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**Federal Transit
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Evaluation of Deep Discount Fare Strategies

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August 1995

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13. ABSTRACT (Maximum 200 words)

This report evaluates the success of a fare pricing strategy known as deep discounting, that entails the bulk sale of transit tickets or tokens to customers at a significant discount compared to the full fare single ticket price. This market-driven strategy is often introduced simultaneously with a fare increase, not only to retain current ridership, but also to increase ridership among infrequent riders and new customers. Other goals of deep discounting typically are to maximize prepayment of fares, reduce cash fares, and enhance the reputation of transit. The evaluation focuses on deep discounting as implemented in three cities in the United States: Denver, Philadelphia, and Richmond.

The evaluation found that, properly executed, deep discounting can achieve its goals. Although ridership is primarily influenced by underlying economic and demographic conditions, deep discounting can further promote ridership increases, or mitigate ridership losses, while producing additional revenues for a transit agency. An attractive fare and a comprehensive marketing campaign are essential for a deep discount fare strategy to succeed. A deep discount fare will significantly reduce an agency's share of cash revenue.

The report describes the motivation, history, and features of the deep discount strategies of the three study cities, evaluates each version, and makes site-specific and general conclusions about the effectiveness of deep discounting.

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PREFACE

This evaluation was prepared by KPMG Peat Marwick LLP under subcontract to Science Applications International Corporation under contract to the Research and Special Programs Administration's John A. Volpe National Transportation Systems Center. The work was sponsored by the Federal Transit Administration, Office of Technical Assistance and Safety. The FTA project sponsor, Bert Arrillaga, TTS-12, provided overall direction for the work. The evaluation was performed under Project Plan Agreement TT-527, Regional Mobility Program Support.

This report evaluates the success of a fare pricing strategy, known as deep discounting, that entails the bulk sale of transit tickets or tokens to customers at a significant discount compared to the full fare single ticket purchase price. This market driven strategy is often introduced simultaneously with a full fare increase not only to retain current ridership, but also to increase ridership among infrequent riders and new customers. The evaluation focused on deep discounting as implemented in three cities in the United States: Denver, Philadelphia, and Richmond.

The authors are grateful for the cooperation and valuable information contributed to this report from the three participating transit agencies. Special thanks to Joseph Smith of the Denver Regional Transportation District, John F. McGee, Jr. of the Southeastern Pennsylvania Transportation Authority, and Tracey Riddick of the Greater Richmond Transit Company.

METRIC/ENGLISH CONVERSION FACTORS

ENGLISH TO METRIC

LENGTH (APPROXIMATE)

1 inch (in) = 2.5 centimeters (cm)
1 foot (ft) = 30 centimeters (cm)
1 yard (yd) = 0.9 meter (m)
1 mile (mi) = 1.6 kilometers (km)

AREA (APPROXIMATE)

1 square inch (sq in, in^2) = 6.5 square centimeters (cm^2)
1 square foot (sq ft, ft^2) = 0.09 square meter (m^2)
1 square yard (sq yd, yd^2) = 0.8 square meter (m^2)
1 square mile (sq mi, mi^2) = 2.6 square kilometers (km^2)
1 acre = 0.4 hectare (he) = 4,000 square meters (m^2)

MASS - WEIGHT (APPROXIMATE)

1 ounce (oz) = 28 grams (gm)
1 pound (lb) = 0.45 kilogram (kg)
1 short ton = 2,000 pounds (lb) = 0.9 tonne (t)

VOLUME (APPROXIMATE)

1 teaspoon (tsp) = 5 milliliters (ml)
1 tablespoon (tbsp) = 15 milliliters (ml)
1 fluid ounce (fl oz) = 30 milliliters (ml)
1 cup (c) = 0.24 liter (l)
1 pint (pt) = 0.47 liter (l)
1 quart (qt) = 0.96 liter (l)
1 gallon (gal) = 3.8 liters (l)
1 cubic foot (cu ft, ft^3) = 0.03 cubic meter (m^3)
1 cubic yard (cu yd, yd^3) = 0.76 cubic meter (m^3)

TEMPERATURE (EXACT)

[(x-32)(5/9)] °F = y °C

METRIC TO ENGLISH

LENGTH (APPROXIMATE)

1 millimeter (mm) = 0.04 inch (in)
1 centimeter (cm) = 0.4 inch (in)
1 meter (m) = 3.3 feet (ft)
1 meter (m) = 1.1 yards (yd)
1 kilometer (k) = 0.6 mile (mi)

AREA (APPROXIMATE)

1 square centimeter (cm^2) = 0.16 square inch (sq in, in^2)
1 square meter (m^2) = 1.2 square yards (sq yd, yd^2)
1 square kilometer (km^2) = 0.4 square mile (sq mi, mi^2)
10,000 square meters (m^2) = 1 hectare (he) = 2.5 acres

MASS - WEIGHT (APPROXIMATE)

1 gram (gm) = 0.036 ounce (oz)
1 kilogram (kg) = 2.2 pounds (lb)
1 tonne (t) = 1,000 kilograms (kg) = 1.1 short tons

VOLUME (APPROXIMATE)

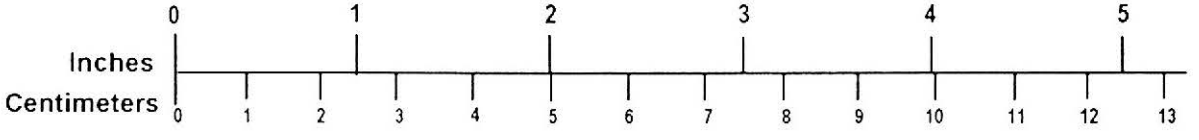
1 milliliter (ml) = 0.03 fluid ounce (fl oz)
1 liter (l) = 2.1 pints (pt)
1 liter (l) = 1.06 quarts (qt)
1 liter (l) = 0.26 gallon (gal)

1 cubic meter (m^3) = 36 cubic feet (cu ft, ft^3)
1 cubic meter (m^3) = 1.3 cubic yards (cu yd, yd^3)

TEMPERATURE (EXACT)

[(9/5) y + 32] °C = x °F

QUICK INCH - CENTIMETER LENGTH CONVERSION



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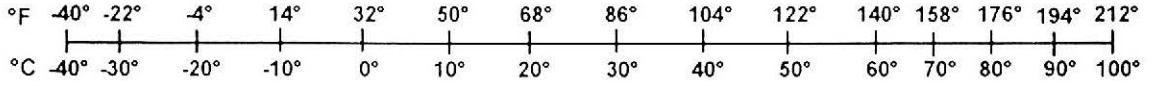

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LIST OF EXHIBITS

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LIST OF ACRONYMS

CAGID	Central Area General Improvement District (Boulder)
CTD	City Transit Division (SEPTA)
FY	Fiscal Year
GRTC	Greater Richmond Transit Company
HOV	High Occupancy Vehicle
MAC	Metro Area Connection (Denver)
MPO	Metropolitan Planning Organization
RRD	Regional Rail Division (SEPTA)
RTD	Denver Regional Transportation District
SEPTA	Southeastern Pennsylvania Transportation Authority
STAR	Specialized Transportation Services for Richmond
STD	Suburban Transit Division (SEPTA)

EXECUTIVE SUMMARY

OBJECTIVE

This report evaluates the impact of deep discount fares on ridership and other measures of transit performance by examining in detail the experience of three representative transit systems.

The deep discount strategy offers substantial discounts of 25 percent or more on prepaid tickets or tokens for transit trips. This market-driven strategy is focused on increasing transit ridership among infrequent and new customers; contributing to revenue growth; maximizing fare prepayment; reducing the use of cash fares; and enhancing the competitiveness of transit.

Discounted pricing strategies contribute to maintaining and/or building ridership by taking advantage of a transit agency's highly segmented market. Similar to airline marketing and pricing strategies, discounted fares focus on increasing ridership among fare-sensitive, infrequent customers. The success of the pricing strategy is contingent upon a transit agency's understanding of its total market base and the reaction of specific market segments to pricing changes.

Transit agencies generally implement deep discount fares by increasing the price of the one way cash fare and offering a discounted multi-ride ticket. According to a recent FTA report prepared by Richard Oram, deep discounting has been used by 15 transit agencies since the late 1980's.

The transit agencies selected for this analysis include the Denver Regional Transportation District (RTD), the Southeastern Pennsylvania Transportation Authority (SEPTA) and the Greater Richmond Transit Company (GRTC). These agencies were selected for this analysis because they represent the most common types of transit service provided in the United States: large multi-modal systems such as SEPTA, large bus systems similar to RTD with a large portion of choice riders, and small-to-medium operations like GRTC. In addition, these agencies had greater experience with deep discount fares relative to other transit properties and had available data measuring the impact of their respective fare strategies.

Regional economic conditions were also a factor in selecting these three systems. This analysis examines how underlying economic conditions influence the impact of deep discounted fares. RTD implemented its fare strategy during a period of economic growth in the Denver region, while SEPTA and GRTC initiated their discounted fares while their service markets were experiencing a recession.

The following summarizes the key findings from the evaluation of the RTD, SEPTA and GRTC discount fare programs.

RTD

Strategy

RTD initiated its ten-ride deep discounted ticket book, known as FareSaver, as part of a 1989 fare change. FareSaver was implemented to offset the impact of a cash fare increase and to promote transit use among infrequent customers, which RTD estimated to be 34 percent of total weekday customers. The deep discount fare provided customers the opportunity to save up to 28 percent off the one way cash fare. To ensure maximum exposure for the ticket book program, RTD implemented an aggressive marketing campaign including television, newspaper and on-bus advertising plus discount coupon offers off the price of FareSaver tickets.

Two years after the introduction of FareSaver, RTD initiated Eco Pass, an annual, unlimited-use photo identification pass valid on all RTD routes. Eco Pass is available to Denver area employers who may purchase it as a tax-free benefit for employees. The cost of the pass is based upon a group insurance concept, with graduated rates based upon company size and level of bus service at the work site. The goals for this initiative included increased transit ridership, reduced auto congestion and pollution, and improved quality of life in the region. Although Eco Pass is not a deep discount fare, it was included in this analysis because it was introduced shortly after FareSaver and, as a result, contributed to fare-related changes in RTD performance.

Since Eco Pass was initiated only two years after the introduction of deep discount fares, it is not always possible to pinpoint performance changes specific to FareSaver. However, it can be assumed that RTD fare-related performance changes are largely attributable to FareSaver as Eco Pass customers represent a small percentage (approximately 4 percent according to recent RTD market research) of total passengers.

Results

Overall, RTD's deep discount strategy has been successful in contributing to improved ridership, revenue and customer satisfaction. Specifically:

- The FareSaver program helped offset the negative impact of the 1989 cash fare increase. Despite the cash fare increase, total 1989 ridership grew by 2.9 percent. Since 1989, ridership has grown at an annual average rate of 4 percent. In contrast, total RTD ridership fell by 5.5 percent in 1987 when the District increased the cash fare without a deep discount ticket. Ridership impacts of the two fare increases cannot be precisely compared because the 1987 fare increase occurred three months earlier than the 1989 fare change. A recession and service reductions also contributed to the 1987 ridership decrease. Despite the impacts of these external forces, the significant difference between the 1987 ridership loss and the 1989 gain indicates that introducing FareSaver increased ridership and minimized the negative impact of the one way cash fare increase.

- A 1989 RTD survey reported that 20 percent of FareSaver purchasers said they increased their use of transit as a result of purchasing the ticket book.

- Eco Pass has contributed to increased RTD usage. As noted earlier, Eco Pass' impact was evaluated in the analysis although it was not a deep discount fare because it was implemented shortly after FareSaver and contributed to RTD ridership performance. The number of companies enrolled in Eco Pass has increased substantially from 22 corporations with 1,184 employees in October 1991 to 498 companies with 22,176 employees in January 1993. RTD reported that the number of companies enrolled grew by 60 percent in 1993.

- According to a 1993 Regional Air Quality Council survey, Denver employees, who received the Eco Pass, increased their use of transit by 17.4 percent. In contrast, the number of days per week employees drove to work alone declined by 25 percent. More than 19 percent of all employees said they increased their use of the bus because of the Eco Pass. Of these employees, slightly less than half stated they were new bus customers.

- The availability of both Eco Pass and FareSaver has resulted in a reduction in the share of cash fares. After the introduction of FareSaver, the share of cash sales declined from 50.1 percent in 1989 to 48.8 percent. The percent of cash sales declined further to the 45 percent range after the initiation of Eco Pass. However, Eco Pass has contributed to a decline in the share of FareSaver sales from a high of 16.3 percent in 1991 to 13.9 percent in 1993, because, given the option, customers are more apt to use a free, or lower cost Eco Pass provided as an employee benefit rather than choose to pay for a FareSaver.

- RTD's revenues have grown steadily since 1987, including 1989, the year FareSaver was introduced. It appears that in Denver the increased ridership due to the deep discounted fares offset the negative impact of increased fares, increasing overall revenues as intended.

- RTD's ridership and revenue growth cannot be entirely attributed to the impact of FareSaver and Eco Pass. Beginning in 1988, a year before RTD initiated its deep discount fare strategy, the Denver region entered a period of economic expansion. Between 1988 and 1992 employment grew at an average annual rate of 2.0 percent. The area's population increased by 8 percent between 1990 and 1993. It is likely these factors have had a significant influence on RTD ridership and revenue levels. According to a 1993 FTA Eco Pass study, a comparison of ridership levels with employment trends over the last ten years showed an 80 percent correlation. Because of these external influences, identifying precisely the impact of FareSaver and Eco Pass on ridership is difficult. However, the significant difference between ridership trends after the 1987 and 1989 fare changes suggests that FareSaver reduced the impact of the one way cash fare increase.

The ridership influence of both FareSaver and Eco Pass are further supported by the previously discussed market research studies, which showed the discounted fares contributed to increased transit use, and RTD revenue trends that demonstrated an increase in the share of tickets and pass use.

- RTD's customers are satisfied with FareSaver and Eco Pass. The results of a 1989 RTD survey showed that 86 percent of weekday customers purchased the ticket book because it cost less on a per ride basis than the one way cash fare. Various Eco Pass surveys showed that both employees and employers were satisfied with the annual pass program.

SEPTA

Strategy

Since the late 1970's, SEPTA has experienced frequent increases in its one way cash fare. To offset the impacts of these fare increases, the Authority began to offer discounted multi-ride tokens in 1982. In early 1990, SEPTA investigated options for promoting transit use by infrequent cash paying customers and to mitigate the impact of an upcoming 20 percent cash fare increase. To enhance the attractiveness of tokens, SEPTA both increased the discount, from 20 percent to 30 percent, and lowered the minimum purchase requirement from ten tokens to two. Tokens are also available in packs of five and ten. Customers can purchase tokens from clerks and vending machines in SEPTA's rapid rail stations and from private retail sales locations.

The new token program provided customers with a number of conveniences. First, riders could enjoy a substantial discount for prepayment of one additional ride. Second, customers could choose among three options for the number of tokens they wanted to purchase (two, five, and ten). This allowed customers the flexibility to buy the number of tokens that was most convenient for them based on their use of SEPTA's services, income, and willingness to make frequent, or infrequent token purchases.

In general, customers who purchase the minimum number of tokens more than likely use them in one day for a round trip. Five- and ten-pack purchases are bought more for convenience and are used for regular commuting trips during the week, or for infrequent travel over an extended period.

Customers who do not take advantage of the discounted tokens and passes pay the full one way cash fare of $1.50. Overall, individuals who continue to pay the full fare are very infrequent users, fare inelastic, or unfamiliar with the fare discount. In addition, although the difference between the full one way fare and the discounted token two-pack is small ($1.50 versus $2.10), there may be a segment of the cash fare paying market that consists of infrequent riders who cannot afford the incremental increase.

Daily, weekly, and monthly "TransPasses" are also available for transit customers. The analysis included a discussion of TransPasses because of their contribution to fare-related changes in SEPTA performance.

As noted earlier, SEPTA has offered discounted tokens since the 1980's. However, only since May 1990 has the Authority aggressively used discounted tokens as a strategy for mitigating the impact of a cash fare increase and for promoting greater transit use among the infrequent rider market segment. As a result, the analysis focused on the effects of SEPTA's May 1990 deep discount token program on City Transit Division (CTD) and Suburban Transit Division (STD) performance. SEPTA's Regional Rail system was not considered in the analysis because discounted tokens are not available for commuter rail use.

Results

Overall, SEPTA's discounted fare program lessened the adverse impact of a 20 percent increase in the base cash fare and a severe regional recession which resulted in a significant decline in Philadelphia employment. Specifically:

- The rate of CTD ridership marginally increased one year after the May 1990 fare increase. By offering the fare discounts, SEPTA reduced the impact of the cash fare increase on transit customers. While the cash fare increased by 20 percent, SEPTA's average CTD fare, which includes all fare types, grew by only 5.8 percent. After the institution of the May 1990 fare changes, the rate of total CTD ridership decline increased by only 0.3 percentage points to 6.3 percent, in FY 1991, while the rate of Philadelphia job loss grew by 1.2 percentage points to 3.1 percent in FY 1991. It is likely that the FY 1991 ridership loss rate did not significantly increase above the FY 1990 rate because customers who were not affected by the recession took advantage of discounted tokens and continued to use transit. During FY 1992 and FY 1993 total CTD ridership losses moderated to 2.0 percent and 1.3 percent, respectively. Similar to total ridership, the average weekday ridership rate of loss marginally increased between FY 1990 and FY 1991. Average weekday ridership declines slowed to 2.4 percent in FY 1992 and 0.8 percent in FY 1993.

- The discounted fare program also lessened the negative impact of the cash fare increase on STD ridership. Total STD ridership increased by 0.6 percent in FY 1989 and fell by 7.3 percent in FY 1990 which included slightly more than one month of the new higher base fare and discounted tokens. In FY 1991, the first full fiscal year that the new fares were in effect, STD ridership grew by 2.7 percent. However, usage fell by 3.4 percent in FY 1992 and recovered by 1 percent in FY 1993. The FY 1992 loss may reflect the impact of higher regional unemployment rates that peaked in mid 1992. Average weekday ridership levels remained essentially stable after the introduction of the higher cash fare and discounted tokens.

- Overall revenues for both CTD and STD increased in FY 1991, after the introduction of the deeply discounted tokens in May 1990. However, in FY 1992 and FY 1993, they fell for CTD and leveled off for STD. Initially the fare increase produced more revenues while the deep discount limited ridership loss, as intended by SEPTA, but the recession in the Philadelphia area countered these trends in FY 1992 and FY 1993. However, it is likely that the ability of deep discounting to mitigate ridership losses in difficult economic times simultaneously mitigated SEPTA's revenue losses.

- The availability of discounted tokens has contributed to a reduction in the use of cash fares. Between FY 1989 and FY 1993 the share of passengers using cash fares declined from 20.2 percent to 12.9 percent for CTD, and from 33.3 percent to 22.4 percent for STD. The decrease in CTD cash use is entirely attributable to an increase in token use. Contrary to industry experience, the availability of discounted tokens resulted in a reduction in CTD pass use. SEPTA attributes this trend, in part, to the recession. Specifically, some transit customers reduced their discretionary travel and switched from passes to tokens. Both tokens and passes contributed to reduced cash use among STD customers.

- According to recent SEPTA surveys, tokens and passes are primarily used by long time, frequent customers. It appears from the survey data that SEPTA has not attracted many new and/or infrequent customers through the token and pass programs. SEPTA's ability to attract new customers may have been hampered in part by the recession's impact which reduced the number of employed workers and consequently the number of potential transit customers.

- Customers said that they believed tokens and passes saved them money. Respondents stated that their use of tokens saved them up $5.00 a week. SEPTA customers who use weekly and monthly passes responded that they saved between $10.00 and $20.00 a week.

- Customers reported they purchased tokens because of convenience. The overwhelming majority of respondents stated that token sales outlets were conveniently located and always had an available stock of tokens.

- The overall success of SEPTA's discounted token program is clouded by the impact of the region's recession and reductions in CTD service. During FY 1990, FY 1991 and FY 1992 Philadelphia employment fell by 1.9 percent, 3.1 percent and 4.1 percent, respectively. The rate of decline slowed to 1.7 percent in FY 1993. Suburban counties also suffered employment losses, but not as severe as Philadelphia. In fact, as of June 1993, the Philadelphia suburbs posted a net employment gain over 1980 levels, while Philadelphia had a net loss for the same period. SEPTA's own analyses show that Philadelphia employment strongly influences CTD ridership. However, the marginal difference in the rate of CTD ridership losses before and after the fare changes (despite worsening job losses) and the slowing rate of decline in the following years indicate that

the discounted token program mitigated the impacts of the cash fare increase, reductions in service and reduced employment. Regarding the fare program's influence on STD use, it appears that tokens and passes contributed to maintaining ridership levels despite the implementation of the fare increase and the impact of a softening suburban economy. SEPTA revenue trends further show the contribution of SEPTA's fare strategy on mitigating the cash fare increase. An analysis of revenue data showed that moderating CTD ridership losses and sustained STD usage corresponded to a decrease in cash use and an increase in token purchases for both divisions.

GRTC

Strategy

To address the adverse, long-term impact of fare increases on ridership, the Richmond Area Metropolitan Planning Organization (MPO) and GRTC undertook a comprehensive fare analysis study in 1991. GRTC and the MPO were interested in evaluating future fare increases that would help cover the growing cost of providing service and would increase passenger revenue, with little, if any loss in ridership. The study found that while GRTC had experienced increases in both costs and revenues, ridership had steadily decreased over time. Decreases in ridership were particularly evident after fares were increased.

The study evaluated a range of fare options including deep discounts, market segmented passes and peak/off-peak differential pricing. The fare analysis recommended the implementation of a deep discount fare strategy and the simplification of GRTC's fare structure. Based on the recommendations of the analysis, GRTC raised the cash fare from $0.75 to $1.00 and introduced a deep discounted ticket book known as SuperSaver priced at $7.50 for ten tickets. The $0.75 per trip cost provided a 25 percent discount from the cash fare. Ticket paying customers were provided with free transfers, while cash customers continued to pay $0.10.

Similar to Denver RTD, GRTC implemented a marketing campaign including advertising at expanded retail sales locations, in newspapers and on television plus discount coupon offers distributed by GRTC bus operators and direct mail.

Because of severe recession-related ridership declines and the inability to expand local subsidies to cover the gap between revenues and costs, GRTC increased the cash fare in July 1993 to $1.25. However, ticket prices remained the same. As a result, SuperSaver customers enjoyed a 40 percent discount off the base fare. The steep discount, however, was temporary. GRTC reduced the discount to 20 percent by increasing the price of SuperSaver tickets from $7.50 to $10.00. Besides reducing the discount on SuperSaver, GRTC began to charge a $0.10 transfer to ticket customers and increased the transfer to $0.15 for cash customers.

Results

Overall, the influence of GRTC's SuperSaver was overshadowed by the severe recession and the movement of jobs away from Richmond, the focus of the transit agency's services. In particular:

- GRTC's trend of ridership losses did not slow after the implementation of deep discount fares; in fact they accelerated. In 1991 ridership fell by 9.4 percent, while it declined by 14.5 percent and 10.0 percent in 1992 and 1993, respectively. During the first six months of 1994 ridership fell by 12.5 percent.

- GRTC revenues continued to fall at essentially the same rate after implementing the discounted fare program. Total revenues declined by 3.9 percent in FY 1991 and FY 1992 and by 3.6 percent in FY 1993. However, revenues increased by 3.1 percent in FY 1994, because GRTC lowered the discount for SuperSaver. The revenue decline between FY 1991 and FY 1993 reflects the impact of decreased ridership levels and increased discounted ticket use which offset any added revenue from the implementation of a higher cash fare. Revenues only increased in FY 1994 because of the reduced SuperSaver discount.

- Ridership, revenue and market research data show that SuperSaver is popular among GRTC's customers. The percent of cash paying customers has fallen from 64.7 percent in 1991 to 37.7 percent in 1993. The share of SuperSaver customers has grown from 34.4 percent during the first year the discounted ticket was offered to 48.8 percent in 1993. However, the fare and marketing program did not contribute to increased ridership and prepaid ticket use among new and infrequent customers. A 1992 market research survey showed that although there was some penetration of the infrequent rider group, tickets are used by more frequent customers, while new and infrequent customers primarily used cash. Cash paying customers reported that they had reduced their use of GRTC services after the implementation of the 1992 fare changes. The survey found that continued cash use among infrequent and new users limited the potential for ridership growth.

- GRTC implemented its deep discount program at the start of a severe recession in the City of Richmond where the transit agency focused its services. As a result, transit ridership was adversely affected. In addition, most of GRTC's customers are infrequent users. These individuals likely use GRTC services for travel to part-time jobs, or discretionary trips, both of which are sensitive to economic changes. In addition, the recession's impact on Richmond's retail activity, which included the closure of a downtown department store, also may have adversely affected transit use. Ridership losses may have been less severe if GRTC had lowered the minimum ride purchase requirement for its SuperSaver ticket. This would have made the ticket more attractive and put it within reach of GRTC's infrequent, transit-dependent customers.

- GRTC's cash fare increase and eventual reduction of the SuperSaver discount to 20 percent in 1993 contributed to the further decline of transit ridership. Based on household income, GRTC's cash fare was higher than SEPTA's and RTD's. It is likely that some GRTC customers with access to a car switched from transit to the auto for their work trips to downtown Richmond where the same auto access constraints do not exist as in a large city such as Philadelphia. Others may have become unemployed and no longer used transit, or found work in the suburban areas not served by GRTC and traveled by car to work.

CONCLUSIONS

Despite the different experiences among the three agencies, several key findings may be drawn from the analysis that other transit agencies should consider in developing and implementing deep discount fares:

- **Although ridership is primarily influenced by underlying economic and demographic conditions, a properly executed deep discount fare strategy can further promote ridership increases, or mitigate ridership losses. An attractive fare and a comprehensive marketing campaign are essential for a deep discount fare strategy to succeed.**

  The success of RTD's fare strategy was largely attributable to the combined impact of a competitively priced fare and an aggressive marketing campaign that included expanded sales outlets, direct mail, discount coupon incentives, in-system advertising and promotional television spots. RTD targeted households with infrequent transit riders for direct mail FareSaver discount coupons. To ensure employee support, RTD offered bus drivers and telephone information center operators the opportunity to win prizes for distributing discount coupons.

  RTD fare-related ridership gains were also, to a lesser extent, attributable to its innovative Eco Pass program, which included free, or low cost annual passes to employees who worked for companies participating in the program. Employers participated in the program to give employees a valuable benefit. In addition, the per pass cost to employers was low because RTD adopted the group insurance pricing concept by using available transit services and expected use to calculate the price of the pass.

  SEPTA's discounted token program combined an attractive 30 percent discount and a low minimum purchase requirement. This provided the opportunity for low income customers who could not afford the cost of a multi-ride pass to make a minimal investment to receive a discount. To ensure increased use of tokens, SEPTA expanded the number of private retail sales outlets and installed token vending machines in its rapid rail stations. Customers recognized SEPTA's efforts to improve the availability of tokens and stated in a recent survey that token sales locations were convenient and that tokens were always

available. However, most customers who took advantage of the token discounts were regular SEPTA customers, not new riders. This may be attributable to a lack of an aggressive marketing campaign focused on infrequent and potential customers. In addition, SEPTA's ability to attract new customers may have been hampered in part by the recession's impact reducing the number of employed workers and consequently the number of potential transit customers.

GRTC's fare program included a marketing program featuring many elements utilized by RTD. However, GRTC's marketing effort did not draw many new and infrequent users to the bus system. Most new and infrequent users reported they continued to use cash. Cash customers said that they reduced their use of GRTC services after the implementation of the fare changes. It is likely that cash customer ridership significantly declined after a 25 percent increase in the cash fare in July 1993. Increasing the discount from 25 percent to 40 percent on GRTC's deep discount ticket did not help to rebuild ridership. Rather, it seems that regular customers switched to tickets and infrequent/new cash customers reduced their use of GRTC services. As a result, fare revenue and ridership continued to decline. GRTC's decision to reduce the discount to 20 percent contributed to further ridership losses during the first six months of 1994.

