Evant	26	3	7
Schertz	Guadalupe-Comal-Bexar	10,555	San Antonio	15	10	14
Rockwall	Rockwall	10,486	Mesquite	13	16	16
Graham	Young	8,986	Breckenridge	34	2	6
Seagoville	Dallas-Kaufman	8,969	Dallas	20	7	11
Converse	Bexar	8,887	San Antonio	13	14	17
Azle	Tarrant-Parker	8,868	Weatherford	16	8	15
Mexia	Limestone	6,933	Fairfield	24	4	12
Commerce	Hunt	6,825	Greenville	14	13	18
Bonham	Fannin	6,686	Sherman	24	5	13
Frisco	Collin-Denton	6,141	McKinney	11	19	19
Iowa Park	Wichita	5,238	Wichita Falls	12	17	20
Midlothian	Ellis	5,141	Waxahachie	11	20	21

[a] Conversion factor: 1 mile = 1.609 kilometers.

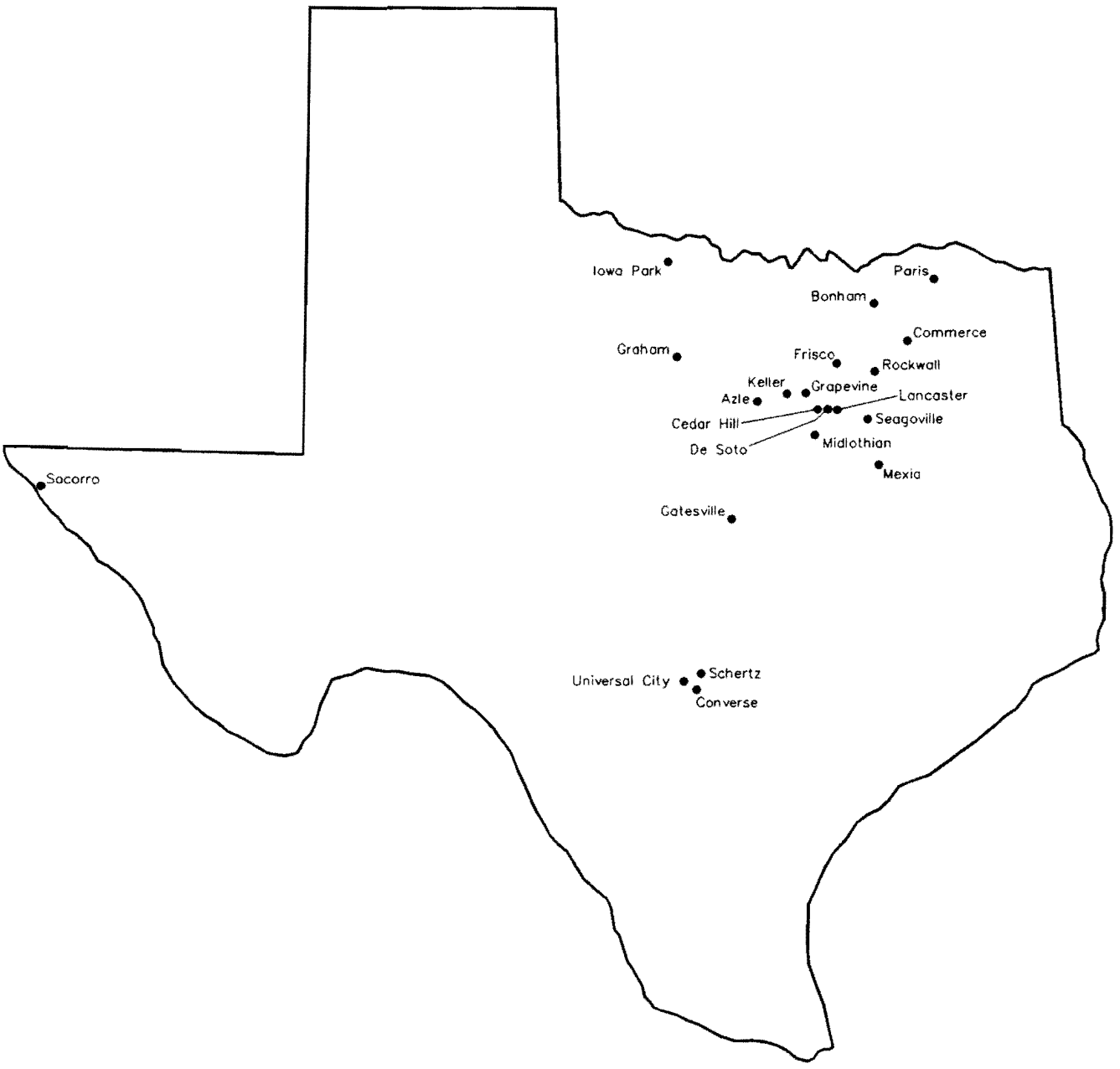
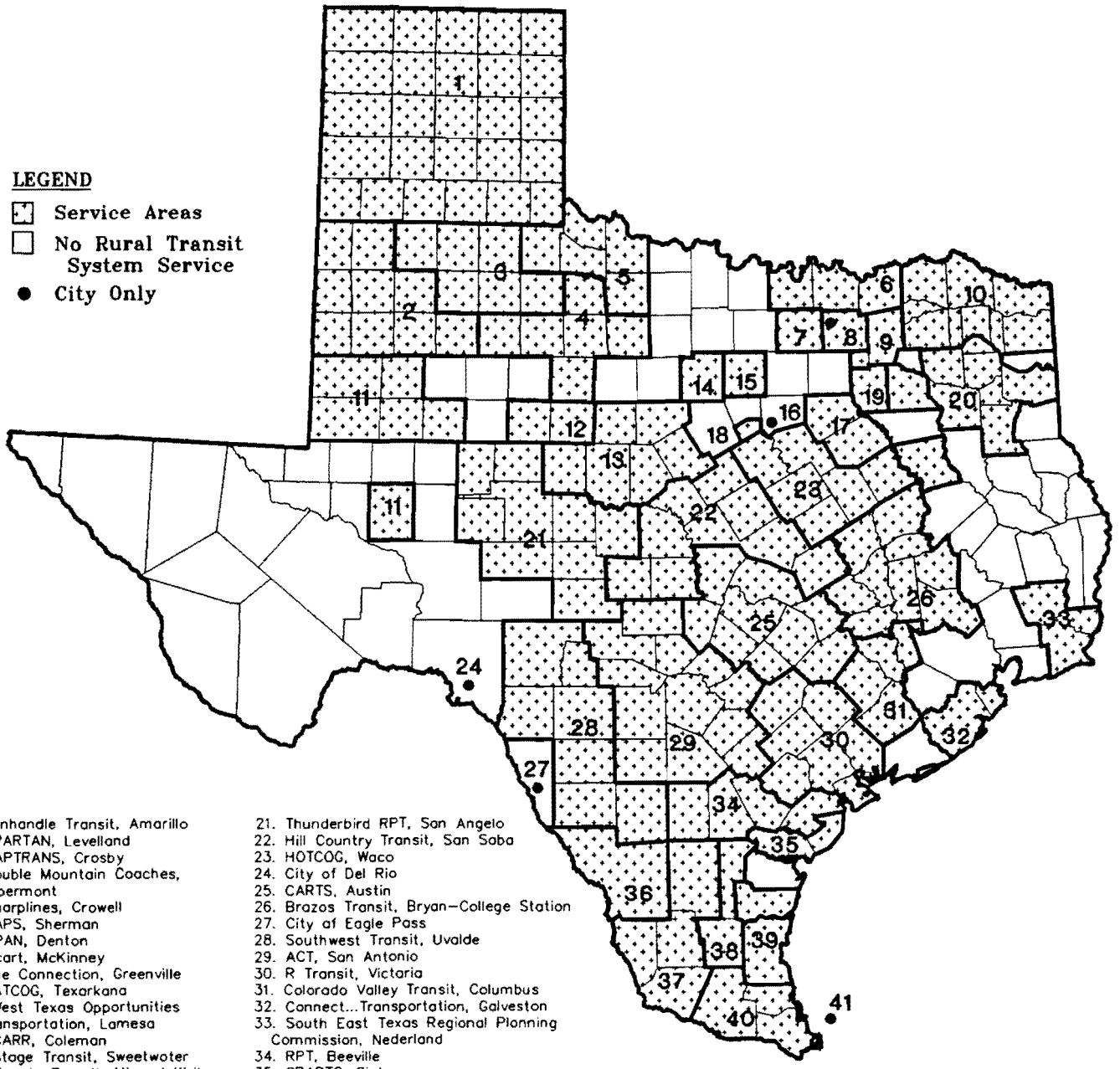


Figure 11. Cities Without Intercity Bus Service With Populations Greater Than 5,000.



1. Panhandle Transit, Amarillo
2. SPARTAN, Levelland
3. CAPTRANS, Crosby
4. Double Mountain Coaches, Aspermont
5. Sharplines, Crowell
6. TAPS, Sherman
7. SPAN, Denton
8. Ccart, McKinney
9. The Connection, Greenville
10. ATCOG, Texarkana
11. West Texas Opportunities Transportation, Lamesa
12. CARR, Coleman
13. Stage Transit, Sweetwater
14. County Transit, Mineral Wells
15. Parker County Transportation Service, Weatherford
16. Cletran, Cleburne
17. Community Transit, Corsicana
18. The Transit System, Glen Rose
19. KART, Terrell
20. East Texas Council of Governments, Kilgore
21. Thunderbird RPT, San Angelo
22. Hill Country Transit, San Saba
23. HOTCOG, Waco
24. City of Del Rio
25. CARTS, Austin
26. Brazos Transit, Bryan–College Station
27. City of Eagle Pass
28. Southwest Transit, Uvalde
29. ACT, San Antonio
30. R Transit, Victoria
31. Colorado Valley Transit, Columbus
32. Connect...Transportation, Galveston
33. South East Texas Regional Planning Commission, Nederland
34. RPT, Beeville
35. SPARTS, Sinton
36. EL AGUILA, Laredo
37. Rainbow Lines, Rio Grande City
38. Royal Transit, Alice
39. Paisano Rural Express, Kingsville
40. Rio Transit, McAllen
41. The Wave, South Padre Island

Figure 12. Service Areas of Rural Transit Providers in Texas.

Table 14. Places Served by Public Transit[a].

Alamo Area Council of Governments (AACOG) Universal City Ark-Tex Council of Governments (ATCOG) Paris Community Service, Inc. (CSI) Midlothian Heart of Texas Council of Governments (HOTCOG) Mexia Hill Country Community Action Association, Inc. Gatesville Hunt County Committee on Aging, Inc. (HCCOA) (For persons age 60 and older) Seagoville	Northeast Transportation Service (NETS)and Forth Worth Transportation Authority(The T) Grapevine (23 miles to Fort Worth)[b] Keller Sun Metro--City of El Paso Mass Transit Department Socorro Texoma Area Paratransit System, Inc. (TAPS) Bonham VIA Metropolitan Transit--San Antonio Converse Schertz

[a] Conversion factor: 1 mile = 1.609 kilometers.

[b] Because "The T" does not serve Lewisville, the closest service to Grapevine, it could take the passenger 23 miles to Fort Worth, a city which it does serve.

Several places are not in the service areas of any metropolitan transit authority, municipal transit system, or rural public transportation system. These places are shown in Figure 13 and listed in Table 15. De Soto, Lancaster, Cedar Hill, Rockwall, and Frisco, which represent five of the eight cities with populations over 5,000, would all be considered part of the Dallas/Fort Worth Metroplex. Residents of all these cities except for Cedar Hill have less than 13 miles (21 km) to travel to a bus station. Residents of Cedar Hill have 23 miles (37 km) to travel. Two of the remaining three cities with populations over 5,000 only have 12 to 16 miles (19.3 to 25.7 km) to travel to the nearest service. Residents of only one city in Texas with population of more than 5,000 have to travel further than 30 miles (48 km) to reach the nearest service.

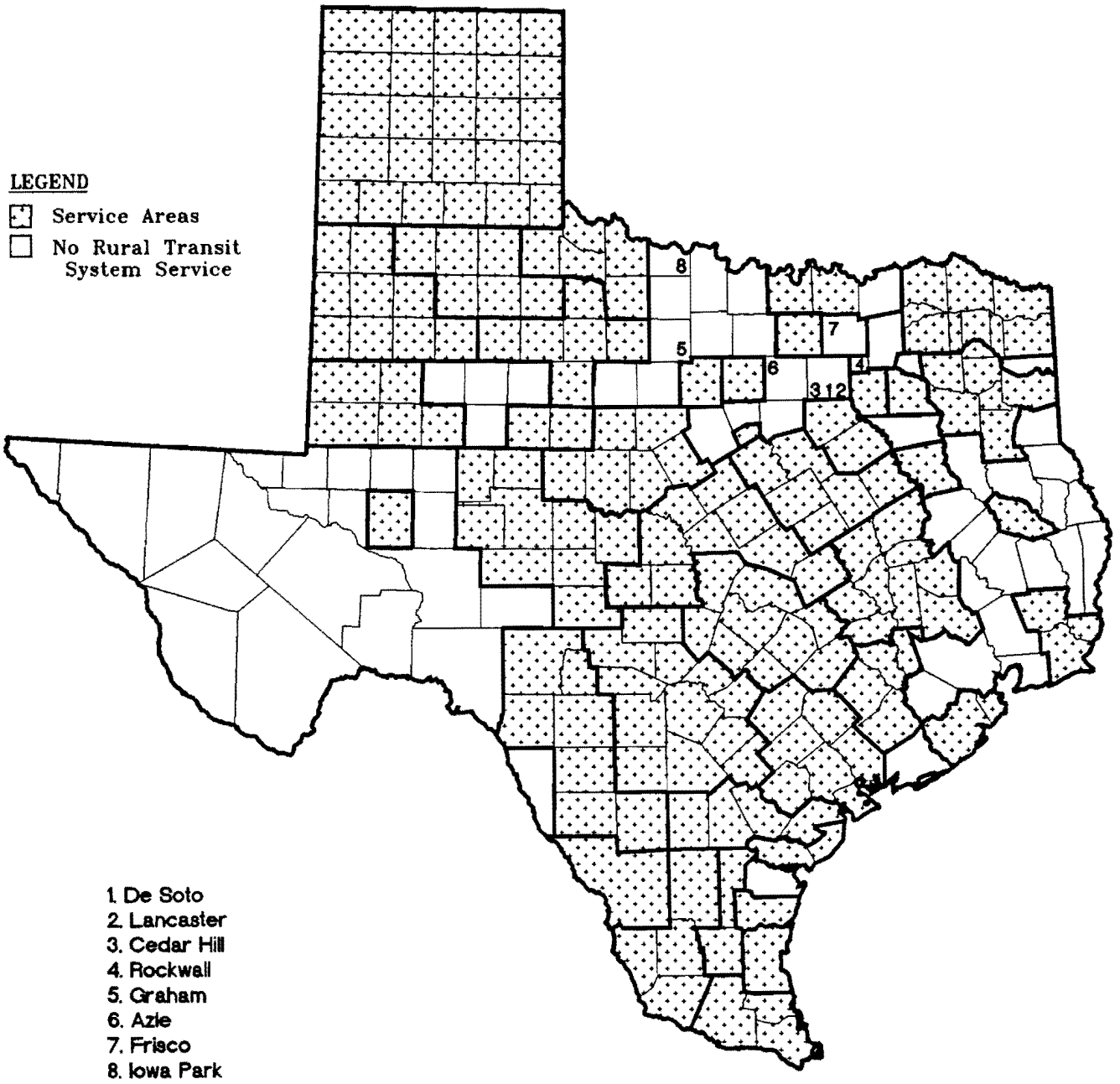


Figure 13. Cities With Populations Greater Than 5,000 and Further Than Ten Miles (16 km) From Intercity Bus Service Without a Transit System.

Table 15. Cities With Populations Greater Than 5,000 and Further Than Ten Miles (16 km) From Intercity Bus Service Without a Transit System.

City	1990 Population	Miles to Nearest Service[a]
De Soto	30,544	12
Lancaster	22,117	13
Cedar Hill	19,976	23
Rockwall	10,486	13
Graham	8,986	34
Azle	8,868	16
Frisco	6,141	11
Iowa Park	5,238	12

[a] Conversion factor: 1 mile = 1.609 kilometers.

CHAPTER 5
ACTIVITIES OF OTHER STATES

GAO REPORT ON AVAILABILITY OF INTERCITY BUS SERVICE

In June of 1992 the United States General Accounting Office (GAO) published a report on the availability of intercity bus service (12). It concluded that regulatory relief for the bus industry in 1982 did not address the causes of the industry's decline: shrinking rural populations, increased competition from air and rail transportation, and increased car ownership. Consequently, the industry continued to contract, from serving 11,820 locations in 1982 to serving fewer than 6,000 locations in 1991. Also concluded in the report was that based on limited available data, the riders who have been losing service are those least able to afford and least likely to have access to alternative modes of transportation.

Part of the GAO investigation was a survey of the states to identify the types of assistance they were offering the intercity bus industry. The GAO found that states most frequently assist bus companies by providing operating support for routes that might otherwise be abandoned and subsidies to obtain new vehicles. In addition, some states fund the construction or rehabilitation of intermodal terminals used by buses. These forms of assistance are believed to reduce capital costs and enhance the comfort and safety of bus travel, and may help to expand ridership. Following is a summary of the GAO findings from the state survey.

Twenty states had activities supporting the intercity bus industry (the other 30 states had no such activities). The type of assistance offered by these twenty states varied between operating assistance, vehicle assistance, terminal assistance, and other programs. The type of assistance offered by state is summarized in Table 16. Seventeen states used federal funds for their programs, while 14 of these states also used either state or other types of funds. State monies were the only source of funding for three of the states.

Table 16. Type of Assistance Offered by States in 1992 to Support Intercity Bus Service (12).

State	Operating Assistance	Vehicle Assistance	Terminal Assistance	Other
Arizona	X			
California			X	X
Delaware	X[a]			
Iowa				X
Maine	X	X		
Maryland	X[a]	X[a]		
Massachusetts	X[a]	X[a]	X	X
Michigan	X	X	X	X
Nebraska	X			X
Nevada	X			
New Jersey	X[a]	X[a]		
New York	X			
North Carolina	X			X
North Dakota	X	X		
Oregon				X
Pennsylvania	X		X	X
Rhode Island				X
Texas			X	
Vermont				X
Wisconsin	X			

[a] Assistance is for intercity bus service that primarily serves commuters.

Operating Assistance

Operating subsidies were provided by fourteen states. The subsidy was usually provided to maintain transportation to rural areas and small towns. Carriers obtained the operating assistance by applying for state funds to maintain service on an unprofitable route that would otherwise have been abandoned. Different criteria were used to determine which routes should receive funding; for instance, Pennsylvania prioritized routes serving small towns between route end points, while New York prioritized small community-to-urban area routes. Pennsylvania and New York had been providing operating subsidies since the 1970s. Operating subsidies did not necessarily lead to increased riderships on assisted routes, however, and in some cases were withdrawn from routes with insufficient ridership and revenue.

Vehicle Assistance

Vehicle assistance programs were administered by six states. In these programs, buses were bought by the state and leased to private carriers for a reduced fee. The bus carriers, in return, used the buses to operate regular route service. The program helped spare bus companies the expense of new buses, while at the same time, provided passengers trips in more comfortable, safe, and reliable buses. The criteria for obtaining vehicle assistance differed among states. Michigan, for example, required the leased buses to be used on regular routes that had no alternative intercity transportation.

Terminal Assistance

Five states assisted bus companies by building or remodeling bus terminals. In many cases, these terminals were intermodal, serving not only buses but passenger rail, transit, and taxis. These projects helped to reverse the view of bus stations as dirty and dangerous places, while at the same time easing the transfer of passengers between modes.

Other Forms of Assistance

A number of states offered marketing help to bus companies. For example, North Carolina prepared brochures, and Oregon placed highway signs to increase awareness of the intercity bus service. Passenger shelters, tax relief, technical assistance, and service coordination were other forms of assistance.

ISTEA Mandate

The GAO report notes that by requiring states to use a portion of their Section 18 funds for intercity bus transportation, ISTEA may make more funding available for existing programs. It may also provide an incentive to other states to initiate programs to enhance intercity bus service. While the ISTEA mandate to spend Section 18 funds was not the impetus behind the programs listed in Table 16, 43 states said they were expecting to use the Section 18 set-aside funds for intercity bus purposes. Only seven states said they were considering waiving the requirement by having the governor certify that intercity bus service in the state was adequate. (These seven states were not identified in the report.)

TELEPHONE SURVEY

To determine the current activities of other states regarding the funding of intercity bus programs, an informal telephone survey (Appendix A) was conducted. A spokesperson for intercity bus activities was contacted in the following states: Massachusetts, Michigan, Nebraska, Nevada, New York, North Carolina, Oregon, Pennsylvania, and Wisconsin. These states were chosen because they were known to have intercity bus programs. Questions were asked regarding the funding of intercity bus programs before ISTEA, the possibility of a study of intercity bus need in response to the ISTEA, the use of Section 18(i) funds as mandated by

ISTEA, and the amount of funding spent on intercity bus programs. The responses to these questions, by state, are listed below.

Massachusetts

Before the ISTEA, Massachusetts operated a capital assistance program in which it bought and leased buses to intercity bus companies at a very low interest rate. While no buses have been bought since 1989, payments are still being made on buses leased before that time. The Massachusetts spokesperson said that while no study of bus need was being planned, she thought that a study would probably be done in the future. Massachusetts chose not to spend any of its 1992 Section 18(i) funds, but has spent about $127,000 of its 1993 Section 18(i) funds to market intercity bus companies in a statewide brochure. The spokesperson noted that the Commonwealth of Massachusetts sends a representative to the meetings of the New England Bus Passenger Transportation Association (NEBPTA), in order to provide technical assistance.

Michigan

Michigan also had a bus loan program before ISTEA, as well as programs offering operating subsidies to unprofitable routes and programs to fund the building of intermodal terminals. The State of Michigan has not performed any study of bus need "in a long time," but the spokesperson said that a new study was a possibility. Section 18(i) funds have been used for vehicle loans, terminal enhancements and renovations, and terminal construction; however, use of the funds for operating subsidies has been discouraged.

Nebraska

The State of Nebraska used federal fuel overcharge funds for operating assistance and intercity bus marketing before ISTEA. Ecosometrics, Inc. was contracted to perform an in-depth study of bus need in the state. The report, distributed in June of 1993, was entitled

Nebraska Intercity Bus Study/Plan Development (22). The purpose of this study was to provide a basis upon which the state's Section 18(i) funds would be used. While Nebraska has not spent any of its Section 18(i) funds yet, it plans to use them to accomplish three goals: 1) to retain the present service, 2) to reinstate abandoned service, and 3) to expand the range of Section 18 service providers.

Nevada

Prior to the ISTEA legislation, Nevada was using Section 18 funds for operating, capital, and administrative costs relating to the intercity bus industry. The State plans to fund a study on intercity transportation needs, with a report to be finished by January of 1994. Presently, Nevada's Section 18(i) funds are being used as operating subsidies for two intercity bus grantees. The spokesperson from Nevada estimated that the State will spend about $300,000 on intercity bus programs in 1993.

New York

New York has provided operating subsidies to intercity bus companies since 1974. A study of intercity bus needs in the state was published by NYSDOT in May of 1993 (23). The State of New York accumulated its Section 18(i) funds for the first two years, and has several ideas on how to use them, including placing signs along highways identifying intercity bus terminals. New York spent approximately $6.5 million on intercity bus programs in 1992.

The spokesperson from New York sent the State's 1993 intercity bus report. The report states that "it is safe to say that in New York, all service that NYSDOT believes to be essential is currently operational," although how "essential" service was determined is not discussed. The report explains that the biggest problems regarding intercity bus service in New York are related to the recent use of two bus schedule publications (*Russell's Guide*, and the Greyhound timetable), and the impacts of Greyhound's raising its rents at its terminals.

Greyhound's timetables are scarce, claims the report, and often ticket agents are not provided copies. Also, having to consult two different schedule guides often leads to errors being made by ticket agents. Finally, the report notes that there have been specific instances in which feeder carriers have not been made aware of Greyhound's schedule changes. These all result in inconveniences for passengers. NYSDOT recommends in its report that the bus industry as a whole design a computer-based schedule information system.

Another problem plaguing the New York bus industry has been caused by Greyhound's increase in rents at its terminals. Some carriers have consequently abandoned routes, have begun serving passengers in nearby streets, have built separate terminals, or have gone out of business altogether. NYSDOT believes that shared, intermodal terminals are in the best interest of the passenger and is currently considering the placement of an intermodal municipal terminal in Syracuse, one city in which interline difficulties have been experienced.

North Carolina

Before the ISTEA, North Carolina was using Section 18 funds to subsidize intercity bus routes operating in the southeastern part of the state. The State has no plans to perform a study of intercity bus needs. North Carolina is initially using its Section 18(i) funds to continue the southeastern route operating subsidies, and helping to pay for intercity bus tickets for indigent persons through a United Way program. Other ideas for Section 18(i) fund usage include aiding in the funding of multimodal terminals, and helping bus companies comply with the Americans with Disabilities Act (ADA) requirements. The use of the Section 18(i) funds was decided in part by the input of county managers, Section 16 and 18 operators, and intercity bus companies, whose opinions were solicited by the State. The North Carolina spokesperson said that about $125,000 will be spent on intercity bus projects (the route subsidies and the tickets for the indigent) in 1993.

Oregon

The spokesperson from the State of Oregon indicated that the State spent very little on intercity bus projects before it was mandated by the ISTEA. Some rural operating assistance was provided in the form of a rural connection to a Greyhound route, and the State placed highway signs locating bus stations. In 1992, Oregon completed its state transportation plan, and it is currently developing a state transit plan: both of these plans involve the intercity bus. Current and potential uses for Section 18(i) funds include the purchasing of equipment for lease, operating subsidies for rural service, and the conversion of Amtrak stations into intermodal stations. Bus signs are also still being used to remind citizens of intercity bus service, and the spokesperson from Oregon encouraged other states to place such signs as well. In 1993, an estimated $500,000 will be spent on intercity bus programs in Oregon.

Pennsylvania

Pennsylvania was offering operating assistance to five carriers on 17 routes before the ISTEA. A study of intercity bus need was performed in 1984, and another study is planned for the next fiscal year (1993-94). The State's Section 18(i) funds have been used for operating assistance and technical assistance. The spokesperson noted that capital assistance was available, but no applications for this assistance were pending. In 1992-93, Pennsylvania spent approximately $1.5 million on intercity bus programs; the estimated figure for 1993-94 is slightly higher.

Wisconsin

Operating subsidies were provided by the State of Wisconsin before the ISTEA. The State is currently performing an intermodal transportation study, of which the intercity bus will be a part. Section 18(i) funds are being used for operating subsidies; when a route is proposed

to be abandoned, the bus company procures a municipality sponsor, through which it can obtain the funds. Wisconsin will spend approximately $243,000 in 1993.

Summary

Table 17 summarizes the findings of the telephone survey.

Table 17. Results of State Telephone Survey.

State	Before ISTEA	After ISTEA	1993 Spending
Massachusetts	Vehicle loan program	Statewide brochure	$127,000 on brochure
Michigan	Vehicle loan program	Vehicle loan program Terminal improvements Terminal construction	
Nebraska	Operating subsidies	Retain present service Reinstate abandoned service Increase service area	
Nevada	Operating subsidies Capital costs Administrative costs	Operating subsidies	$300,000
New York	Operating subsidies	Placement of signs Others under consideration	$6.5 million (1992)
North Carolina	Operating subsidies	Operating subsidies Buying tickets for indigents Multimodal terminals ADA compliance	$125,000
Oregon	Operating subsidies Highway signs	Vehicle lease program Operating subsidies Intermodal stations Highway signs	$500,000
Pennsylvania	Operating subsidies	Operating subsidies Technical assistance Capital assistance	$1.5 million
Wisconsin	Operating subsidies	Operating subsidies	$243,000

CHAPTER 6
TEXAS INTERCITY BUS HOUSEHOLD SURVEY

As was done in 1981, a household survey was mailed to residents in the state of Texas (Appendix B). The survey was designed to gather data concerning demographics, attitudes toward and knowledge of the intercity bus system, and information on intercity bus use. The survey was made as similar as possible to the 1981 survey so that the responses from the two could be compared. (It should be noted that comparisons are not offered in all cases because for some of the data the research team did not feel the comparisons were warranted.) Like the 1981 survey, the 1993 household survey reached a high number of non-bus users because of the relatively small number of individuals who use intercity buses and because the selection of names was, within limitations, random. Both surveys attempted to identify what would be necessary to encourage a non-user to ride a bus.

In order to insure a representative cross-section, the sampling scheme used for the household survey distribution was based on region and community size. The state was divided into three regions as was done in the 1981 study. The border area was considered its own region ("south") because of the poorer economic status of the people living in that area (1). The rest of the state was divided roughly in half, forming the "west" and "east" regions. A community's size was determined according to the size of the largest standard metropolitan statistical area (SMSA) in the same county. Communities in the same county with an SMSA population of 1,000,000 or more were considered "large." Communities in the same county with an SMSA population of less than 1,000,000 were considered "medium." Communities in counties with no SMSA were considered "small."

Because the 1981 survey was mailed to a total of 2,040 households, the study team used 2,040 as the minimum target number of deliverable addresses. Population of each region/community size was used to determine the number of households to receive surveys (see Table 18). In order to survey a number of households proportional within each community size, a similar number of deliverable addresses (700) was desired for each of the large, medium, and small size communities. Because of the high number of incomplete addresses on the mailing

list, more than 700 households in each size community were sent surveys. Table 19 lists the breakdown of household survey distribution by region and community size. The number of households sent surveys in the east region was 1,424, while 276 households were sent surveys in the west region and 443 households were sent surveys in the south region.

Table 18. 1990 Total Population by Region and Community Size.

	Small	Medium	Large
East	2,199,691	3,587,913	5,841,112
West	794,794	976,219	0
South	676,855	1,659,659	1,185,394

Table 19. Number of Households Sent Surveys.

	Small	Medium	Large	TOTAL
East	439	400	585	1424
West	161	115	0	276
South	133	190	120	443
TOTAL	733	705	705	2143

As in 1981, the database used for obtaining household addresses was the Metromail computerized list of addresses based on all telephone directories in Texas. Although the sample was biased against households without phones, this was deemed acceptable as the survey was aimed at non-users, and people without phones were considered more likely to be users.

All 254 counties in the state of Texas were categorized into the nine region and size categories (although no counties fit into the category of "west/large"). Because Metromail

charged according to the number of counties from which names were selected, in the interest of costs five counties were selected (randomly) from each region/size category. Because the category "east/large" contained only three counties, and the category "south/large" contained only one category, households in all of these counties were sent surveys. Metromail was then asked to send addresses from the 34 counties selected according to the distribution shown in Table 19.

A letter and two survey forms were sent to each of the 2,143 households. The letter instructed the recipient to have two adults complete the surveys and return them in the postage-paid envelope provided. Only 1,908 of the households had deliverable addresses. Of the 1,908 deliverable households, 274 households returned surveys after the first mailing for a response rate of 14 percent. To avoid obtaining surveys from the same household more than once, only households that had not returned surveys were mailed surveys in the second and third mailings. A total of 457 households had returned surveys after the second mailing to bring the response rate to nearly 24 percent. After the third and final mailing, 545 households had returned at least one completed survey, which brought the final household response rate to almost 29 percent. The total number of surveys returned after the final mailing was 814.

RESPONSES FROM ALL HOUSEHOLDS

Personal Characteristics

The household survey included questions regarding age, gender, education level, occupation, household income and vehicle ownership. Summarized below are the responses to these questions, and comparisons to the responses to the same questions asked in the 1981 survey.

Age, Gender, and Education Level. Figure 14 shows the cumulative frequency distribution for the age of household respondents who answered the question, "What is your

age?" Thirty percent were under 40 years of age and 24 percent were over the age of 65. The average age of persons responding to this question was 52, slightly higher than the average age of respondents in the 1981 survey, which was 48.

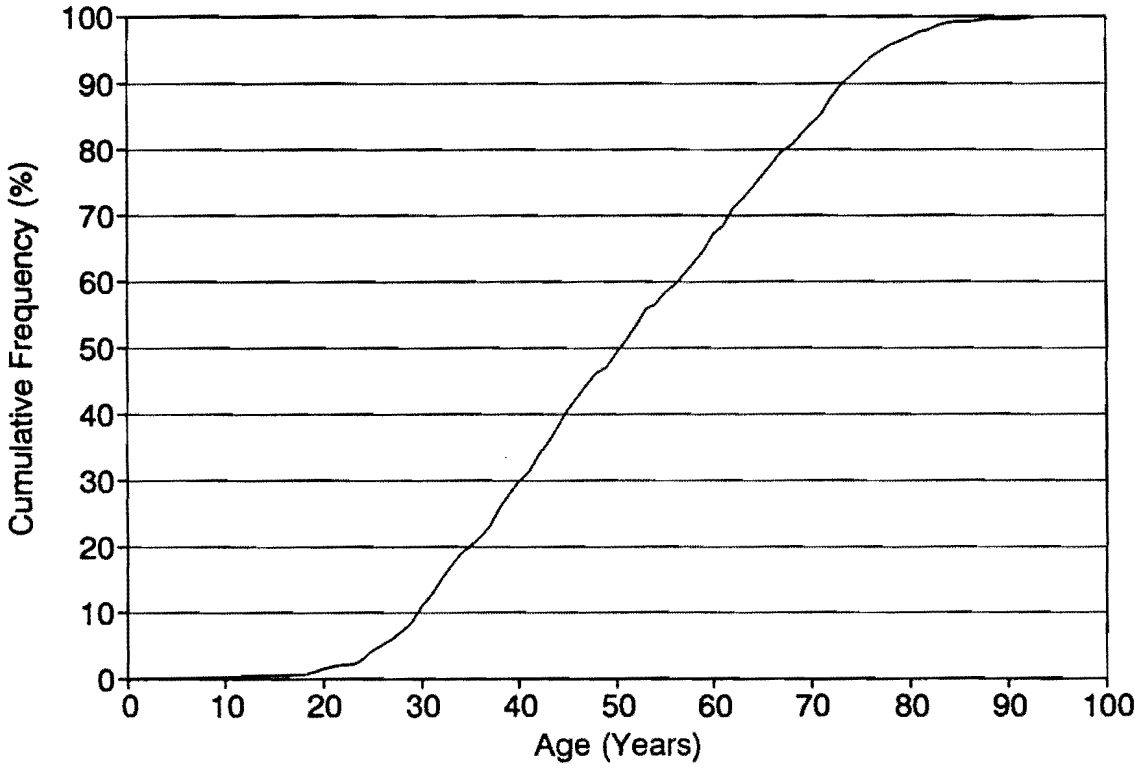


Figure 14. Age of Household Respondents.

Using a chi-square test, a statistically significant difference was seen in the average age of respondents among community sizes, with age of respondent increasing consistently as size of community decreased. The average respondent age for small, medium, and large communities was 57, 51, and 48, respectively.

No significant difference was seen in the gender of the respondents. In the 1993 survey, 49 percent of the respondents were male and 51 percent were female. In the 1981 survey, 52 percent of the respondents were male and 48 percent of the respondents were female. Gender of respondent in the 1993 survey was not significantly different among community size.

Figure 15 shows the breakdown of household survey respondents answering the question regarding the level of education they had attained. As shown, 8 percent of respondents did not graduate high school. High school graduate was the highest level of education attained by 42 percent of respondents, while 37 percent of respondents had obtained a college degree. Thirteen percent of respondents had completed at least some graduate school. A significant difference was seen in education level by community size, with medium and large cities having more respondents with college degrees, and small communities having more respondents with high school diplomas.

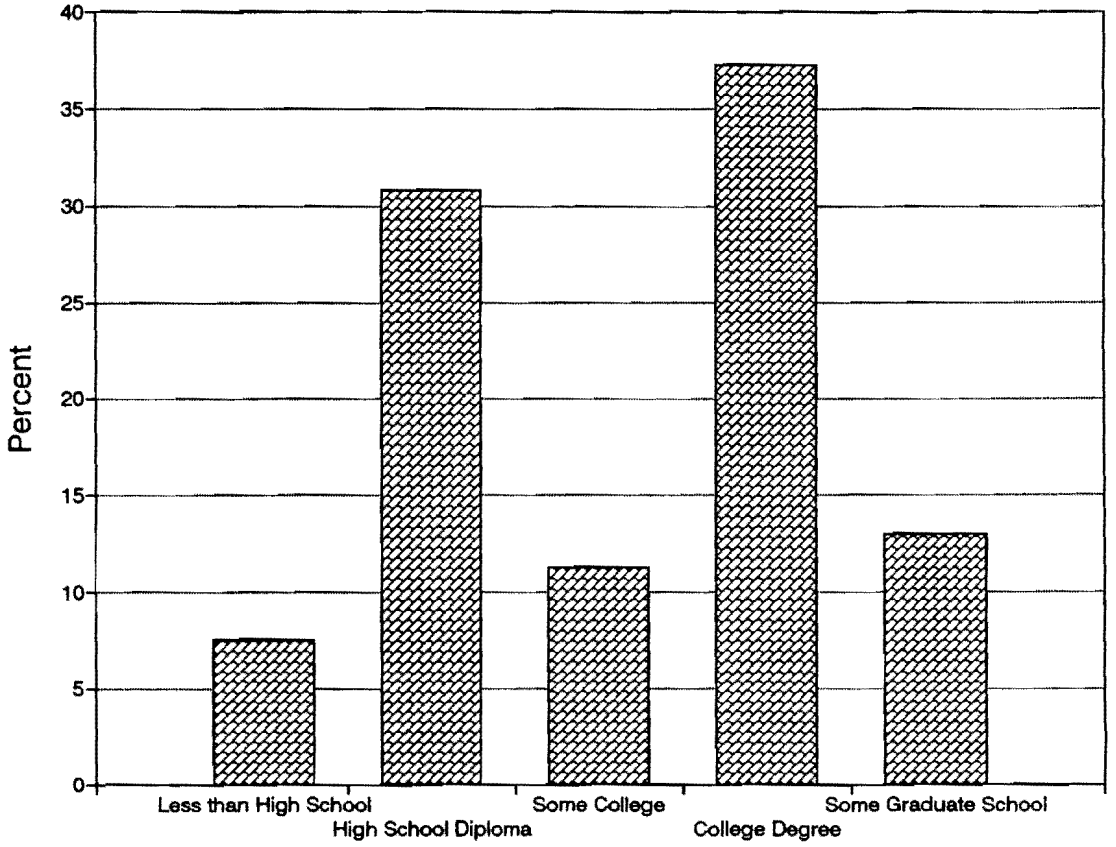


Figure 15. Education Level of Household Respondents.

Occupation. Figure 16 illustrates the responses of those who answered the question, "What is your occupation?" The largest group was retired persons, accounting for 29 percent of respondents. This number is up considerably from the 1981 survey, when only 22 percent

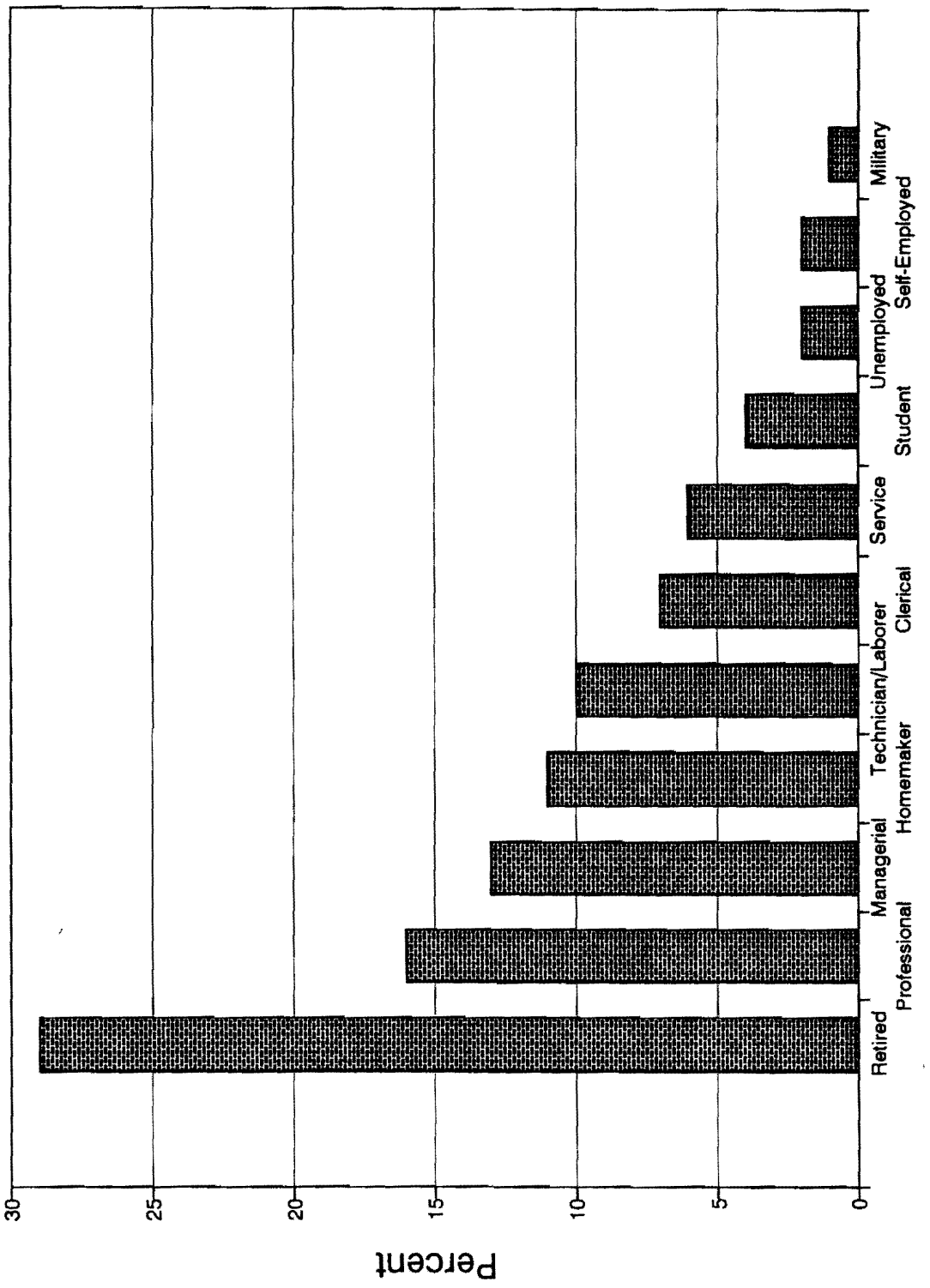


Figure 16. Occupation Types of Household Respondents.

of respondents were retired persons, and may reflect the aging United States population. Homemakers represented 11 percent of survey respondents in the 1993 survey, down from 15 percent of respondents in 1981. This could also be theorized as a reflection of the recent influx of women into the work force.

Income. Sixty-three percent of all respondents who indicated their annual household income listed it as over $30,000. Sixteen percent of respondents had household incomes between $20,000 and $30,000, while 12 percent of respondents had household incomes between $10,000 and $20,000. Nine percent of respondents came from households with incomes of less than $10,000 a year. A significant difference was seen in the variation of income by size of community, with over 76 percent of respondents from large communities coming from households with annual incomes of more than $30,000, while only 62 percent and 50 percent of medium and small community respondents, respectively, came from households with an annual income of over $30,000. These results are shown in Figure 17.