Similar to SEPTA, GRTC's inability to attract new customers also may have been influenced in part by the Richmond region's severe recession. Structural changes in the economy resulted in a significant decline in the City of Richmond, the focus of GRTC's services. GRTC's market research data showed that most of its customers were infrequent users, making two or fewer trips a week. These customers may be using GRTC's services for travel to part-time jobs, or discretionary trips, both sensitive to economic downturns. In contrast, SEPTA's market research surveys showed that most respondents were frequent token and pass customers.

In addition, GRTC's ability to attract additional customers may also be attributable to the overall competitiveness of its services. Unlike larger metropolitan areas such as Philadelphia and Denver, transit services in small cities similar to Richmond do not have a significant time and cost advantage over the auto as highway congestion and parking are not as constrained in small cities as in larger cities. According to the 1990 census, transit's share of travel within the Philadelphia and Denver regions was 11.6 percent and 4.2 percent, respectively, while in the Richmond region, it was 3.7 percent. As a result, it is somewhat more difficult for GRTC to compete with the auto, increase its market share and successfully use pricing to attract additional ridership.

- **A transit agency's deep discount marketing plan should be focused on attracting infrequent and new customers.** As part of the planning for its deep discount fare strategy, RTD focused on increasing transit use among infrequent customers. RTD found in its early market research that infrequent customers comprised 34 percent of total weekday customers and predominantly used cash to pay their fares. RTD concluded that

a prepaid deep discount fare would induce infrequent customers to switch from cash to tickets and provide an incentive to increase transit use by purchasing a multi-ride fare. As noted above, RTD targeted infrequent customer households with direct mail discount coupons. RTD's 1989 discount ticket survey found that 20 percent of ticket book purchasers increased their number of transit trips because of purchasing the ticket books. It is unclear from RTD's survey analysis how many from this group were infrequent customers. However, RTD did report that the more frequent the number of trips, the greater the potential for purchase. RTD found that 84 percent of purchases were by customers who had ridden the bus at least once a week. As a result, the survey results showed that RTD's fare program captured both infrequent (one to four trips per week) and frequent (five or more trips per week) customers.

As noted above, SEPTA's and GRTC's fare programs did not achieve a significant increase in the number of infrequent customers. Most SEPTA token users reported they were long term (more than three years) and frequent transit (using more than ten tokens a week) customers. Although the recession adversely affected the market for new customers, SEPTA might have attracted infrequent and new customers if it had set up an aggressive marketing campaign similar to RTD's.

Although GRTC did market its SuperSaver ticket, a relatively small percent of infrequent customers used discounted tickets according to the transit agency's 1992 on board survey. As a group, infrequent and new customers were disproportionate in noting reduced transit use. The market research also found that cash payment was common for all ridership groups, even for high frequency users despite the savings available. However, discounted tickets were used most by GRTC's frequent customers. The analysis recommended that the marketing program be geared more to infrequent and new customers who generally were younger (less than 34 years old) and had higher incomes ($25,000 to $50,000). GRTC's initial direct mail campaign was geared toward households with incomes less than $30,000, although other elements of its marketing campaign were more broad based.

GRTC could have attracted a larger share of the infrequent customer segment to SuperSaver by adopting SEPTA's discounted fare approach. Specifically, GRTC may have offered a ticket with a lower minimum ride requirement such as a two, or five-ride ticket, besides the ten-trip fare.

- **Implementation of deep discount fares significantly reduces the share of cash revenue.** Each of the three transit agencies reported a significant decline in the percent of cash as total revenue. Reduced cash revenue handling provides transit agencies with several benefits including reducing the risk of theft and lowering costs related to revenue counting, storage and security. In addition, prepayment of fares improves revenue flows and provides float to a transit agency because it receives an up-front fare before a customer uses the agency's services.

- **Competing fares may adversely affect the success of a deep discount fare program. As a result, transit agencies should ensure its fares are priced for specific markets and do not overlap.** The analysis showed that the share of FareSaver revenue declined after RTD introduced Eco Pass. This is because given the opportunity, a FareSaver customer would likely switch to using an Eco Pass, because it is usually free to employees of employers participating in the RTD program. In contrast, SEPTA token sales were not adversely affected by the availability of daily, weekly and monthly passes as the two fare media are priced for separate markets. Passes are attractive for customers who use SEPTA for commuting and discretionary travel, while tokens are priced for riders who use SEPTA exclusively for commuting. In contrast to general experience, CTD token use increased, while pass use declined. SEPTA attributes this, in part, to customers switching from passes to tokens because of a reduction in discretionary travel. GRTC discontinued its pass when it introduced the Super Saver program to eliminate price competition.

- **Transit agencies should ensure that discounts are large enough to attract new riders and encourage prepaid fares over cash, but do not adversely affect revenue flows.** To achieve a 60 percent fare operating ratio, GRTC raised its cash fare from $1.00 to $1.25, but did not change the price of its SuperSaver tickets. As a result, the discount off the cash fare increased from 25 percent to 40 percent. Presumably, GRTC did not raise the SuperSaver fare as a strategy for offsetting the impact of the cash fare increase. However, the revenue loss persisted after the fare change because of continued ridership declines attributable to the recession and movement by customers from the full cash fare to the discounted ticket. Because of these continuing losses, GRTC reduced the ticket discount to 20 percent in December 1993, and revenues in FY 1994 grew.

- **Deep discount fares contribute to greater customer satisfaction and improved perceptions of transit service.** Market research conducted by all three agencies demonstrated strong satisfaction with the discounted fares. RTD and SEPTA customers used discounted fares because of the savings and convenience. SEPTA customers indicated that they saved up to $5.00 a week by using discounted tokens. The quality of GRTC services was rated higher overall by SuperSaver customers than by cash paying riders.

The above analysis shows that a properly executed deep discount fare program can yield several benefits for a transit agency. Deep discounted fares can contribute to ridership increases, or, can sometimes mitigate losses, reduce the handling of cash revenue, improve revenue flows and enhance customer satisfaction. When implemented with a cash fare increase, they can maintain or increase ridership, simultaneously increasing revenues for the transit agency.

1. INTRODUCTION

1.1 BACKGROUND AND OBJECTIVE

This report evaluates the impact and success of deep discount fares on transit ridership and other measures of transit performance by examining in detail the experience of three representative transit systems.

The deep discount strategy offers substantial discounts of 25 percent or more on prepaid tickets or tokens for transit trips. The objective of the strategy is to:

- Increase transit ridership, particularly among new and infrequent customers
- Increase revenues
- Maximize prepayment and reduce the use of cash fares
- Increase customers' commitment to use transit
- Enhance the perception of transit as a viable and competitive mode of transportation

Deep discount pricing was identified as an effective fare strategy by Richard Oram in a 1988 FTA-sponsored report entitled, *Deep Discount Fares: Building Transit Productivity with Innovative Pricing*. According to Oram, deep discount fares emerged in the mid-1980's as a tool to increase revenue with minimal ridership loss. In some instances, the strategy has achieved simultaneous increases in both revenue and ridership. This result had been, in general, difficult to achieve in transit pricing because of an observed negative fare elasticity; that is, most research had suggested that ridership would decline with increases in fare.

Discounted pricing strategies contribute to maintaining and/or building ridership by taking advantage of a transit agency's highly segmented market. Similar to market specific airline pricing strategies, discounted fares focus on increasing ridership among fare sensitive, infrequent customers. The success of the pricing strategy is contingent upon a transit agency's understanding of its total market base and the reaction of specific market segments to pricing changes.

Transit agencies generally implement deep discount fares by increasing the price of their one way cash fares and offering discounted multi-ride tickets. The deep discount fares allow transit agencies to segment their markets by giving customers the choice of either purchasing significantly discounted multi-ride tickets, or paying higher cash fares. The choices customers make help transit agencies identify which segments of their markets are sensitive and insensitive to fare changes. Transit agencies use the discounted fares to increase ridership among fare

sensitive customers cost effectively, while adding revenues from infrequent riders who continue to pay higher cash fares and generally do not lower their ridership.

Deep discounting, according to Oram, has been used by 15 transit agencies since the late 1980's. The success of these agencies' fare programs has been influenced by changing economic and demographic conditions. Because of the early 1990's recession, many systems experienced significant ridership and revenue losses. As a result, the full impact of deep discounting at many transit systems has been masked by the recession. However, it is believed that deep discounting has sometimes slowed the rate of ridership loss. Oram adds that a successful deep discounting program can increase revenues by 10 to 15 percent while maintaining ridership. This is in contrast to the average fare increase where a transit agency realizes a short term revenue gain, but in the long term loses ridership and thus requires another fare increase.

Deep discount fares also provide several advantages over multi-ride passes. Oram found that although passes are popular among transit customers for their savings and convenience features and are straightforward for transit agencies to administer, passes are also associated with revenue loss because of intensive use and abuses such as pass sharing. Further, Oram noted that passes draw few new riders and generally have a net negative impact on revenues. By effectively segmenting the ridership market, deep discounted fares can attract new customers, and increase ridership among infrequent users without adversely impacting revenues.

The transit agencies selected for this analysis include the Denver Regional Transportation District (RTD), the Southeastern Pennsylvania Transportation Authority (SEPTA) and the Greater Richmond Transit Company (GRTC). The agencies selected represent the most common types of transit service provided in the United States: large multi-modal systems such as SEPTA, large bus systems similar to RTD with a significant portion of choice riders, and small-to-medium operations like GRTC. In addition, these three systems were chosen because of their greater experience with deep discount fares relative to other transit properties and the agencies' ability to provide sufficiently detailed data measuring the impact of their fare strategies. Regional economic conditions were also contributing factors in selecting these three systems. This analysis examines how underlying economic conditions influence the impact of deep discounted fares. RTD implemented its fare strategy during a period of economic growth in the Denver region, while SEPTA and GRTC initiated their discounted fares while their service markets were in a recession.

The analysis evaluates the deep discounting experience of these three transit agencies through their fiscal year ending in 1993. The evaluation relies upon available data sources provided by the three systems. The detail in the analysis varies among the three transit agencies due to differences in the type and extent of data collected by RTD, SEPTA and GRTC.

1.2 ORGANIZATION OF THIS REPORT

This report has five sections. Following this introduction, Sections 2, 3, and 4 evaluate the impact of deep discount fares on RTD, SEPTA, and GRTC, respectively. Each section includes a description of the agency's deep discount fare program. The influence of each system's deep discount fares is evaluated by examining ridership and revenue trends, changes in the mix of cash and prepaid fares, changes in customer perceptions and use of discounted fares, and the impact of external forces such as changes in employment, population and transit service. Brief descriptions of the economic and demographic characteristics of the RTD, SEPTA and GRTC service areas, a summary of the services the agencies provide, and the range of other available fare options are also included. Section 5 summarizes the major findings from the analysis and identifies the factors transit agencies should consider in developing and implementing deep discounted fares.

2. EVALUATION OF DENVER RTD DEEP DISCOUNT FARE STRATEGY

2.1 DENVER REGION ECONOMIC AND DEMOGRAPHIC OVERVIEW

The Denver metropolitan area covers 4,503 square miles and includes six counties: Adams, Arapahoe, Boulder, Denver, Douglas and Jefferson. According to the U.S. Census Bureau, the region's 1993 population was 2,013,786, representing an increase of 8.3 percent since 1990, and a 24.4 percent gain since 1980. The region's population is projected to increase more than 9 percent by 2000 and an additional 8.7 percent by 2010.

Most of the region's population is concentrated in Denver, Jefferson and Arapahoe counties, representing 24.6 percent, 23.5 percent and 21.4 percent of the total metropolitan area, respectively. The median age of Denver's population is 33 years, slightly below the national median of 33.4. Minorities represent 20.2 percent of Denver's population.

The region's location, infrastructure, cost of living and education of its population contribute to its economic growth. Denver's central location within the Rocky Mountain region provides easy access to the growing western and southwestern regions of the United States. Access to other cities will be enhanced after the region's new airport opens; it is projected to serve 110 million passengers a year by 2020. An extensive network of local and express bus routes (discussed in greater detail in the next section), three interstate highways and a light rail line lie within the metropolitan area. The region's cost of living is considered affordable. In mid-1993, the cost of a single family house was $96,300, which was below the national average. The region also has a highly educated labor force. In 1990, 86.2 percent of residents were high school graduates and 30.5 percent were college graduates.

Regional household income levels are above the national average, reflecting a high percentage of two income families. According to a survey by the periodical *Sales and Marketing Management*, 1992 household income was estimated to be $36,454, almost 10 percent above the national average.

Eighty percent of the region's jobs are in the services, trade, government and manufacturing sectors. Major employers include US West, AT&T, Martin Marietta, EG&G-Rocky Flats, Continental Airlines and Adolph Coors Company.

Employment growth has been strong since the end of the region's mid-1980's oil industry related recession. According to the Colorado Department of Labor and Employment, 1992 employment grew by 2.6 percent, while the unemployment rate was 5.5 percent, which was lower than the state's 5.9 percent rate. Through November 1993 employment grew by 2.2 percent, while unemployment fell to 5.1 percent.

2.2 DESCRIPTION OF RTD SERVICES AND FARE STRUCTURE

2.2.1 Administration

The Denver Regional Transportation District (RTD) provides transit service throughout all of Arapahoe and Denver counties and the urbanized areas within Adams, Boulder, Douglas and Jefferson counties (see Exhibit II.1). The agency was created by the State in 1969 and was initially responsible for planning the region's mass transportation services. In 1974, RTD's enabling legislation was amended to allow the District to assume responsibility for developing, operating and maintaining the region's transit system.

RTD is governed by a fifteen-member Board of Directors. Each board member is elected from one of fifteen director districts comprising the RTD service area. RTD's day-to-day operations are managed by a General Manager, who is appointed by the Board. In FY 1993, RTD had a work force of 2,022.

2.2.2 Current Services

RTD operates a fleet of 782 buses over 155 routes. The District's bus fleet consists largely of standard 30- and 40-foot transit coaches, but also includes intercity buses, small buses, mall vehicles, articulated coaches and double-decker buses. In addition, private operators under contract to RTD operate using their own buses. In 1993, RTD's total ridership was 61,400,632, or 204,379 average weekday customers.

To improve operating cost efficiency, the Colorado State Senate enacted legislation in 1988 requiring RTD to contract competitively at least 20 percent of the District's bus routes to private operators. Under this program, RTD establishes the routes, schedules and fares for the contracted routes, while the private operator is responsible for the service's daily operations and maintenance. In 1993, 22.8 percent of RTD's service was provided by private operators.

RTD provides five types of transit service to meet the region's travel needs. These include:

- ***Express routes*** providing nonstop service from distant locations within the service area to downtown Denver and other major employment areas.

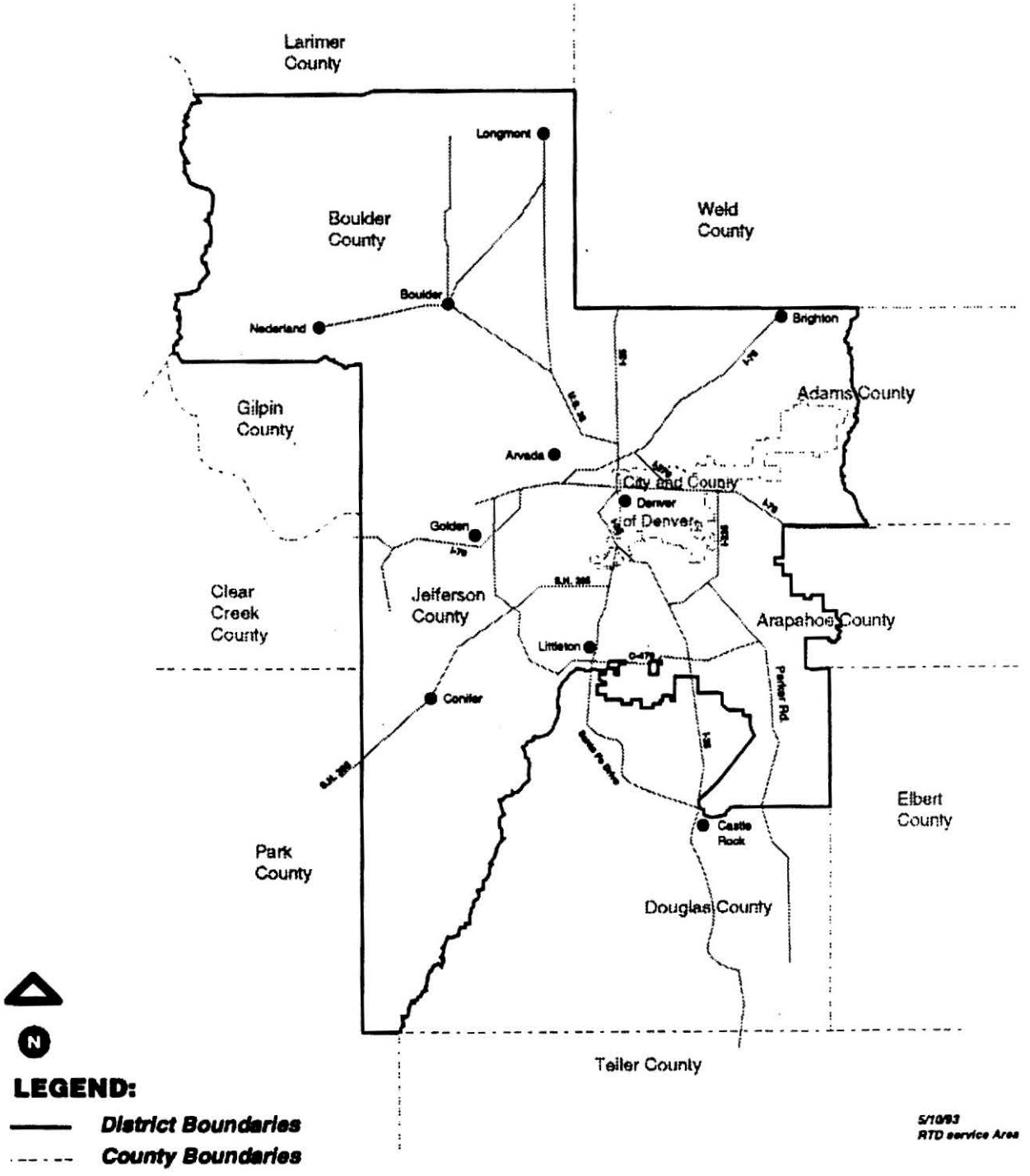
- ***Local routes*** operating along major streets and making frequent stops within the Denver metropolitan area and the cities of Boulder and Longmont.

- ***Limited routes*** serving high density corridors with less frequent stops than local routes.

Exhibit II.1

RTD

RTD Service Area



Source: Denver RTD

- A ***mall shuttle*** providing a free service along the Sixteenth Street Mall in downtown Denver.

- ***Regional routes*** providing service between outlying communities and employment centers to Denver and Boulder.

RTD's expenses are covered by fare revenue, subsidies from local and federal sources, nonpassenger revenue and investment income. The State does not provide an operating subsidy. Local funding is provided through receipts of a 0.6 percent RTD dedicated sales tax. Fare revenue covers 23 percent of RTD's expenses.

2.2.3 Planned Service Expansions

To meet the region's future transportation needs, RTD is undertaking several system expansion projects (see Exhibit II.2). These initiatives include:

- **Metro Area Connection (MAC)**, a 5.3 mile light rail line serving Downtown Denver. Full revenue service began on October 7, 1994.

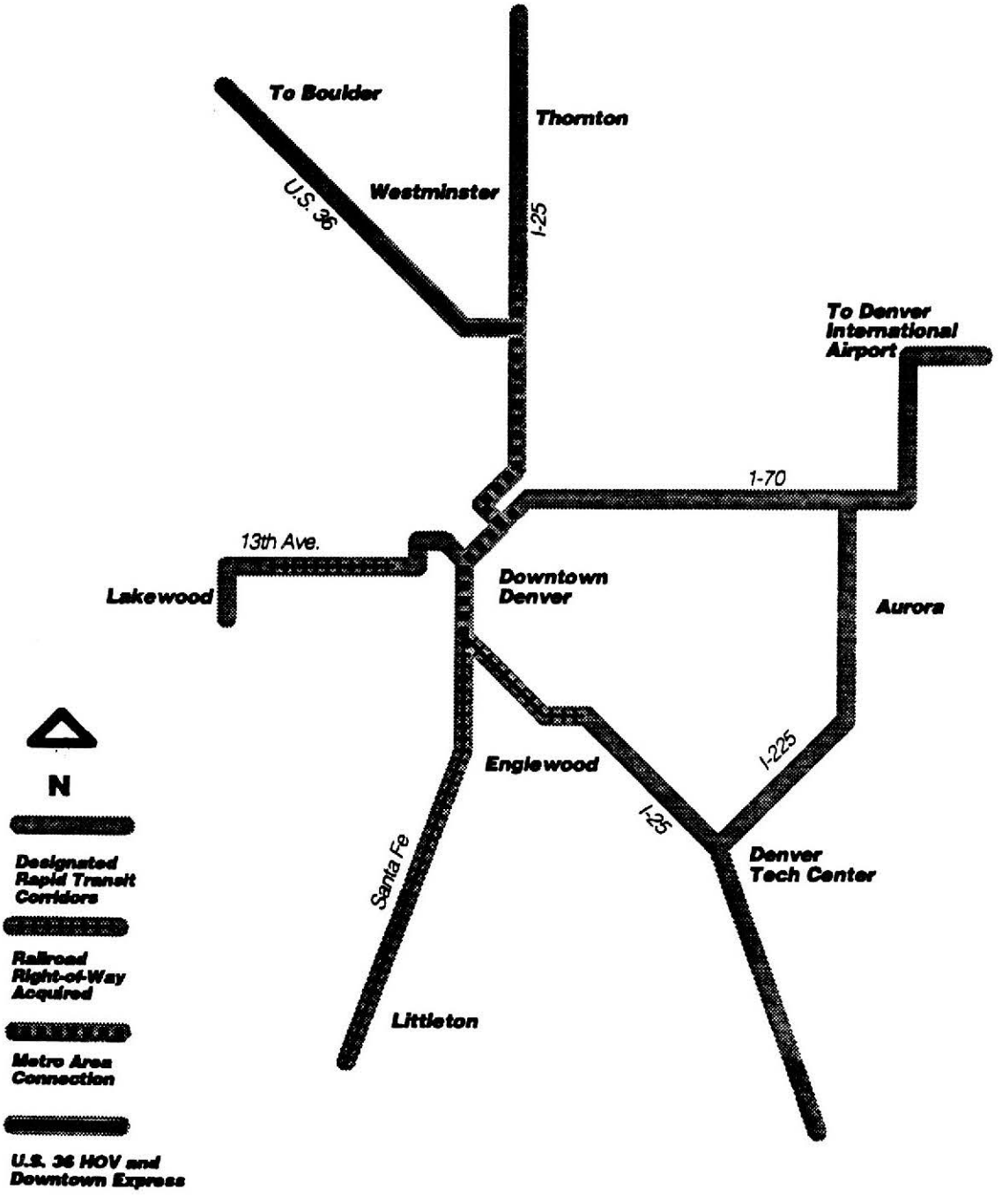
- **Downtown Express service**, two reversible exclusive bus lanes in the median of I-25 between US 36 and 20th Street. The first segment of the high occupancy vehicle (HOV) lanes between 53rd Avenue and 20th Street opened in September 1994. The lanes connect to another bus lane along a reconstructed 20th Street viaduct into downtown Denver. Buses use the lanes to serve two downtown destinations. To accommodate increased demand, RTD expanded parking capacity at two park-and-ride lots served by the new bus lanes.

- **Southwest Corridor Alternatives Analysis**, an evaluation of a 10.7 mile corridor from Broadway and I-25 to the south end of the MAC. RTD, in cooperation with the Colorado Department of Transportation, has reserved a former freight railroad right of way for possible light rail transit use. Preliminary engineering and Environmental Impact Statement preparation are currently underway and are scheduled for completion by the end of 1995.

- **Commuter Rail Implementation Study**, a feasibility study of starting commuter rail service along one of two existing freight lines serving the northwest metropolitan area. In November 1992, the RTD Board identified the rail corridor to Golden for further analysis. A year later, Burlington Northern, the owner of the rail corridor, completed its review of the proposed operating and capital plan for the commuter rail service. It is anticipated that the next phase of the project will include negotiations for a final agreement and the development of an implementation plan.

Exhibit II.2

RTD Existing/Planned Rapid Transit Projects



Source: Denver RTD

- **Denver International Airport services**, approved by the RTD Board in August 1993, entail the rerouting of existing bus routes from Stapleton to the region's new international airport. In addition, to the route reconfiguration, RTD is considering additional regional, express and local service that would connect the new airport with key travel markets within the District.

- **Americans with Disabilities Act compliance**, which, similar to other transit systems, includes the development and implementation of a paratransit service for persons with disabilities who cannot use RTD's regular route bus network and the provision of wheelchair accessible buses and light rail vehicles. RTD's paratransit service is required to be in place by January 26, 1997. The District's policy is that all fixed route services will be wheelchair accessible by the end of 1997.

2.2.4 Current Fare Structure

RTD offers its customers a wide range of fare options (see Exhibit II.3). Within these fare types, RTD provides discounts for elderly, disabled and student travelers. The current fare structure, described below, has been in effect since September 1989.

2.2.4.1 Single Trip Fares

The cash fare for Denver, Boulder and Longmont local service is $1.00, $0.60 and $0.35, respectively. In addition, RTD offers other one way cash fares ranging from $2.50 and $1.50 for Regional and Express service. Mall Shuttle service is free.

During the off-peak, RTD provides a 50 percent discount off the Denver local fare. Off-peak elderly fares cost 15 cents, while one way fares for disabled customers are 25 cents.

2.2.4.2 Monthly Passes

RTD offers monthly passes priced according to service type that the District has sold since 1980. At present, the regular one way fare discount ranges from 27 percent for Express and Boulder local service to 35 percent and 37 percent for Denver and Longmont local customers. Monthly passes are also available for children and students, and for the elderly and disabled. The average student pass discount is 41.4 percent, while the average elderly/disabled pass savings is 52.6 percent.

2.2.4.3 Paratransit

Besides the discounted fares for elderly and disabled customers using RTD's regular route bus service, the District has a separate tariff for paratransit customers. Paratransit fares are double the comparable one way cash fare.