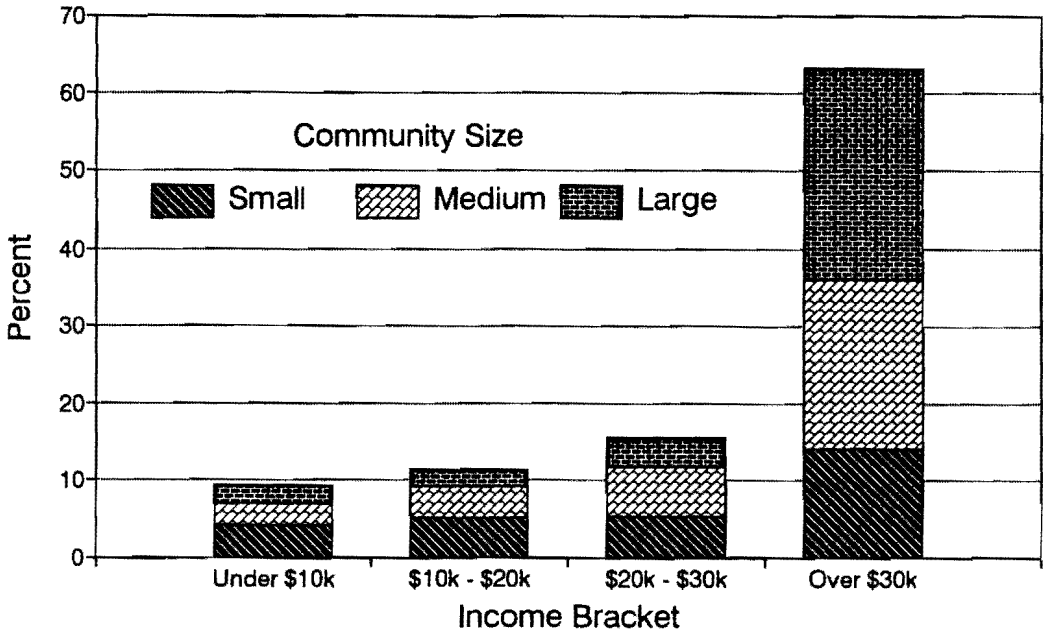


Figure 17. Income Levels of Household Respondents.

The 1993 survey respondents were a less variable group than the 1981 survey respondents regarding income. Roughly 25 percent of the 1981 household survey respondents made up each of the four income categories listed in Figure 17.

Vehicle Ownership and Licensed Drivers. Ninety-six percent of those responding to the question of whether they owned a vehicle did own a vehicle. The same percentage of respondents had a valid driver's license. No variability was seen in either question among community size. These results are nearly identical to the responses from the 1981 survey, in which 95 percent of respondents had both a vehicle and a driver's license.

General Attitude and Knowledge

Two statements were posed regarding the general attitude toward the riding and subsidization of intercity buses and the knowledge of intercity bus services. The same two statements were posed in the 1981 survey, and the responses from both studies are shown in Table 20.

Table 20. Attitudes Toward the Intercity Bus.

Statement	Agree	Disagree	Not Sure
"I will always dislike the idea of riding intercity buses no matter how good the service is."			
1981	19%	63%	18%
1993	25%	48%	27%
"Federal or state tax money should be used to subsidize intercity bus operating costs."			
1981	15%	58%	27%
1993	15%	61%	24%

Table 20 shows that the attitude of respondents toward riding the bus has changed significantly. In 1981, only 19 percent of respondents said that they would always dislike the idea of riding intercity buses, no matter how good the service was; in 1993 the number had grown to 25 percent. Attitudes toward subsidizing intercity bus operations have stayed about the same, with only 15 percent of respondents condoning the subsidization of bus operations with federal or state tax money, and 61 percent disagreeing with the idea.

Several questions on the survey were aimed at determining whether the respondents were knowledgeable of the services provided by the intercity bus. Table 21 shows the responses of those who answered these questions. The number of respondents who had ever ridden a bus has declined slightly in the last twelve years, from 69 percent of respondents in 1981, to 62 percent of respondents in 1993. Of those who had used an intercity bus in the last year, the average number of times they had taken the bus in the last year (a round-trip was considered two times)

Table 21. Knowledge and Use of Intercity Bus Services.

Question	Responses		
	Yes	No	If "Yes," Average Number of Times in Past Year
"Have you ever used an intercity bus?"			
1981	69%	31%	1[a]
1993	62%	38%	8[a]
"Do you know that packages can be shipped by bus?"			
1981	94%	6%	N/A
1993	88%	12%	N/A
"Have you ever shipped a package by bus?"			
1981	59%	41%	3
1993	55%	45%	3

[a] The 1993 survey eliminated the zero responses while the 1981 survey findings are believed to include them.

was 8. This number appears to have jumped significantly since 1981; however, the average number of one trip in the last year obtained from the 1981 survey was determined by including the respondents who had indicated that "yes" they had ridden the bus in the previous year and then placed the value of "zero" in response to the "how many times in the past year" question. The 1993 survey eliminated the "zero" responses from the calculation.

Table 21 also shows that knowledge and use of the package service has declined somewhat since 1981. In 1981, 94 percent of respondents said that they knew packages could be shipped by bus, and 59 percent of respondents had, in fact, shipped packages in this manner. The 1993 survey results showed that these numbers had dropped to 88 percent of respondents knowing of bus package service, with 55 percent of respondents ever having shipped by bus. Of those who had shipped by bus, the average number of times remained the same, about 3 times in a year, in both 1981 and 1993.

The 1993 survey responses did not vary among community size as to the proportion who had ever ridden a bus or as to the number who knew of package service and used it. The question of the number of times those who had ever ridden the bus had ridden it in the last year showed a significant difference among community size. While the average number of trips over all communities was about 8, the average number of trips per year by community size was 16 for small communities, 7 for medium size communities, and 3 for large communities. This reinforces the notion that persons living in rural communities are more frequent bus users than those living in large communities.

The question was asked, "If intercity bus service were not provided, how much would you be inconvenienced?" Responses from both the 1981 and 1993 surveys are shown in Figure 18. The number of respondents indicating they would not at all be inconvenienced without intercity bus service has risen significantly, from 53 percent in 1981 to 74 percent in 1993. Accordingly, the number of respondents to the 1993 survey saying that they would be inconvenienced "a little" or "a lot" has dropped to 12 percent and 3 percent, respectively, from

23 percent and 9 percent, respectively, in 1981. The 1993 survey results also showed that persons from small communities said they would be slightly more inconvenienced than those coming from larger communities.

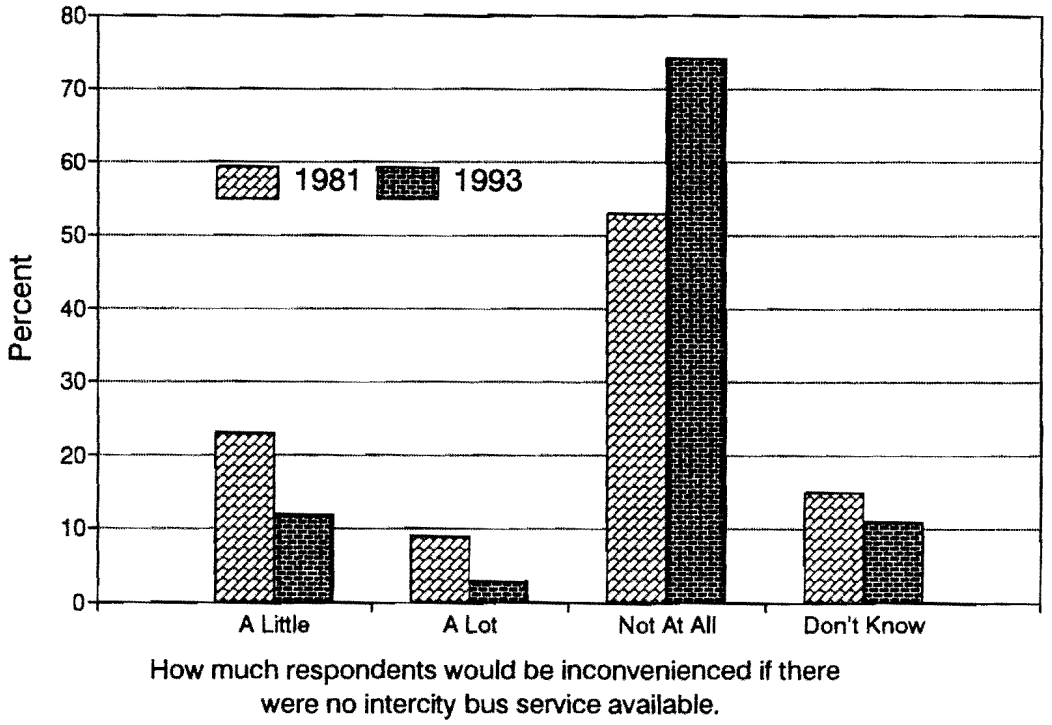


Figure 18. Inconvenience Level if Intercity Bus Service Were Not Provided.

Important and Unimportant Features of Intercity Bus Service

One purpose of the survey was to determine what would make respondents more likely to ride the bus. The question was posed, "How likely would you be to use an intercity bus...," along with a list of seventeen features. The survey asked that respondents circle a number from one to five next to each feature, with one indicating they would "not likely" ride the bus, and five indicating they would be "very likely" to ride the bus. The average responses are shown in Table 22, along with the average responses from the 1981 household survey. Also shown on

Table 22. Importance of Various Features to Household Survey Respondents.

Question: "How likely would you be to use an intercity bus..."	1981 Average Response[a]	1993 Average Response[a]	1993 Duncan Multiple range Group[b]
if more express bus service were available	3.14	2.74	A
if bus stations were located in better places	2.87	2.69	A
if the cost of air or train transportation were to increase greatly	2.98	2.63	A
if availability of gasoline were to decrease	3.09	2.51	B
if the cost of gasoline were to increase	3.20	2.50	B
if there were more leg room, wider aisles and more comfortable seats	2.79	2.48	B
if local city bus transportation were available at destination	2.94	2.42	B
if buses were newer and more modern	2.77	2.42	B
if the buses always arrived and departed on time	2.91	2.41	B
if auto parking were available near the bus station	2.73	2.40	B
if a bus trip were safer	2.64	2.34	B
if the speed of the bus trip were faster	2.50	2.27	C
if the frequency of intercity bus service were increased	2.55	2.27	C
if the purchase of bus tickets from travel agents were available	2.16	2.15	C
if you had a better understanding of how the service operated	2.32	2.12	C
if bus fares were lower	2.42	2.08	C
if the trip did not involve sitting next to strangers	1.91	2.07	C

[a] Response is based on a scale of 1 to 5 with 1 being not likely to ride the bus and 5 being very likely to ride the bus.

[b] Features within the same group (A,B, or C) have means which are not significantly different.

the table is the grouping of features by significance level according to a Duncan's multiple range test. Duncan's multiple range test ranks the sample means from lowest to highest. Two population means are declared significantly different if the absolute value of their sample differences exceeds W_r, where

$$W_r = q_\alpha(r,v) \sqrt{s_W^2/n} \qquad (1)$$

and, n = number of observations in each sample,

s^2_W = mean square within samples obtained from the analysis of variance table,

v = number of degrees of freedom for s^2_W, and

$q_\alpha(r,v)$ = critical value of the Studentized range required for Duncan's procedure when the means being compared are r steps apart.

Features within the same group (A, B, or C) have means which are not significantly different.

The factors which appeared to be most likely to increase bus use were the provision of more express bus service, locating bus stations in better places, and the increase in cost of air or train transportation. Factors least likely to increase bus use were not having to sit next to strangers, the lowering of bus fares, and better understanding of bus service operations. All average ranks, however, were less than 3, indicating that the average response to all questions tended toward "not likely"; i.e., none of the features would not likely increase bus usage by the respondents as a whole.

Among community size, respondents tended to answer similarly regarding the influence of bus service features on their bus usage, although the response rankings from small communities tended to be slightly lower than the response rankings from medium or large communities. This indicates that respondents from small communities would be even less likely to ride the bus despite any feature improvements. The highest-ranking responses from the small communities were also different from those of the medium or large communities. Availability

and cost of gasoline appeared to be most critical factor in bus usage for respondents from small communities.

HOUSEHOLDS SEGMENTED INTO USERS AND NON-USERS

Another aim of the survey was to determine the differences between intercity bus users and those who were not intercity bus users. The survey asked respondents whether or not they had *ever* ridden a bus, and whether they had ridden a bus *in the last year.* Those respondents who had never ridden an intercity bus (298 respondents) are classified as "Non-Users." Those respondents who had ever ridden an intercity bus (478 respondents) are classified as "Previous Users." The 74 respondents in the "Previous Users" group who indicated they had ridden an intercity bus in the last year are further classified as "Recent Users." Because of the low number of respondents who said they had used an intercity bus in the last year, the results of some of the statistical tests regarding this group must be interpreted with caution.

Personal Characteristics

Age, Gender, and Education Level. The Previous User group, with an average age of 53, was significantly older than the Non-Users group, who had an average age of 49. No significant difference was seen in the gender of Previous Users or Non-Users; both had about 49 percent male and 51 percent female respondents. Likewise, no significant difference was seen between Previous Users and Non-Users in the level of education attained. These results imply that neither gender nor education level are determinants for a person's ever having ridden a bus; however, age may be a determinant.

Income. Figure 19 shows the comparison of the incomes of all respondents to the incomes of the Recent Users group. The small number of respondents in each Recent User group category did not support a significance test to compare these results to the replies of all respondents.

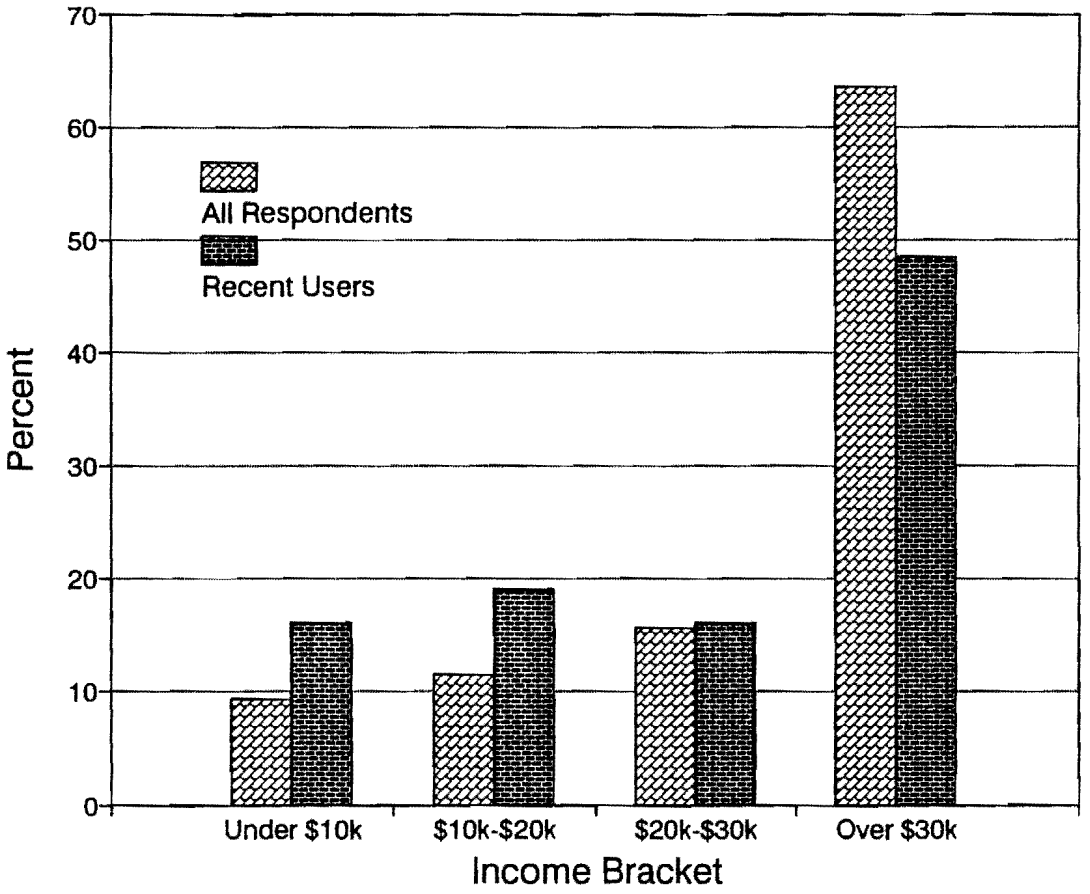


Figure 19. Comparison of Income Between All Respondents and Recent Users.

Occupation. Figure 20 shows the comparison of the occupations of all respondents to the occupations of the Recent User Group. The small number of respondents in each Recent User category did not support a significance test to compare these results to the replies of all respondents.

Vehicle Ownership and Licensed Drivers. While 96 percent of all respondents said that they owned a vehicle, about 89 percent of the Recent Users group said that they owned a vehicle. This was not evaluated to be a significant difference. Likewise, 96 percent of all respondents said that they had a valid driver's license, as opposed to 91 percent of the Recent Users group. This was also not determined to be a significant difference.

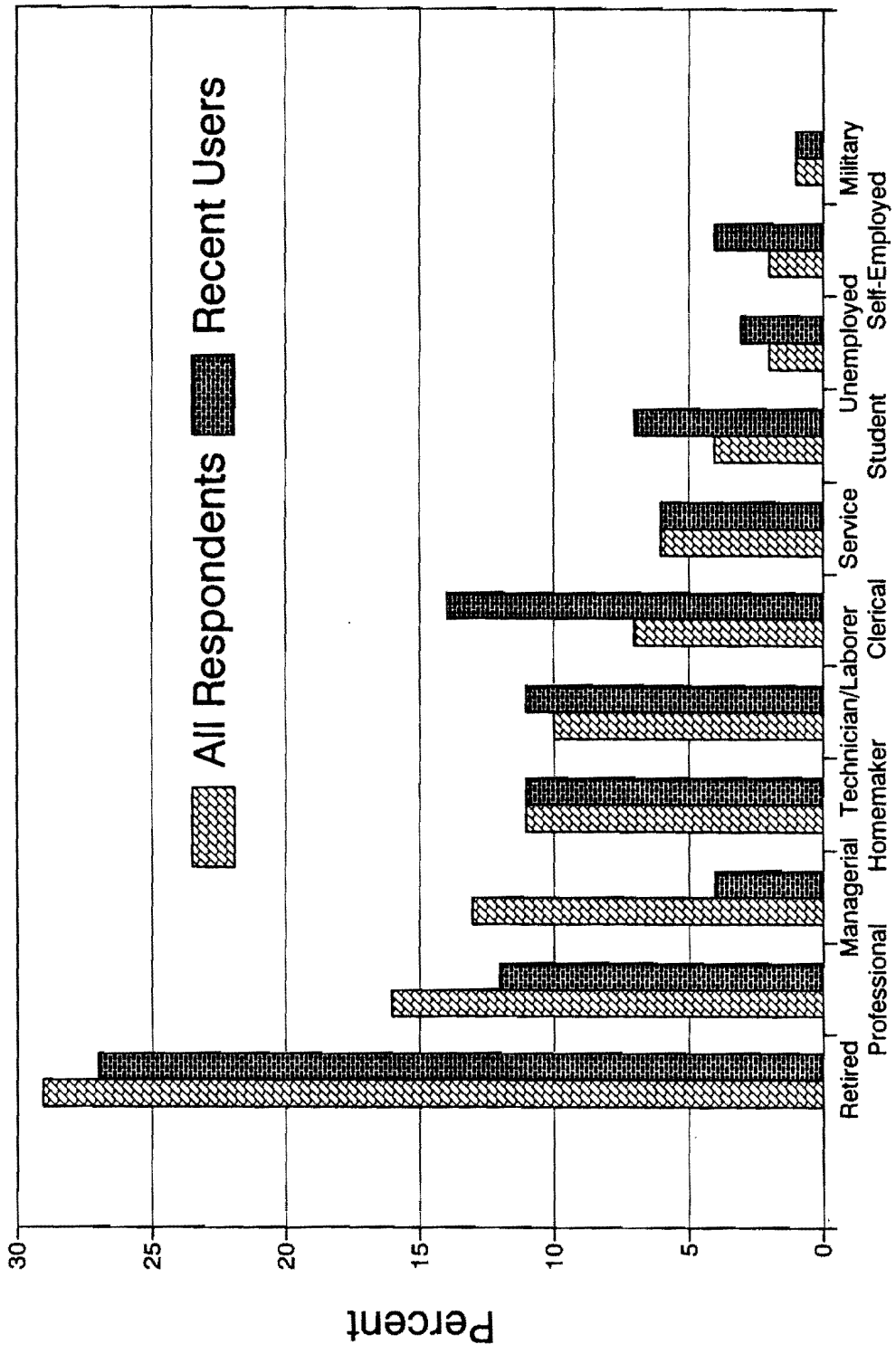


Figure 20. Comparison of Occupations Between All Respondents and Recent Users.

General Attitudes

Figure 21 shows how the three respondent groups, Non-Users, Previous Users, and Recent Users, answered the question, "If intercity bus service were not provided, how much would you be inconvenienced?" Thirty-five percent of the Recent Users group said that they would be inconvenienced "a little" if intercity bus service were not provided. This is significantly greater than the 14 percent of Previous Users and 6 percent of Non-Users who said they would be inconvenienced "a little" by the lack of bus service. Seventeen percent of the Recent User Group said they would be inconvenienced "a lot" if there were no intercity bus service. This is significantly greater than the 9 percent of the Previous User group and 1 percent of Non-Users who said they would be inconvenienced "a lot." The most notable finding from this question was that 47 percent of persons in the Recent User group who lived in small communities said that they would be inconvenienced "a lot" if no intercity bus service were provided. It appears that a significant portion of individuals living in small communities who do ride the bus may be dependent upon it.

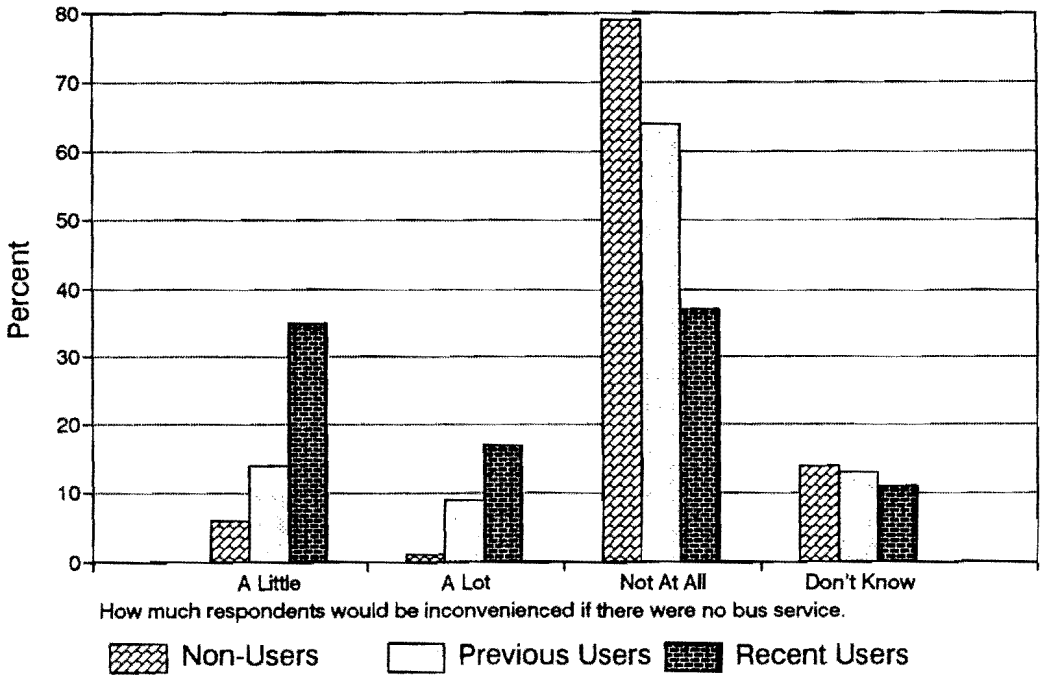


Figure 21. Comparison of Inconvenience Levels for the Different User Groups.

Important and Unimportant Features of Intercity Bus Service

The Previous Users answered similarly to the respondents as a whole as to which features would make them more likely to ride an intercity bus (see Table 22). Non-user rankings, however, could not be grouped into more than one significance level; in other words, no one feature would be more likely to induce a non-user to ride a bus than any other feature. Responses of the Recent Users group also could not be grouped into more than one significance level. The average rankings for the Recent Users group, however, were much greater than the rankings of the Non-Users group or the Previous Users group. This indicates that although not any one feature would be more likely than any other feature to make a respondent in Non-Users group ride an intercity bus, respondents in the Recent User group would be more easily enticed by any feature to ride an intercity bus than any other respondent group.

COMMENTS FROM RESPONDENTS

At the end of the household survey, space was provided for respondents to add any general comments they had regarding the intercity bus industry. One hundred sixty-three comments were obtained with the general point or subject falling into one of fourteen groups. Following are the general comment themes, in ranked order by the number of respondents who expressed each of them.

- I think bus service is vital for some people (the elderly, the handicapped), but I personally do not need it. (20 respondents)
- I have ridden on the bus in the past and have enjoyed it. (17 respondents)
- I do not ride the bus because bus stations are dirty and in dangerous places. (14 respondents)
- I might consider riding the bus. (12 respondents)
- I would consider riding the bus; however, there is no bus service near me. (12 respondents)

- I don't need the bus because I always take my car. (11 respondents)
- More express bus routes are needed; otherwise, trips by bus take too long. (9 respondents)
- What we really need, and what I would use, is better rail service. (8 respondents)
- I had a bad experience on a bus once and would never ride it again. (5 respondents)
- There need to be better transportation mode connections at bus stops. (5 respondents)
- Buses need to be cleaner and more comfortable. (3 respondents)
- More rural-to-city bus service needs to be provided. (3 respondents)
- Bus service should definitely not be subsidized. (3 respondents)
- Bus companies need to be more careful with passenger luggage. (2 respondents)

CHAPTER 7
TEXAS INTERCITY BUS RIDER SURVEY

To gather socioeconomic and demographic data for bus riders, and to identify the features important to riders when choosing to ride a bus, a bus rider survey was performed (Appendix C). The survey was made as similar as possible to the bus rider survey of 1981 so that the responses from the two could be compared.

The same regional divisions (south, east, and west) were used for the bus rider survey distribution as were used in the household survey distribution. A bus stop's size was determined according to whether or not it was located in an SMSA. Bus stops located in an SMSA with a population of 1,000,000 or more were considered "large." Bus stops located in an SMSA with a population of less than 1,000,000 were considered "medium." Bus stops not located in an SMSA were considered "small."

The first step in the stratification of the survey distribution points was determining the number and size of bus stops within each region. Table 23 shows the results of this step which were acquired from *Russell's Bus Guide*.

Table 23. Number of Bus Stops by Size and Region.

Region	Size		
	Small	Medium	Large
East	226	17	2
West	135	6	0
South	110	8	1

Each bus stop in the list of all stops by size and region was assigned a random number. The ten bus stops with the lowest random numbers were extracted from each cell. The number of departures per day for these stops was then found by consulting *Russell's Bus Guide*

(December, 1992). The number of departures for these randomly selected stops are shown in Table 24.

Table 24. Number of Departures per Day for Ten Randomly Chosen Stops, by Size and Region[a].

Region	Size		
	Small	Medium	Large
East	28	313	214
West	49	153	0
South	69	491	105

[a] If the number of stops in a cell in Table 23 is less than ten, the number of departures shown in Table 24 is all the departures in that cell.

The number of departures as provided by *Russell's Bus Guide* for each of the cells in Table 24 was then used to *estimate* the number of departures for *all* stops within each cell. This procedure was used due to the exorbitant amount of time it was taking to extract the number of departures for each of the 505 Texas bus stops. The number of estimated departures for each cell is given in Table 25. Estimates were determined by calculating the average number of departures per day per stop for each cell of Table 24 based on the *Russell's Guide* data and multiplying it by the actual number of bus stops in each cell. These are given in Table 25.

Table 25. Estimated Number of Departures per Day by Size and Region.

Region	Size		
	Small	Medium	Large
East	633	532	214
West	662	153	0
South	759	491	105

The numbers in Table 25 made it possible to proportionally allocate the number of departures with regard to bus stop size. The proportional allocation is shown in Table 26.

Table 26. Proportional Allocation of Departures With Regard to Size.

Region	Size		
	Small	Medium	Large
East	30.8	45.2	67.1
West	32.2	13.0	0.0
South	37.0	41.8	32.9
Total	100.0	100.0	100.0

The bus rider survey of 1981 estimated that a sample size of 1,000 bus riders would be required to complete the survey in order to yield the desired accuracy and confidence level. With an estimated response rate of 50 percent, the 1981 survey was distributed to 2,000 bus riders. The 1993 bus rider survey was distributed to 2,100 riders, with 700 surveys allotted to each bus stop size. Because the number of bus riders per bus stop size or region was unknown before the distribution of the survey, the estimated number of departures for each cell was used to proportionally allocate the number of surveys required for distribution. These figures are shown in Table 27, and were used to plan a schedule of survey distribution.

Table 27. Required Number of Surveys for Distribution.

Region	Size		
	Small	Medium	Large
East	216	316	470
West	225	91	0
South	259	293	230
Total	700	700	700

The survey distribution schedule was designed so that surveys were distributed at a minimum of three small bus stops in each region, and at a minimum of two medium and large bus stops (where possible) in each region. The schedule attempted to provide a representative cross-section of bus stops, yet at the same time keep the distance that each survey team had to travel to a reasonable level. The bus stops at which surveys were distributed are shown in Figure 22.

Fourteen bus companies with routes in Texas were asked for permission to distribute surveys on their buses (the letter sent to the bus companies is shown in Appendix C). With the cooperation of seven of these companies, the buses to be surveyed were boarded, and surveys and pencils were distributed, just prior to departure. The number of buses boarded is shown by region and size of bus station in Table 28. The number of buses boarded was based on the assumption that buses would have an average of 15 passengers.

Table 28. Number of Buses Boarded for Survey Distribution.

Region	Size			Total
	Small	Medium	Large	
East	15	23	31	69
West	13	15	0	28
South	17	27	17	61
Total	45	65	48	158

Surveys were given to every passenger over the age of 12 who would accept one. Surveys were available in both English and Spanish. The passengers were instructed to complete the surveys and to return them to the bus driver. The bus drivers were instructed to compile the surveys in the postage-paid envelope provided to them, and place the envelope in a mailbox. Fifty-nine envelopes were returned from the east region, while 23 envelopes were returned from

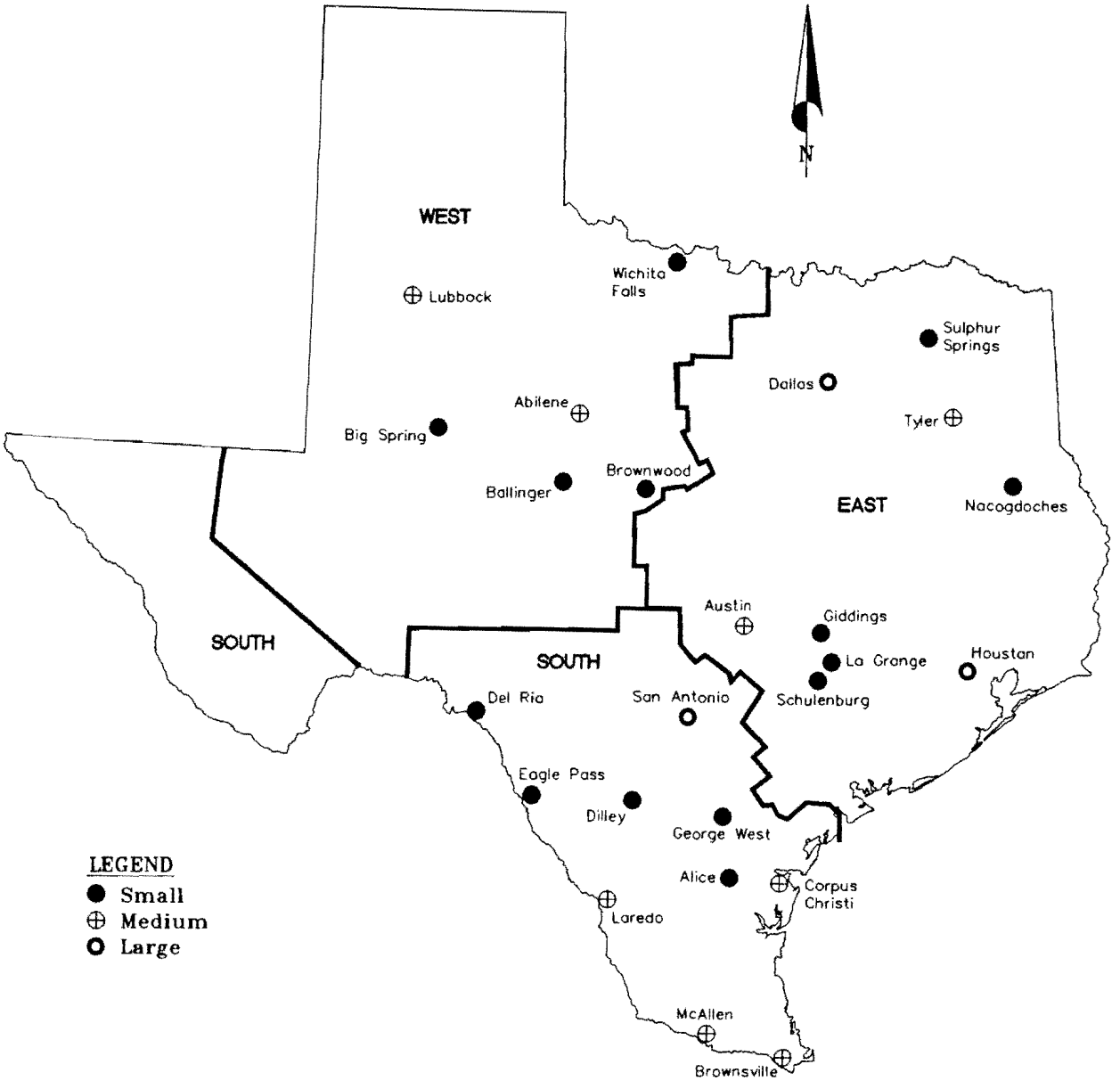


Figure 22. Surveyed Bus Stops.

the west region and 45 envelopes were returned from the south region. Table 29 shows the number of surveys distributed, returned, and the resulting return rates. A total of 2,213 surveys were distributed, and 1,253 surveys were returned for a final return rate of 56.6 percent.

Table 29. Bus Rider Survey Return Rates.

Region	Size			Total
	Small	Medium	Large	
East				
Distributed	219	322	476	1,017
Returned	133	217	260	610
Return Rate	60.7	67.4	54.6	60.0
West				
Distributed	225	231	0	456
Returned	142	111	0	253
Return Rate	63.1	48.1		55.5
South				
Distributed	194	312	234	740
Returned	102	163	125	390
Return Rate	52.6	52.2	53.4	52.7
Total				
Distributed	638	865	710	2,213
Returned	377	491	385	1,253
Return Rate	59.1	56.8	54.2	56.6

PERSONAL CHARACTERISTICS

The bus rider survey included questions regarding age, gender, education level, occupation, household income, vehicle ownership, first language, and place of residence. Summarized below are the responses to these questions, and comparisons to the responses to the same questions asked in the 1981 survey.

Age, Gender, and Education Level

Figure 23 shows the cumulative frequency distribution for the age of bus rider respondents who answered the question, "What is your age?" About 30 percent of respondents to the 1993 survey were under 25 years of age and 20 percent were over the age of 55. The average age of persons responding to this question was 37.

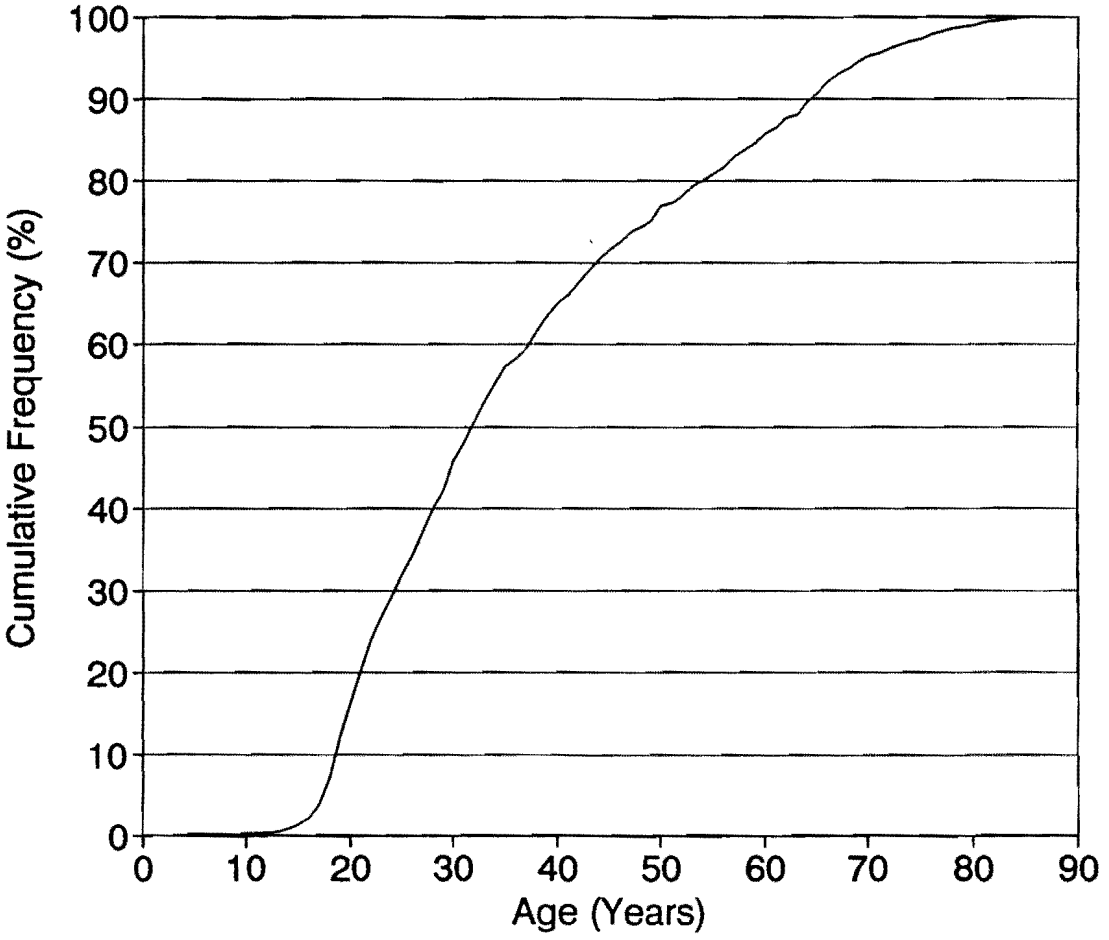


Figure 23. Ages of Bus Rider Respondents.

No significant difference was seen in the gender of the respondents. In the 1993 survey, 50 percent of the respondents were male and 50 percent were female. In the 1981 survey, 46 percent of the respondents were male and 54 percent of the respondents were female.

Figure 24 shows the breakdown of bus rider survey respondents answering the question regarding the level of education they had attained. As shown, 8 percent of respondents had no schooling past the sixth grade. Twenty-nine percent did not graduate high school. High school graduate was the highest level of education attained by 58 percent of respondents, while 9 percent of respondents had obtained a college degree. Four percent of respondents had completed at least some graduate school. The 1981 survey results showed that 32 percent of respondents had not graduated high school, 36 percent had a high school diploma, and 15 percent had obtained a college degree.

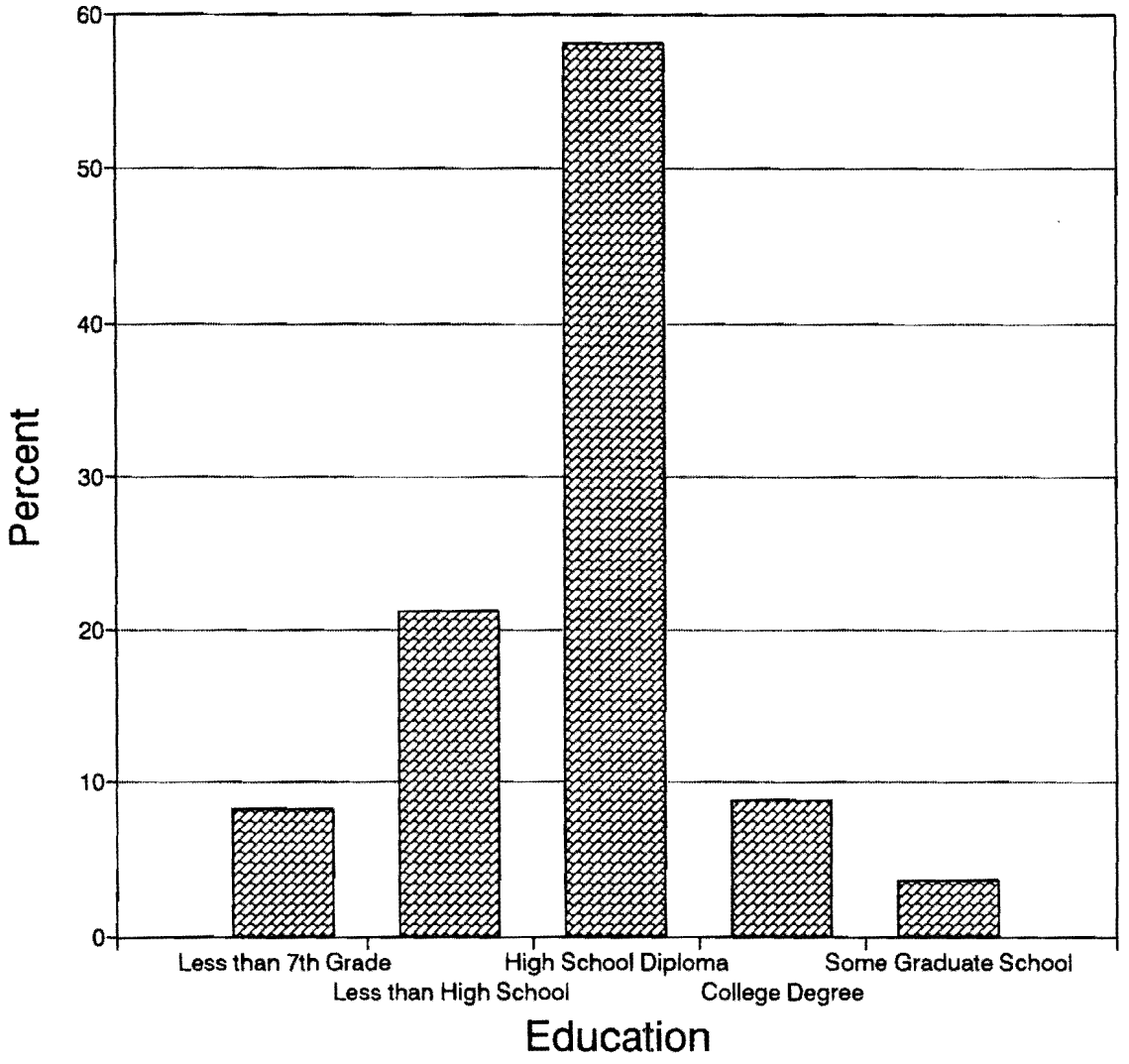


Figure 24. Education Level of Bus Rider Respondents.

Occupation

Figure 25 illustrates the responses of those who answered the question, "What is your occupation?" Students made up the largest group, accounting for 21 percent of respondents. Homemakers and technicians/laborers were the two next largest groups, each making up 16 percent of the survey respondents.