Exhibit II.3
Current RTD Fare Structure

Fare Type	Fare	Cost/Trip	Savings vs. Cash
Denver Local Fares			
Peak Cash	1.00		
FareSaver	7.25	0.73	28%
Off-Peak Cash	0.50		
Disabled Off-Peak	0.25		
Regular Pass	27.50	0.66	35%
Student Pass	23.00	0.55	45%
Senior & Disabled Pass	19.00	0.45	55%
Express Fares			
Cash Fare	1.50		
FareSaver	12.00	1.20	20%
Sr. Off-Peak	0.15		
Disabled Off Peak	0.25		
Regular Pass	46.00	1.10	27%
Student Pass	39.00	0.93	38%
Senior & Disabled Pass	27.50	0.66	56%
Regional Fares			
Cash Fare	2.50		
FareSaver	19.50		
Sr. Off-Peak	0.15	1.95	22%
Disabled Off Peak	0.25		
Regular Pass	74.00	1.76	30%
Student Pass	63.00	1.50	40%
Senior & Disabled Pass	46.50	1.11	56%
Boulder Fares			
Cash Fare	0.60		
FareSaver	4.75	0.48	21%
Sr. Off-Peak	0.15		
Disabled Off Peak	0.25		
Regular Pass	18.50	0.44	27%
Student Pass	15.75	0.38	38%
Senior & Disabled Pass	12.75	0.30	49%
Longmont			
Cash Fare	0.35		
FareSaver	2.25	0.23	36%
Sr. Off-Peak	0.15		
Disabled Off Peak	0.15		
Regular Pass	9.25	0.22	37%
Student Pass	8.00	0.19	46%
Senior & Disabled Pass	7.75	0.18	47%

Exhibit II.3
Current RTD Fare Structure

Fare Type	Fare	Cost/Trip	Savings vs. Cash
Special Services			
seniorRide	0.50		
access-a Ride			
Local Peak	2.00		
Local Off-Peak	1.00		
Boulder Local	1.20		
Regional	5.00		
Just for Youth Fares			
June, July, August, only	7.00	0.32	16.00
Sports Rides			
Rockies Ride			
All Suburban	4.00		
Market Street Station Shuttle	2.00		
BroncoRide	4.00		
Federal Shuttle	2.00		
Market Street Station Shuttle	2.00		
p-n-R Pass	20.00	2.50	38%
Federal Shuttle Pass	12.00	1.50	25%
BuffaloRide			
From park-n-Rides	4.00		

Airport Fares	Suburban	Denver	Stapleton
SkyRide to DIA			
One Way	8.00	6.00	4.00
Advanced Round Trip	13.00	10.00	N/A
Ten Ride Ticket	64.00	48.00	32.00
Monthly Pass	85.00	85.00	46.00
Colorado Univ. Boulder-Cash	5.00	N/A	N/A
Senior & Disabled	4.00	3.00	2.00
Children 6 to 12	4.00	3.00	2.00
Children 5 and under	Free	Free	Free

2.2.4.4 Airport, Youth and Special Event Fares

RTD provides special fares for its services to Stapleton Airport. Customers can purchase full fare one way tickets ranging in price from $4.00 to $8.00, discounted advanced purchase round trip tickets, ten-trip tickets and monthly passes. In addition, discounted one way fares are available for children, the elderly and disabled. These fares have been offered since RTD assumed operation of the region's transit service in 1974. The District also sells discounted youth passes for the summer months and special tickets for sporting events.

2.2.5 Fare Trends

Exhibit II.4 shows RTD fare changes by ticket type from 1974 to 1988, the year before the most recent fare change. During this period, the Denver local fare increased in 1978 by 43 percent to $0.50, in 1981 to $0.70 and in 1987 to $0.75. The Boulder local fare was initially introduced at $0.25 in 1977 and doubled in 1981. Longmont local fares were first offered only in 1977 at $0.25 cents and were not made available again until 1987 when they were reintroduced at the previous price.

Until 1988, RTD offered a circulator fare for special routes serving neighborhoods and downtown areas. The District charged $0.25 for these services until 1981 when the fare increased to $0.35. In 1987 the Circulator fare grew to $0.50.

Regional and Express peak fares increased at approximately the same rate as RTD's local fares. (In the 1970's RTD had a range of different regional fares based on medium and long distance travel. These distance-based fares were combined into a single regional fare in 1979.)

Before 1989, RTD offered off-peak fares for most of its routes. However, RTD eliminated off-peak fares for all routes in 1989 except for Denver local service.

RTD has offered monthly passes since 1980. One year after the passes were implemented, the District substantially increased fares for all services except the Denver local monthly pass. Fares increased slightly in 1987 for all services, except Boulder Local that decreased and Circulator, which increased. In 1989, monthly fares grew between 7.8 and 8.8 percent.

2.3 IMPLEMENTATION OF DEEP DISCOUNT FARES

During the mid-1980's RTD suffered significant ridership losses because of the region's recession and a 1987 fare increase, which included a 7.1 increase in the Denver local fare. Total ridership fell by 7.4 percent in 1986 and another 5.5 percent in 1987.

Exhibit II.4
RTD Fare History

	1974	1975	1976	1977	1978	1979	1980	1981-1986	1987-1988
Denver Local									
Peak	0.35	0.35	0.35	0.35	0.50	0.50	0.50	0.70	0.75
Off-peak	0.25	0.25	0.25	0.25	0.25	0.25	0.25	0.35	0.50
Elderly/Handicapped peak	0.35	0.25	0.25	0.25	0.50	0.50	0.50	0.70	0.75
Elderly/Handicapped off-peak	0.25	0.15	0.15	0.15	0.25	0.10	0.10	0.05	0.10
Pass							15.00	24.00	25.50
Student Off Peak Pass		10.00							
Student Pass		10.00					12.50	16.00	21.50
Student and Disabled		5.00					12.50	16.00	18.00
Student and Disabled Pass									6.75
Tickets									
Boulder Local									
Peak				0.25	0.25	0.25	0.25	0.50	0.50
Off-peak				0.25	0.25	0.25	0.25	0.35	0.50
Elderly/Handicapped peak				0.10			0.25	0.50	0.50
Elderly/Handicapped off-peak				0.10	0.10	0.10	0.10	0.05	0.10
All Day Pass				0.50					
Pass							15.00	17.00	17.00
Student Pass							12.50	11.00	14.50
Student and Disabled Pass							12.50	11.00	12.00
Tickets				7.50					
Longmont Local									
Peak				0.25					0.25
Off-peak									
Pass							7.50	11.00	8.50
Student Pass							5.00	8.00	7.25
Student and Disabled Pass							5.00	8.00	7.25
Tickets				1.00					
Circulator									
Peak		0.25	0.25	0.25	0.25	0.25	0.25	0.35	0.50
Off-peak		0.25	0.25	0.25	0.25	0.25	0.25	0.35	0.50
Elderly/Handicapped peak		0.25		0.15	0.25	0.25	0.25	0.35	0.50
Elderly/Handicapped off-peak		0.15		0.15	0.25	0.10	0.10	0.05	0.10
Student		0.20		0.20					
Student Pass							5.00	8.00	14.50
Student and Disabled Pass							5.00	8.00	9.00

Exhibit II.4
RTD Fare History

	1974	1975	1976	1977	1978	1979	1980	1981-1986	1987-1988
Express									
Peak	0.50	0.50	0.50	0.50	0.75	0.75	0.75	1.05	1.25
Elderly/Handicapped peak	0.40	0.40	0.40	0.40	0.75	0.75	0.75	1.05	1.25
Elderly/Handicapped off-peak	0.40	0.40		0.15	0.25	0.10	0.10	0.05	0.05
Student	0.35	0.35	0.35	0.35					
Pass							25.00	36.00	42.50
Student Pass							22.50	24.00	36.00
Student and Disabled Pass							22.50	24.00	26.00
Tickets									11.50
Regional									
Med Distance	.50 to 1.00	.50 to 1.00		.50 to 1.00	.75 to 1.00	1.25			
Long Dist. Peak	.75 to 1.50	.75 to 3.00		1.25	1.25	1.25	1.75	1.75	2.00
Long Distance O.P.						0.50			
Elderly/Handicapped Peak							1.75	1.75	2.00
Elderly/Handicapped Off Peak							0.50	0.05	0.10
Pass							40.00	60.00	68.00
Student Pass							35.00	40.00	58.00
Student and Disabled Pass							35.00	40.00	44.00
Tickets	2.50 to 18.00	3.50 to 18.00	3.50 to 18.30					15.00	18.00

As part of the planning process for the 1989 fare changes, RTD investigated the feasibility of deep discounted fares. The objectives of the District's deep discount fare strategy were to:

- Provide a "stepping stone" for converting infrequent customers to regular transit users. According to the District's market research, the infrequent customer market segment represented 34 percent of total weekday customers.

- Offset the negative ridership impacts of a steep fare increase which included a 33 percent increase in the Denver one way cash fare in 1989.

RTD based its strategy on the deep discount concept advanced in Richard Oram's 1988 report *Deep Discount Fares, Building Transit Productivity with Innovative Pricing*. The District found in its market research that infrequent customers represented a significant opportunity for ridership growth. Infrequent riders, defined as customers using RTD services four or fewer times per week, represented 34 percent of the weekday customer base. RTD determined that this group had a high annual turnover rate of 30 percent. In addition, the vast majority of infrequent customers (72 percent) paid by cash or tokens, on a trip-by-trip basis.

RTD researched other agencies and found that offering multiple ride discounted tickets to infrequent customers could be a successful strategy for inducing higher trip frequencies. It was believed that the increased number of trips could offset the revenue losses caused by the discounts.

Initially, RTD staff recommended a deep discount strategy for both peak and off-peak use. Up to that time, there had been only limited experience with deep discount fares at other transit agencies (Milwaukee, Lafayette, Oakland). As a result, the RTD Board adopted a more cautious approach, approving a deep discount ten-trip ticket, known as FareSaver, for peak period use only. This FareSaver strategy provided savings up to 28 percent off the comparable one way fare.

Like other RTD fares, the FareSaver is priced according to service. Denver and Boulder local FareSaver tickets are $7.25 and $4.75, respectively, representing 28 percent and 21 percent discounts off the respective one way cash fares. Discounts for Regional and Express customers are about 20 to 22 percent, while discounts for Longmont passengers are 36 percent with FareSaver tickets.

RTD decided not to offer a FareSaver for off-peak Denver local service since the off-peak cash fare already had a 50 percent discount off the peak fare. In addition, the vast majority of customers traveling during this time were frequent transit users.

To promote FareSaver, RTD started an aggressive marketing campaign. This included:

- A television, radio and newspaper advertising campaign promoting the benefits of FareSaver. As part of this effort, RTD secured joint sponsorship of a local television station which provided in-kind advertising time for the promotion.

- In-system marketing including printed advertisements on the outside and inside of RTD buses. Further, brochures were distributed on board buses by RTD employees.

- Geographically targeted direct mail advertising which included discounted FareSaver offers of $1.25 off a ticket book purchase. RTD focused the direct mail coupons on households identified as having infrequent customers. Discounted coupons were also distributed to customers by RTD bus drivers and telephone information center operators.

- Training for bus operators and telephone information center personnel to ensure full awareness and comprehension of the FareSaver program.

- Programs to motivate employees to promote FareSaver. Bus drivers and telephone information center operators were provided an incentive for distributing FareSaver discount coupons by being entered into a contest for gift certificates worth up to $500.

- Increasing the number of RTD ticket sales outlets by 75 to 185, including retail establishments such as gasoline stations and supermarkets, as well as corporate sales locations.

- In-person sales calls on all major sales outlets to explain the sales approach for FareSaver, to secure outlet personnel support and to inform sales outlets about incentive programs for promoting the ticket book.

- Market research surveys to gauge customer perceptions of the ticket book and to measure advertising awareness.

Examples of RTD's FareSaver marketing materials are included in Appendix A.

2.4 IMPLEMENTATION OF ECO PASS

Two years after the introduction of FareSaver, RTD initiated Eco Pass, an annual, unlimited-use photo identification pass valid on all RTD routes. The goals for this initiative include increased transit ridership, reduced auto congestion and pollution, and improved quality of life in the region. In addition, the pass can be a valuable tool to help companies meet Clean Air Act mandates. Although Eco Pass is not a deep discount fare, it is included as part of this analysis because it was introduced shortly after FareSaver and, as a result, is a contributing factor to fare-related changes in RTD performance.

Eco Pass is available to Denver area employers who may purchase it as a tax-free benefit for employees. Most employers provide the pass free of charge to employees. However, some companies charge employees an amount up to the full cost of the pass. The cost of the pass is based upon a group insurance concept with graduated rates based upon company size and level of bus service at the work site. In 1994, RTD defined its service level areas as:

- **Area A**: had the least ridership (estimated at 5 percent of existing ridership) with one to 24 bus trips to the work site between 7:00 and 8:00 a.m.

- **Area B**: had moderate ridership (estimated at 9 percent of existing ridership) with between 25 to 64 trips between 7:00 and 8:00 a.m.

- **Area C**: had higher ridership levels (estimated at 14 percent of existing ridership) with 65 or more bus trips arriving at the work site between 7:00 and 8:00 a.m.

- **Area D**: includes employers at Denver International Airport. Use of this pass will begin once the new airport is opened and transit service to the facility is initiated.

According to a November 1993 FTA evaluation study of the Eco Pass, a typical transit commuter may save up to $1,200 in cash fares, or $900 in monthly passes using the Eco Pass. RTD's Eco Pass price per employee based on company size and available transit service is shown in Exhibit II.5.

Exhibit II.5
1994 Eco Pass Prices

		Annual Employer Cost per Employee		
Service Level Area	Geographic Area	1-24 Employees	24-249 Employees	250 or More Employees
A	Suburban	$35	$30	$25
B	Boulder CBD Fringe Denver CBD	$70	$65	$60
C	Denver CBD	$180	$170	$160
D	Denver International Airport Employers	$185	$175	$165

Exhibit II.5 shows that the cost per employee is greater in areas with more frequent service. RTD charges employers a minimum annual fee of $100 for participating in the program. Similar to the group insurance concept, RTD provides a volume discount for large employers.

The cost per pass is low because it is provided to all employees of a company participating in the program regardless of whether the individual actually uses the pass. An additional benefit of the Eco Pass is that the employee is guaranteed a ride home through a service sponsored by the Denver Regional Council of Governments. In case of an unplanned emergency, an Eco Pass holder may use a taxi free of charge by showing his or her pass.

Eco Pass is aggressively marketed by the City of Boulder as a tool for reducing auto congestion. The pass is marketed to area businesses as part of the activities of a city created alternative transportation organization known as GO Boulder. GO Boulder provides an incentive of 25 percent off the first year cost of the pass to participating companies. Through its marketing efforts GO Boulder secured an agreement in 1993 where members of the city's business improvement district, known as the Central Area General Improvement District (CAGID), would receive free Eco Passes for their employees for a one year period. The cost of the pass was funded by business taxes levied and collected by CAGID.

Outside Boulder, RTD is responsible for marketing Eco Pass. The District does not provide the discount offered by GO Boulder because the agency believes the pass is priced competitively enough to attract employers. RTD markets the pass through direct mail to employers and print advertisements in the *Denver Business Journal*.

To measure the success of Eco Pass, RTD conducted separate market research surveys at small, medium and large employers in 1992. The surveys identified the number of employees with the passes; respondent reported changes in bus ridership; the number of new transit customers; and respondent perceptions and comments about the pass. In addition, the Regional Air Quality Council conducted a separate Eco Pass survey in 1993. The results of these surveys appear later in this analysis.

2.5 EVALUATION OF DEEP DISCOUNT STRATEGY

2.5.1 Analytical Approach

This section evaluates the success and impact of RTD's FareSaver deep discount program, using existing data sources including RTD annual reports, ridership and revenue statistics and market research surveys.

The analysis evaluates whether RTD's deep discount strategy contributed to:

- Increasing transit ridership, particularly by converting infrequent customers to regular users
- Increasing revenues
- Maximizing prepayment and reducing the use of cash fares

- Enhancing the perception of transit as a viable and competitive mode of transportation relative to the auto

Several measures of performance evaluate the success of RTD's program including changes in revenue and ridership, the percent share of cash and pass sales, a modal share, customer perceptions of the discounted fares, and indicators of marketing effectiveness.

As noted earlier, Eco Pass is included in this evaluation because it began shortly after the introduction of FareSaver. Since Eco Pass was initiated only two years after the introduction of deep discount fares, it is not always possible to pinpoint performance changes specific to FareSaver. However, it can be assumed that RTD fare-related performance changes are largely attributable to FareSaver, as Eco Pass customers represent a small percentage (approximately 4 percent according to recent RTD market research) of total passengers. Changes in transit performance that can be attributed to either fare type are addressed.

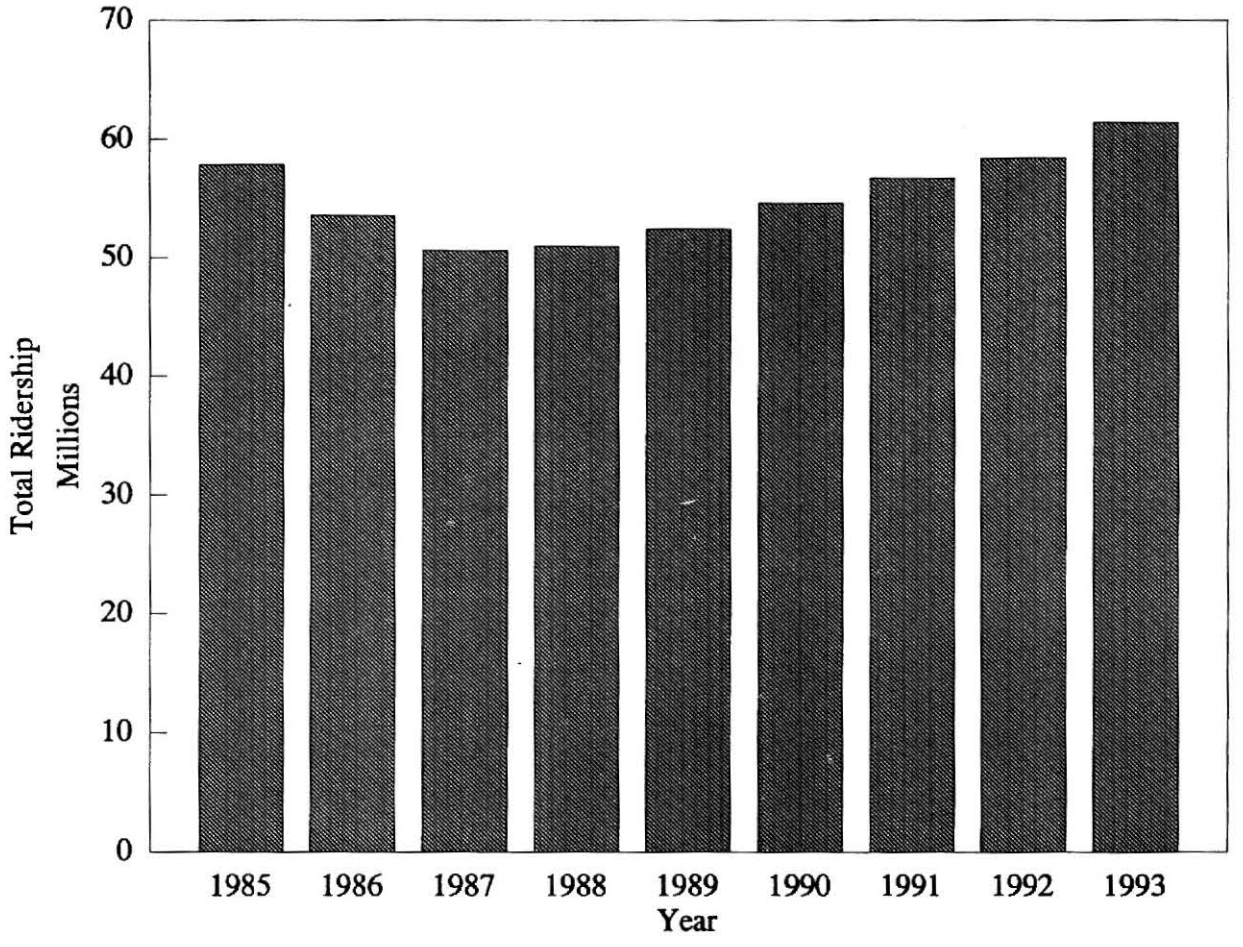
RTD's goal in initiating both FareSaver and Eco Pass was to increase transit ridership. However, previous research shows that passes may have an adverse impact on deep discount ticket sales. In Denver's case specifically, Eco Pass may adversely affect FareSaver ticket sales. Given the opportunity, a FareSaver customer would likely switch to using an Eco Pass because it is either free or available at a marginal cost to employees of corporations participating in the RTD program. The influence of Eco Pass on FareSaver sales is addressed as part of this analysis.

Changes in RTD's performance are not entirely attributed to the District's FareSaver and Eco Pass programs. Rather, trends in key economic and demographic indicators such as employment, retail sales and population, and changes in the level of transit service have a significant impact on ridership and other performance measures. As a result, this analysis evaluates changes in these variables and qualitatively discusses the separate impacts of economic, demographic and fare changes on ridership.

2.5.2 Ridership

Instituting the FareSaver program appeared to offset the potential negative ridership impact of the cash fare increase. As shown in Exhibit II.6, total 1989 ridership grew by 2.9 percent. In contrast, total RTD ridership fell by 5.5 percent in 1987 when the District began a cash fare increase without a deep discount ticket incentive. It should be mentioned that the data cannot be precisely compared because the 1987 fare increase was implemented in June, while the 1989 fare change occurred later in the year in September. Since there were three additional months with higher fares in 1987 than in 1989, the negative ridership implications of the 1987 fare hike may be more pronounced. The 1987 ridership loss may also be due in part to RTD service reductions that were instituted in late 1986 and early 1987. In addition, the Denver area economy was in a recession in 1987, while the region was beginning to experience a recovery in 1989. (The influence of the regional economy is discussed in more detail later in the analysis.) However, despite the impact of these external forces, the significant difference between the 1987

Exhibit II.6	Denver RTD Total Annual Ridership 1985-1993



ridership loss and the 1989 gain indicates that the introduction of FareSaver reduced the negative impact of the one way cash fare increase.

Total ridership has continued to grow at a healthy rate since 1989, increasing an average of 4 percent a year in contrast to the sharp declines in 1986 and 1987 and the marginal increase in 1988. Continued ridership gains can be attributed to the combined impact of RTD's FareSaver and Eco Pass strategies, the level of transit service provided by the District and favorable economic and demographic conditions. The following examination of changes in ridership subgroups provides insight in to the contribution RTD's deep discount fare strategy has made in increased transit ridership.

2.5.2.1 Average Weekday Ridership

Average weekday ridership, which primarily measures the number of work trips made by transit, significantly increased after the 1989 fare changes (see Exhibit II.7). Excluding the free Sixteenth Street Mall service, weekday ridership grew by 1.1 percent and 3.1 percent in 1989 and 1990, respectively. In contrast, after the 1987 fare increase, weekday ridership declined by 9 percent, then grew by 0.8 percent in 1987 and 1988, respectively.

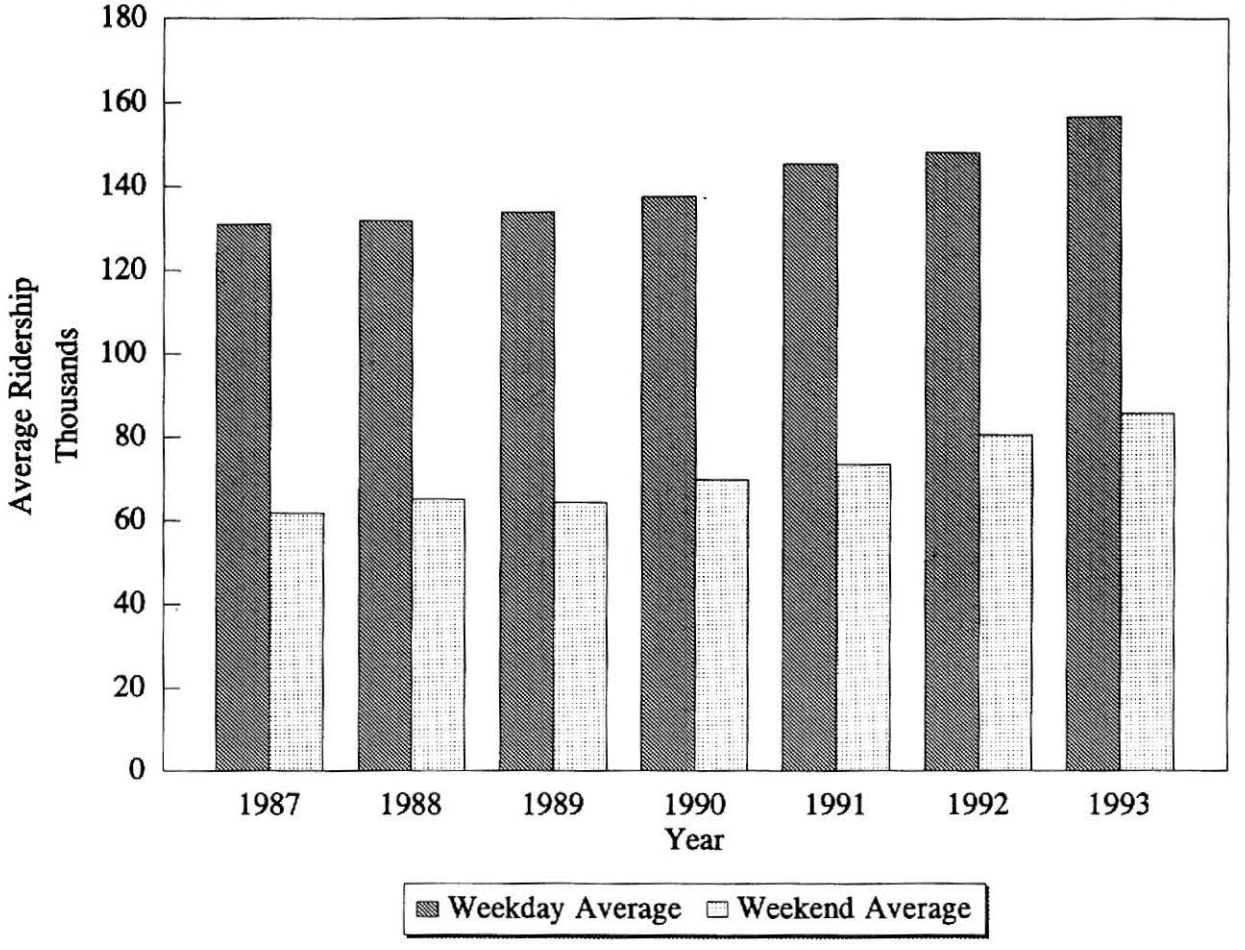
Similar to total ridership, average weekday ridership has continued to grow since 1989, with average annual gains of 4.1 percent. The strongest growth has been on RTD's regional routes, which have posted average annual gains of 7.4 percent. Ridership on these routes grew at less than 1 percent a year between 1987 and 1989.

Average ridership on RTD's local routes, representing 60 percent of the District's total weekday ridership, also posting significant gains since 1989. Local ridership has grown an average of 3.1 percent since 1989. In contrast, between 1987 and 1989, ridership on these routes increased annually by an average of 1.9 percent.

2.5.2.2 Weekend Ridership

A primary objective of RTD's FareSaver program was to increase transit use among infrequent customers. Trends in average weekend ridership, which largely measure the number of discretionary trips made by transit, illustrated that FareSaver helped RTD achieve this goal (see Exhibit II.7). Since 1989, weekend average ridership, excluding the free Sixteenth Street Mall service, has grown with average annual gains of 7.6 percent. Between 1989 and 1993 average weekend ridership grew by 34.1 percent to 69,597. In contrast, weekend ridership grew by 6.8 percent in 1988 and declined by 1.1 percent in 1989. Most of this recent growth occurred on the Denver local routes, which provide the overwhelming majority of weekend RTD service.

Exhibit II.7	Denver RTD Average Weekday and Weekend Ridership 1987-1993



2.5.2.3 FareSaver Customers Reported Use of Transit

Twenty percent of ticket purchasers reported an increase in transit trips in an RTD 1989 FareSaver survey as a result of purchasing the ticket books.

2.5.3 Measures of Eco Pass Use

As noted earlier, RTD's fare-related ridership growth is not entirely attributable to FareSaver. The District's Eco Pass program has also contributed to increased transit use. The following sections discuss the Eco Pass program's specific impact on RTD ridership and performance. It should be noted that Eco Pass has had a smaller influence on RTD ridership than FareSaver because Eco Pass users represent a smaller share of RTD customers than FareSaver users (4 percent versus 14 percent according to RTD's 1993 Rider Survey).