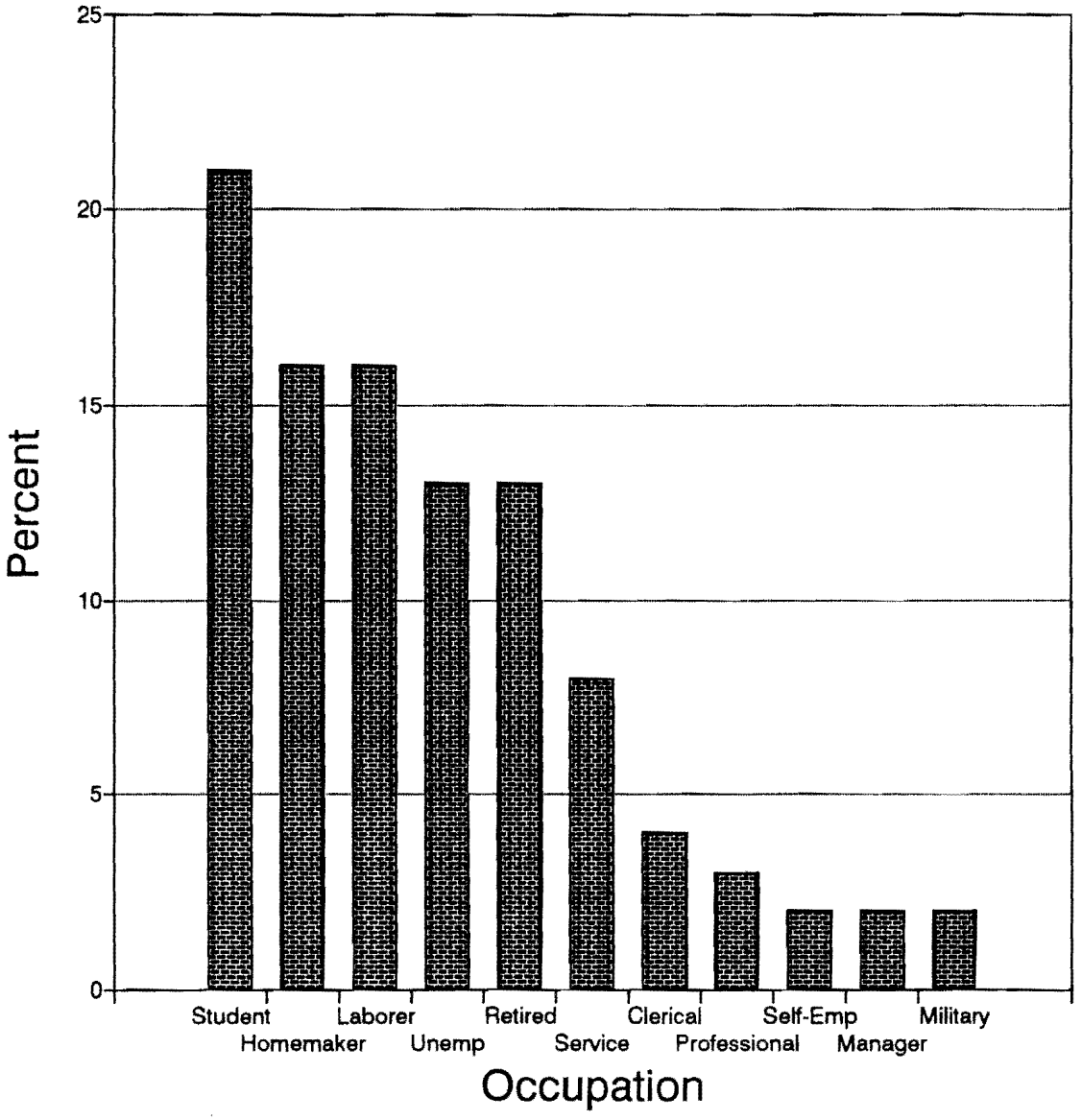


Figure 25. Occupation of Bus Rider Respondents.

Income

Thirteen percent of all 1993 respondents who indicated their annual household income listed it as over $30,000. Fifteen percent of respondents had household incomes between $20,000 and $30,000, while 43 percent of respondents had household incomes between $10,000 and $20,000. Thirty percent of respondents came from households with incomes of less than $10,000 a year. These results are shown in Figure 26.

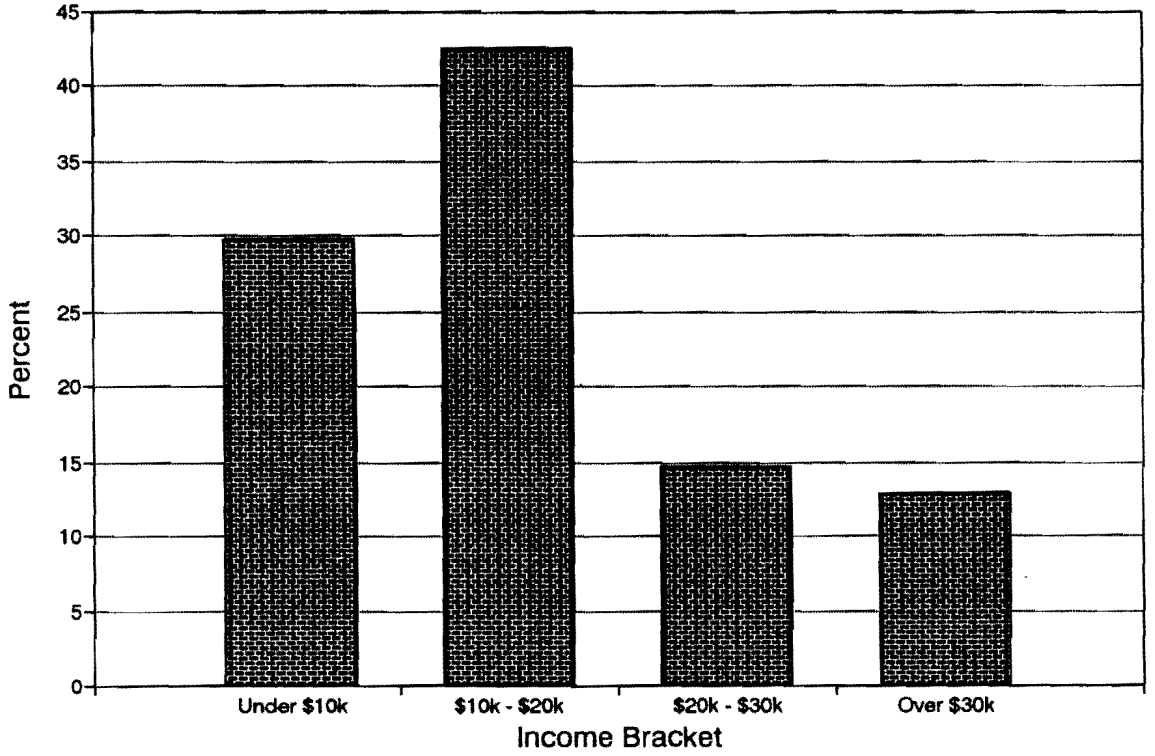


Figure 26. Household Income of Bus Rider Respondents.

Table 30 shows how the incomes of bus passengers in Texas compare to the incomes of bus passengers nationally and the incomes of the general U.S. population. The table shows that the U.S. population has a much larger percentage of persons in the highest income bracket (over $35,000), than bus riders nationally (with 19 percent having incomes of over $35,000). Both of these groups are larger than the percentage of respondents to the Texas bus rider survey in the highest income bracket (over $30,000), which was 13 percent.

Table 30. Bus Passenger and General Population Income (percent).

Annual Income Bracket	Texas Bus Passengers	National Bus Passengers[a]	General U.S. Population[b]
< $10,000 < $15,000	30	46	24
$10,000-$20,000 $15,000-$25,000	43	21	18
$20,000-$30,000 $25,000-$35,000	15	14	16
> $30,000 > $35,000	13	19	42

[a] From *Greyhound On Board Passenger Survey*, April 1991 (12).

[b] From U.S. Bureau of the Census, *Money Income of Households, Families, and Persons in the United States: 1990 Current Population Reports*, Series P-60, No. 174, Washington, DC, 1991 (12).

Vehicle Ownership and Licensed Drivers

Fifty-three percent of those responding to the question of whether they owned a vehicle did own a vehicle. Of those who did own a vehicle, 44 percent said it was available for the trip, and 48 percent said it was not available for the trip. Sixty-seven percent of respondents had a valid driver's license. These results differ from the responses of the 1981 survey, in which 58 percent of respondents had a vehicle and 75 percent of respondents had a driver's license.

First Language

While first language of passengers was not a question asked on the survey, an idea of the percentage of respondents speaking English or Spanish as their first language was determined by the number of Spanish and English surveys distributed. Approximately 79 percent of respondents took the English survey, while 21 percent of respondents took the Spanish survey.

Place of Residence

Respondents were asked to record their place of residence, and indicate its population. From the places of residence, respondents were categorized as living in one of six regions: south Texas; west Texas; east Texas; the states surrounding Texas, including Mexico; overseas countries; and all other states and Canada. The south, west, and east Texas boundaries were the same as what was used for both the bus rider and household survey distributions (see Figure 22).

The largest portion of respondents, 31 percent, lived in east Texas. Twenty-nine percent of respondents lived in the states not surrounding Texas, or lived in Canada, while 24 percent of respondents lived in south Texas. The fourth largest group was those living in places surrounding Texas: Mexico, New Mexico, Oklahoma, Arkansas, and Louisiana. This group made up 11 percent of respondents. Passengers living in west Texas made up only four percent of the respondents, while overseas riders made up one percent of the total.

The majority of respondents lived in places with populations greater than 50,000. Thirty-one percent lived in places with populations between 50,000 and 500,000 while the same percentage lived in places with populations of over 500,000. Places with populations between 5,000 and 50,000 were the hometowns of 27 percent of respondents. Eleven percent of respondents lived in places with populations less than 5,000.

TRAVEL CHARACTERISTICS

The bus rider survey asked a number of questions regarding the travel characteristics of the passengers. Included in these questions were location and population of trip origin and destination, mode of travel to and from the bus station, purpose of trip, alternative mode of travel, number of trips taken in the past year, and reason for choosing the bus. The following sections describe the findings of these questions.

Trip Origin/Destination Characteristics

A significant association was seen between where a passenger began and ended the trip. Passengers who began their trips in a particular region tended to end their trips in the same region. An exception to this was observed in the passengers beginning their trips in the states surrounding Texas (New Mexico, Oklahoma, Arkansas, and Louisiana) or Mexico; most of these passengers ended their trips in south Texas. Table 31 shows the frequencies of trip origin region by trip destination region. The same region categories were used as were used when classifying place of residence: south Texas; west Texas; east Texas; the states surrounding Texas, including Mexico; overseas countries; and all other states and Canada.

Table 31. Origin and Destination by Region (percent).

Origin	Frequency of Trips				
	Destination				
	South Texas	West Texas	East Texas	Surrounding Texas	Other
South Texas	45	0	34	1	20
West Texas	16	31	30	6	17
East Texas	24	3	44	8	21
Surrounding Texas	39	2	25	4	30
Other	22	4	23	7	43

No association was seen between the size of a passenger's origin and the size of a passenger's destination. Respondents beginning their trips in one size city did not necessarily end their trips in the same size city. Table 32 shows the frequencies of trip origin population by trip destination population. Most respondents (73 percent) beginning their trips in cities over 500,000 ended their trips in cities of 50,000 or more. Those passengers beginning their trips in cities with populations between 50,000 and 500,000 also tended to end their trips in cities of

more than 50,000 (69 percent). Most passengers coming from small cities (populations between 5,000 and 50,000) ended their trips in cities with populations over 500,000 (42 percent), as did most passengers coming from places with populations less than 5,000 (43 percent).

Table 32. Origin and Destination by Population (percent).

Size of Origin	Frequency of Trips			
	Size of Destination			
	> 500,000	50,000-500,000	5,000-50,000	< 5,000
> 500,000	36	37	23	4
50,000-500,000	33	37	25	6
5,000-50,000	41	27	26	6
< 5,000	43	21	25	11

Mode of Travel To and From the Bus Station

The survey asked bus passengers how they arrived at the bus station that day. Figure 27 shows the responses from this question. Sixty-two percent had been driven by someone else to the station, while 12 percent had arrived via city bus. Very few passengers (only two percent) had driven themselves to the station. These results are nearly identical to the results obtained from the 1981 survey.

The survey then asked the passengers how they would get to their final destination from the bus station. Figure 28 shows the responses from this question. Again, the majority of passengers (64 percent) planned to be driven by someone else to their final destination, and a very small percentage (three percent) planned to drive themselves. These results are also similar to the 1981 survey findings.

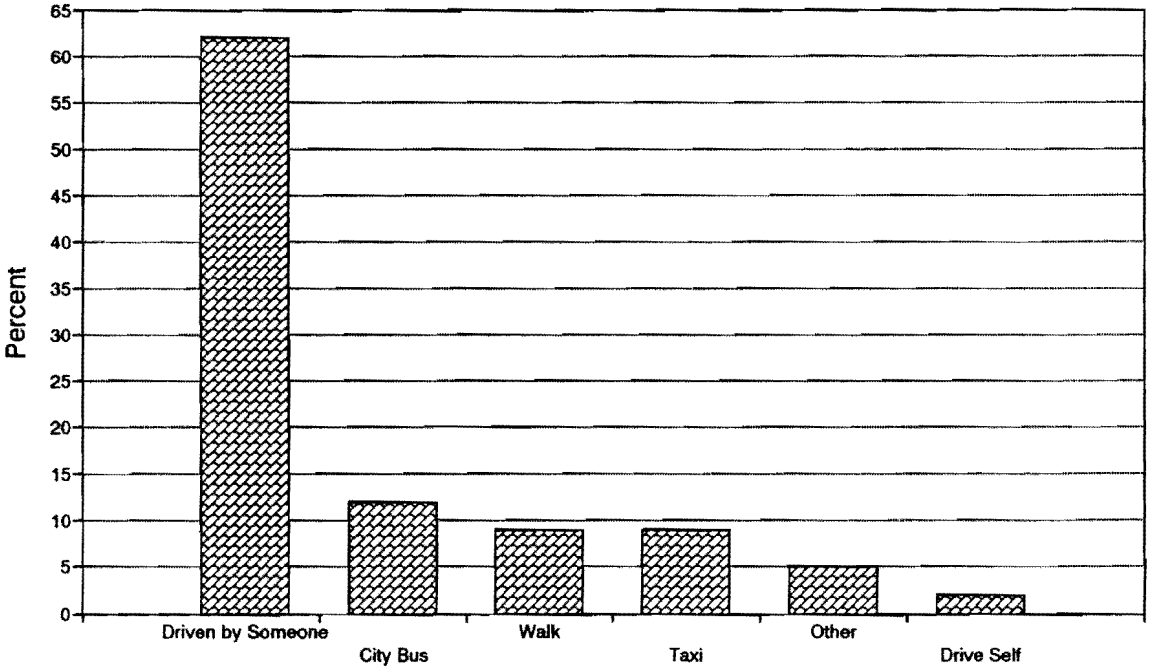


Figure 27. Mode of Travel to Bus Station.

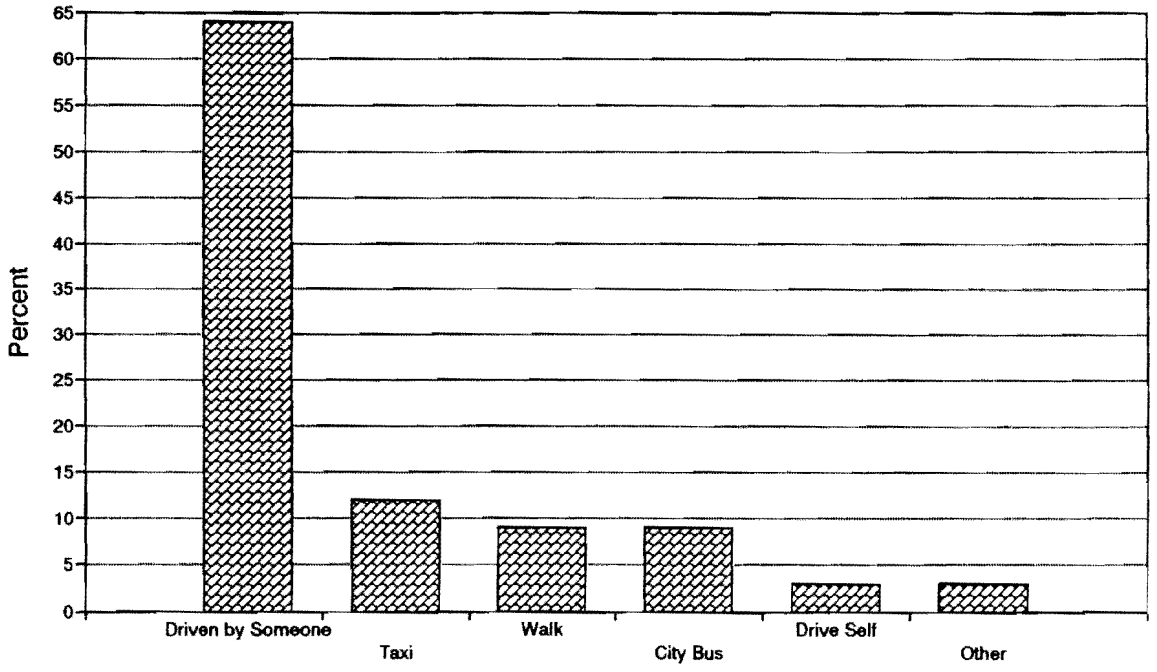


Figure 28. Mode of Travel from Bus Station.

Trip Purpose

Figure 29 shows that the primary trip purpose of the surveyed passengers was to visit friends or relatives. Fifty-seven percent of trips fell into this category. Vacation and "other" reasons each made up 11 percent of responses, while business was the purpose of 10 percent of respondents' trips.

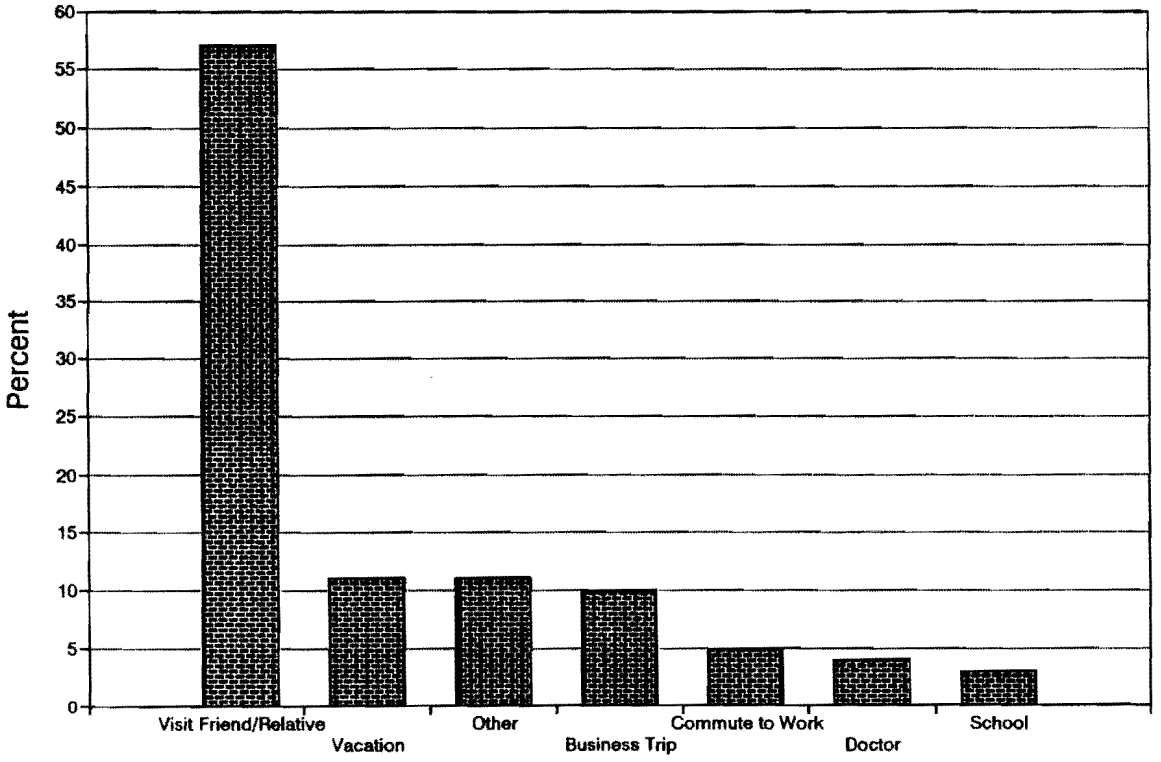


Figure 29. Purpose of Trip.

The reasons cited more than once under "other" are listed below, along with the number of respondents who mentioned them.

- Moving (36 respondents)
- Family emergency (6 respondents)
- Returning home from prison (5 respondents)
- Attending a graduation (5 respondents)

- Personal business (3 respondents)
- Attending drug rehabilitation (2 respondents)
- Seeing probation officer (2 respondents)
- Picking up a car (2 respondents)
- Running away from home (2 respondents)
- Taking a day trip (2 respondents)

Alternative Mode of Travel

Figure 30 shows that if bus service were not available, the majority of respondents would have ridden (in a car) with someone else (29 percent), or would have taken an airplane (29 percent) to their destinations. Fifteen percent of respondents said they would have driven

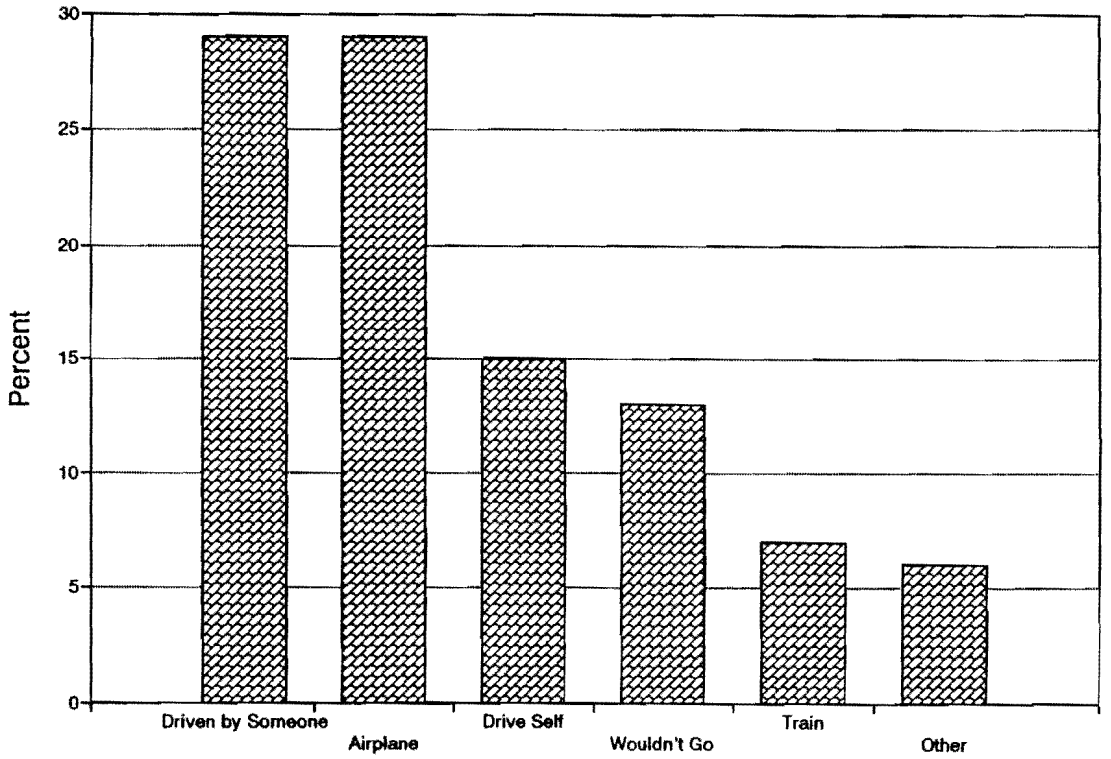


Figure 30. Alternative Mode of Travel.

themselves to their destinations, while 13 percent said they wouldn't have made the trip. These results are similar to the 1981 survey results, in which 47 percent said they would have driven themselves or with someone else, 25 percent would have flown, and 17 percent wouldn't have made the trip.