2.5.3.1 Monthly Boardings

According to FTA's 1993 Eco Pass evaluation, the number of customers boarding with an Eco Pass grew between October 1991 and December 1992 by more than four times to over 87,000 a month. Eco Pass monthly boardings as a percent of total monthly boardings grew from 0.5 percent in October 1991 to 2.3 percent in December 1992.

Boarding data are collected by RTD bus operators, who key in the pass type on the bus fare box. Operator error occurs if the operator hits the wrong key, or misidentifies the pass type. RTD recognizes the potential for error, but does not adjust the data and has not attempted to quantify the extent of the error.

2.5.3.2 Number of Companies Enrolled in Eco Pass

The number of companies enrolled in Eco Pass, according to the 1993 FTA study has grown substantially from 22 corporations with 1,184 employees in October 1991, to 498 companies with 22,176 employees in January 1993. More recently, RTD reported that the number of enrolled companies grew by 60 percent in 1993.

2.5.3.3 Percent of Employees Using Eco Pass

According to the FTA Eco Pass study, a 1992 survey conducted by CAGID found that 69 percent of Boulder area employees in companies offering Eco Pass had obtained it, but only 17 percent of the employees (12 percent of total) used the pass. In contrast, a 1992 survey of medium and large businesses conducted for RTD showed that 80 percent of Boulder area employees eligible for Eco Pass received it. Approximately 14 percent of all employees used the pass. It is unclear why the results of the two surveys differ significantly. The discrepancy may be attributable to potential differences in the survey instruments, or sample sizes. The CAGID

survey had a sample of 467 participants in the Boulder area, while the RTD survey had more than 800 respondents from the Boulder and Denver area.

Within Denver, RTD found that approximately 87 percent of eligible employees obtained the pass and 50 percent used it. In its review of the Denver employee survey, FTA cautioned that the 17 companies participating in the survey may not represent the 30 companies that did not participate.

An employee's decision to obtain a pass is contingent upon the availability and convenience of transit from home to work. In addition, cost may be a factor if an individual's employer charges for the pass.

2.5.3.4 Eco Pass Customers' Reported Use of Transit

A 1992 RTD survey of medium and large employers showed that approximately one fifth of the employees who received the pass became new bus customers. However, it is not known how often these new customers used RTD services. The sample consisted of 812 respondents employed by private companies and public agencies that participated in the Eco Pass program. The number of respondents was almost equally divided among the Eco Pass service areas.

Both employees with a pass and without a pass reported they increased their use of transit after the introduction of Eco Pass. The greatest net increase in one way bus trips per week was reported for those service areas with frequent transit service (currently defined by RTD as Areas B and C). Ridership for employees with and without passes increased in areas B and C by 1.8 and 1.9 one way trips per week, respectively. Employees with a pass in areas B and C reported a net increase of 2.3 and 2.2 one way trips per week, respectively. Employees with passes in less frequently served areas reported a net increase in one way trips per week of 1.2 to 1.9, while all employees (with and without passes) increased their use of the bus by 0.7 to 1.9 trips, respectively.

RTD's small employer survey, which included a sample of 185 companies, demonstrated strong Eco Pass use among employees. The results showed that 50 percent of eligible employees rode the bus daily. The survey analysis does not separate changes in bus use for Eco Pass users and nonusers. The percent of employees using the bus in each service area significantly exceeded the District's projections. For example, RTD estimated that 11 percent and 29 percent of employees working for small companies would use the bus in service areas B and C, respectively. The survey data showed that 44 percent of employees in Service Area B and 62 percent in Service Area C used the bus.

Following the 1992 RTD employee surveys, the Regional Air Quality Council conducted additional market research in 1993 on Eco Pass use. The survey sample was drawn from a telephone survey of 577 employees working for participating Eco Pass companies. The sample was divided among 200 respondents from 65 small companies, 200 respondents from 14 medium

sized companies and 177 employees from two large employers. Results were weighted to minimize sampling bias.

The survey found that employees working for companies participating in the Eco Pass program increased their use of transit by 17.4 percent from 2.3 to 2.7 days per week. In contrast, the number of days per week employees drove to work alone declined by 25 percent to 1.6. More than 19 percent of all employees said their use of the bus increased as a result of the Eco Pass. Of these employees, slightly less than half stated they were new bus customers.

2.5.3.5 Modal Share

A travel diary conducted in the Boulder Valley area in 1990 and 1992 showed a marginal gain in transit's share of the total travel market. Between 1990 and 1992 RTD's share of total travel grew from 1.5 percent to 2.1 percent. The FTA's 1993 Eco Pass analysis attributed the shift in modal share to the combined impact of the Eco Pass and FareSaver programs.

The Regional Air Quality Council's 1993 survey found for all Denver CBD employees with an Eco Pass 47.2 percent used the bus, 38.7 percent drove alone and 10.2 percent used a car or vanpool. Employees who did not have an Eco Pass drove (68.9 percent) or used a car or van pool (19 percent). Only 5 percent of employees without an Eco Pass used the bus.

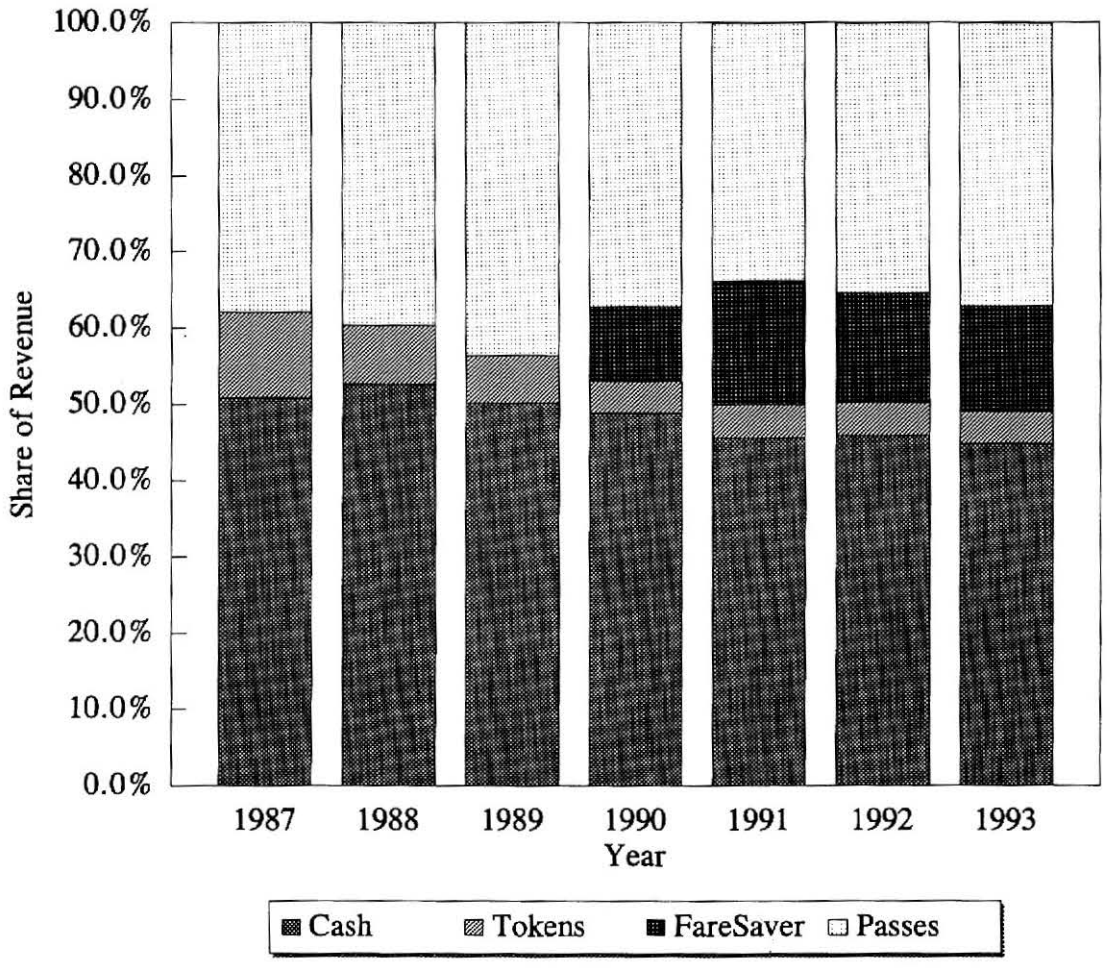
2.5.4 Revenue Trends

Between 1990 and 1993 passenger revenues increased annually an average of 7.5 percent. From 1987 to 1989 revenues grew annually by 7.1 percent. RTD's total revenue growth trends are significantly influenced by higher fare receipts attributable to the 1987 and 1989 fare increases. As a result, total revenue trends may not be a suitable indicator of the success of RTD's deep discount strategy. Rather, changes in the share of cash, pass and ticket sales as a percent of total revenue as well as year-to-year revenue trends for specific fare media provide a better measure of the impact of the deep discount fares.

Since 1989, RTD customers have shown an increasing preference for using tickets and passes over cash. The District found in a 1989 market research survey that most new FareSaver purchasers had previously paid their fare with cash. Exhibit II.8 shows changes in the share of cash, tokens, tickets and passes as percent of total fares.

FareSaver sales represented nearly 10 percent of total revenue after the first year it was introduced. The ticket book's share climbed to 16.3 percent in 1991. Most of this gain is attributable to a decline in the share of cash, token and pass sales, however, FareSaver's share has since eroded to the 14 percent range. FareSaver sales declined by 10.6 percent and 0.8 percent in 1992 and 1993, respectively because of a rebound in the share of pass sales in 1992 and 1993. Pass sales grew by 6.0 percent and 7.6 percent in 1992 and 1993, respectively. The increase in pass sales and decline in tickets is attributable in part to growth in Eco Pass sales.

Exhibit II.8	Denver RTD Share of Revenue by Ticket Type 1987-1993



The availability of both Eco Pass and FareSaver has resulted in a reduction in the share of cash fares. After the introduction of FareSaver, the share of cash sales declined from 50.1 percent in 1989 to 48.8 percent in 1990. The initiation of Eco Pass contributed to a further reduction in the share of cash sales to the 45 percent range. Before the implementation of FareSaver, cash sales represented more than 50 percent of total revenue. In addition, it appears that FareSaver and Eco Pass have both contributed in part to an erosion in the share of tokens. Between 1987 and 1989 the share of tokens as a percent of total revenues fell from 11.3 percent to 6.3 percent. The decline in the share of token revenue may be attributable to other factors besides the introduction of RTD's deep discount fares. The share of token sales began to decline before the initiation of deep discount fares.

2.5.5 Cost Recovery and Subsidy Per Passenger

RTD's cost recovery ratio, which is the Board approved ratio of total revenues to total expenses, has improved after the implementation of the 1989 fare changes (see Exhibit II.9). Between 1985 and 1988 the cost recovery ratio ranged between 29.3 percent and 32.5 percent. After the 1989 fare changes, the ratio improved, ranging from 34.1 percent to 38.0 percent. The cost recovery ratio peaked at 38.0 percent in 1991 and as of 1993 was 34.9 percent. FareSaver may have contributed to the overall improvement in the ratio because the introduction of a prepaid discounted ticket promotes more up-front ticket sales and increases the flow of incoming revenues, induces more transit trips and as a result of decreased cash sales, reduces expenses related to revenue handling. The overall growth in RTD's fare operating ratio is also attributable to improvements in the region's economy which is discussed in more detail in the next section.

It is likely that the ratio's decline in 1992 and 1993 is a result of increased service levels that added to the District's operating cost. The impact of service level changes is presented later in the analysis.

However, RTD's subsidy per passenger (see Exhibit II.10) has not been significantly influenced by the District's discounted fare policy. Between 1985 and 1993, this indicator has fluctuated between $1.43 and $1.59. It is likely that the subsidy per passenger is more influenced by other factors such as the availability of public subsidies and policies governing service levels.

2.5.6 Customer Satisfaction and Measures of Marketing Effectiveness

Besides monitoring trends in ridership and revenue, RTD and other local agencies used market research to measure customer satisfaction with FareSaver and Eco Pass and to gauge the effectiveness of the District's marketing efforts. The following summarizes the findings from this research.

Exhibit II.9	Denver RTD Cost Recovery Ratio 1985-1993

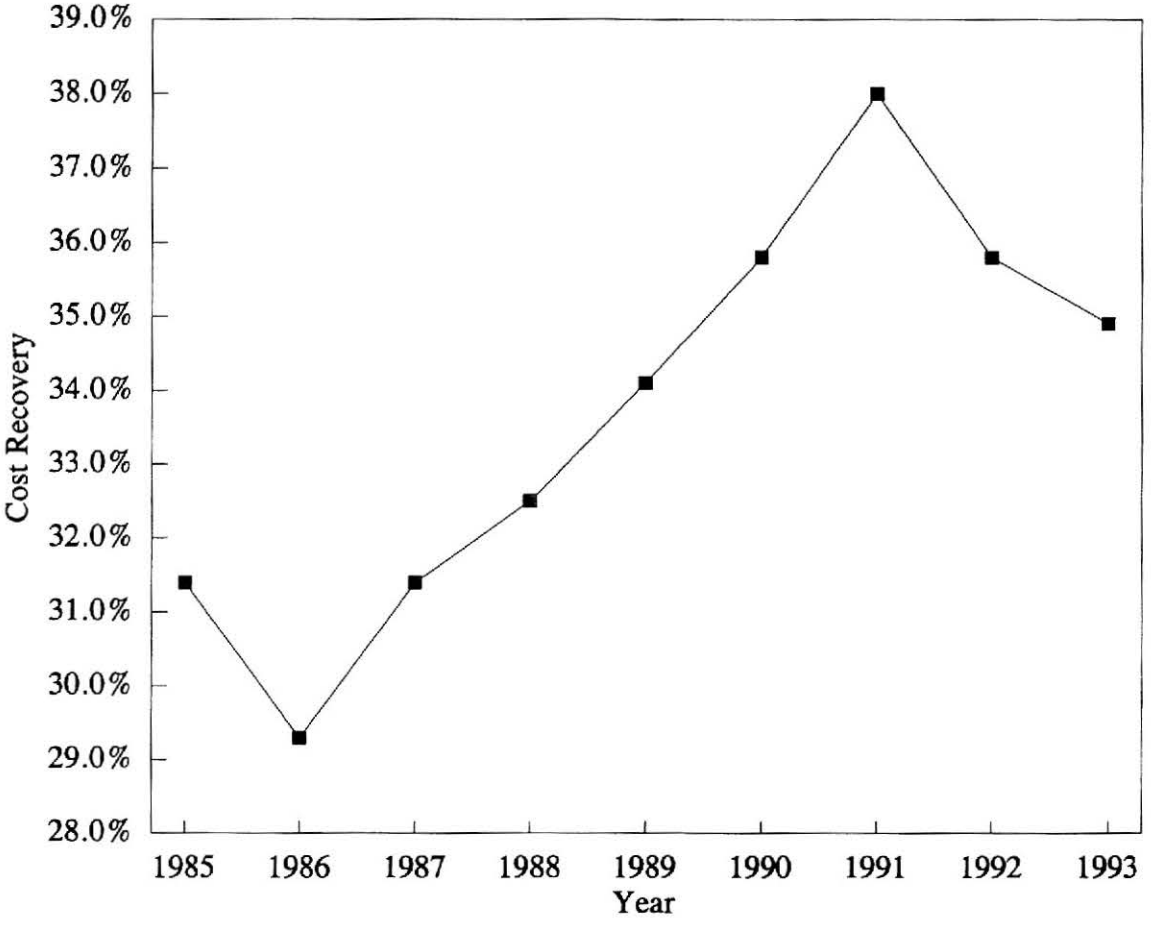
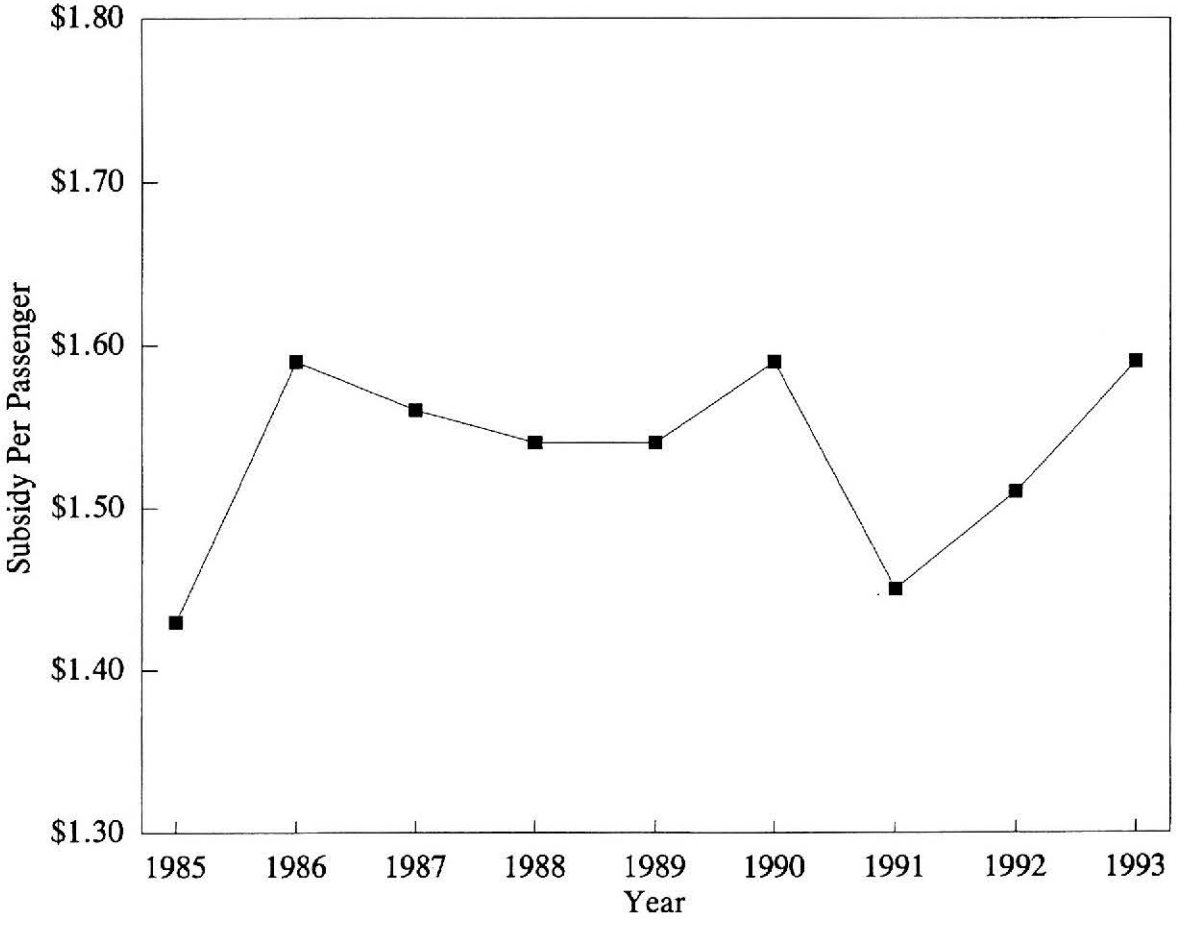


Exhibit II.10	Denver RTD Subsidy Per Passenger 1985-1993



2.5.6.1 FareSaver Customer Satisfaction

The results of RTD's 1989 FareSaver survey showed that 86 percent of weekday customers purchased the ticket book because it cost less on a per ride basis than cash or tokens and 63 percent used it because it was more convenient than using change. Fifty-six percent purchased FareSaver because of the promotional discount coupon and 53 percent used it because of the availability of RTD ticket sales outlets. RTD allowed customers to provide multiple responses to the reasons why they used the ticket book.

2.5.6.2 FareSaver Marketing Effectiveness

Eighty percent of weekday customers responding to the 1989 survey had previously heard of FareSaver. Frequent riders were more aware of the ticket book than infrequent customers (89 versus 70 percent). Two thirds of weekday riders were aware of FareSaver through bus interior advertising (67 percent) and bus driver handouts (15 percent). Among the general public (i.e., those who used the bus once per year), the primary sources of awareness of FareSaver were friends and relatives (24.8 percent), bus interior advertising (18.4 percent) and the newspaper (13.6 percent).

Respondent groups who were classified as the general public and regular weekday users both recalled that "savings" was the primary message of the advertising. Weekday customers also recalled the FareSaver "saved money and compensated for the fare increase."

Interestingly, among all respondents, most (60 percent) did not use the discount coupon when they purchased a ticket book. However, over half of RTD's regular weekday customers reported they used the RTD discount coupon when they purchased their ticket book.

2.5.6.3 Eco Pass Customer Satisfaction

Participating employees indicated in RTD's 1992 surveys that they felt positive about Eco Pass. Forty-four percent of employees at small companies and 41 percent at medium and large companies gave the pass favorable ratings.

The Regional Air Quality Council's 1993 survey showed that 90.2 percent of employers believed Eco Pass was very beneficial. Employers elaborated that the program was beneficial because it provided a cost savings for employees (42.5 percent), increased bus ridership (29.8 percent) and employees appreciated it (27.7 percent). Employers believed that participation in Eco Pass would increase bus ridership at their company by nearly 23 percent.

2.5.6.4 Eco Pass Marketing Effectiveness

According to the Regional Air Quality Council survey, most employers became aware of Eco Pass through their employees (25.5 percent). Others heard about the program from other bus riders (13.7 percent), an RTD sales contact (11.8 percent) and another company (11.8 percent).

2.5.7 Measures of Auto Congestion

The Regional Air Quality Council survey found that the Eco Pass program contributed to a reduction of 521 daily auto trips among Denver CBD employees participating in the program. The survey results were used to estimate the reduction in total daily commuting vehicle miles traveled (VMT) among the current Denver CBD employees participating in Eco Pass. The analysis concluded that there was a 17,440-mile reduction in daily commuting VMT. This represented a 2.4 mile reduction per survey respondent.

The FTA's Eco Pass evaluation estimated that pass users working in the Boulder area reduced auto use by 114,000 miles per month, or 5,429 miles a day. The report also noted that for every employee shifting to transit within the Boulder business area, 7.8 daily parking spaces were saved per month. Weighting this to the total number of pass holders shifting from single occupancy vehicles, the FTA found that 4,468 daily spaces were freed up each month, or 150 a day.

The review of the available data sources showed that comparable analyses of reductions in auto travel attributable to FareSaver are not available.

2.5.8 External Factors Influencing Ridership

2.5.8.1 Economic and Demographic Trends

Beginning in 1988, a year before RTD initiated its deep discount fare strategy, the Denver region began to recover from its oil industry related recession. Between 1988 and 1992, nonagricultural employment grew annually an average of 2.0 percent. Through November employment grew by 2.2 percent in 1993, in contrast to the 1.5 percent and 0.3 percent employment declines posted in 1986 and 1987. Most of the late 1980's and early 1990's employment growth was within the finance, services, trade and government sectors. Starting in 1990, the construction industry posted strong gains largely because of work related to the new Denver International Airport.

Recovering employment levels more than likely contributed to increases in RTD ridership, particularly in the core commuter market. As a result, separating the impacts of the region's economic growth and RTD's fare discounts on ridership is difficult. According to the FTA's 1993 Eco Pass evaluation study, a comparison of ridership levels with nonagricultural employment over the last ten years showed an 80 percent correlation. Similarly, significant growth in retail sales

likely contributed to RTD's ridership increases, particularly in the strong weekend ridership market where more discretionary shopping trips are made. According to the Colorado Department of Revenue, retail sales between 1988 and 1992 grew an average of 7.3 percent a year. Retail sales growth has been strongest between 1990 and 1992.

Other indicators of economic activity further demonstrate a strong regional economy. Office vacancy rates have declined from 25.6 percent in 1987 to 18.8 percent in 1992. Similarly apartment vacancies have fallen from 11.8 percent in 1987 to 4.7 percent in 1992. Housing permits climbed by 23.4 percent during this period.

The impact of FareSaver and Eco Pass may further be clouded by gains in the region's population. As a result of the area's economic growth, population has significantly increased. According to the Census Bureau, population grew by more than 8 percent to 2,013,786 between 1990 and 1993. The 1994 Metro Denver Economic Profile noted that most of this growth is attributable to a net immigration of individuals seeking improved economic and life style opportunities from Texas, Arizona and California, areas suffering from the early 1990's recession. The FTA Eco Pass study reported that many retirees and semi-retirees have moved into the region. Both groups represent important additions to the travel market that would use RTD's services for work or discretionary travel. As a result, it is likely the region's population growth has also significantly influenced RTD ridership.

2.5.8.2 Service Level Changes

Ridership is also influenced by the level of transit service provided. Exhibits II.11 through II.13 show changes since 1987 in RTD service as defined by the number of vehicle hours operated. Service adjustments are implemented approximately every quarter. During this period, RTD expanded weekday service by 6.8 percent, Saturday by 9.8 percent and Sunday by 13.1 percent. Service expanded presumably to meet increased demand resulting from renewed economic activity and the District's FareSaver and Eco Pass programs.

RTD service levels have grown at a slower rate than ridership. Between 1987 and 1993 average weekday ridership grew by 18.8 percent, average Saturday ridership increased by 31.8 percent and average Sunday usage gained by 49.0 percent. These trends demonstrate that RTD's service planners have adjusted service to meet increased demand. It is likely RTD increased service at a slower rate than ridership because the District already had available capacity in its schedule to meet the greater demand levels.

2.5.9 Conclusions Regarding the Impact of External Factors

RTD initiated its discount fare strategy during a period of significant economic and population growth in the Denver region. In addition, discounted fares were initiated at the

Exhibit II.11	Denver RTD Weekday Service Hours Operated For Each Quarterly Service Change

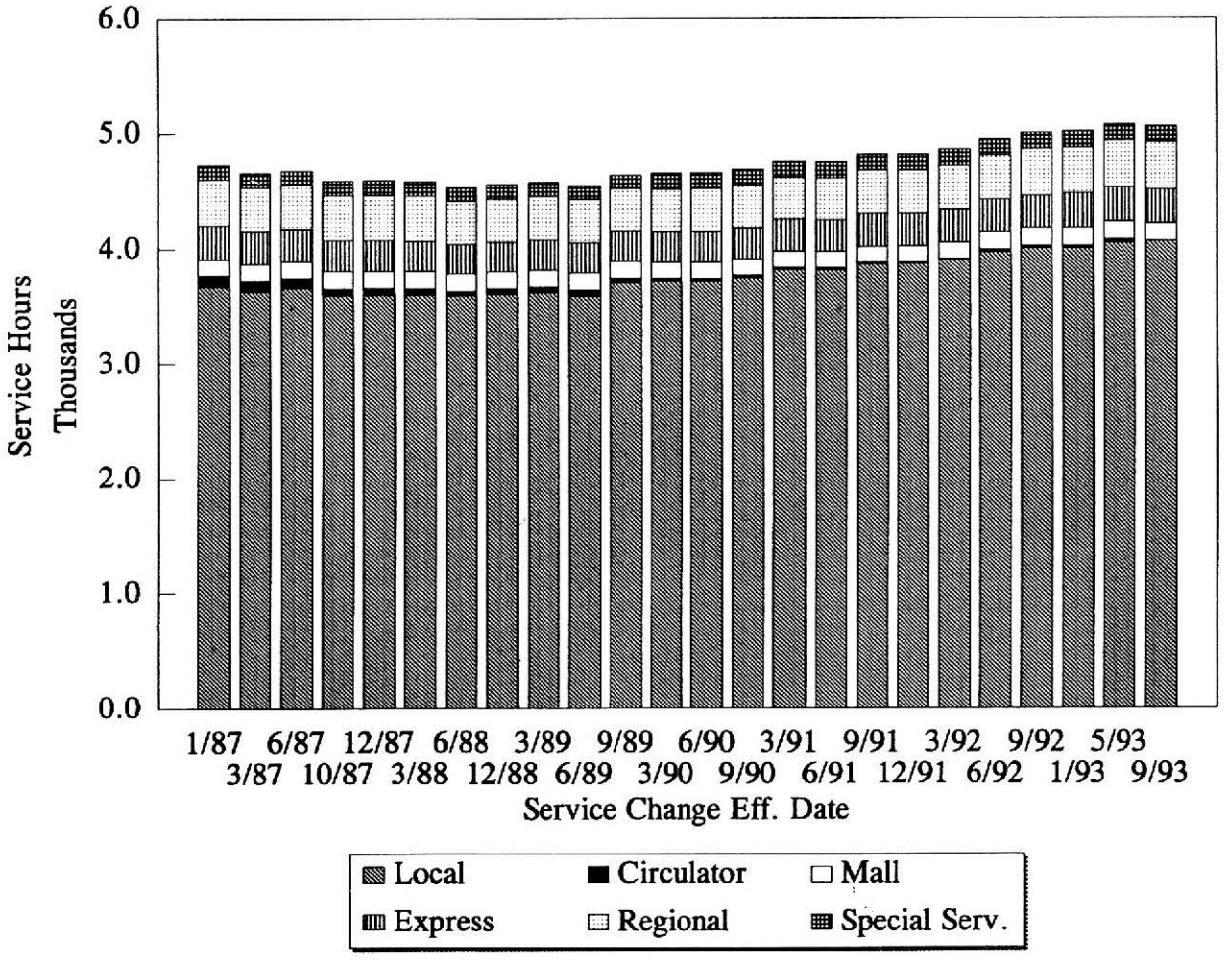


Exhibit II.12	Denver RTD Saturday Service Hours Operated For Each Quarterly Service Change

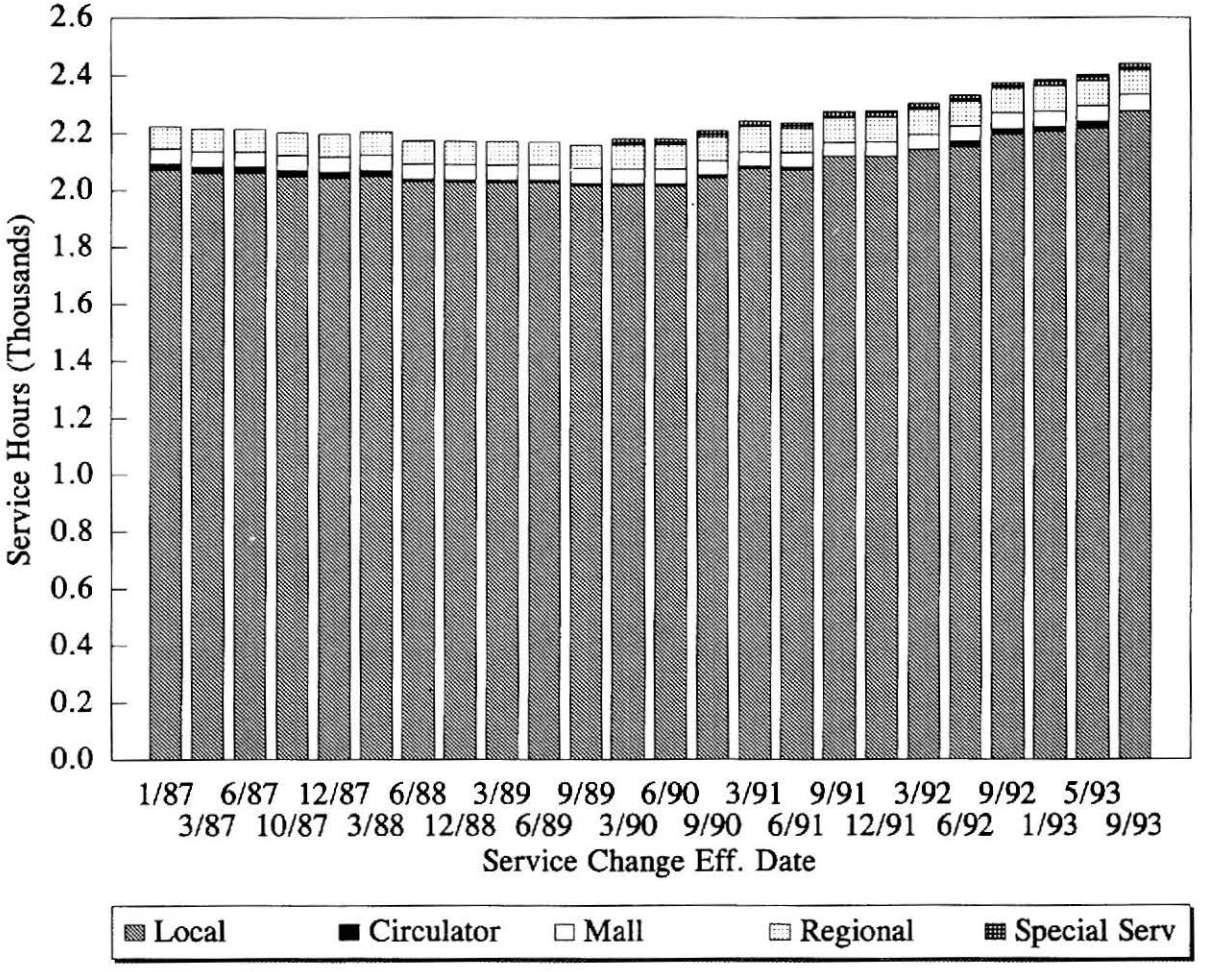
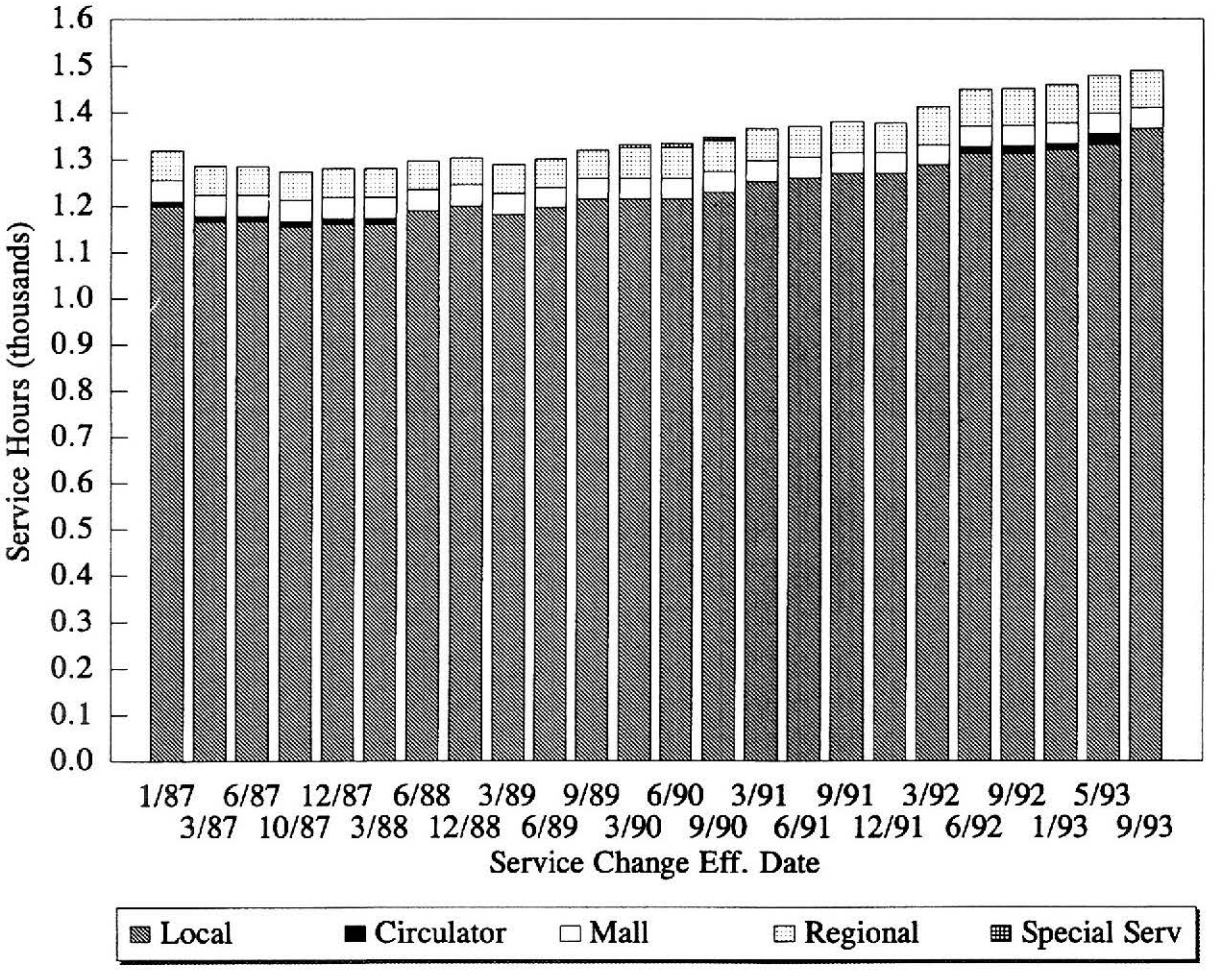


Exhibit II.13	Denver RTD Sunday Service Hours Operated For Each Quarterly Service Change



same time RTD expanded service. As a result, isolating the influence of FareSaver on ridership is difficult. However, it can be concluded that RTD's fare strategy did contribute to ridership growth as total revenue ridership grew by 4 percent in 1989 and 1.3 percent in 1990 despite a sharp increase in the one way cash fare. This is in contrast to a 6.7 percent loss in 1987 and a 1 percent gain in 1988 after the 1987 fare increase that did not include discounted fares. Comparing the size of the changes after the 1987 and 1989 fare increases clearly illustrates that economic and demographic factors alone cannot be used to explain RTD ridership trends. Rather, FareSaver and Eco Pass contributed to RTD's late 1980's and early 1990's ridership growth. Previously discussed market research surveys where respondents reported increased transit use as result of the FareSaver and Eco Pass programs support this further.

The market research studies also noted that new and current customers positively perceived Eco Pass and FareSaver. This finding is reinforced by RTD revenue trends that showed a decrease in the use of cash fares and growth in tickets and passes after the introduction of FareSaver and Eco Pass.

2.6 SUMMARY OF FINDINGS

This section summarizes RTD's experience with its FareSaver deep discount ticket. The analysis also included a discussion of the District's Eco Pass program. Although the Eco Pass is not a deep discount fare, it was included as part of the analysis, because it was introduced only two years after FareSaver and, as a result, was a contributing factor to fare-related changes in RTD performance. An analysis of available data sources including measures of ridership and revenue and market research survey data indicates that RTD's fare strategy has been successful in contributing to improved RTD performance. Specifically:

- The FareSaver program helped offset the negative impact of the 1989 cash fare increase. Despite the cash fare increase, total 1989 ridership grew by 2.9 percent. Since 1989, ridership has grown at an annual average rate of 4 percent. In contrast, total RTD ridership fell by 5.5 percent in 1987 when the District instituted a cash fare increase without a deep discount ticket. Ridership impacts of the two fare increases cannot be precisely compared because the 1987 fare increase was instituted three months earlier than the 1989 fare change. In addition, a recession and service reductions also contributed to the 1987 ridership decrease. However, despite the impact of these external forces, the significant difference between the 1987 ridership loss and the 1989 gain shows that the introduction of FareSaver helped to increase ridership and reduce the negative impact of the one way cash fare increase.

- A 1989 RTD survey reported that 20 percent of FareSaver purchasers said they increased their use of transit after purchasing the ticket book.

- Eco Pass has contributed to increased RTD usage. As noted earlier, Eco Pass' impact was evaluated in the analysis even though it was not a deep discount fare, because it began

shortly after FareSaver and contributed to RTD ridership performance. The number of companies enrolled in Eco Pass has increased substantially from 22 corporations with 1,184 employees in October 1991 to 498 companies with 22,176 employees in January 1993. RTD reported that the number of companies enrolled grew by 60 percent in 1993.

- According to a 1993 Regional Air Quality Council survey, Denver employees, who received the Eco Pass, increased their use of transit by 17.4 percent from 2.3 to 2.7 days per week. In contrast, the number of days per week employees drove to work alone declined by 25 percent to 1.6. More than 19 percent of all employees said they increased their use of the bus after Eco Pass. Of these employees, less than half stated they were new bus customers.

- The availability of both Eco Pass and FareSaver has resulted in a reduction in the share of cash fares. After the introduction of FareSaver, the share of cash sales declined from 50.1 percent in 1989 to 48.8 percent. The percent of cash sales declined further to the 45 percent range after the initiation of Eco Pass. However, Eco Pass has contributed to a decline in the share of FareSaver sales from a high of 16.3 percent in 1991 to 13.9 percent in 1993.

- RTD's revenues have grown steadily since 1987, including 1989, the year FareSaver was introduced. In Denver the increased ridership due to the deep discounted fares appears to have offset the negative impact of increased fares, so that overall revenues increased as intended.

- RTD's ridership and revenue growth cannot be entirely attributed to the impact of FareSaver and Eco Pass. Beginning in 1988, a year before RTD initiated its deep discount fare strategy, the Denver region entered a period of economic expansion. Between 1988 and 1992 employment grew at an average annual rate of 2.0 percent. The area's population increased by 8 percent between 1990 and 1993. It is likely these factors have had a significant influence on RTD ridership and revenue levels. According to a 1993 FTA Eco Pass study, a comparison of ridership levels with employment trends over the last ten years showed an 80 percent correlation. Because of these external influences, identifying precisely the impact of FareSaver and Eco Pass on ridership is difficult. However, the significant difference between the ridership trends after the 1987 and 1989 fare changes shows that FareSaver reduced the negative impact of the one way cash fare increase. The ridership influence of both FareSaver and Eco Pass are further supported by the previously discussed market research studies, which showed that discounted fares contributed to increased transit use, and RTD revenue trends that demonstrated an increase in the share of tickets and pass use.

- RTD's customers are satisfied with FareSaver. The results of a 1989 RTD survey showed that 86 percent of weekday customers purchased the ticket book because it cost less on a

per ride basis than the one way cash fare. Various Eco Pass surveys showed that both employees and employers were satisfied with the annual pass program.

3. EVALUATION OF SEPTA DEEP DISCOUNT STRATEGY

3.1 PHILADELPHIA REGION ECONOMIC AND DEMOGRAPHIC OVERVIEW

The Philadelphia area covers 2,174 square miles and includes eleven counties in Pennsylvania, New Jersey and Delaware (see Exhibit III.1). According to the 1990 census, the region's population is 5.7 million. The Southeastern Pennsylvania Transportation Authority (SEPTA) provides service mainly within the City of Philadelphia and the four surrounding suburban counties in Pennsylvania: Bucks, Chester, Delaware, and Montgomery. The population of the SEPTA service area is 3.7 million, including 1.6 million in Philadelphia. The Delaware Valley Regional Planning Commission forecasts that population within the SEPTA service region will grow 6.9 percent by 2020. Population growth will occur in the suburban counties, while Philadelphia is projected to lose 4.8 percent of its population.

The region has a large and diverse economy. According to the U.S. Bureau of Labor Statistics, the eleven county region's February 1993 employment was 2,069,700. The region's job base is focused in the services (33 percent), trade (22 percent), manufacturing (15 percent) and government (14.5 percent) sectors. Major employers include CIGNA, Campbell Soup, Merck, Conrail, Bell Atlantic and ARA Services.

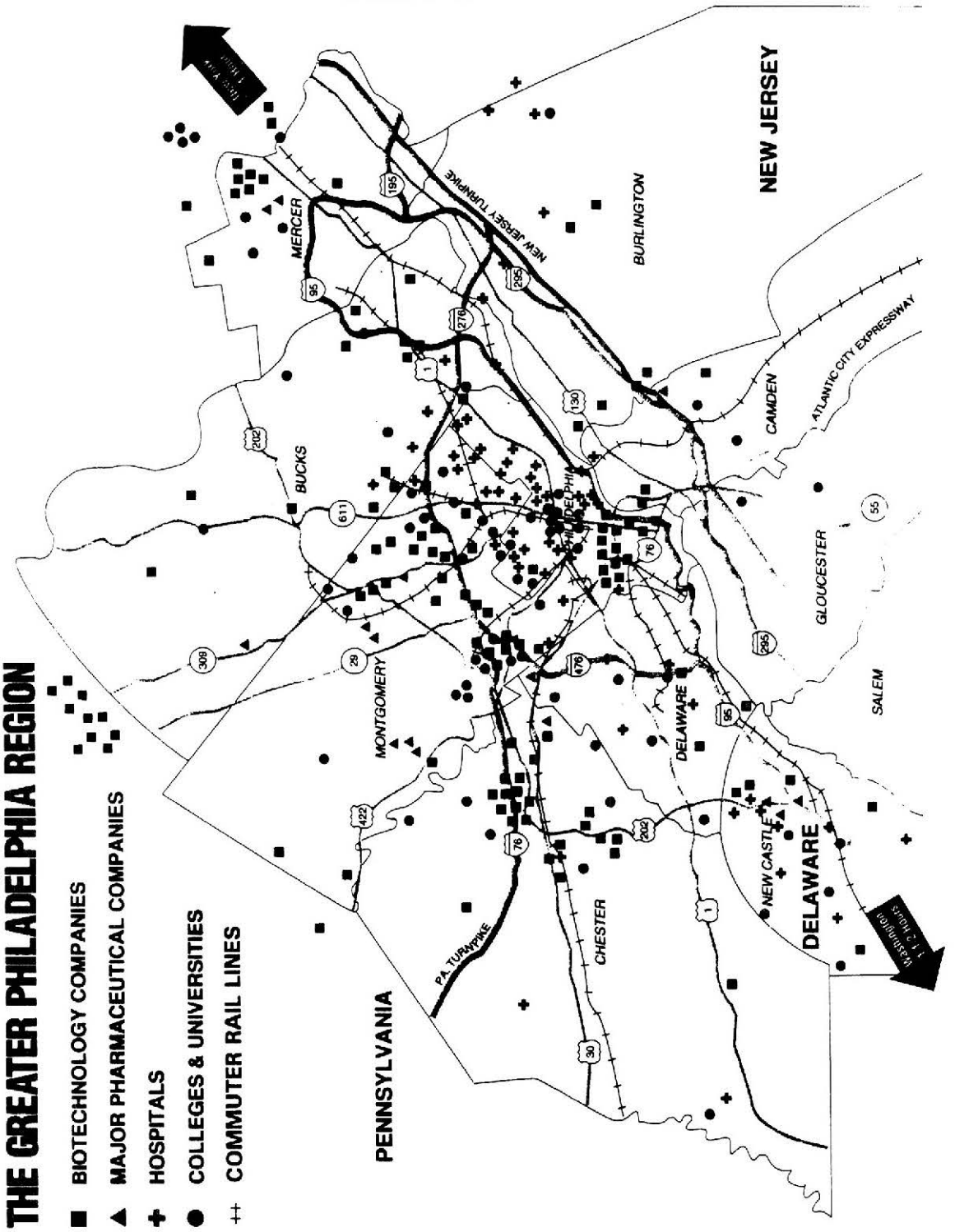
The region's concentration of colleges and universities has promoted the development of a highly skilled work force. According to the Greater Philadelphia Economic Coalition, there are more than 80 colleges and universities granting degrees to 50,000 graduates a year.

Greater Philadelphia has a low cost of living, compared with other East Coast metropolitan regions. The average selling price of a house in 1992 was $117,600. According to Cushman and Wakefield 1992 rates per square foot in the Philadelphia CBD were $23.07. This is in contrast to $36.52 in Midtown Manhattan, $29.49 in Los Angeles and $37.51 in Washington, D.C.

Salaries are also lower than in other metropolitan areas. According to 1991 U.S. Department of Labor statistics, Philadelphia salaries for manufacturing workers (less than $29,000) were below the average manufacturing wages paid in Boston, Washington and Baltimore. Similarly, Philadelphia ranked behind New York, Washington and Boston for clerical wages.

Besides its low cost of living, the region's extensive transportation network gives it with a competitive advantage over other areas. SEPTA operates a diverse network of buses, commuter rail, rapid transit, light rail and trolley buses, providing more than one million rides a day. A more detailed discussion of SEPTA's services is presented in the next section. Access is also provided by many interstate highways and major arterials. Amtrak operates hourly service from Philadelphia to New York City and Washington, D.C. According to the Greater Philadelphia

Exhibit III.1



Source: Greater Philadelphia Economic Development Coalition

Economic Development Coalition, the Port of Philadelphia is the fourth largest United States seaport for imported goods. Eighteen national and international commercial airlines provide service to Philadelphia International Airport. These airlines operate more than 100 domestic and 15 foreign flights each day to nearly 80 cities.

The early 1990's recession has had an adverse impact on the region. According to SEPTA's fiscal year 1993 Ridership and Statistics Report, the five-county SEPTA service area lost almost half, or 130,300, of the new jobs created during the 1980's. Most of the 1980's growth was in service-related industries in the suburban counties. Within Philadelphia, increases in service sector jobs were offset by significant declines in manufacturing and construction. Since 1989, Philadelphia has lost a total of almost 80,000 jobs. The rate of job loss in the service sector slowed in 1992 and 1993, but continued in manufacturing. As of June 1993, Philadelphia had 13 percent fewer jobs than it did in 1980, while the suburbs had 23 percent more jobs.

3.2 DESCRIPTION OF SEPTA SERVICES AND FARE STRUCTURE

3.2.1 Administration

Created in 1964 under the Pennsylvania Metropolitan Transportation Authorities Act of 1963, Southeastern Pennsylvania Transportation Authority (SEPTA) is an instrumentality of the Commonwealth of Pennsylvania. SEPTA runs transit service in the City of Philadelphia and the four surrounding counties in Pennsylvania as well as providing transit service to the north in Trenton, New Jersey, and to the south in Wilmington, Delaware. The Authority is governed by a fifteen-member Board of Directors consisting of two members from each of the surrounding jurisdictions, one member appointed by the Governor, and four members appointed by the state legislature. Day-to-day operations are the responsibility of the Board-appointed General Manager. As of December 1993 SEPTA had a work force of 9,898 employees.

3.2.2 Services Provided

SEPTA provides service using five different modes of transportation: bus, trackless trolley, light rail, heavy (or rapid) rail, and commuter (or regional) rail. Service hours are as follows:

Bus/trackless trolley/light rail	24 hours a day/seven days a week
Rapid rail	5:00 a.m. to 1:00 a.m., seven days a week
Regional rail	5:00 a.m. to 1:00 a.m., weekdays, varies weekends

Services are organized under three separate divisions: the City Transit Division (CTD), the Suburban Transit Division (STD), and the Regional Rail Division (RRD). CTD primarily serves the City of Philadelphia with a network of 183 subway-elevated, subway-surface, streetcar, trackless trolley and bus routes. STD serves the western and northern suburbs with a network of 42 interurban trolley, streetcar and bus routes. RRD provides service to the entire SEPTA region with a network of seven commuter rail lines.

The divisions operate a combined peak fleet requirement of approximately 1,105 standard and articulated buses, 32 trackless trolleys, 10 streetcars, 120 light rail vehicles, 254 rapid rail cars, and 266 regional rail cars. SEPTA presently is acquiring new rapid rail cars for the Norristown High Speed line, a former interurban rail line, and the Market-Frankford subway-elevated line.

SEPTA is the nation's fourth largest public transit operator. Total ridership in FY 1993 was 308,600,000, while average weekday ridership was 1,056,000. The CTD carries most of SEPTA's total ridership, representing 88.1 percent. RRD was 6.2 percent of ridership, while STD served 5.6 percent of SEPTA's customers.

To enhance service quality, SEPTA is undertaking two major capital reconstruction projects. These projects include a rehabilitation of the elevated structures of the Market-Frankford line and the replacement of bridges and other structures connecting the commuter rail lines with SEPTA's major passenger terminals in Center City Philadelphia. Because of the extent of these reconstruction efforts, service on the Market-Frankford line and the RRD has been at times temporarily interrupted.

To meet the mobility needs of disabled customers, SEPTA has equipped most of its buses with wheelchair lifts. In addition, the Authority is undertaking construction projects to ensure its facilities meet ADA mandates. At present, the rail network includes 25 stations that are "functionally accessible" though not fully compliant with the ADA requirements.

For customers who cannot use the regular route transit system, SEPTA provides paratransit services through private contractors that operate shared ride, door-to-door advanced reservation transportation services throughout the City of Philadelphia and select suburban destinations. SEPTA retains responsibility for registration, reservations, scheduling and service monitoring. Besides its paratransit operations, SEPTA manages the Shared Ride Program which provides door-to-door transportation for senior citizens. The service is funded with revenue from the state lottery.

SEPTA expects to provide 427,000 paratransit and 950,000 Shared Ride trips during FY 1994. The Authority has set a goal of meeting 95 percent of customer requests for these services.

3.2.3 Current Fare Structure

SEPTA offers separate fares for City Transit, Suburban Transit and Regional Rail services. For City and Suburban Transit services, customers have the option of using cash, tokens, or daily, weekly and monthly passes. Regional Rail customers can use one way, one way off-peak and ten-trip tickets as well as weekly and monthly passes, which include transit travel privileges.

This analysis focuses on the impact of SEPTA's token deep discount strategy on CTD and STD performance. The following provides a more detailed description of the Authority's fare structure for these services.

One way cash fare is $1.50, making it one of the highest base fares in the country. SEPTA charges $0.40 for transfers and for each additional suburban zone of travel.

SEPTA also offers discounted, unlimited ride passes for daily, weekly and monthly travel. A weekly TransPass costs $16.00, while a DayPass is $5.00. Daily and weekly passes provide savings for customers who use SEPTA services for more than just travel to and from work. The monthly TransPass costs $58.00 and provides a discount of at least 8 percent off the one way cash fare for customers who use only SEPTA for work trips. During the off-peak period, senior citizens can use SEPTA's services free, while disabled customers pay $0.75.

3.3 IMPLEMENTATION OF DEEP DISCOUNT FARES

Since the late 1970's, SEPTA has experienced frequent increases in its one way cash fare (see Exhibit III.2). To offset the negative ridership impacts of these fare increases, the Authority began to offer discounted tokens in 1982. Exhibit III.2 shows the minimum token purchase requirement and the discount off the cash fare since 1982.

Exhibit III.2
Cash and Token Fares

Effective Date	Cash Fare	Percent Increase	Min. Token Purchase	Token Price	Per Ride Savings
July 1982	$.75		7	$5.00	4.8%
July 1983	$.75	0.0%	10	$7.00	6.7%
July 1984	$.85	13.3%	10	$7.00	17.6%
July 1985	$.95	11.8%	10	$7.50	21.1%
August 1985	$1.00	5.3%	10	$8.50	15.0%
July 1986	$1.25	25.0%	10	$8.50	32.0%
August 1989	$1.25	0.0%	10	$10.00	20.0%
November 1989	$1.25	0.0%	10	$8.50	32.0%
January 1990	$1.25	0.0%	10	$10.00	20.0%
May 1990	$1.50	20.0%	2	$2.10	30.0%

Overall, SEPTA has increased the discount on tokens from a little less than 5 percent in 1982 to 30 percent in 1990. The objectives of the discounts were to offset potential ridership losses stemming from sharp increases in the cash fare, reduce cash fare use and most recently to increase transit ridership among infrequent customers. Richard Oram's analysis of deep discounting noted that token discounts also provided an acceptable mechanism for raising fares.