Number of Intercity Bus Trips in the Last Year

Thirteen respondents rode the bus 100 or more times in the past year (a round-trip was counted as two times), with the highest frequency reported being 630 times. The average number of rides in the past year for all respondents was 8.3. When the thirteen extremely frequent riders (those riding more than 100 times in the past year) were excluded, the average number of rides per year went down to 5.1. In either case, however, the 50th percentile was two rides per year; i.e., 50 percent of respondents made more than one round-trip in the last year. This frequency is down slightly from 1981, when the survey results showed that the 50th percentile was three rides per year.

Reason for Choosing the Bus

Figure 31 shows that the low cost of a bus ticket was the main reason that 50 percent of respondents chose to take the bus as their mode of travel. Twenty-one percent of respondents said they took the bus because they had no car, while 11 percent said they were riding the bus because the distance they were traveling was too far to drive by themselves. Another 11 percent of respondents said they chose the bus for "other" reasons. The reasons cited more than once are listed below, along with the number of respondents who mentioned them.

- I wanted someone else to do the driving. (11 respondents)
- I am afraid of flying. (11 respondents)
- Someone else chose the bus and paid for the ticket. (10 respondents)
- I like the bus best. (9 respondents)

- I wanted to see the countryside. (8 respondents)
- The bus is the only form of transportation serving my origin/destination. (6 respondents)
- I had to drop off/pick up a car. (6 respondents)
- It was too late to get airplane or train tickets. (4 respondents)
- The ticket was free because I have a relative working for the bus company. (3 respondents)
- The bus is the quickest way of getting to my destination. (2 respondents)
- I'm afraid of driving by myself. (2 respondents)

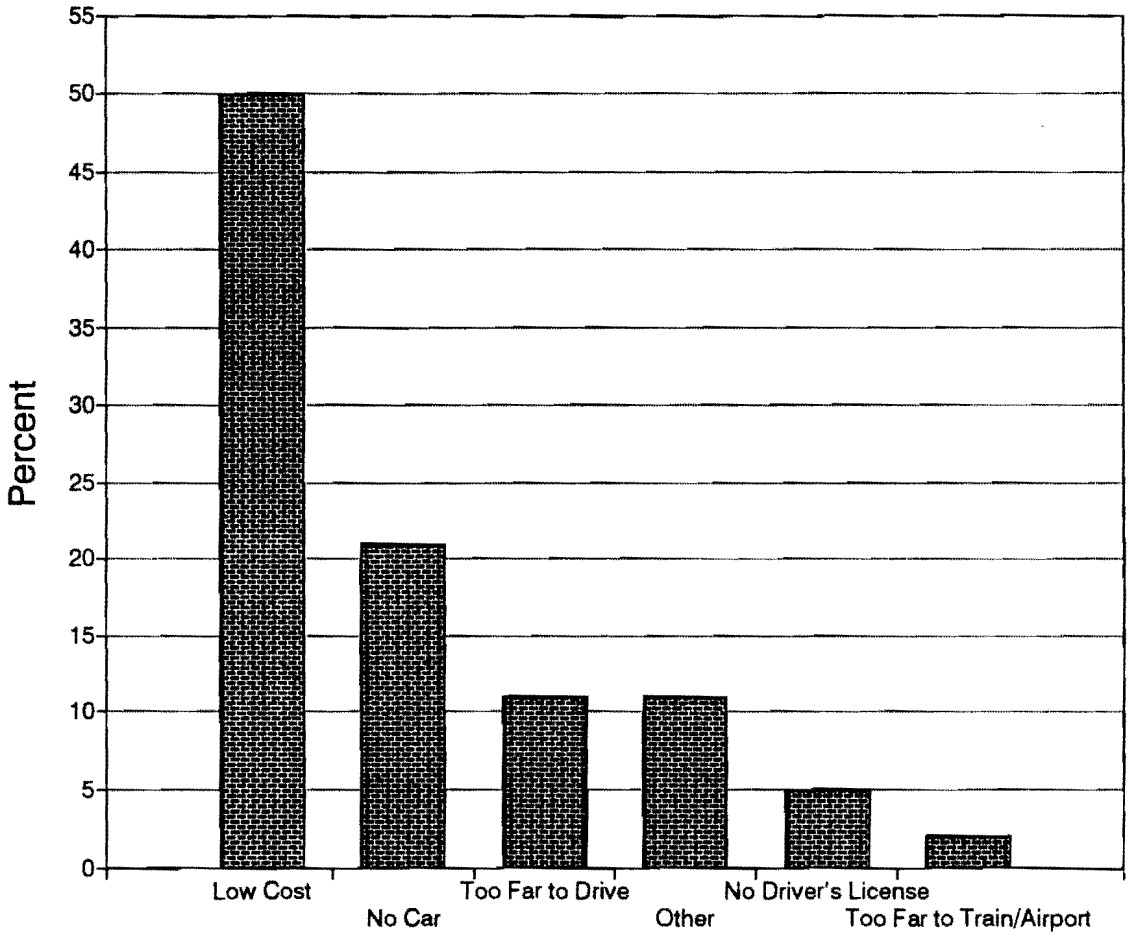


Figure 31. Reason for Taking Bus.

GENERAL ATTITUDES

Several of the questions on the bus rider survey aimed to acquire information on the satisfaction of passengers with intercity bus service, their willingness to pay more for the existing and for improved service, and the features important to passengers when choosing to ride the bus.

Satisfaction With Existing Service

The question was asked, "How would you rate your satisfaction with intercity bus service overall?" The responses from this question for both 1981 and 1993 are displayed in Figure 32. Thirty-four percent of respondents in 1993 said they were "very satisfied" with service, as opposed to 42 percent in 1981. Accordingly, eight percent of respondents in 1993 said they were "not satisfied" with service, as opposed to five percent in 1981.

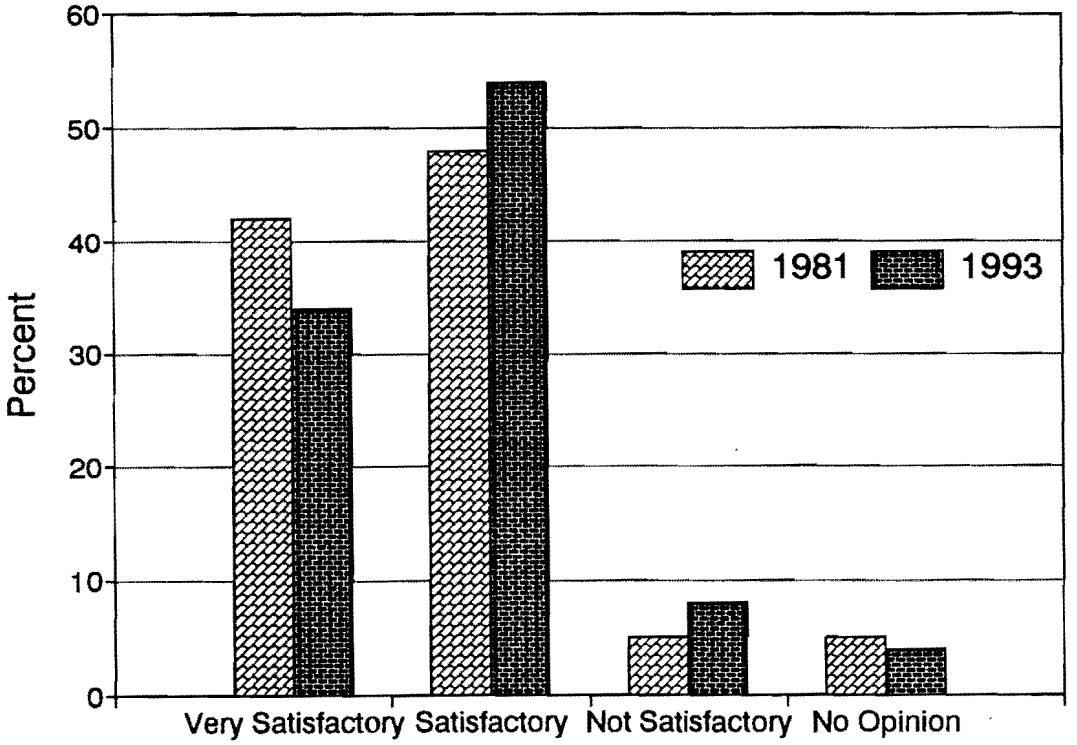


Figure 32. Satisfaction With Intercity Bus Service.

Willingness to Pay More for Existing Service

The question was then asked, "How much more would you be willing to pay to continue the **existing** service?" Figure 33 shows the responses from this question for both the 1981 and 1993 surveys. Fifty-eight percent of respondents in 1993 said they would be willing to pay "nothing more" for the existing service, as opposed to 51 percent in 1981. Also, 39 percent of respondents in 1993 said they would be willing to pay "a little more" for the existing service, as opposed to 46 percent in 1981. The percentage of respondents who said they would be willing to pay "a lot more" was the same (three percent) for both survey years.

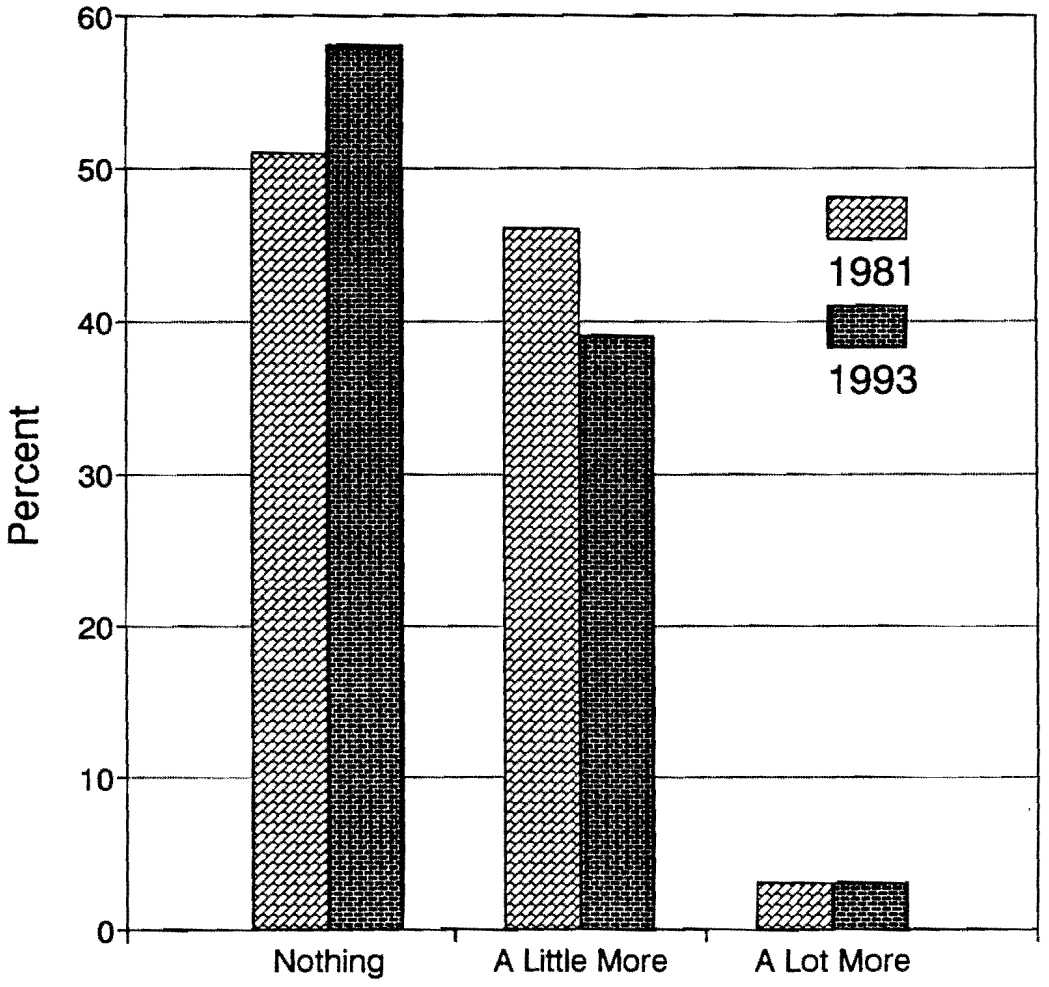


Figure 33. Willingness to Pay More for Existing Service.

Willingness to Pay More for Improved Service

Passengers were also asked, "How much more would you be willing to pay for **improved** bus service?" The responses from this question are shown in Figure 34. Twenty-nine percent of respondents in 1993 said they would be willing to pay "nothing more" for improved service, as opposed to 33 percent of respondents in 1981. Only a small group of respondents in both survey years said they would be willing to pay "a lot more" for improved service--five percent in 1993 and six percent in 1981.

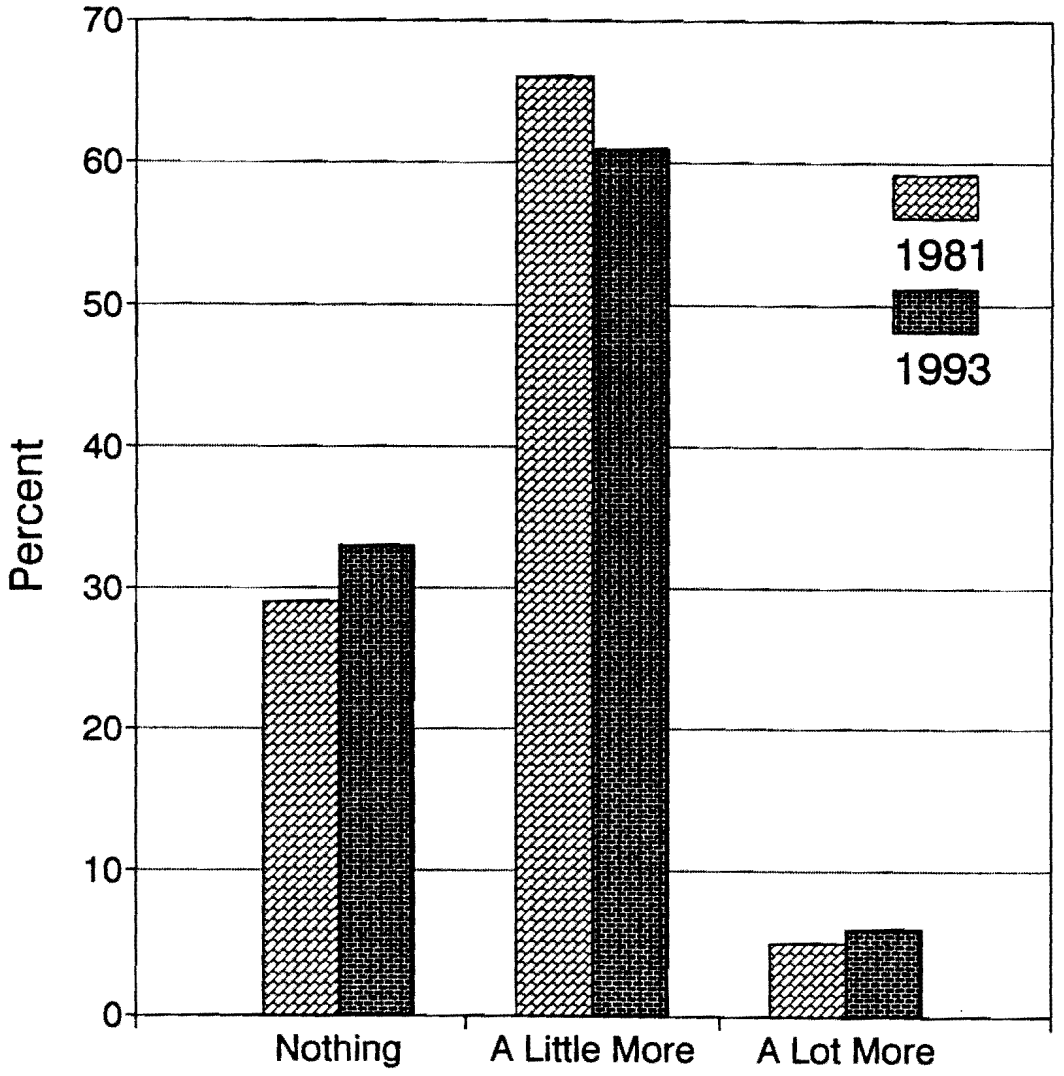


Figure 34. Willingness to Pay More for Improved Service.

Important and Unimportant Features of Intercity Bus Service

One purpose of the survey was to determine which features of intercity bus service were most important to riders in their decision to ride the bus. The question was posed, "How important is...," along with a list of eleven features. The survey asked that respondents circle a number from one to five next to each feature, with one indicating the feature was "not important" in their decision to ride the bus, and five indicating that the feature was "very important" in their decision to ride the bus. The average responses are shown in Table 33,

Table 33. Importance of Various Features to Bus Rider Survey Respondents.

Question: "How Important Is..."	1981 Average Response[a]	1993 Average Response[a]	1993 Duncan Multiple range Group[b]
Safety at the bus station and on the bus	4.44	4.57	A
Leg room and comfortable seats	4.32	4.48	A
Leaving and arriving on time	4.38	4.46	A
Bus fare	3.98	4.39	A
Having express bus service	4.09	4.23	B
Frequency of intercity bus service	4.05	4.20	B
The speed of the bus trip	3.92	4.18	B
The location of the bus station	3.87	4.05	C
Local city bus transportation at destination	3.67	3.82	C
Food service at the bus station	3.64	3.70	C
Auto parking near the bus station	3.31	3.46	C

[a] Response is based on a scale of 1 to 5 with 1 being not important in the decision to ride the bus and 5 being very important in the decision to ride the bus.

[b] Features within the same group (A, B, or C) have means which are not significantly different.

along with the average responses from the 1981 bus rider survey. Also shown on the table is the grouping of features by significance level according to a Duncan's multiple range test. Features within the same group (A, B, or C) have means which are not significantly different.

The features which appeared to be most likely to influence bus use of 1993 passengers were safety at the bus station, leg room and comfortable seats on the bus, adherence to schedules, and bus fare. Features least likely to influence bus use were location of the bus station, local city bus transportation at the destination, food service at the bus station, and auto parking at the bus station. The relative importance of all of these features appears to have changed little since the 1981 survey.

COMMENTS FROM RESPONDENTS

At the end of the bus rider survey, space was provided for respondents to add any general comments they had regarding the intercity bus industry. The comments expressed generally fell into one of two categories: (1) comments expressing opinions about the service and (2) comments offering suggestions for improved service. Listed below are the two general comment categories with the comment themes and the number of respondents who expressed each of them.

Comments Expressing Opinions About the Service

- Bus service is very good. (76 respondents)
- There are too many stops/more express bus service is needed. (23 respondents)
- The bus drivers are very courteous. (22 respondents)
- The buses are overcrowded. (19 respondents)
- The bus drivers are rude. (11 respondents)
- Buses are always late. (11 respondents)

- Baggage is mishandled. (7 respondents)
- Food at the stops is too expensive. (7 respondents)
- Bus fares are too high already. (7 respondents)
- Dangerous and/or dirty passengers should not be allowed on the buses. (6 respondents)
- There is not enough leg room on buses. (6 respondents)
- Bus stations need to be cleaner and safer. (6 respondents)
- Bus restrooms need to be cleaner. (6 respondents)
- It's too cold on the buses. (5 respondents)
- The buses are dirty. (5 respondents)
- Layovers are too long. (4 respondents)
- Ticket agents are rude and inefficient. (4 respondents)
- Bus service is poor in general. (4 respondents)
- I will never ride the bus again. (3 respondents)
- Non-smoking areas need to be enforced. (3 respondents)
- Announcements at bus stations need to be louder. (2 respondents)
- Seats on buses are too small. (2 respondents)
- More meal stops are needed. (2 respondents)
- The bus station is too far from where I live. (2 respondents)
- Buses need to leave at better times (during the day and not at night). (2 respondents)

Comments Offering Suggestions for Improved Service

- A smoking section should be offered on buses. (7 respondents)
- Stereo headsets should be available on buses. (3 respondents)
- Trays need to be installed on seat backs (like they are on airplanes). (3 respondents)
- Buses should have television sets. (3 respondents)
- Showers should be installed in bus stations for riders on long trips. (2 respondents)
- Bus companies need frequent-rider programs. (2 respondents)
- Refreshments should be served on buses. (1 respondent)
- There should be a pre-boarding call for disabled passengers and passengers with small children. (1 respondent)
- Bus companies need a reservation system. (1 respondent)
- Free coffee should be served at bus stations. (1 respondent)
- Windows on buses should be openable. (1 respondent)
- Bus stations need better, lighted, parking areas. (1 respondent)
- Bus stations should be taken out of the downtown areas. (1 respondent)
- Pillows should be offered on buses like they are on airplanes. (1 respondent)
- To block out the sun, curtains should be placed over bus windows. (1 respondent)
- Buses need seat belts. (1 respondent)
- All bus company employees should be bilingual. (1 respondent)
- Multi-modal facilities (bus, train) should be built. (1 respondent)

CHAPTER 8
TEXAS BUS STATION SURVEY

A 1984 study of intercity bus terminals performed by the United States Department of Transportation defined an adequate bus station as one which "provides a place to purchase tickets, obtain some schedule information and wait in a sheltered area, perhaps with access to food service and/or rest rooms" (24). It was on some of these criteria that a sample of Texas bus terminals was judged. The study was performed concurrently with the bus rider survey. The stations which were surveyed were those stations at which bus rider surveys were being distributed.

Twenty-eight bus stations were surveyed (survey form is shown in Appendix D). The three "large" stations are located in cities with populations of over one million, and included San Antonio, Houston, and Dallas. The ten "medium" stations are located in cities that are considered Standard Metropolitan Statistical Areas (SMSAs), yet have populations of under one million, and included Austin, Tyler, Lubbock, Abilene, Corpus Christi, Laredo, and two stations in both Brownsville and McAllen. The fifteen "small" stations are located in towns that are not considered part of an SMSA, and included Nacagdoches, Sulphur Springs, Giddings, LaGrange, Schulenberg, Brownwood, Ballinger, Wichita Falls, Big Spring, Del Rio, Eagle Pass, Dilley, Alice, and two stations in George West. Figure 22 shows the locations of the surveyed bus stations.