Between July 1986 and January 1990 the discount fluctuated between 20 and 32 percent as SEPTA adjusted the price of a token ten-pack between $8.50 and $10.00. In 1989 SEPTA planned to reduce the discount on tokens and passes to generate needed revenue. However, according to Richard Oram, consumer groups sought an injunction against the new fares. A judicial ruling allowed the increase, but it was rolled back temporarily after consumer groups won an appeal. The fare SEPTA initially proposed for tokens and passes was allowed to stand in January 1990. However, five months later, the base cash fare increased from $1.25 to $1.50.

Before implementing the new cash fare, SEPTA considered using discounted tokens to mitigate the impact of the increase and promote transit use among infrequent cash paying customers. As part of this effort, SEPTA initiated a market segmentation analysis by surveying a sample of cash fare customers in March 1990. The research consisted of 1,084 intercept interviews with CTD customers. At the time of the survey the token discount was 20 percent of the cash fare and the minimum required token purchase was ten. Asked why they used cash, 33 percent of respondents stated that they did not travel enough to justify purchasing tokens or passes. More than 25 percent stated they usually used tokens or passes, but did not at the time of the survey. Other responses included: tried to buy tokens but the lines were too long, or the sales outlet did not have any in stock (12 percent), and the sales locations were not convenient (9.7 percent).

The survey data showed that most cash paying customers used SEPTA services infrequently. Greater than 50 percent of respondents made fewer than ten trips per week, while 47.2 percent were frequent users, making ten or more trips per week. Over half the trips were work related. Eighty percent of frequent transit customers believed that the purchase of tokens and passes provided a cost savings to them, while only 10 percent thought they did not realize a savings by using tokens and passes.

When asked if they would have used tokens if they were sold in smaller quantities, nearly half of all respondents said they would be more likely to use them. Ninety percent of frequent customers said they supported the idea of expanded token sales locations, while half the infrequent customers showed support for the idea.

To increase the attractiveness of tokens, SEPTA, as part of the May 1990 fare change, both increased the discount on tokens from 20 percent to 30 percent, and lowered the minimum purchase requirement from ten to two. Tokens are also available in packs of five and ten.

Customers purchase tokens from clerks and vending machines in SEPTA's rapid rail stations and at retail sales locations. The low minimum token purchase requirement provides the opportunity for lower income customers, who previously could not afford the price of multi-pack tokens, to enjoy a substantially discounted fare by paying a small up-front cost.

The new token program gave customers several conveniences. First, riders could enjoy a substantial discount for prepayment of a minimum of one additional ride. Second, they could choose among three options for the number of tokens they wanted to purchase (two, five and ten). This gave customers the flexibility to buy the number of tokens that was most convenient for them based on their use of SEPTA's services, income and willingness to make frequent, or infrequent token purchases.

Overall, customers who purchase the minimum number of tokens use them in one day for a round trip. Five and ten-packs are bought more for convenience and used for regular commuting trips during the week, or for infrequent travel over a week, month, or extended period.

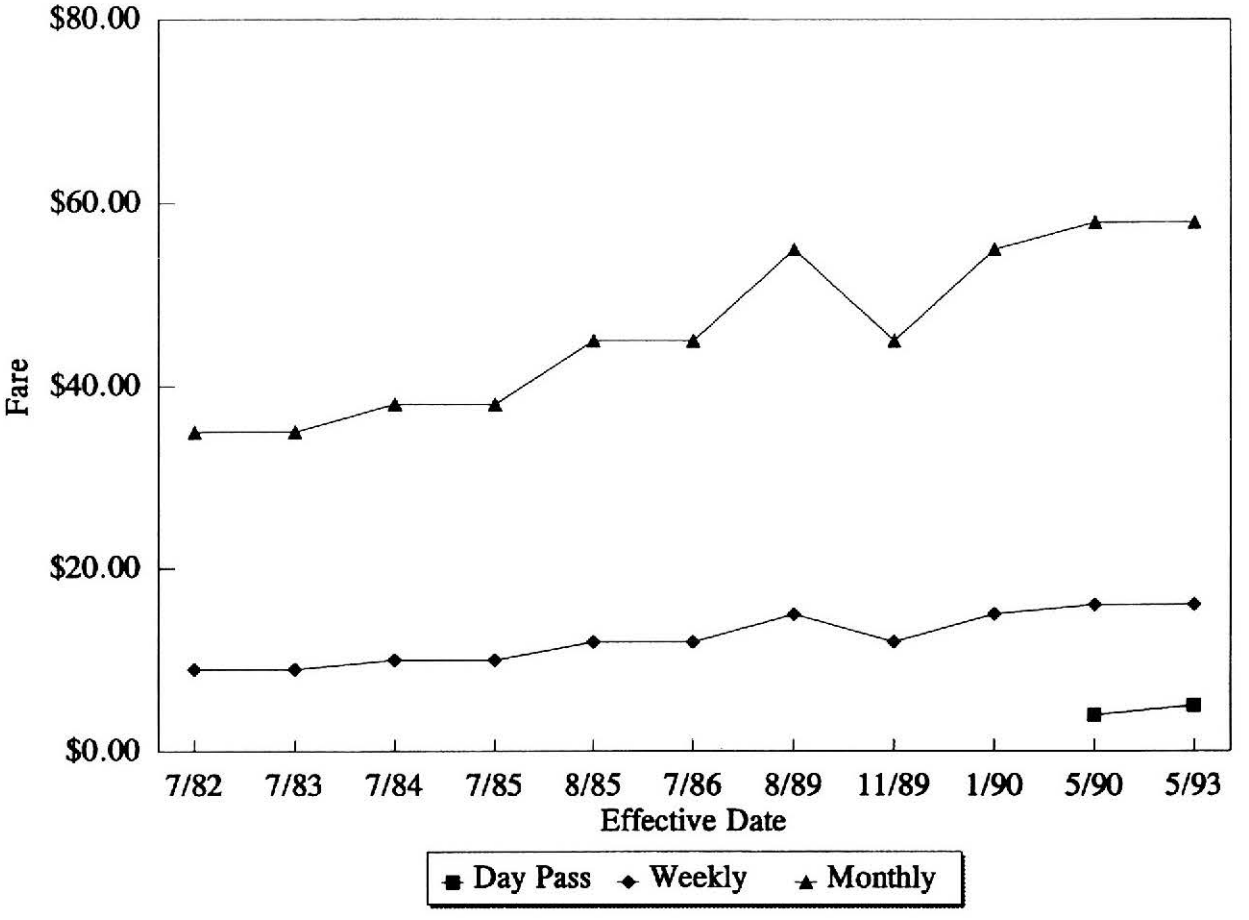
Customers who do not take advantage of the discounted tokens and passes pay the full one way cash fare of $1.50. Overall, individuals who continue to pay the full fare are likely very infrequent users, unfamiliar with the fare program, or fare inelastic. In addition, although the difference between the price of discounted tokens and the one way fare is small, a segment of the ridership market may be unable to afford to pay the difference between the cash fare and discounted token.

3.4 TRANSPASS TRENDS

Exhibit III.3 shows changes in SEPTA's TransPass fare structure since 1982. The DayPass has been available since May 1990. The fare increased by $1.00 to $5.00 in 1993. Since 1982, the prices of weekly and monthly TransPasses have risen at a slower rate than the cash fare. Cash fares have increased at an average rate of 7.5 percent, while the costs of monthly and weekly passes have risen by an average of 5.9 percent and 6.8 percent, respectively. As noted earlier, the price of weekly and monthly passes fluctuated between 1989 and 1990 because of the suits filed against SEPTA's proposed change in token and pass discounts. During this period a weekly pass ranged from $12.00 to $15.00, while the monthly pass varied between $45.00 and $55.00.

Similar to the evaluation of Denver RTD's deep discount experience, this analysis includes a discussion of SEPTA's passes, because they contributed to fare-related changes in the Authority's performance. As previously noted, reviewing trends in pass fares and sales is also important because of their potential impact on deep discount token sales.

Exhibit III.3	SEPTA Pass Fare Changes 1982-Present



3.5 EVALUATION OF DEEP DISCOUNT STRATEGY

3.5.1 Analytical Approach

As noted earlier, SEPTA has offered discounted tokens since the 1980's. However, only since May 1990 has the Authority aggressively used discounted tokens as a strategy for mitigating the impact of a cash fare increase and to promote greater transit use among infrequent customers. This section focuses on the effects of SEPTA's May 1990 deep discount token program on CTD and STD performance. Since the token program is available only for transit customers using SEPTA's CTD and STD services, the evaluation does not examine changes in Regional Rail performance indicators. Changes in CTD and STD performance are considered separately because of the significant differences between the types and levels of service these divisions provide and the markets they serve. The analysis is based upon a review of existing data sources including SEPTA ridership and revenue statistics and market research analyses measuring customer use and perceptions of tokens and passes.

The evaluation identifies whether SEPTA's deep discount token program contributed to:

- Increasing and/or stabilizing ridership by mitigating the negative impact of the May 1990 20 percent increase in the cash fare
- Improving revenues
- Maximizing the use of prepaid fares and reducing customer reliance on cash
- Improving customer perceptions of SEPTA services

To measure the success of SEPTA's program the analysis evaluates changes in ridership and revenue, the share of cash, token and pass sales, and customer perceptions and use of different fare types.

SEPTA's passes are also included as part of the analysis, because of their direct influence on fare-related performance. Evaluating the Authority's passes, particularly the Day Pass and weekly TransPass, is also important because of their potential negative impact on token sales. The passes' unlimited ride feature and cost make them very competitive with SEPTA's two, five and ten-pack tokens.

As with other transit properties, SEPTA's performance is significantly influenced by economic and demographic trends. Ridership is also affected by the level of service SEPTA provides. As noted earlier, the region, in general, and Philadelphia, in particular, were adversely affected by the early 1990's recession. During this period, SEPTA significantly reduced CTD service to address falling ridership and revenues. Suburban Transit usage continued to grow steadily until the early 1990's when ridership began to decline because of the recession and modest

service reductions in FY 1993. The recession was less severe in the suburbs, and, as a result, STD ridership losses were not as severe as the CTD's. This analysis evaluates in detail the influence of the recession and service changes on SEPTA ridership and whether the Authority's discount token program mitigated the impact of these forces.

3.5.2 Ridership

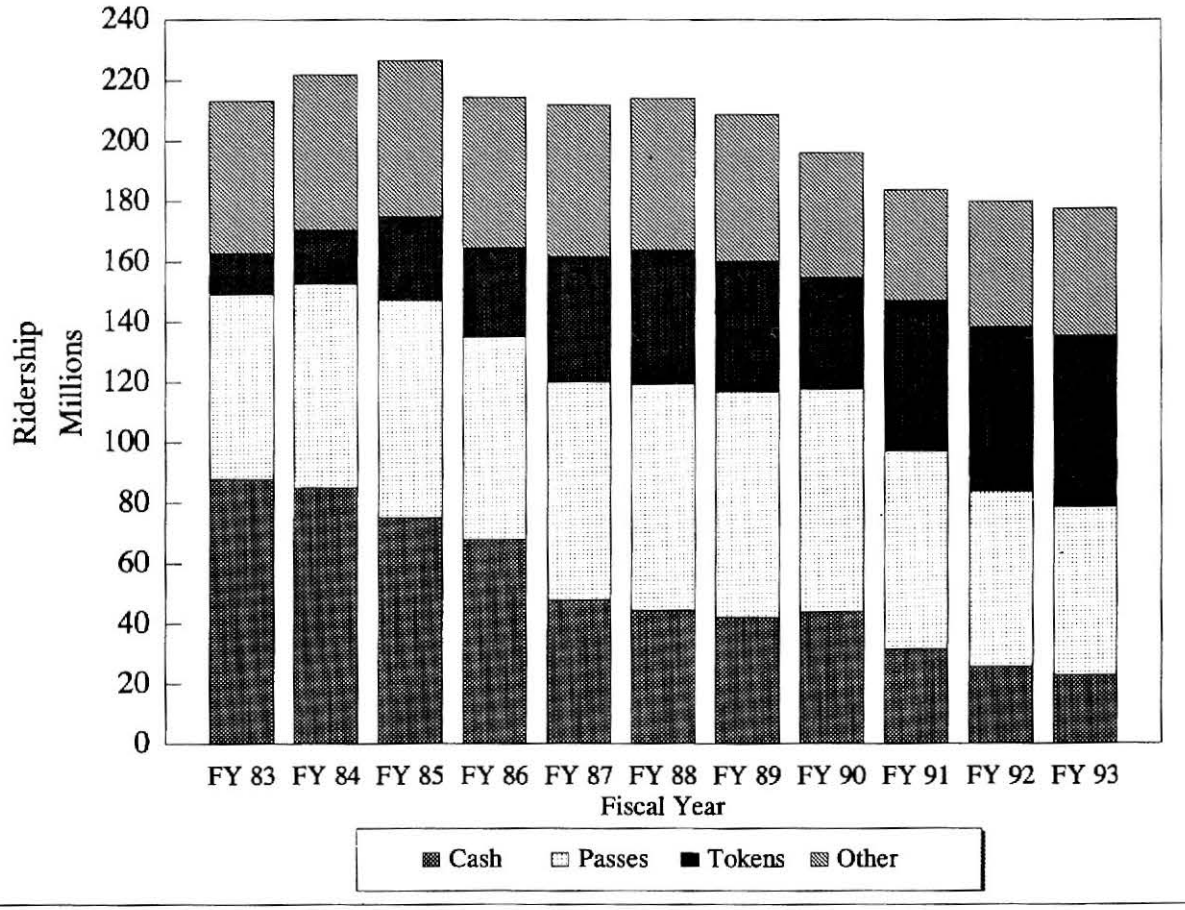
3.5.2.1 City Transit Division Total Ridership

Exhibit III.4 shows that total City Transit Division Ridership has declined since FY 1983. (SEPTA's fiscal year begins on July 1.) During this period, ridership fell by 16.6 percent to 177.8 million. Most CTD customers use SEPTA buses (51.7 percent in FY 1993). More than 30 percent use the subway, while 11 percent use the light rail system.

Total ridership began falling in 1985 after an 11.8 percent and a 5.3 percent fare increase in July and August. City Transit use remained essentially stable from 1985 until the beginning of the region's recession in FY 1989 when total ridership fell by 2.5 percent. Due to the impact of the recession, the rate of decline worsened in FY 1990 and FY 1991 when system usage declined by 6.0 percent and 6.3 percent, respectively. In addition, fluctuations in pass and token discounts during 1989 and 1990, which were finally reduced to 20 percent in January 1990, contributed to the FY 1990 ridership loss.

SEPTA raised the cash fare to $1.50 and instituted its discounted token program on May 27, 1990, a little more than one month before the end of FY 1990. Beginning in FY 1992, SEPTA ridership began to stabilize. This is due in part to a decreasing job rate loss. However, instituting the Authority's deep discounted token and pass program also contributed to slowing the ridership decline. By offering the fare discounts, SEPTA reduced the impact of the cash fare increase. While the cash fare increased by 20 percent in May 1990, SEPTA's average CTD fare, which includes all fare types, grew by only 5.8 percent. The rate of CTD ridership loss marginally increased by 0.3 percentage points from 6.0 percent in FY 1990 to 6.3 percent in FY 1991, while the rate of Philadelphia employment loss significantly increased from 1.9 percent in FY 1990 to 3.1 percent in FY 1991. It is likely that the FY 1991 ridership loss rate did not significantly increase above the FY 1990 rate because customers who were not influenced by the recession took advantage of discounted tokens and continued to use transit. Subsequent moderate ridership declines in FY 1992 and FY 1993 further suggest that changes in the region's economy did not solely influence SEPTA ridership. Instead, the introduction and expanded use of tokens and passes contributed to mitigating the rate of decline. (The recession's influence on SEPTA ridership is discussed later in this section.) The contribution of SEPTA's discounted fare program is further supported in Exhibit III.4, showing increased token use as ridership losses moderated.

Exhibit III.4	SEPTA City Transit Division Ridership by Fare Type Fiscal Years 1983-1993



The percent of customers using cash declined from 20.2 percent in FY 1989 to 12.9 percent in FY 1993, largely reflecting an increase in token use. The share of token paying customers increased significantly from 27.2 percent in FY 1991 to 32 percent in FY 1993.

The exhibit also shows that the availability of competitively priced daily and weekly passes has not adversely impacted the number of customers using tokens. As a result, the fare-related mitigating impact on SEPTA's ridership loss is largely attributed to the discounted token program. In fact, the share of pass holding customers declined from 35.8 percent in FY 1989 to 31.3 percent in FY 1993. This is in contrast to industry experience where passes contribute to reduced deep discount token use. In SEPTA's case, the finding may be that the steep discount and the low minimum purchase requirement for tokens is more attractive than are passes for customers who use transit only for work trips.

In addition, the increase in token use at the expense of pass use is also attributable to the impact of the recession. During this period SEPTA customers reduced their number of discretionary trips, and, as result, chose to purchase tokens instead of multi-ride passes.

3.5.2.2 City Transit Division Average Weekday Ridership

Ridership in SEPTA's core weekday commuter market has fallen dramatically since FY 1985. During this period average weekday use of CTD services declined by 21.4 percent to 605,000. As shown in Exhibit III.5, the sharpest declines occurred in FY 1990 and FY 1991 when ridership fell by 5.9 percent and 6.3 percent, respectively. The discounted token program appeared to soften the impact of the cash fare increase, as the rate of ridership loss increased by only 0.4 percent between FY 1990 and FY 1991. Ridership losses slowed to 2.4 percent in FY 1992 and 0.8 percent in FY 1993. It is likely that the combined impact of SEPTA's discounted token program and moderating job losses beginning in 1992 contributed to slowing the loss in average weekday ridership.

3.5.2.3 Suburban Transit Division Total Ridership

In contrast to CTD trends, STD ridership marginally increased during the past eight fiscal years after dropping 20.8 percent in FY 1986 because of a 25 percent increase in the cash fare and a 61-day strike. Between FY 1986 and FY 1993, STD ridership increased by 5 percent to 15,223,000. However, Suburban Transit use has fallen from its recent FY 1989 peak. Since FY 1990 ridership trends have been mixed. A stronger economy relative to the City of Philadelphia has contributed to essentially flat Suburban Transit ridership. The sharpest drop occurred when STD use fell by over 7 percent in FY 1990. It is unlikely that this decline is attributable to the most recent fare increase that began only one month before the end of the 1990 fiscal year. During the last two fiscal years, STD ridership has remained stable. An improving suburban economy and the impact of SEPTA's discounted token program contributed to the ridership stability. As shown in Exhibit III.6, the share of Suburban Transit customers using tokens and passes has significantly increased since FY 1986.

Exhibit III.5	SEPTA City Transit Division Average Weekday Ridership Fiscal Years 1985-1993

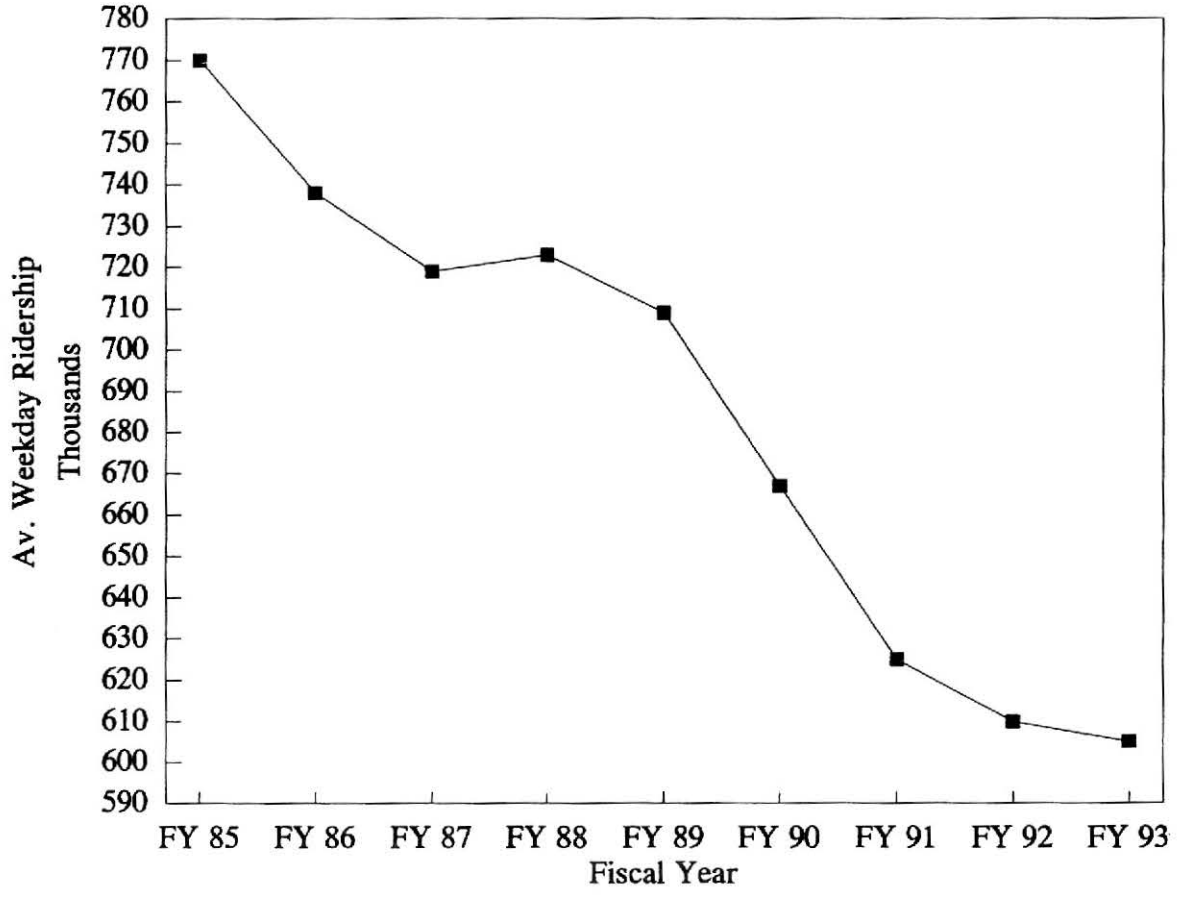
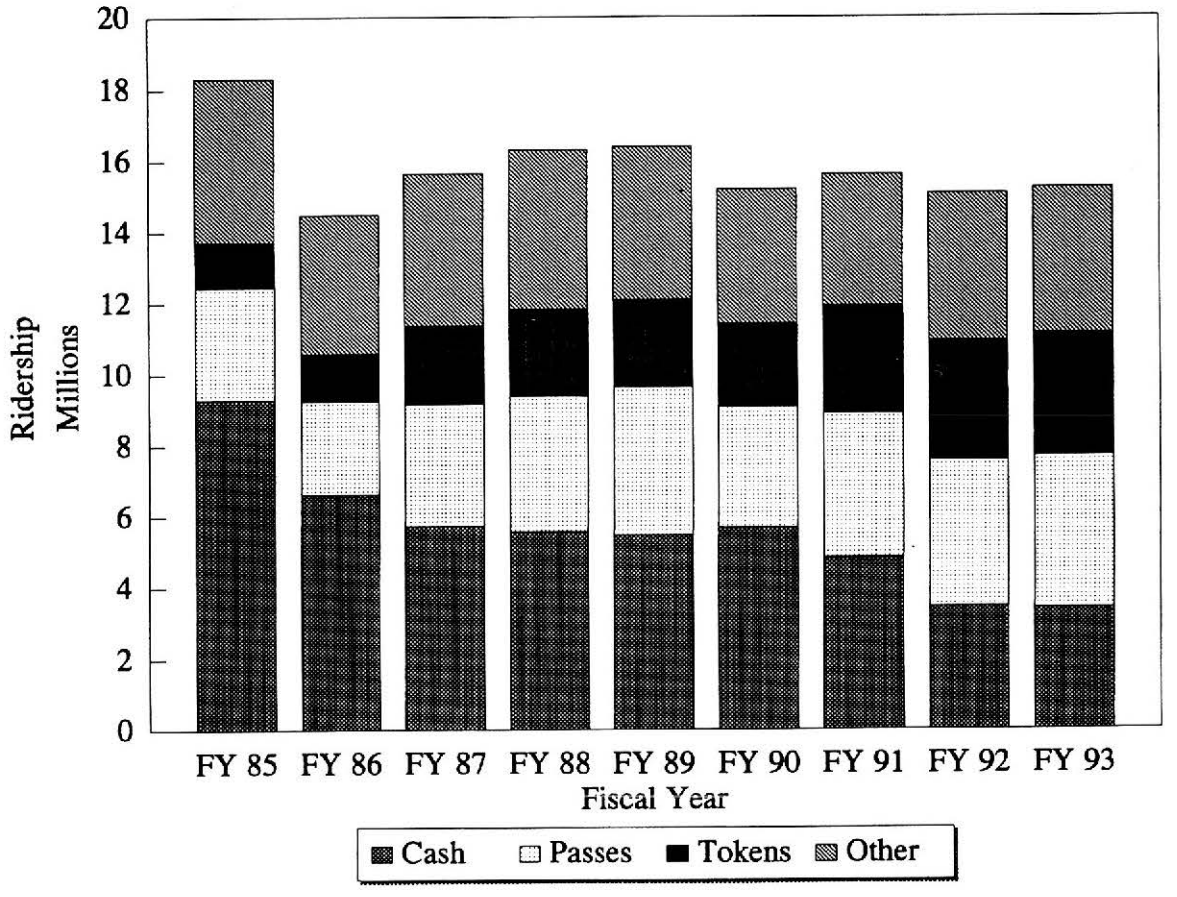


Exhibit III.6 | **SEPTA Suburban Transit Division Ridership by Fare Type Fiscal Years 1985-1993**



Between FY 1989 (the year before deep discounted tokens were introduced) and FY 1993, the percent of customers using cash has fallen from 33.3 percent to 22.4 percent. The share of pass and token customers has climbed from 25.5 percent and 15.0 percent, respectively to 28.1 percent in FY 1989 and 22.7 percent in FY 1993. SEPTA increased the number of token sales outlets during this period, which contributed to the greater share of token use. Pass and token use climbed steadily between FY 1989 and FY 1993, except in FY 1990 when cash use increased. This corresponds to the period when SEPTA reduced the discount on tokens and passes in August 1989 and January 1990. Interestingly, the use of *both* tokens and passes has recently increased. As a result, it appears that there may be no competition between the two fare types. Instead, they have both contributed to a reduction in cash use. The significant increase in token and pass use after FY 1990 shows that SEPTA's discounted token and pass programs contributed to maintaining STD ridership levels during this period.

3.5.2.4 Suburban Transit Division Average Weekday Ridership

Exhibit III.7 demonstrates that STD average weekday ridership trends essentially mirror the division's total ridership. After the July 1986 fare increase, average weekday ridership fell by 6.2 percent in FY 1986 and 10 percent in FY 1987. STD usage grew in FY 1988 and FY 1989 and then fluctuated. It appears that the combination of a less severe suburban recession and SEPTA's token and pass discounts mitigated the negative impact of the May 1990 cash fare increase on the core commuter market. However, worsening unemployment which peaked in mid-1992 likely offset the positive effects of the discounted fares and caused a 3.7 percent FY 1992 ridership decrease.