HOURS OF OPERATION

Table 34 shows the hours of operation of the twenty-eight bus stations surveyed. All of the large bus stations were open twenty-four hours a day. Of the medium size bus stations, five were open twenty-four hours, four were open between twelve and twenty-four hours a day, and for one station the hours of operation could not be found. None of the small stations were open twenty-four hours; however, eight were open for more than twelve hours a day, and four were open fewer than twelve hours a day. There were three small stations for which the hours of operation could not be determined. Many of the small stations opened and closed throughout

the day, opening some time before a bus was to arrive, and closing soon thereafter. In fact, on many of the signs posting hours of operation, the sign would simply say "Meets Buses," especially for Sundays. Considering that several of the stations did not have bus schedules posted, the statement "Meets Buses" does little to tell potential passengers when exactly the bus station is open.

Table 34. Number of Hours Bus Station is Open.

Number of Hours Open per Day	Small	Medium	Large
24	0	5	3
12 - 24	8	4	0
0 - 12	4	0	0
Unknown	3	1	0

TYPE OF ESTABLISHMENT SERVING AS A BUS STATION

All of the three large and ten medium size bus stations functioned primarily as bus stations. All of the large stations also had secondary businesses: the Dallas station had a fast-food restaurant, the San Antonio station had a gift shop, while the Houston station contained a gift shop, barber shop, and snack bar. Of the fifteen small bus stations, eight served as bus stations primarily, while seven of the stations had bus activity as their secondary function. Table 35 outlines the other types of establishments serving as bus stops, which included gas stations/convenience stores, restaurants, a motel, and an auto parts store.

Table 35. Type of Establishment Serving as a Bus Stop.

Primary Function of Bus Stop	Number of Stations
Bus Station	21
Gas Station/Convenience Store	3
Restaurant	2
Motel	1
Auto Parts Store	1

SHELTER

With the exception of one small station, all twenty-eight bus stations offered shelter to passengers both while the passenger was buying the ticket and while the passenger was waiting for the bus to arrive. Figure 35 shows the shelter provided at one medium size station. The one stop without such shelter appeared to be next to a boarded-up retail store, and it was assumed that passengers could purchase tickets from the bus driver. Benches were provided for waiting at all of the large and medium stations and at nine of the fifteen small stations. Passengers were sheltered while boarding the bus at all three of the large stations, nine of the

Figure 35. Picture of Bus Station with Shelter.

ten medium size stations, and only five of the fifteen small stations. It was not observed whether umbrellas were available to passengers in the case of inclement weather (as they are at many airports which require passengers to walk unsheltered on the tarmac when moving to and from an airplane).

FACILITIES

Each of the survey groups assigned a subjective value between one and ten to each of the bus stations according to the area in which the station was located. This was deemed important because one of the reasons often cited for not riding the bus is that bus stations are in "bad" or undesirable areas of town. A score of one would indicate that the surveyors felt very unsafe in the area, and that they considered the area run-down or dirty. On the other end of the spectrum, a score of ten would indicate that the area was clean, pleasant, and gave the surveyors a feeling of security. Table 36 shows the breakdown of scores by station size.

Table 36. Condition of Area in Which Bus Station is Located.

Condition of Area	Small	Medium	Large
1 - 4	0	1	1
5 - 7	9	4	2
8 - 10	6	5	0

One item of importance at a bus station is a pay telephone. Table 37 shows the distribution of pay phones among bus stations, and whether these phones were inside or outside. Table 37 shows that all of the large and medium size stations had at least one indoor phone. Five of the small stations, however, did not have any pay phone for public use.

Table 37. Availability of Public Pay Phones.

Phones	Small	Medium	Large
Had Indoor and Outdoor Phones	2	1	0
Had Indoor Phone(s)	3	9	3
Had Outdoor Phone(s)	5	0	0
Had No Phone	5	0	0

Another amenity that was rated by the survey teams was the public restroom located in the station. Once again, a score of one indicated that the restroom was dirty and poorly maintained, while a score of ten indicated a very clean, well-maintained restroom. Table 38 shows the breakdown of scores by station size.

Table 38. Condition of Restrooms.

Restroom Condition	Small	Medium	Large
1 - 4	2	2	1
5 - 7	9	7	2
8 - 10	2	1	0
No Public Restrooms	2	0	0

Food service in the bus stations varied from soft drink machines to full-service snack bars and fast-food restaurants. Table 39 shows the number of stations in each size category having hot food, cold food (from vending machines), soft drinks, or no food service at all.

Table 39. Available Food Service.

Type of Food Service	Small	Medium	Large
Hot Foods, Cold Foods, and Soft Drinks	4	4	3
Cold Foods and Soft Drinks	1	3	0
Soft Drinks Only	8	3	0
No Food Service	2	0	0

The final amenity that was observed at the bus stations was the number of parking spaces available. Table 40 shows the number of parking spaces by station size.

Table 40. Parking Available for Bus Customers.

Available Parking	Small	Medium	Large
Pay Parking Lot	0	0	3
Parking on Street	0	3	0
Free Parking: 10 or More Spaces	8	4	0
Free Parking: Fewer than 10 Spaces	4	1	0
No Parking	3	2	0

EASE OF PURCHASING A TICKET

The ability to take rural or city public transit to and from the bus station could be important to passengers. Each bus station was surveyed to determine whether or not public transit was available, and the results are shown in Table 41. The table shows that all of the medium and large size stations could be reached by public transit. Most of the small station agents cited that there was no public transit available; however, it could be that the agents do not know about demand-responsive transit providers. The four small station agents that mentioned there was transit available said that it was demand-responsive van service that carried mostly handicapped and elderly persons.

Table 41. Available Public Transit.

Public Transit	Small	Medium	Large
City Buses	1	10	3
Rural Transit/Van Service	4	0	0
No Public Transit	10	0	0

Clearly posting the bus station sign aids users in locating the bus station along with serving as advertising. Table 42 shows the number of stations having easily identifiable bus station signs according to station size. Table 42 indicates that all of the medium and large size stations had large, easily identifiable bus station signs (see Figure 36). Four of the fifteen small size stations either had no sign or the sign was too small to see or obscurely placed.

Table 42. Display of Bus Station Sign.

Bus Station Sign	Small	Medium	Large
Had Easily Identifiable Bus Station Sign	11	10	3
Had No Sign or Sign was Too Small to See	4	0	0

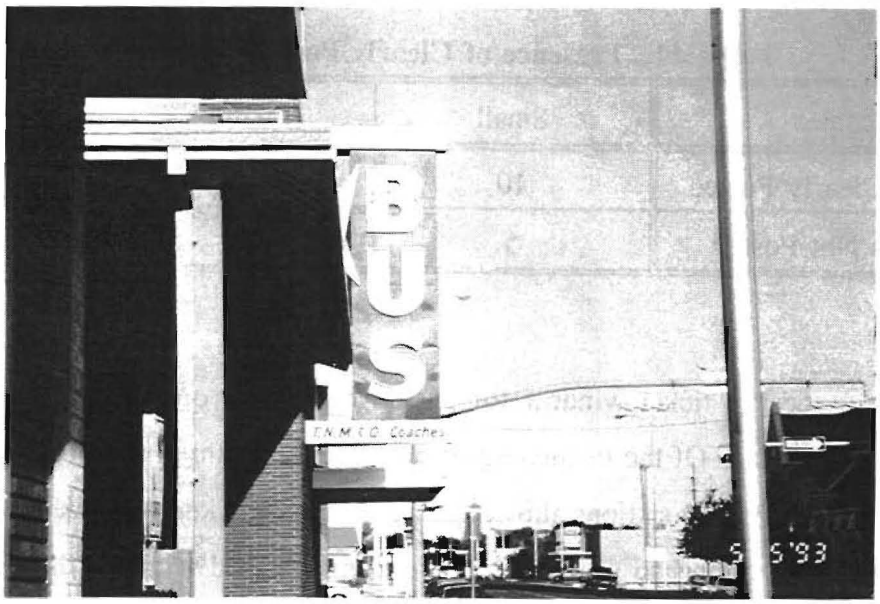


Figure 36. Example of a Large, Easily Identifiable Bus Station Sign.

Potential passengers must know when the bus stations are open so that they can obtain schedule information, buy tickets, or wait for their buses under shelter. Table 43 shows the number of stations which had their hours of operation clearly posted. Table 43 shows that most of the bus stations that were visited did not have their hours of operation posted clearly. It should be noted that all of the large stations and many of the medium stations which did not post their hours were open twenty-four hours.

Table 43. Presence of Clearly Posted Hours.

Posting of Hours	Small	Medium	Large
Clearly Posted Hours of Operation	8	2	0
Hours of Operation Not Clearly Posted	7	8	3

In order for people to be familiar with scheduled bus arrivals and departures, schedules need to be either posted at or available for hand-out by the station. Table 44 shows the number of stations having clearly posted schedules or printed schedules available for hand-out during the survey period.

Table 44. Presence of Clearly Posted Schedules.

Schedules	Small	Medium	Large
Schedules Clearly Posted	10	8	1
Schedules Not Posted	5	2	2

Having a specific ticket window for passengers to ask questions and buy tickets also facilitates riding the bus. Of the twenty-eight stations, twenty-three stations had specific ticket agent windows. Four (small) stations allowed the purchase of tickets at a cashier for the primary business. Only one station had no ticket agent or window and required the buying of tickets from the bus driver.

PACKAGE EXPRESS SERVICE

From conversations with ticket agents, it was clear that package express service is vital to the profitability of many ticket agencies. Auto dealerships in smaller towns seemed to be one of the biggest users of the service. Agents said that dealers could order large and odd-shaped parts from dealers in large cities and have the part to them in a matter of hours--at all hours of the day and seven days a week. Surveyors observed auto dealership delivery trucks making several pick-ups a day from several of the bus stations (see Figure 37). All of the large and medium size stations offered package service, and all but three of the fifteen small stations offered the service.

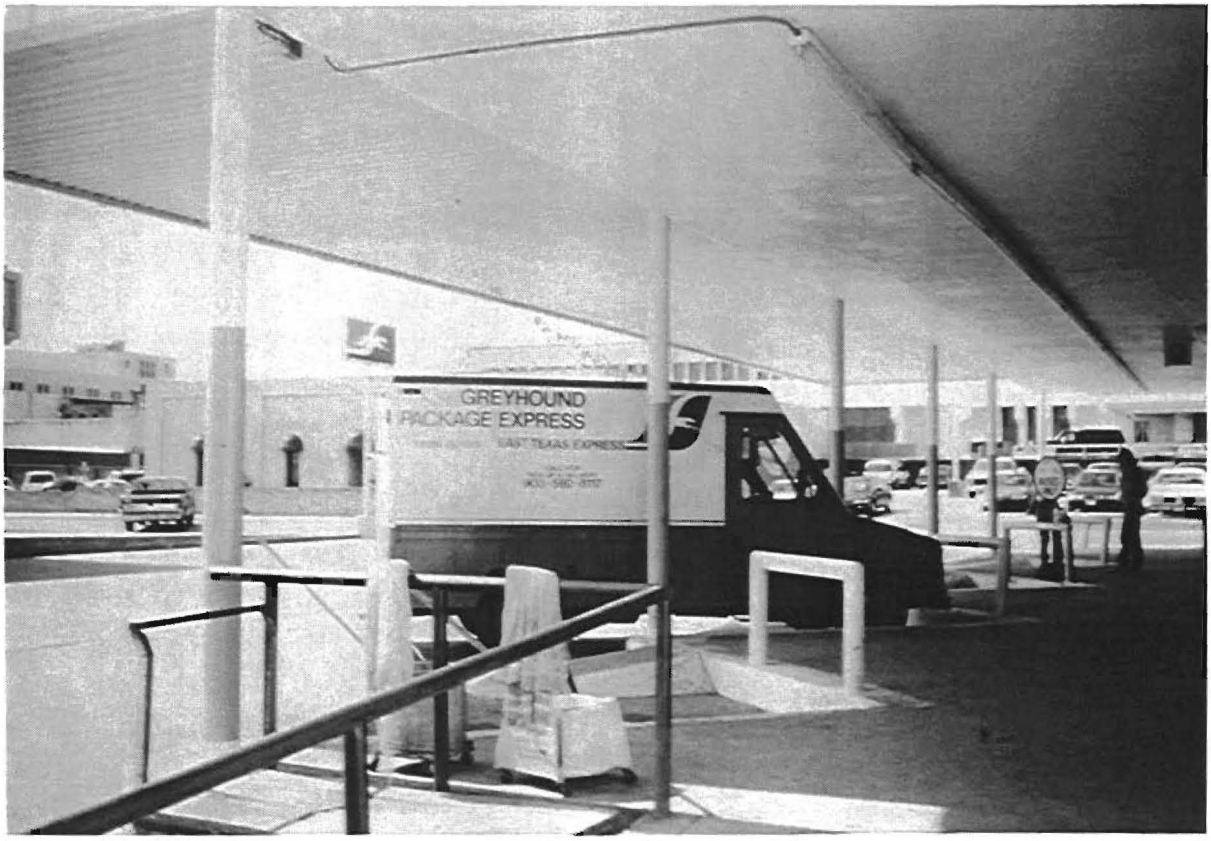


Figure 37. Picture of Tyler Package Express Van.

CHAPTER 9
TEXAS BUS COMPANY SURVEY

An intercity bus company survey was sent to fourteen intercity bus companies operating from the state of Texas. A copy of the survey is shown in Appendix E. The survey attempted to ascertain from the bus companies details on their operations, whether they thought that the state's intercity bus needs were being met, and what the state of Texas could do to help meet those needs. Two mailings of the survey were done; three companies responded to the first mailing and four companies responded to the second mailing. Of the companies responding, two considered themselves "large" size companies, two considered themselves "medium" size companies, and three considered themselves "small" size companies. The following sections outline the responses from the seven companies who returned the survey.

HOW DO YOUR POTENTIAL PASSENGERS ACQUIRE YOUR BUS SCHEDULES?

This question was asked to determine the ease with which a potential passenger could acquire a bus schedule. Five of the companies stated that a potential customer must call (or visit) the local bus station to acquire a bus schedule. One large company had an 800 number that could be called to obtain bus schedules.

HOW DO YOU MARKET YOUR SERVICES?

The yellow pages, radio, newspaper advertisements, fliers, and word-of-mouth were frequently mentioned means of advertising bus services. One company said that the name on the side of its buses was its form of advertising, while other companies said they targeted students and military personnel by advertising in their respective publications.

HOW COULD THE STATE OF TEXAS HELP THE INTERCITY BUS INDUSTRY AND YOUR COMPANY?

Three of the companies responding to this question cited that government-owned multi-modal transportation facilities would be of help. These facilities would serve two purposes: first, they would streamline the transfer from one mode of transportation to another, and second, they would eliminate the reliance the smaller bus companies have on terminal facilities owned or operated by larger companies.

One company suggested that the State should play a part in the monitoring of larger carriers' activities at bus terminals (i.e., to prevent larger carriers from taking predatory actions on smaller carriers). The same company thought a standard bus station code should be set, in regard to such things as the appearance of the station, conduct of employees, and availability of safety equipment. Also, the company cited that subsidies to small carriers could help them initiate new rural routes, or maintain existing routes.

Other responses to this question were that the State could provide billboards or highway signs advertising bus service (or all intercity transportation services); that the State should subsidize rural routes which the Railroad Commission of Texas requires they operate; that the State remove the diesel fuel tax on regular route intercity bus service; and that the State ban illegal bus operators (presumably, the companies operating illegal express service to Mexico).

IF YOU BELIEVE THAT THE NEEDS OF INTERCITY BUS RIDERS ARE NOT ADEQUATELY BEING MET, WHAT IS NEEDED TO MEET THOSE NEEDS?

Two of the companies responded to this question. One company said that it would take a commitment by the State to bring all transportation modes in a city into one facility so that a seamless transportation network was formed. The second company cited that only more schedules would be able to fulfill any unmet needs.

IS THERE ANYTHING THE STATE OF TEXAS COULD SPECIFICALLY DO TO HELP MAINTAIN SERVICE OR FOSTER NEW SERVICE TO RURAL AREAS?

Four of the companies returning the survey responded to this question. Two of the respondents said that rural routes that would otherwise be unprofitable would have to be subsidized, and that bus usage in the towns along these routes would have to be encouraged. (One suggestion was that this be done through rural transit centers.) The third company's response was that scheduled services should be regulated. Finally, the fourth company stated that because usually only small carriers can make rural routes profitable, that small companies needed to be protected from the predatory actions of larger carriers.

WHAT CHANGES HAVE OCCURRED TO YOUR COMPANY SINCE DEREGULATION, AND WERE THESE CHANGES BENEFICIAL OR HARMFUL TO YOUR COMPANY?

Of the five companies responding to the first part of this question, three companies said their services have been down-sized, one company said its service area had actually increased, and the fifth company said it was created in response to the need for service that had been created by regulatory reform. Of the five companies responding to the second part of this question, two of the respondents said regulatory reform had benefited their companies, while one company said that regulatory reform had been harmful to it. One large company cited that while regulatory reform had made the company less profitable, it was beneficial to consumers in that it provided more competition and lower prices. A medium-size company providing mostly airport transportation and charter service stated that regulatory reform had very little impact on its operations.

DO YOU BELIEVE THAT THE INTERCITY BUS INDUSTRY IS IN A DECLINE, AND IF SO, WHAT IS CAUSING THIS DECLINE, AND WHAT COULD CAUSE A REVERSAL?

All seven respondents stated that yes, they thought the bus industry was in a decline. Two companies pointed to regulatory reform as the culprit for decline, while two other companies blamed the increase in private automobile usage. One medium size company said it thought that a combination of monopolistic actions by larger bus companies and a simple lack of demand for bus service was the cause, another company attributed the downfall to federal and state funding to other transportation modes (specifically Amtrak), and yet another company blamed the express package services (e.g., Federal Express, UPS) and subsidized specialized passenger carriers.

Several suggestions were made as to how a reversal of the current decline could be brought about. One suggestion was to allow both transit and intercity buses greater access to intercity locations on high occupancy vehicle (HOV) lanes. A second suggestion was a restatement of the importance of intermodal terminals for passenger transfer. One company offered a complete list of suggestions, which among others, included downsizing equipment, increasing schedules, improving personnel attitudes, using alternative fuel-burning vehicles, and tracking of packages with uniform bar codes. Other comments were that only higher gasoline prices, strict regulation, or "a miracle" could cause a reversal of the intercity bus industry's current decline.

OTHER CONCERNS

The following quotes were extracted from the returned surveys, and reflect the bus companies' concerns about the intercity bus industry in Texas.

"The state DOT needs to take a leading role in moving passengers from originations to destinations in the most fuel-efficient manner. If the private sector is doing an efficient job of that, praise them, don't constrain them. Look at Mag Lev costs and let the people decide if the State should spend that much money on another mode of transportation--be straight with the public. Force the transit agencies to participate in multimodal centers to make tax payers' money go further--currently they don't need to because of funding availability."

"Bus companies need to be exempted from state fuel taxes so they can keep fares lower and larger cities need a bus terminal that can be used by smaller companies without high access fees ...."

"I feel the Railroad Commission has been a great watchdog for our industry. We have been in business for 60 years and have provided safe, reasonable bus service for our customers. Oklahoma has deregulated intrastate [intercity bus service] and their buses are in terrible shape because of low rates. Our state can be proud of the quality buses which operate here."

"The honesty of the industry of working together and helping one another--everyone could make their fair share."

"[Our company] has run three schedules between [two specified cities] for many years. [Another bus company] decided they wanted what we had even with the many runs they have. They put on 2 schedules fifteen minutes in front of our two best runs. This caused [our company] to drop their other schedule. This is bad for the traveling public. The Railroad Commission should not approve runs that duplicate service and try to put small operators out of business."

"When one agent represents two or more carriers, but is failing to act impartially...., there exists a definite and insurmountable barrier for small, entry level carriers."

CHAPTER 10
SUMMARY AND CONCLUSIONS

The intercity bus industry in the United States has been in a decline since the end of World War II. The increase in the use of private automobiles and competition for intercity passengers by airlines has caused bus companies to lose passengers and in many cases to become less profitable. Furthermore, passage of the Bus Regulatory Reform Act in 1982 allowed bus companies to exit from unprofitable routes, resulting in a decrease in the number of places served by intercity buses. Despite the exit from unprofitable routes, bus companies in the United States still have not enjoyed the profitability they had during earlier years.

The Motor Carrier Act of 1935 was the first form of federal regulation for intercity buses. It gave the Interstate Commerce Commission (ICC) control over the fares charged, the routes served, and the schedules of intercity bus companies, and also gave the ICC authority over package and charter service. The Bus Regulatory Reform Act of 1982 was an attempt to allow bus companies to become more profitable by easing entry into competitive markets, easing exit from unprofitable routes, and allowing companies to set their own rates. The Intermodal Surface Transportation Efficiency Act of 1991 mandates that states spend a certain portion of their Section 18 (rural transit) funds on intercity bus purposes. This mandate can be waived by the governor of a state if the governor certifies that intercity bus needs in the state are being "adequately met."

The number of points receiving intercity bus service in Texas has been reduced by nearly half in the last twenty years. The exit of Texas bus companies from unprofitable routes allowed by the Bus Regulatory Reform Act has not made bus companies in Texas more profitable. In fact, annual reports from the Railroad Commission of Texas have shown that companies operating bus service in Texas have become less profitable since regulatory reform in 1982.

A study of the coverage area of intercity bus companies revealed that only twenty-one cities and towns in Texas with populations over 5,000 were further than ten miles (16 km) from

the nearest intercity bus stop. Most of these cities and towns had access to transit service by which they could reach an intercity bus stop.

The United States General Accounting Office (GAO) published a report in 1992 which concluded that shrinking rural populations, increased competition from air and rail transportation, and increased car ownership were the causes of the intercity bus industry's decline. The GAO's survey of all 50 states found that 20 states had intercity bus support programs, while the other 30 states had no such programs. The types of aid offered by the state programs included operating assistance, terminal assistance, and vehicle assistance.

An informal telephone survey of nine states known to have active intercity bus programs showed that each state was planning to use its Section 18(i) funds on intercity bus programs. The planned activities include instituting vehicle loan programs, providing route operating subsidies, helping with capital costs, placing highway signs, printing intercity bus brochures, and making terminal improvements.

Two surveys were performed to elicit the opinions and demographic characteristics of both the Texas general public and intercity bus riders. Both surveys showed that respondents were riding the bus less often. The bus rider survey revealed that bus riders were generally a lower-income group than the Texas and U.S. population, were most often taking the bus to visit a friend or relative, and in most situations were dropped off and picked up at the bus station by someone else.

Another feature of the surveys was that they aimed to determine what would make non-bus riders more likely to ride the bus and what would make current bus riders likely to ride the bus more often. More express bus service, bus stations located in better places, and increased air and train fares were factors that would make household survey respondents more likely to ride the bus. Safety at the bus station and on the bus, leg room and comfortable seats, adherence to schedules, and low bus fares were the factors that most influenced bus rider survey

respondents in their decision to ride the bus. A survey of bus stations was performed concurrently with the bus rider survey to identify the current characteristics of bus stations in Texas.

A fourth survey solicited comments from representatives from Texas bus companies. Representatives from seven bus companies offered their thoughts and suggestions on what could be done to aid the ailing industry. Government-owned multimodal transportation facilities was a frequently cited improvement. These facilities would serve two purposes: first, they would streamline the transfer from one mode of transportation to another, and second, they would eliminate the reliance the smaller bus companies have on terminal facilities owned or operated by larger companies. Operating subsidies for rural routes and billboards or highway signs advertising intercity bus service were other suggestions mentioned by bus company representatives.

The general attitude of the respondents from the bus company survey was that the bus industry was indeed in a decline. Regulatory reform in 1982 had varying effects on bus companies: three companies were forced to down-size, one company said its service area had increased, and a fifth company was formed to fill gaps in service resulting from regulatory reform.

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APPENDICES

A -- SURVEY OF OTHER STATES

B -- HOUSEHOLD SURVEY

C -- BUS RIDER SURVEY

D -- BUS STATION SURVEY

E -- BUS COMPANY SURVEY

APPENDIX A

SURVEY OF OTHER STATES

Telephone Survey
What Other States are doing for their Intercity Bus Industries

"Hi, my name is _____(name)_____ and I am calling from the Texas Transportation Institute. We are currently performing a study for TxDOT on the status of the intercity bus industry in Texas. Would you be the correct person to talk to regarding the intercity bus industry in _(state)_?

"You are probably aware that the 1991 Intermodal Surface Transportation Efficiency Act, or ISTEA, has mandated that each state spend a given portion of its Section 18 funds for rural public transportation on intercity bus transportation, unless the intercity bus needs are being adequately met as certified by the state's governor. We are interested in finding out from other states how they are determining the adequacy of intercity bus transportation, and also, how they are deciding to spend these funds if they do, in fact, choose to spend them on intercity bus programs. Would you mind answering a few questions for me?"

1. Before the ISTEA legislation, was your state offering any kind of financial aid to its intercity bus industry?

2. Has your state performed, or does it plan to perform, a study of its intercity bus need in response to the ISTEA legislation?

3. How have your state's Section 18(i) funds been used since the ISTEA went into effect, and how was their use decided?

4. Does your state have any other programs aiding the intercity bus industry which you have not mentioned?

4. (OPTIONAL) Do you have a rough estimate of the dollars your state spends annually on intercity bus funding?

APPENDIX B

HOUSEHOLD SURVEY

Texas Department of Transportation

DEWITT C. GREER STATE HIGHWAY BLDG. • 125 E. 11TH STREET • AUSTIN, TEXAS 78701-2483 • (512) 463-8585

February 25, 1993

INTERCITY BUS SURVEY

Dear Resident:

We need your help in a survey being undertaken by the Texas Transportation Institute, Texas A&M University System. The purpose of the survey is to obtain information about your household's use of intercity bus service.

Since it is not possible to send questionnaires to all households in Texas, we have selected a small number at random. Your completion of the requested information is needed to insure the success of this effort.

We have included two survey forms. If possible, please have two adults complete the survey forms.

We are grateful for your participation in the survey. Please complete the requested information as best you can and return the survey forms in the enclosed, postage-paid envelope, within one week.

Sincerely,

Richard G. Christie
Director, Public Transportation

Texas Department of Transportation

DEWITT C. GREER STATE HIGHWAY BLDG. • 125 E. 11TH STREET • AUSTIN, TEXAS 78701-2483 • (512) 463-8585

May 12, 1993

INTERCITY BUS SURVEY

Dear Resident:

We recently asked a small number of Texas residents to participate in a survey being conducted by the Texas Transportation Institute, Texas A&M University System. The purpose of the survey is to obtain information about your household's use of intercity bus service.

Since we have included only a small number of households in this survey, your participation is essential to the success of the project. If you have already completed the survey, we wish to thank you for your cooperation in this undertaking. If you did not respond, we would appreciate you completing the attached survey.

We have included two survey forms. If possible, please have two adults complete the survey forms.

We are grateful for your participation in the survey. Please complete the requested information as best you can and return the survey forms in the enclosed, postage-paid envelope, within one week.

Sincerely,

Richard G. Christie
Director, Public Transportation

Texas Intercity Bus Survey

Undertaken by the Texas Transportation Institute, Texas A&M University
in cooperation with the Texas Department of Transportation
and the U.S. Department of Transportation Federal Highway Administration

The Texas Transportation Institute at Texas A&M University is conducting a survey concerning intercity bus service in Texas. This questionnaire is designed to be easy to complete and take no more than five to ten minutes of your time. Your responses will be of great value to the study and will be held in **strict confidence**.

This survey concerns bus service **between** cities such as that provided by Greyhound-Trailways.

1. (a) Have you ever used an intercity bus (that is, a bus travelling between cities)?
___ Yes ___ No

   (b) If "yes," how many times have you ridden an intercity bus in the last year? (A round trip should be counted as 2 times.)
___ Times

2. The following is a list of possible changes which could be made to existing intercity bus service. Please circle the number that best explains how likely you would be to use an intercity bus if the following changes were made. The higher the number, the more likely you feel you would be to ride an intercity bus.

   How likely would you be to use an intercity bus . . .

if bus fares were lower	1	2	3	4	5
if you had a better understanding of how the service operated	1	2	3	4	5
if the speed of the bus trip were faster	1	2	3	4	5
if the buses always arrived and departed on time	1	2	3	4	5
if availability of gasoline were to decrease	1	2	3	4	5
if auto parking were available near the bus station	1	2	3	4	5
if buses were newer and more modern	1	2	3	4	5
if there were more leg room, wider aisles and more comfortable seats	1	2	3	4	5
if the cost of air or train transportation were to increase greatly	1	2	3	4	5
if a bus trip were safer	1	2	3	4	5
if the cost of gasoline were to increase	1	2	3	4	5
if local city bus transportation were available at destination	1	2	3	4	5
if the trip did not involve sitting next to strangers	1	2	3	4	5
if the frequency of intercity bus service were increased	1	2	3	4	5
if the purchase of bus tickets from travel agents were available	1	2	3	4	5
if bus stations were located in better places	1	2	3	4	5
if more express bus service were available	1	2	3	4	5

3. What are your feelings about the following statements?

   I will always dislike the idea of riding intercity buses no matter how good the service is.
   ___ Agree ___ Disagree ___ Not sure

   Federal or state tax money should be used to subsidize intercity bus operating costs.
   ___ Agree ___ Disagree ___ Not sure

4. Do you know that packages can be shipped by bus? ___ Yes ___ No

5. (a) Have you ever shipped a package by bus? ___ Yes ___ No

   (b) If "yes," how many times in the past year? ___ Times

6. If intercity bus service were not provided, how much would you be inconvenienced?
   ___ A little ___ A lot ___ Not at all ___ Do not know

7. In what city and county do you live? City _____ County _____

8. What is the population of the city or metropolitan area in which you live?
   ___ 500,000 or more ___ 5,000 - 50,000
   ___ 50,000 - 500,000 ___ less than 5,000 or rural area

9. What is your age? _____

10. Are you . . .? ___ Male ___ Female

11. Do you own a car, pickup truck, or van? ___ Yes ___ No

12. Do you have a valid driver's license? ___ Yes ___ No

13. What is your current occupation in as specific terms as possible? (Please specify if retired, unemployed, student, or homemaker.)

    _____

14. What is the highest grade/level of school you have completed? _____

15. What is your **household's** annual income?
    ___ $0 - $10,000 ___ $20,000 - $30,000
    ___ $10,000 - $20,000 ___ $30,000 or more

COMMENTS: _____

THANK YOU FOR YOUR COOPERATION

Please return this survey at your earliest convenience in the postage-paid envelope provided.

APPENDIX C

BUS RIDER SURVEY

April 7, 1993

Name
Bus Company Name
Street Address
City, State, Zip Code

Dear Name:

The Texas Department of Transportation (TxDOT), in conjunction with the Texas Transportation Institute (TTI), and supported by the Texas Railroad Commission, is conducting a research project concerning the Intercity Bus Industry in Texas. As part of this project, the research team has developed a survey intended for intercity bus riders. This survey is similar to one we conducted in 1981 with your company. The survey must be randomly distributed to passengers of intercity buses, and [Bus Company Name] is one of those selected. I am writing to you to obtain permission to conduct the bus rider survey on various randomly selected [Bus Company Name] buses.

A copy of the TxDOT approved bus rider survey has been attached for your information. Conducting this survey would entail a representative from TTI to board a [Bus Company Name] bus at a designated stop along its route. The TTI representative, after confirming with the bus driver our permission to do so, would then distribute the survey to passengers. The TTI representative would ask the bus driver to collect the completed surveys at the next stop and to mail them in a postage-paid envelope provided by TTI. It is anticipated that the survey will take place in mid-May.

If you agree to participate in this survey, please provide us with a letter of authorization that we may show your bus drivers. Upon consent from the [Bus Company Name], TTI will send you a final copy of the buses we plan on boarding. If you should have any questions regarding the survey, please feel free to contact Torsten Lienau at (409) 845 2640, or myself at (409) 845 1535.

Your timely reply would be very helpful, as mid-May is approaching quickly. Thank you for your time, and your cooperation is appreciated.

Very truly yours,

Thomas Urbanik, II, Ph.D., P.E.
Research Engineer

TKL/TU/tkl
cc: Torsten Lienau

June 7, 1993

Name
Bus Company Name
Street Address
City, State, Zip Code

Dear Name:

The Texas Transportation Institute has completed its data collection effort in which your bus company allowed us to distribute surveys to bus riders. The data collection effort went very well, and we were able to collect a significant number of surveys. The information we will obtain from these surveys will prove to be an invaluable asset to this project. On behalf of the Texas Department of Transportation and the Texas Transportation Institute, I would like to extend my sincerest gratitude for the efforts put forth by you, your drivers, and your bus station personnel. Without your participation, the type of information we were seeking would have been much more difficult to obtain.

If you should have any questions or comments, please feel free to contact Torsten Lienau at (409) 845-2640, or myself at (409) 845-1535.

Sincerely,

Thomas Urbanik II, Ph.D., P.E.
Research Engineer

TKL/TU/tkl
cc: Kay Fitzpatrick
Torsten Lienau

Intercity Bus Users Survey

Undertaken by the Texas Transportation Institute, Texas A&M University
in cooperation with the Texas Department of Transportation
and the U.S. Department of Transportation, Federal Highway Adminstration

1. Where do you live? City _____ County _____ State _____

2. What is the population of the city or metropolitan area in which you live?
   ___ 500,000 or more ___ 5,000 - 50,000
   ___ 50,000 - 500,000 ___ less than 5,000 or rural area

3. In what city and state did today's trip begin?
   City _____ State _____

4. How did you get to the bus station today?
   ___ Driven by someone else ___ Walked ___ City bus
   ___ Drove self ___ Taxi ___ Other

5. What was the purpose of your trip?
   ___ Visit friend/relative ___ Vacation ___ Commute to work
   ___ Business trip ___ School ___ Visit doctor/dentist
   ___ Other (specify) _____

6. In what city and state will today's trip end?
   City _____ State _____

7. How will you get to your final destination from the bus station?
   ___ Driven by someone else ___ Walk ___ City bus
   ___ Drive self ___ Taxi ___ Other

8. (a) How would you have made this trip if the intercity bus service were not available?
   ___ Ride with someone ___ Airplane ___ Would not make trip
   ___ Drive self ___ Train ___ Other
   (b) Why did you choose the bus instead of using one of the methods in part (a)?
   ___ Low cost ___ No driver's license ___ No car available
   ___ Trip too far to drive by self ___ Too far to train station/airport
   ___ Other (specify) _____

9. How many times have you ridden an intercity bus in the last year? (A round trip should be counted as 2 times.) ___ Times

10. How would you rate your satisfaction with intercity bus service overall?
    ___ Very satisfactory ___ Satisfactory ___ Not satisfactory

11. How much more would you be willing to pay to continue the **existing** service?
___ Nothing ___ A little more ___ A lot more

12. A number of different factors are important to people in deciding to use intercity bus service. Please circle the number that best explains how important the following features are to you in deciding to use the intercity bus. The higher the number, the more important you feel a factor is to you.

How important is . . .

bus fare	1	2	3	4	5
the speed of the bus trip	1	2	3	4	5
leaving and arriving on time	1	2	3	4	5
auto parking near the bus station	1	2	3	4	5
leg room and comfortable seats	1	2	3	4	5
the location of the bus station	1	2	3	4	5
safety at the bus station and on the bus	1	2	3	4	5
food service at the bus station	1	2	3	4	5
local city bus transportation at destination	1	2	3	4	5
having express bus service	1	2	3	4	5
frequency of intercity bus service	1	2	3	4	5

13. How much more would you be willing to pay for **improved** bus service?
___ Nothing ___ A little more ___ A lot more

14. What is your age? _____ 15. Are you . . . ? ___ Male ___ Female

16. (a) Do you own a car, pickup truck, or van? ___ Yes ___ No
(b) If "yes," was it available for this trip? ___ Yes ___ No

17. Do you have a driver's license? ___ Yes ___ No

18. What is your current occupation in as specific terms as possible? (Please specify if retired, unemployed, a student, or a homemaker.)

_____

19. What is the highest grade/level of school you have completed? _____
20. What is your **household's** annual income?
___ $0 - $10,000 ___ $10,000 - $20,000
___ $20,000 - $30,000 ___ More than $30,000

COMMENTS _____

_____

THANK YOU FOR YOUR COOPERATION
PLEASE RETURN THIS SURVEY TO THE BUS DRIVER!

Encuesta para Pasajeros del Servicio de Autobús

(Hecho por El Instituto de Transporte de Texas, La Universidad de Texas A&M en cooperación con El Departamento Estatal de Carreteras y Transportes Púlicos de Texas)

1. ¿Donde vive usted? Ciudad _____ Condado _____ Estado _____

2. ¿Cuál es la población de la ciudad o el área metropolitana en que vive usted?
   _____ 500,000 o más _____ 5,000 - 50,000
   _____ 50,000 a 500,000 _____ menos de 5,000 o ún area rural

3. ¿En cuál ciudad y estado comenzó su viaje hoy?
   Ciudad _____ Estado _____

4. ¿Cómo llegó usted a la estación de autobús?
   _____ Alguien me llevó _____ Caminar _____ En Autobús
   _____ Manejar yo mismo _____ En taxi _____ Otra manera

5. ¿Què es el propósito de su viaje hoy?
   ___ A visitar amigos o parientes ___ Para ir de vacaciones ____ viaje diario
   ___ Comercio viaje ___ Para ir a la escuela ____ Para ir al medico
   _____ Otra razón (específicamente)_____

6. ¿En què ciudad y estado va a terminar su viaje hoy?
   Ciudad _____ Estado _____

7. ¿Comó llegar usted a su destino final desde la estación del autobús?
   _____ Alguien we recogera _____ Caminar _____ En el autobús municipal
   _____ Manejar _____ En taxi _____ Otra manera

8 (a) ¿Cómo habría viajado usted si no hubiera us servicio de autobús?
   _____ Encoche con alguien _____ Por avion _____ Por tren
   _____ Manejarè yo mismo _____ En taxi _____ No viajaría

   (b) ¿Por que usted elegir el autobús en lugar de los métodos escorar en parte (a)?
   _____ de bajo costo _____ no licencia _____ No coche obtenible
   _____ El viaje lejos ír en coche _____ Lejos de estación ferroviaria/aeropuerto
   _____ Otra (explicar por favor) _____

9. ¿Cuántas veces ha viajado en autobús durante el año pasado? Un viaje de ida y vuelta cuenta como dos viajes. _____ Viajes

10. ¿Què grado de satisfacción ha recibido usted del servicio de autobús interurbano?
    _____ Muy satisfecho _____ Satisfecho _____ Insatisfecho

11. ¿Cuánto dinero pagaría usted para continuar el servicio existente?
___ Nada más ___ Un poco más _____ Mucho más

12. ¿Hay un Número de factores diferentes que son muy importantes para los que usan el servicio de autobús interurbano. Por favor, indique con un circulo el número que muestre la importancia del servicio. Cuanto más alto el número, más importante el factor.

Que importancia tiene . . . .

El precio de pasaje 1 2 3 4 5
El tiempo que toma el viaje 1 2 3 4 5
Salir y llegar a tiempo 1 2 3 4 5
Estacionamiento cerca de la estación de autobús 1 2 3 4 5
Espacio para las piernas y asientos cómodos 1 2 3 4 5
Ubicación de la estación de autobús 1 2 3 4 5
La seguridad en la estación de autobús y en el autobús 1 2 3 4 5
El servicio de restaurante en la estación de autobús 1 2 3 4 5
La disponibilidad del autobús municipal al llegar a su destino 1 2 3 4 5
Servicio de autobús expreso 1 2 3 4 5
La frecuencia del servicio de autobús interurbano 1 2 3 4 5

13. ¿Cuanto dinero pagaría usted por mejorar el servicio de autobús?
_____ Nada más _____ Un poco más ____ Mucho más

14. ¿Cuantos años tiene usted?_____ 15. ¿Es usted un: ____ Hombre_____ Mujer

16 (a) ¿Posee usted un vehículo de passajeros o carga? _____ Sí _____ No
(b) Sila respuesta es sí, tenía su vehículo disponsible para este viaje? _____ Sí ____ No

17. ¿Tiene usted una licencia para manejar? ___ Sí ____ No

18. ¿Cuál es su ocupación? (Indique si es estudiante, ama de casa, jubilado, o desocupado)
_____

19. ¿Cuál es el último año de escuelo que ha completado usted?
_____

20. ¿Cuál es el ingreso anual de toda la familia? (en dóllares)
____ $0-$10,000 ____ $10,000-$20,000 ____ $20,000-$30,000 ___ Más de $30,000

COMENTAR _____
_____

Muchas gracias por su cooperación en este estudo.
Por favor devuelva este formulario al conductor del autobús.

APPENDIX D

BUS STATION SURVEY

BUS STOP SURVEY

Location: _____

_____

_____

Hours/Days of operation: _____

Bus Stop:

Primarily for bus operations? Yes No

Other businesses? Yes No Types: _____

Passengers are sheltered when purchasing tickets? Yes No

Passengers are sheltered when waiting for bus? Yes No

Passengers are sheltered when waiting to board the bus? Yes No

Benches are available for waiting on buses? Yes No

Public (City/Rural) transit nearby? Yes No

Interior:

Restrooms? Yes No Condition:_____

Public phone available? Yes No Number of phones: _____ indoor/outdoor

Food....

Vending Machines? Yes No

Cold Foods? Yes No

Hot Foods? Yes No

Tables? Yes No

Condition of area: _____

Appendix D -- Bus Station Survey

Location: _____

Exterior:

Parking -- approx number of spaces: _____

Bus entrance separated from parking area? Yes No

Bus stop sign(s) clearly displayed? Yes No

Hours/Days of operations clearly posted? Yes No

Condition of area: _____

Tickets

Specific ticket window available? Yes No

If no, where can tickets be purchased? _____

Approx. number of tickets sold per day: _____

Schedules

Schedules conveniently available? Yes No

Number of buses a day? _____

Packages

Package service available? Yes No

Packages held for pickup? Yes No

APPENDIX E

BUS COMPANY SURVEY

July 1993

name at bus company
bus company
address
city, TX zip

Dear name:

The Texas Transportation Institute is conducting a research project concerning the Intercity Bus Industry in Texas for the Texas Department of Transportation (TxDOT). We recently contacted you regarding a bus passenger survey we intend to distribute on your buses. TTI has also developed a survey to gather information from you, a representative of the intercity bus industry. Both TTI and TxDOT would greatly appreciate your completing the survey as it will provide valuable information to the Department. Unless otherwise indicated by you, your responses will be held in strict confidence.

If you have any questions regarding the survey, please feel free to contact Kay Fitzpatrick or me at (409) 845-1535.

Sincerely,

Thomas Urbanik, II, Ph.D., P.E.
Research Engineer

KF/TU/disk

cc: Kay Fitzpatrick

Intercity Bus Company Survey

The Texas Transportation Institute at Texas A&M University is conducting a survey concerning intercity bus service in Texas for the Texas Department of Transportation. Your responses and observations will be of great value to the study and will be held in strict confidence.

- Would you describe your company as small, medium, or large? _____

- How do potential passengers acquire your bus schedules?

_____

_____

_____

_____

- How do you market your services (e.g., newspaper ads, radio spots, ads directed toward a specific group such as students or retirees, billboards, etc.)?

_____

_____

_____

_____

- How could the State of Texas help the intercity bus industry and your company?

_____

_____

_____

_____

- If you believe that the needs of intercity bus riders (existing and/or potential) are not adequately being met, what is needed to meet those needs?

_____

_____

_____

_____

- Is there anything the State of Texas could specifically do to help maintain service or foster new service to rural areas?

- What changes have occurred to your company since deregulation (e.g., increase in revenue, eliminated service, decrease in size of company, merge with other companies, etc.)?

  Were these changes beneficial or harmful to your company?

- Do you believe that the intercity bus industry is in a decline?

  If so, what is causing this decline?

What could cause a reversal of the decline?

- Please take this opportunity to inform us of any other concerns you have on the intercity bus industry in Texas.

Thank you for your cooperation.

Please return this survey at your earliest convenience in the postage-paid envelope provided.