3.5.3 Revenue

3.5.3.1 City Transit Division

Overall, SEPTA CTD revenues increased by 41.9 percent to $187,681,000 between FY 1983 and FY 1993. However, Exhibit III.8 shows that total revenues stabilized and began to fall after a 25 percent fare increase in the cash fare in FY 1986 as total ridership declines had offset any of the additional revenue generated from the increased fares. Revenues grew again by 7.4 percent and 4.5 percent in FY 1990 and FY 1991, due partly to the added revenue from the May 27, 1990 fare increase and the temporary reduction in token and pass discounts from January to May 1990. Due to deepening ridership losses, revenue fell significantly by 6.1 percent in FY 1992. By FY 1993 the rate of decline slowed to 1.5 percent. It is likely that the slowing revenue loss is attributed to an increased share of token sales, as shown in Exhibit III.8. However, customers' increased preference for discounted tokens over cash may have also contributed to the overall decline in fare revenue. As noted earlier, customers also switched from passes to tokens when they reduced their discretionary travel. Between FY 1989 and FY 1993 the percent of cash revenue declined from 34.6 percent to 27.0 percent, while the share of token sales climbed from 20.3 percent to 31.8 percent. Similar to the previously discussed ridership trends, the share

Exhibit III.7 | **SEPTA Suburban Transit Division Average Weekday Ridership Fiscal Years 1985-1993**

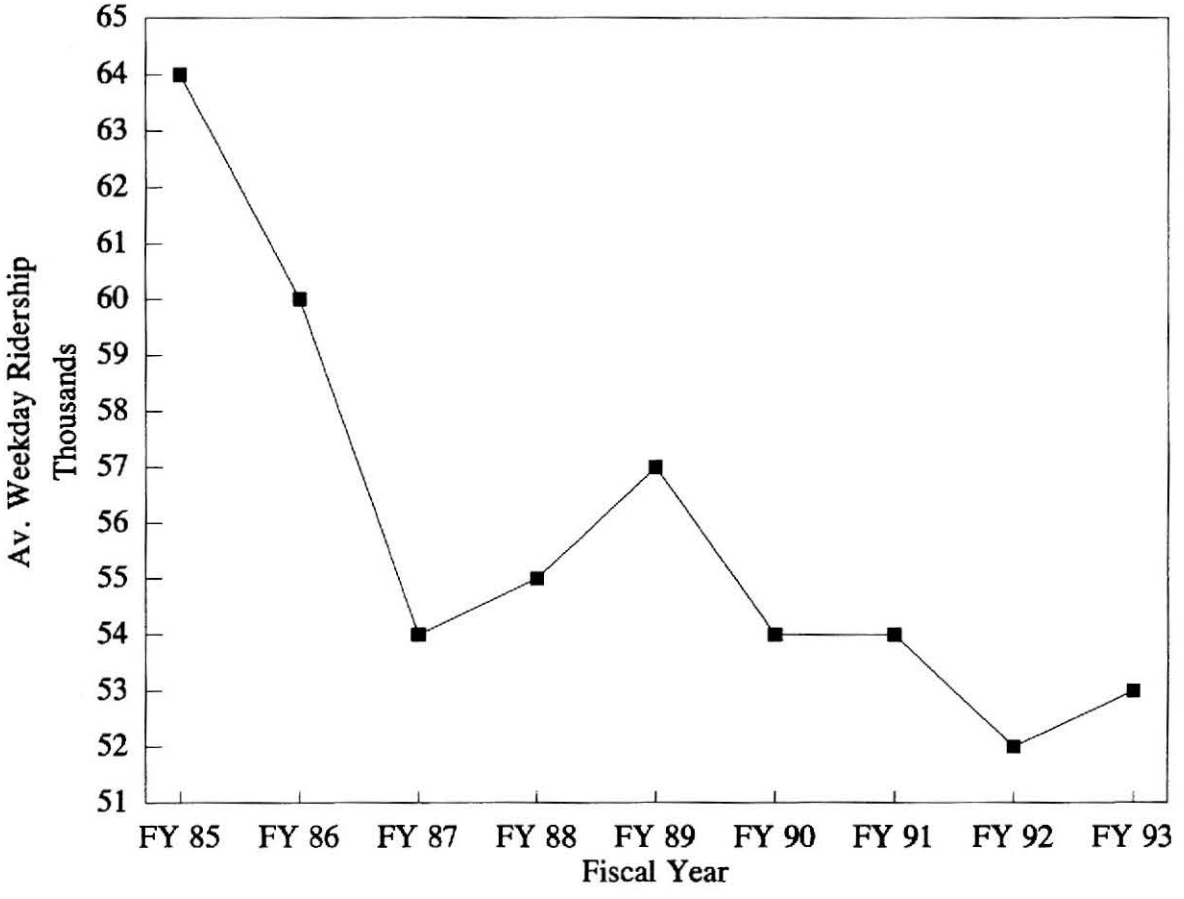
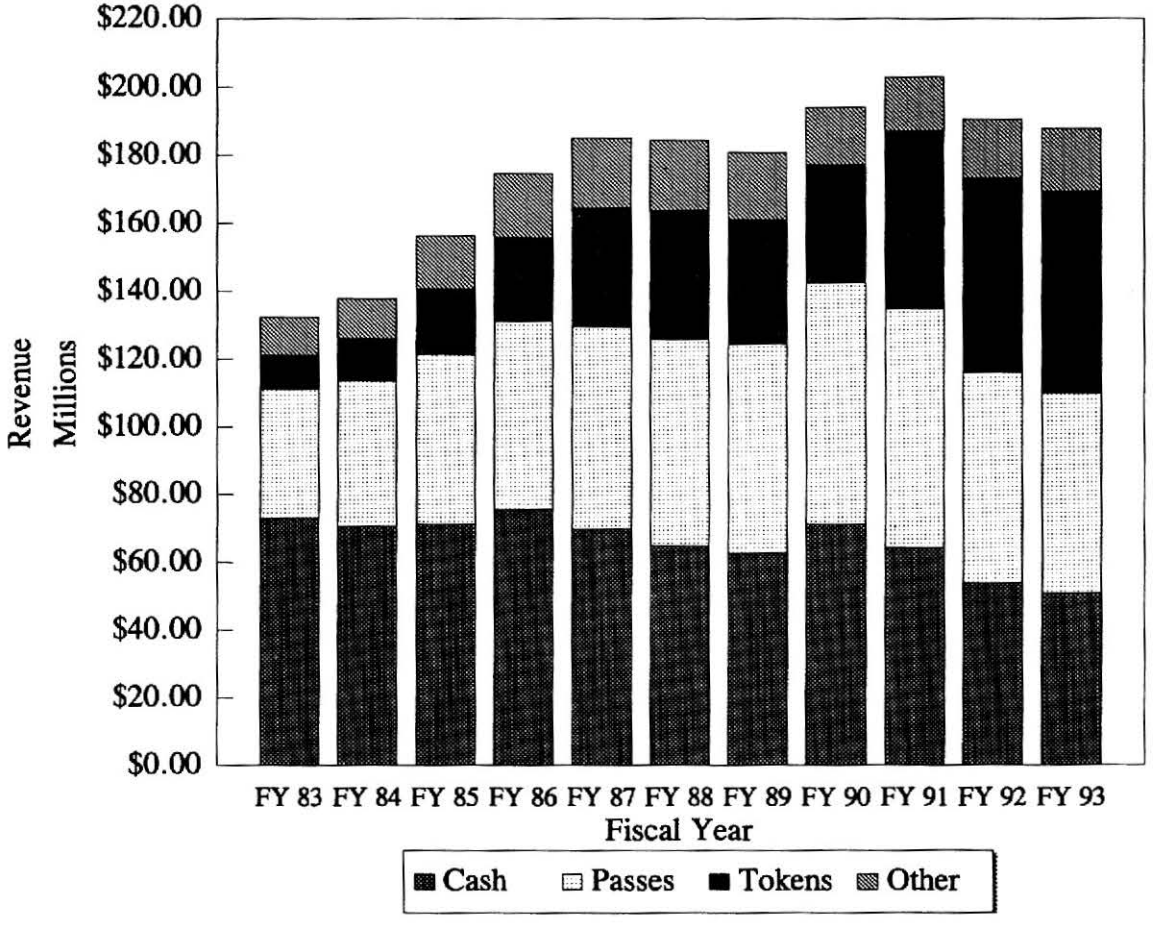


Exhibit III.8	SEPTA City Transit Division Revenue by Fare Type Fiscal Years 1983-1993



of pass revenue for CTD also declined between FY 1989 and FY 1993 from 34.1 percent to 31.5 percent.

3.5.3.2 Suburban Transit Division

Unlike CTD, STD revenue has increased and remained stable after the sharp ridership decline in FY 1986 (see Exhibit III.9), due largely to the combination of a stronger ridership base and additional revenue generated from fare increases. The exhibit shows that cash revenue has declined while passes and tokens have increased. Reflecting the STD ridership trend, cash revenue did increase in FY 1990 after SEPTA reduced the discount on tokens and passes. However, since FY 1990 the share of cash revenue has fallen substantially from 60.2 percent to 46.9 percent between FY 1990 and FY 1993. During this period the share of token and pass sales both increased from 15.8 and 23.1 percent, respectively to 22.3 percent and 27.5 percent, respectively. STD revenue trends reinforce the previous finding from the ridership analysis that both discounted tokens and passes contributed to a reduction in cash use among STD customers.

3.5.4 Customer Perceptions and Use of Tokens and Passes

In addition to internal performance measures of ridership and revenue, SEPTA also measures the success of its fare strategy by conducting periodic market research surveys to track customer perceptions and use of different fare types. The following identifies the major findings from recent analyses of token and pass customers.

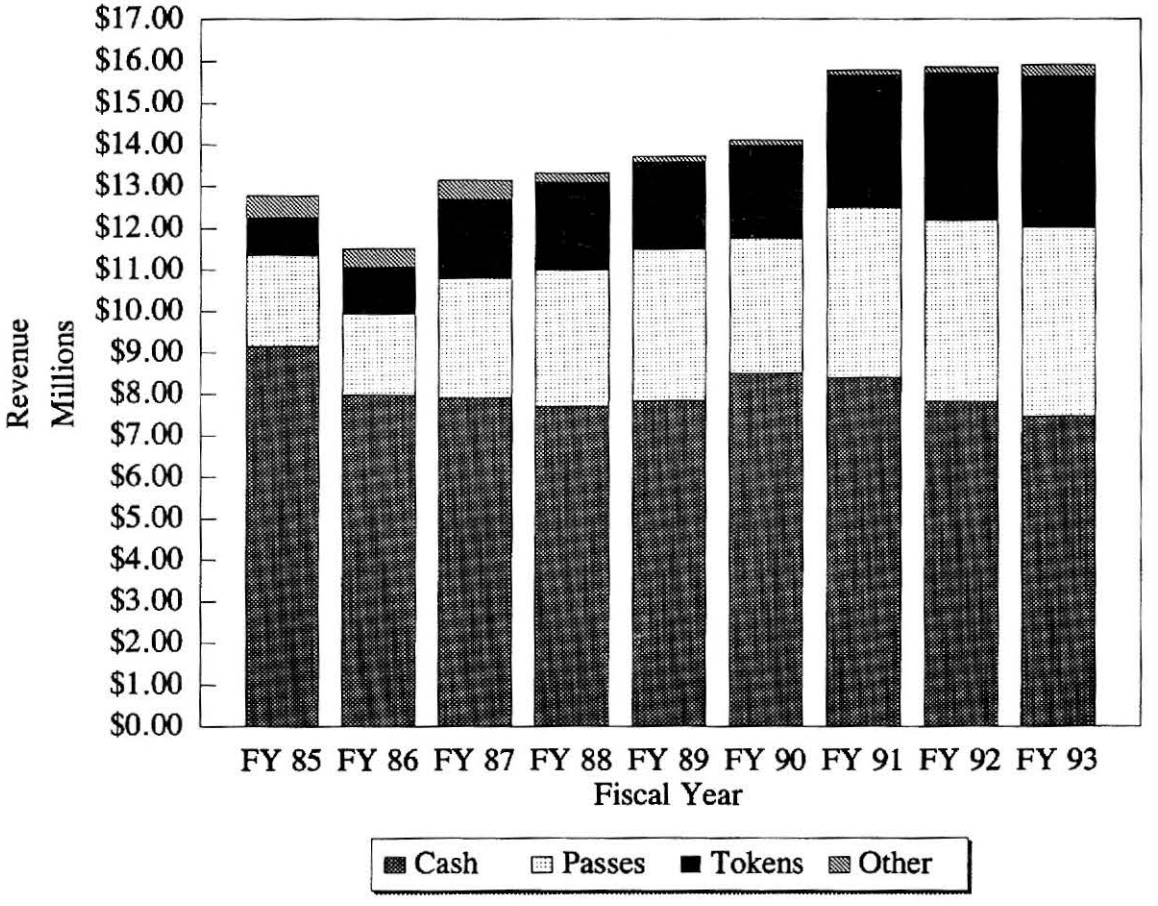
3.5.4.1 1994 Token Mail and Intercept Surveys

SEPTA recently conducted market research among token customers through two separate surveys. The Authority obtained 1,292 responses from a mail back survey distributed at various locations selling SEPTA tokens. An intercept survey was conducted among 413 respondents at key bus and subway locations in Philadelphia. A primary distinction between the two surveys is that the intercept survey reached more Philadelphia residents than the mail survey (93.1 percent versus 85.2 percent).

Most of the survey respondents (85 percent mail and 88 percent intercept) have been SEPTA customers for more than three years. Although the token program has attracted long time SEPTA customers, this finding shows that discounted fares have not induced many new riders to use the system. SEPTA's ability to attract new customers may have been hampered by the recession's impact on the number of employed workers and consequently the number of potential transit customers.

Although SEPTA lowered the minimum purchase requirement for token purchases, most customers buy ten or more tokens at a time. Fifty-six percent of mail and 86 percent of intercept survey respondents purchased ten or more tokens. Twelve percent of mail survey respondents and 23 percent of intercept respondents purchased smaller quantities of tokens.

Exhibit III.9 | **SEPTA Suburban Transit Division Revenue by Fare Type Fiscal Years 1985-1993**



It is likely that intercept respondents' lower household incomes relative to mail survey respondents contributed to the larger percentage of those individuals purchasing smaller quantities of tokens. Twenty-six percent of intercept and 21 percent of mail survey respondents had household incomes of less than $15,000 a year. Twenty-four percent of intercept and 34 percent of mail survey respondents reported incomes between $15,000 and $30,000.

Regarding token use during the previous week, most respondents from both surveys reported using over ten. Fifty-six percent of mail survey and 35 percent of intercept respondents stated they used over ten tokens during the previous week. Thirty percent of intercept and 35 percent of mail respondents stated they used fewer than ten tokens during the prior week.

Respondents from both surveys said they purchased tokens to save money (51 percent mail respondents and 49 percent intercept). Convenience was also a major reason (20 percent mail and 37 percent intercept).

Both surveys showed that respondents believed purchasing tokens saved them up to $5.00 a week. Sixty-seven percent of mail and 54 percent of intercept respondents stated they saved up to $5.00 a week using tokens.

Reflecting improvements in the location of sales outlets and the availability of tokens, the overwhelming majority of respondents in both surveys said token sales locations were convenient to them and that tokens were always available.

Token purchasers also used SEPTA TransPasses. Sixty-two percent of mail and 77 percent of intercept respondents said they had purchased a TransPass. The survey data did not indicate how often respondents purchased or used passes.

Most respondents (59 percent mail and 85 percent intercept) used two or more SEPTA vehicles to reach their destination. Survey participants said they used SEPTA because of a lack of an available car (41 percent mail and 49 percent intercept) and convenience (23 percent mail and 27 percent intercept).

3.5.4.2 1993 TransPass Survey

During Spring 1993 SEPTA conducted a mail survey of weekly and monthly TransPass customers. The Authority obtained 516 responses to the monthly pass survey and 640 for the weekly pass survey.

The results suggested that pass users are long time SEPTA customers and frequent pass purchasers. Similar to the token program, TransPasses have attracted regular users, but have not promoted a significant increase in infrequent customers. Eighty-nine percent of weekly and 85 percent of monthly pass holders have been using SEPTA services for more than three years. Most of weekly (82 percent) and half the monthly (50 percent) customers use more than one SEPTA

vehicle to reach their destination. Both weekly and monthly customers take an average of 22 trips per week on SEPTA. Eighty-six percent purchase a weekly pass every week and 89 percent purchase a monthly pass every month.

Forty-six percent of monthly and 49 percent of weekly pass customers use SEPTA services because they do not have a car available to them. Eighteen percent of weekly and 24 percent of monthly ride SEPTA because they said it was convenient.

Approximately a third of both weekly and monthly customers (37 percent and 33 percent) believe they save less than $10.00 a week by using a TransPass. A similar number of weekly and monthly users said they save between $10.00 and $20.00 a week. According to SEPTA, the average estimated savings is $16.00 for a weekly pass user and $17.00 for a monthly pass customer.

3.5.5 External Factors Influencing Ridership

3.5.5.1 The Region's Recession

When SEPTA initiated its discounted token program, the Philadelphia region was in a severe recession. The recession, which affected Philadelphia more than the suburban counties, adversely impacted CTD and to a lesser extent STD ridership. As a result, measuring exact changes in SEPTA performance related to the discounted token program is difficult.

According to SEPTA's FY 1993 Ridership and Statistics Report, the Authority has learned by experience that transit ridership is a precursor of city economic conditions. As noted earlier, the CTD experienced significant ridership losses in FY 1989, FY 1990 and FY 1991. SEPTA reported that Philadelphia posted a 1.9 percent, 3.1 percent and 4.1 percent decline in employment in FY 1990, FY 1991 and FY 1992, respectively. The CTD rate of decline moderated to 1.9 percent in FY 1992, while in FY 1993 the rate of job loss in Philadelphia slowed to 1.7 percent.

Before the recession, Philadelphia experienced growth in service producing jobs, though this gain was offset by a significant decline in manufacturing. By the start of the recession, Philadelphia had lost 5,800 jobs during the 1980's. In contrast, suburban counties experienced significant job growth until 1990 when the number of jobs declined. However, the suburban counties recovered from the recession earlier than Philadelphia. According to SEPTA, by June 1993 Philadelphia had 100,000 fewer jobs than 1980 (a decline of 13 percent), while suburban counties in Pennsylvania and New Jersey had 257,100 more jobs than 1980, a 23 percent gain.

SEPTA reported that the 100,000-job loss in Philadelphia between 1980 and 1993 represented 200,000 daily work trips. Since FY 1980, SEPTA has lost 23.4 percent of its ridership, or 220,000 daily trips. According to the 1990 census, 30 percent of Philadelphia residents use transit for work trips. For travel to Center City Philadelphia jobs, transit's share is

approximately 70 percent. SEPTA estimates that between 27 percent and 63 percent of the ridership loss since 1980 is attributable to the decrease in jobs in Philadelphia.

Changes in the region's population likely contributed to changes in SEPTA ridership patterns as well. Between 1980 and 1990 Philadelphia's population declined by 6.1 percent to 1,585,577. In contrast, the five Pennsylvania suburban counties increased by 7.5 percent during this period to 2,143,332.

3.5.5.2 Service Level Changes

Exhibits III.10 and III.11 show changes in SEPTA CTD and STD service levels as measured by revenue vehicle miles. Overall CTD service has declined since FY 1985 by 7.1 percent to 49,868,000 miles. Most of this decline occurred after FY 1989 when vehicle miles fell an average of 2.2 percent a year. The decrease in CTD service reflects SEPTA's efforts during this period to address constrained resources and reduced ridership.

In contrast, Suburban Transit service has grown by 25.4 percent to 9,761,000 miles between FY 1985 and FY 1993. After a 10.9 percent reduction in FY 1986, service grew significantly between FY 1988 and FY 1992 by an average of 6.1 percent a year. However, revenue vehicle miles declined slightly in FY 1993 by 1.3 percent, presumably in reaction to the 3.7 percent ridership decline in FY 1992. The overall growth in SEPTA Suburban Transit service is attributable to the Authority's efforts to meet the mobility needs of the economically stronger counties in the Philadelphia region.

3.5.5.3 Conclusions Regarding the Impact of External Influences

The above analysis shows that influence of the recent recession adversely affected SEPTA ridership levels. Structural changes in the region's economy, most notably the loss of city based manufacturing jobs, population decline in Philadelphia, and growth in the suburban counties, have contributed to reduced use of CTD services and an increased demand for STD buses, light rail and high speed routes. In addition to these external influences, a series of sharp fare increases that, until recently, were not moderated by discounted tokens contributed to the erosion of CTD ridership. To address the problem of declining transit demand and the need to maintain a balanced budget, SEPTA significantly reduced the level of CTD services. Although these adjustments better matched service with demand, it is likely they contributed to a cycle where lower service frequencies lessened the attractiveness of transit and contributed to a further decline in transit use which in turn required a further reduction in service.

Because of these economic, demographic and service factors, pinpointing the impact of SEPTA's discounted token program is difficult. However, it can be concluded that the fare discount program contributed to moderating the rate of ridership decline. This is supported by the previous analysis of ridership trends before and after the recent increase in the cash

Exhibit III.10	SEPTA City Transit Division Revenue Vehicle Miles Fiscal Years 1985-1993

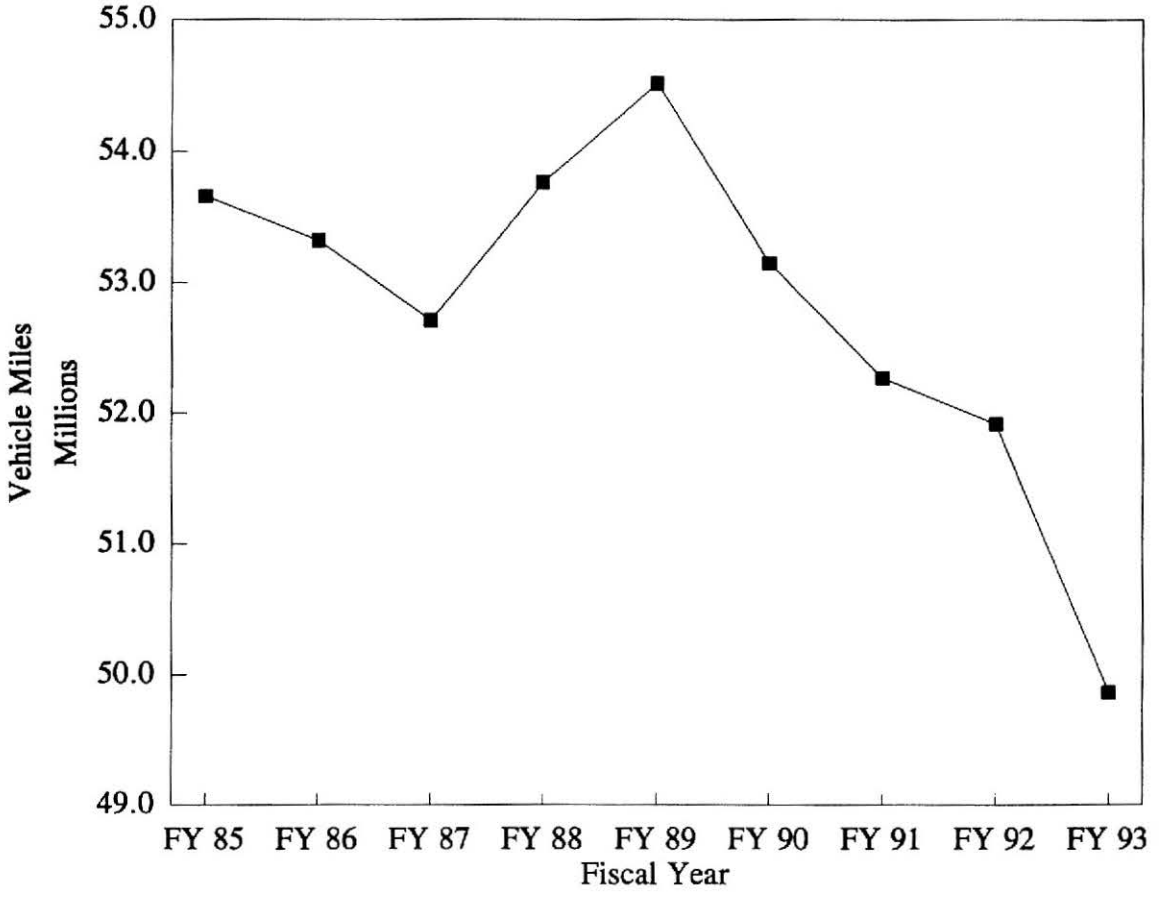
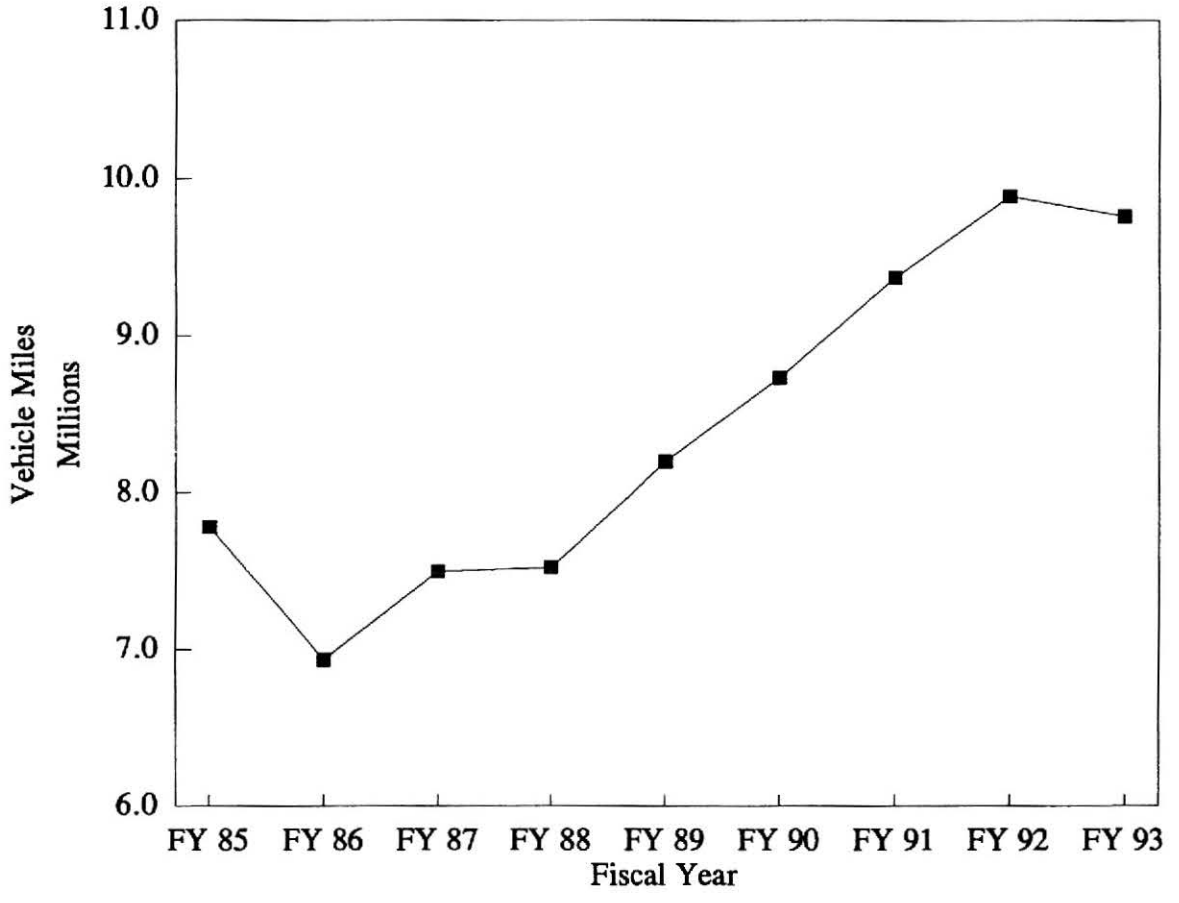


Exhibit III.11	SEPTA Suburban Transit Division Revenue Vehicle Miles Fiscal Years 1985-1993



fare and institution of discounted tokens. Before initiating the 20 percent cash fare increase and deep discounted token program in May 1990, CTD ridership fell by 2.5 percent in FY 1989. During FY 1990 when SEPTA reduced pass and token discounts to 20 percent in January 1990, CTD usage fell by 6.0 percent. Although the 20 percent cash fare increase and discounted token program, which resulted in a lower average fare increase of 5.8 percent, were implemented in May 1990, it is likely that most of the FY 1990 ridership loss occurred before the new fare structure, which was in effect for one month before the end of the fiscal year. Despite the higher cash fare, lower service frequencies and worsening employment losses that increased from 1.9 percent to 3.1 percent between FY 1990 and FY 1991, the rate of CTD ridership loss only increased by 0.3 percentage points during this period. During FY 1992 and FY 1993, CTD ridership losses moderated to 2.0 percent and 1.3 percent, respectively. The marginal difference between the rate of ridership loss in FY 1990 and 1991 and the moderation in the rate of CTD patronage declines in FY 1992 and FY 1993 show that the discounted token program contributed to offsetting SEPTA City Transit ridership losses. Customers who were not affected by the recession took advantage of the fare discount and continued to use transit. This finding is supported by the analysis of SEPTA revenue and ridership data that showed the moderating ridership losses coincided with an increase in token use.

The success of the token program is further demonstrated by SEPTA's recent market research. Customers said that they bought tokens because of savings and convenience. Respondents reported that they saved up to $5.00 a week using tokens.

Regarding the effect of SEPTA's fare program on STD ridership, it appears that discounted tokens mitigated the negative impact of the cash fare increase and contributed to continuing overall ridership growth. Total STD ridership increased by 0.56 percent in FY 1989 and fell by 7.3 percent in FY 1990. In FY 1991, the first full fiscal year that the new fares were in effect, STD ridership grew by 2.7 percent. The size of the strong FY 1991 ridership increase after the new fares versus the slight gain in FY 1989 and the sharp loss in FY 1990 demonstrates that the discounted fare program positively influenced STD ridership. However, usage fell by 3.4 percent in FY 1992 and recovered by 1 percent in FY 1993. As noted earlier, the FY 1992 loss may reflect the impact of higher regional unemployment rates that peaked in mid 1992.

The contribution of discounted fares on STD ridership is demonstrated by the previously discussed decrease in cash fare use after FY 1990. Unlike CTD revenue trends, the decline in cash use was attributable to an increase in both token and pass use.

3.6 SUMMARY OF FINDINGS

SEPTA's discounted fare program lessened the adverse impact of a 20 percent increase in the 1990 base cash fare and a recession that resulted in a significant decline in Philadelphia employment. Specifically:

- The rate of CTD ridership marginally increased one year after the May 1990 fare increase. By offering the fare discounts, SEPTA reduced the impact of the cash fare increase on transit customers. While the cash fare increased by 20 percent, SEPTA's average CTD fare, which includes all fare types, grew by only 5.8 percent. After the May 1990 fare changes, the rate of the total CTD ridership decline increased only by 0.3 percentage points to 6.3 percent in FY 1991, while the rate of Philadelphia job loss grew 1.2 percentage points to 3.1 percent. It is likely that the FY 1991 ridership loss rate did not significantly increase above the FY 1990 rate because customers, who were not impacted by the recession, took advantage of discounted tokens and continued to use transit. During FY 1992 and FY 1993 total CTD ridership losses moderated to 2.0 percent and 1.3 percent, respectively. Similar to total ridership the average weekday ridership rate of loss marginally increased between FY 1990 and FY 1991. Average weekday ridership declines slowed to 2.4 percent in FY 1992 and 0.8 percent in FY 1993.

- The discounted fare program also lessened the negative impact of the cash fare increase on STD ridership. Total STD ridership increased by 0.6 percent in FY 1989 and fell by 7.3 percent in FY 1990, which included about one month of the new higher base fare and discounted tokens. In FY 1991, the first full fiscal year that the new fares were in effect, STD ridership grew by 2.7 percent. However, usage fell by 3.4 percent in FY 1992 and recovered by 1 percent in FY 1993. The FY 1992 loss may reflect the impact of higher regional unemployment rates that peaked in mid-1992. Average weekday ridership levels remained essentially stable after introducing the higher cash fare and discounted tokens.

- Overall revenues for both CTD and STD increased in FY 1991, after the introduction of the deeply discounted tokens in May 1990. However, in FY 1992 and FY 1993, they fell for CTD and leveled off for STD. It appears that initially the fare increase produced more revenues while the deep discount limited ridership loss, as intended by SEPTA, but the recession in the Philadelphia area countered these trends in FY 1992 and FY 1993. However, it is likely that deep discounting's ability to mitigate ridership losses in economic downturns simultaneously mitigated SEPTA's revenue losses.

- The availability of discounted tokens has contributed to a reduction in the use of cash fares. Between FY 1989 and FY 1993 the share of passengers using cash fares has declined from 20.2 percent to 12.9 percent for CTD, and from 33.3 percent to 22.4 percent for STD. The decrease in CTD cash use is entirely attributable to increased token use. Contrary to industry experience, the availability of discounted tokens resulted in a reduction in CTD pass use. SEPTA attributes this trend, in part, to the recession. Specifically, some transit customers reduced their discretionary travel and switched from passes to tokens. Both tokens and passes contributed to reduced cash use among STD customers.

- According to recent SEPTA surveys, tokens and passes are primarily used by long time, frequent customers. It appears from the survey data that SEPTA has not attracted a significant number of new and/or infrequent customers through the token and pass programs. SEPTA's ability to attract new customers may have been hampered in part by the recession's impact on the reduced number of employed workers and consequently the number of potential transit customers.

- Customers said that they believed tokens and passes saved them money. Respondents stated that their use of tokens saved them up $5.00 a week. SEPTA customers who use weekly and monthly passes responded that they saved between $10.00 and $20.00 a week.

- Customers reported that they purchased tokens for convenience. The overwhelming majority of respondents stated that token sales outlets were conveniently placed and always had an available stock of tokens.

- The overall success of SEPTA's discounted token program is clouded by the impact of the region's recession and reductions in CTD service. During FY 1990, FY 1991 and FY 1992, Philadelphia's employment fell by 1.9 percent, 3.1 percent and 4.1 percent, respectively. The rate of decline slowed to 1.7 percent in FY 1993. Suburban counties also suffered employment losses, but not as severely as Philadelphia. As of June 1993, the Philadelphia suburbs posted a net employment gain over 1980 levels, while Philadelphia had a net loss for the same period. SEPTA's own analyses indicate that Philadelphia employment strongly impacts CTD ridership. However, the marginal difference in the rate of CTD ridership losses before and after the fare changes despite worsening job losses, and the slowing rate of decline in the following years show that the discounted token program mitigated the impact of the cash fare increase, reductions in service and reduced employment. Regarding the fare program's influence on STD use, it appears that tokens and passes contributed to maintaining ridership levels despite the implementation of the fare increase and the impact of a softening suburban economy. SEPTA revenue trends further indicate the contribution of SEPTA's fare strategy on mitigating the cash fare increase. An analysis of revenue data showed that moderating CTD ridership losses and sustained STD usage corresponded to a decrease in cash use and an increase in token purchases for both divisions. As noted earlier, pass use declined among CTD users, but increased for STD customers.

4. EVALUATION OF GRTC DEEP DISCOUNT STRATEGY

4.1 RICHMOND REGION ECONOMIC AND DEMOGRAPHIC OVERVIEW

The Richmond area is defined in this analysis as the City of Richmond and Henrico County (see Exhibit IV.1). It has a population of 425,582 according to 1992 estimates, representing a 6.4 percent increase since 1980. The region's population increase is attributable to growth in Henrico County adding 24.8 percent to its population during this period. In contrast, Richmond lost 8.8 percent of its population between 1980 and 1992. By 1997, it is projected that the region's population will grow by 2.5 percent to 436,391. During this period, Henrico County's population will grow by 8.3 percent, while Richmond's will decline by 4 percent.

Compared with other areas, Richmond has a low cost of living, according to the American Chamber of Commerce Researcher Association's fourth quarter 1993 cost of living index. The index showed that the cost of food, housing, utilities, transportation and health care is less in Richmond than in Boston, Washington, D.C., Los Angeles, Philadelphia, Chicago and Wilmington, Delaware.

In 1992, the Richmond area ranked ninth in the nation in affordable housing. The rental rate for a three-bedroom, single family house is between $600 and $800 per month. Apartment rents range from $500 to $700 per month.

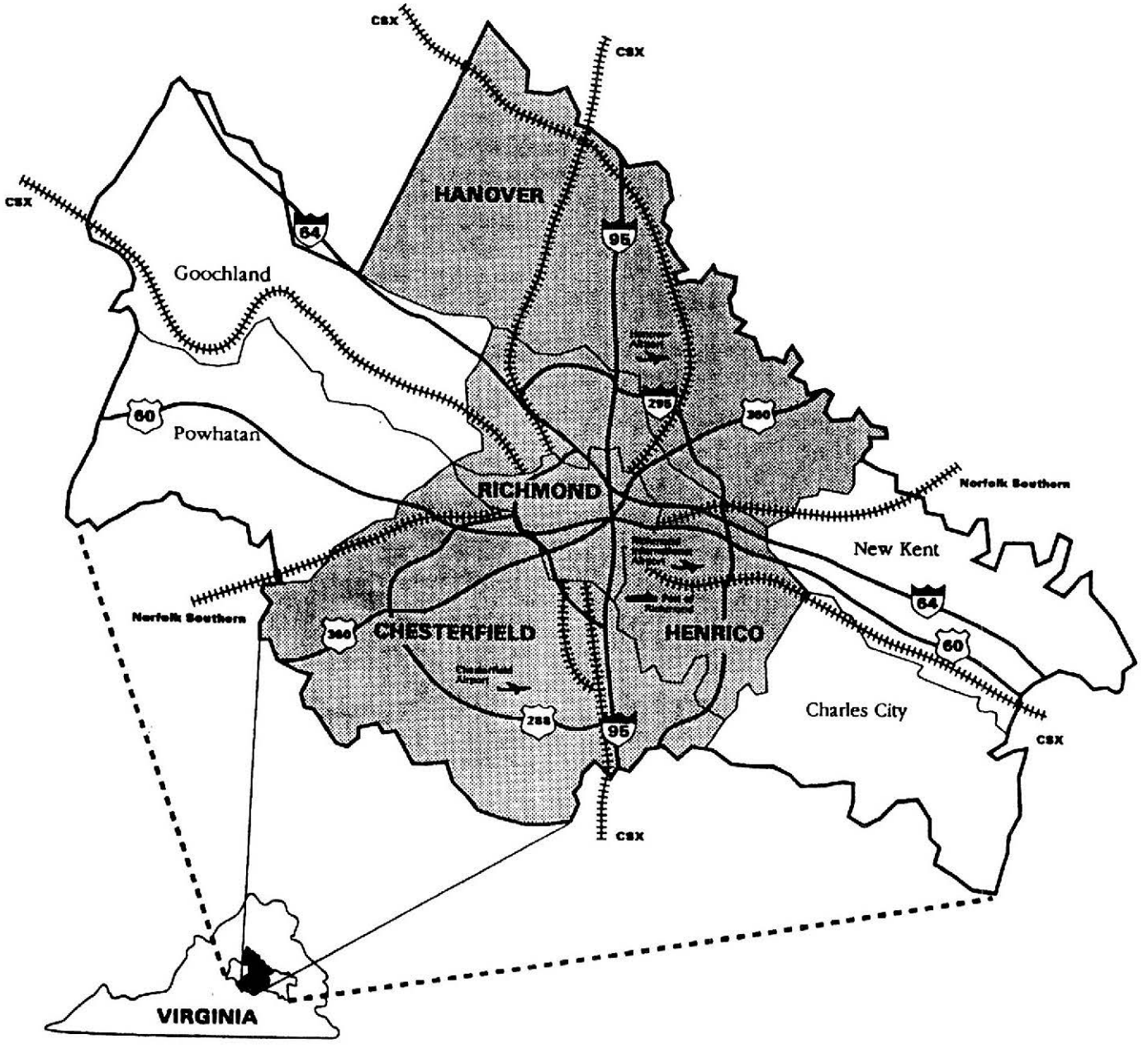
According to the Virginia Employment Commission, 222,706 workers were employed during 1993 in Richmond and Henrico County. Over half the region's jobs are in Henrico County, which has been the dominant employer in the region since 1987. Although Richmond's share of the job market has declined, it is the headquarters for 35 major corporations including Central Fidelity Bank, Dominion Resources, Chesapeake Corporation, Circuit City Stores, and Crestar Financial Corporation. As the capital of the Commonwealth of Virginia, Richmond also has many government employees.

Henrico County and to a lesser extent, Richmond, experienced significant economic growth during the mid to late 1980's. Unemployment in Richmond remained in the 5 percent range between 1986 and 1989, while the jobless rate never exceeded 3 percent during this period in Henrico County. Employment grew by 13.7 percent in Henrico between 1986 and 1989, while the number of jobs in Richmond increased by 4.2 percent.

Five major interstate highways, Amtrak and commercial airline service from Richmond International Airport (RIA) provide access to the metropolitan area. RIA is served by more than 150 daily scheduled nonstop flights to major domestic markets and international gateways. CSX, Norfolk Southern and over 90 truck lines provide freight transportation services.

Exhibit IV.1

RICHMOND METROPOLITAN REGION



Source: Metropolitan Economic Development Council

Freight cargo is also handled at RIA and the Port of Richmond. Within the region, the Greater Richmond Transit Company (GRTC) operates 47 bus routes throughout the area. A detailed discussion of GRTC's services is included in the next section.

However, similar to other regions, Richmond and Henrico County were adversely affected by the early 1990's national recession. Between 1989 and 1992 unemployment in Richmond and Henrico County climbed from 5.0 and 3.0 percent, respectively, to 9.0 and 5.4 percent, respectively. The recession particularly affected Richmond and resulted in the closing of two May's department stores, two hotels and several other businesses. However, by 1993 unemployment began to fall in Richmond and Henrico County.

4.2 DESCRIPTION OF GRTC SERVICES AND FARE STRUCTURE

4.2.1 Administration

The Greater Richmond Transit Company (GRTC), a nonprofit public service corporation, is the primary provider of public transportation service in the Richmond urbanized area. The GRTC was created under authority of the City of Richmond pursuant to Section 2.03.3 of the Richmond City Charter. GRTC was incorporated on April 12, 1973 to provide public transportation in Richmond and the surrounding areas. On September 1, 1973, GRTC acquired the Richmond division of the Virginia Transit Company.

To form a regional transportation agency, the Greater Richmond Transit Company Board of Directors offered stock to Chesterfield County and Henrico County in April 1988. Purchase of the additional stock by the two counties would have resulted in joint ownership of the Greater Richmond Transit Company with the City of Richmond. The Chesterfield County Board of Supervisors agreed to the proposal, purchasing five shares of stock for $50,000. The Henrico County Board of Supervisors ultimately decided not to participate. In 1989, the GRTC Board of Directors amended its bylaws to provide a six-member Board of Directors with three members nominated by the City of Richmond and three members nominated by the County of Chesterfield. The Council of the City of Richmond and the Board of Supervisors of Chesterfield County annually elect the Board of Directors.

Transit services are provided under contract by ATE Management and Service Company, Inc. and its subsidiary Old Dominion Transit Management Company. Five principal operating officials including GRTC's General Manager are ATE employees. All other GRTC personnel are employees of Old Dominion Transit.

4.2.2 Services Provided

GRTC operates 47 bus routes including a downtown trolley route and peak period express bus service. The transit agency provides fixed route service seven days a week. Most of the fixed route service is oriented within the City of Richmond. GRTC also provides limited service in

Henrico County on a contractual basis, including several express routes designed to transport commuters from the urbanized areas and four outlying park-and-ride lots to downtown Richmond. GRTC provides incidental service in Chesterfield County consisting of some express service along its border with Richmond and some subscription service to plants and businesses in the county.

GRTC provides specialized transportation for elderly and disabled persons. In 1981, GRTC set a policy that any bus purchased in the future would be fully accessible. New buses are equipped with wheelchair lifts and tiedowns. GRTC also leases 29 vans to the Specialized Transportation Assistance for Richmond (STAR), an organization providing assistance to disabled persons. GRTC offers one half fare for disabled persons and persons 65 years of age or older. The reduced fare is available at all times except the morning peak period, 7:30 to 9:30 a.m., and the evening peak period, 4:00 to 6:00 p.m.

The transit agency has an active fleet of 192 buses and 10 trolleys. GRTC uses 160 buses in peak service and 59 buses in base service. Eight trolleys are required for peak service on the downtown circulator. For Saturday service, 57 buses and two trolleys are used, for Sunday service, 27 buses are used.

4.2.3 Current Fare Structure

GRTC has implemented several fare changes since its inception in 1975. Exhibits IV.2 and IV.3 show GRTC's fare history. Currently, GRTC's fares are based on a flat fare system for regular fixed route service in the City of Richmond. The regular fare is $1.25 during both peak and off-peak periods. Fares for express services between suburban areas and Richmond range from $1.25 to $1.70. The express service fare for travel within a county is $1.25. A $0.15 transfer fee applies for cash fares; transfers with tickets are $0.10 and free for senior citizen and disabled customers. The downtown trolley service is $0.25. Besides its cash fare structure, GRTC offers several discounted multi-ride ticket books for commuters, senior citizens and the disabled. These are discussed in greater detail in the next section.

GRTC has experienced increases in both costs and revenues over the last few years. Ridership has decreased over this time, with significant decreases after a fare increase. Between 1973 and 1993 annual ridership declined by more than 50 percent to 8,797,720. In addition, operating expenses have risen faster than revenue, producing greater operating deficits each year and resulting in an increasing subsidy requirement.

4.3 IMPLEMENTATION OF DEEP DISCOUNT FARES

4.3.1 1991 Fare Analysis Study

To address the adverse, long-term impact of fare increases on ridership, the Richmond Area Metropolitan Planning Organization (MPO) and the GRTC undertook a comprehensive fare

Exhibit IV.2
Greater Richmond Transit Company
Fare History

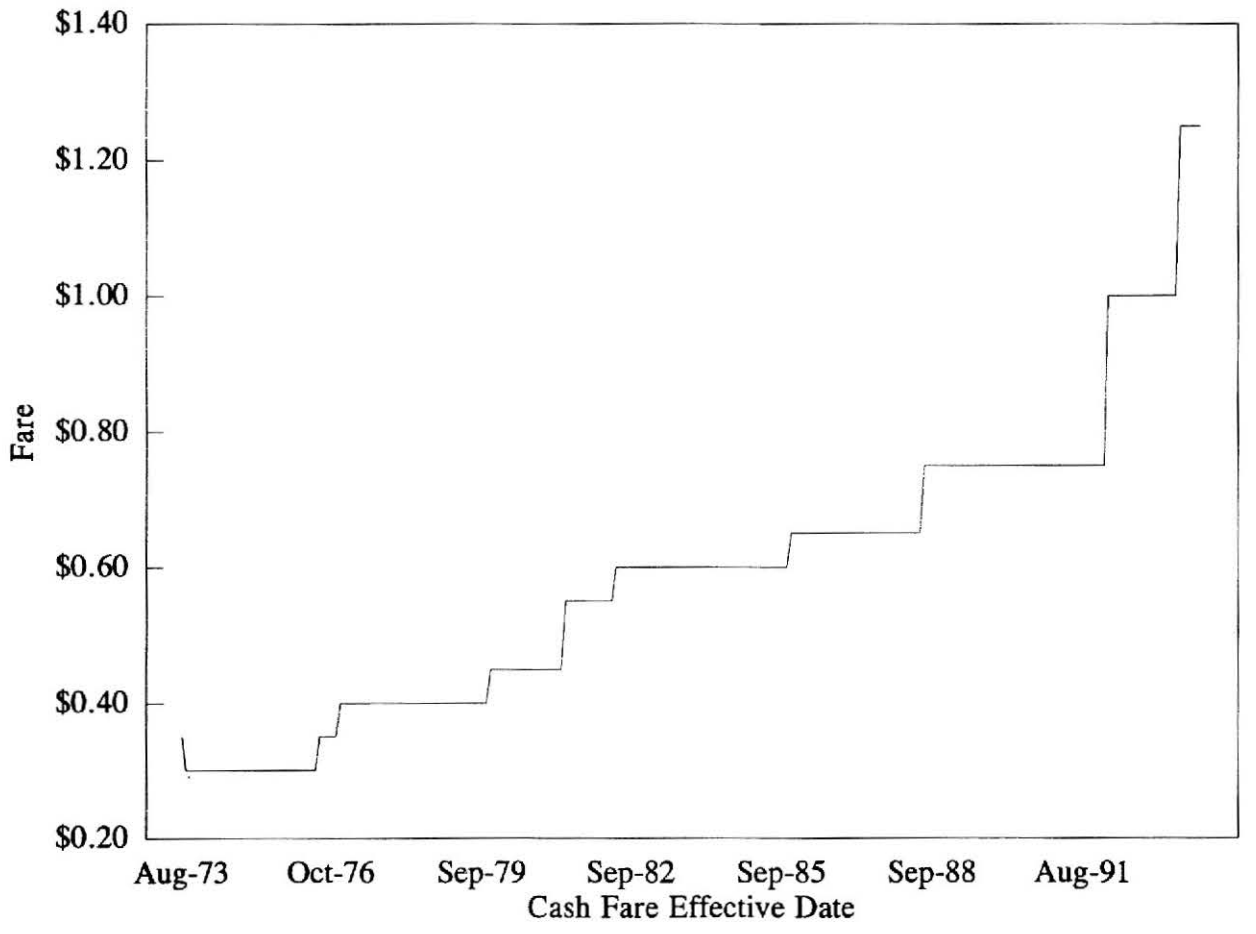
	Aug. '73	Sept. '73	July '76	Dec. '76	Nov. '79	May '81	Nov. '82
Base Fare	0.35	0.30	0.35	0.40	0.45	0.55	0.60
Zone Charge (City)	0.05						
Transfer Charge	0.05	0.05	0.05	0.05	0.05	0.05	0.05
Transfer with SuperSaver							
Students (20)	3.50	2.50	3.50	4.00	4.50	5.50	6.00
Senior Citizens (10)	1.45	1.45	1.75	2.00	2.25	2.75	3.00
Handicapped Citizens (10)		1.45	1.75	2.00	2.25	2.75	3.00
Tokens (10)	3.25						
SuperSaver							
Handi-Ten Ticket Book		3.00	3.50	4.00	4.50	5.50	6.00
Weekly Pass	5.50	4.50	5.25	6.00	6.75	8.25	9.00
45-Ride Ticket Book	13.50	13.50	15.75	18.00	20.25	24.75	27.00
Turnpike Express	0.50	0.45	0.50	0.55	0.70	0.80	1.00
Commuter Express							
Frugaline & Kanawha Plaza							
(8/78-11/79)	0.10	0.10	0.10	0.10	0.10	0.10	0.10
Downtown Trolleys							
Commuter (10)			5.50	6.00	7.50	10.00	10.00
Special Service	0.35	0.30	0.50	0.60	0.65	0.75	0.80
City-County Zone	0.05	0.05	0.10	0.10	0.15	0.20	0.20
JOBS Bus							

Eliminated transfer charge for seniors and handicapped.
Additional increase for service operating into Henrico County became effective 12/2/79, 5/3/79.
Additional increase for Henrico County express service (Parham and Glenside) effective May 1981 and December 1985.

Exhibit IV.2
Greater Richmond Transit Company
Fare History

	Nov. '85	July '88	July '89	Feb '92	July '93	Dec '93
Base Fare	0.65	0.75	0.75	1.00	1.25	1.25
Zone Charge (City)						
Transfer Charge	0.05	0.05	0.10	0.10	0.10	0.15
Transfer with SuperSaver				Free	Free	0.10
Students (20)	6.50	7.50	7.50	10.00	10.00	12.50
Senior Citizens (10)	3.25	3.75	3.75	3.75	3.75	5.00
Handicapped Citizens (10)	3.25	3.75	3.75	3.75	3.75	5.00
Tokens (10)						
SuperSaver				7.50	7.50	10.00
Handi-Ten Ticket Book	6.50	7.50	7.50			
Weekly Pass	9.75	11.25	11.75			
45-Ride Ticket Book	29.25	33.75	33.75			
Turnpike Express	1.25	1.25	1.25			
Commuter Express				1.50	1.50	1.35 to 1.70
Frugaline & Kanawha Plaza (8/78-11/79)						
Downtown Trolleys	0.25	0.25	0.25	Free	Free	0.25
Commuter (10)	12.50	12.50	12.50	12.50	12.50	12.50
Special Service	0.90	1.25	1.25	1.50	1.50	
City-County Zone	0.25	0.25	0.25	0.25 to 0.45	0.25 to 0.45	0.10 to 0.45
JOBS Bus		1.00	1.00	1.00	1.00	1.50

Exhibit IV.3 | **GRTC Cash Fares 1973-1993**



analysis in 1991. This study addressed the need for adjustments and improvements in GRTC's fare structure for fixed route service and for paratransit services (STAR). GRTC and the MPO were interested in evaluating future fare increases that would help cover the growing cost of providing service and specifically increase passenger revenue, with little, if any loss in ridership.

The study found that while GRTC had experienced increases in both costs and revenues, ridership had steadily decreased over time. Decreases in ridership were particularly evident after fares were increased. Additionally, the increase in revenues had not kept up proportionately with the rising cost of transit operations. As a result, subsidy requirements were increasing.

GRTC established several goals for a new fare structure. Specifically, the fare structure should:

- Be simple to understand
- Increase revenue, or at least not reduce existing passenger revenue
- Be equitable and recognize the different needs of captive and choice riders
- Be packaged in a way that would be easily obtained by the public

A study advisory committee was formed, with representation from GRTC's management staff, the MPO, City of Richmond, Henrico County, Chesterfield County, and the Virginia Department of Transportation.

Several objectives, which reflected GRTC's service goals, were developed to guide the assessment of fare structure options for the fixed route service. The objectives identified that the fare structure should:

- Be ready for implementation on short notice to allow GRTC to respond to changing conditions
- Increase passenger revenue by a minimum of 5 percent ($475,000)
- Minimize any loss in ridership normally attributable to higher fares (i.e., no more than 3 percent loss in ridership)
- Help GRTC maintain an approximate 60 percent fare recovery ratio
- Be easy to understand and reduce the complexity and number of fare elements in the old structure
- Be equitable and not place captive riders at a disadvantage

- Extend discounts to regular riders and promote development of regular transit use
- Support GRTC's marketing objectives and promote new ridership
- Not place GRTC at risk of unanticipated negative impacts
- Offer appropriate fare payment mechanisms for different market segments
- Simplify application of employer fare subsidies
- Promote GRTC institutionally

The analysis examined several innovative fare structure options including deep discount fares, peak/off peak differential fare structures, and market segmented passes.

The study included an on board survey of customers using GRTC's fixed route system during March 1991. The purpose of the survey was to identify customer characteristics and usage patterns for each fare category. Results of the survey showed a strong market for additional prepayment users and a propensity to ride more frequently when a pass is used.

The study recommended a deep discount fare plan. Other specific recommendations included:

- Eliminating the 45-trip ticket that could be substituted easily with ten-trip handi-ride tickets, which were more popular among GRTC customers
- Giving no cost transfers to customers who purchase tickets
- Integrating the County fares with the primary fare structure to reduce the complexity of the structure and simplify marketing efforts
- Developing and using appropriate marketing and sales-related efforts

The Fare Analysis Study also emphasized the critical importance of effective marketing for the success of the Deep Discount plan. The primary target market for the deep discount program was the infrequent transit rider. Direct marketing was recommended as the most effective strategy to convey the myriad of information necessary, i.e., the savings available from the new tickets, and where and when customers could purchase the discounted tickets.

4.3.2 The Discounted Fare Structure

The GRTC Board of Directors approved the new fare structure in December 1991, which became effective in February 1992, and included the following:

- An increase in the cash fare from $0.75 to $1.00
- Introduction of deep discounted prepaid tickets offered for sale in books of ten tickets for $7.50. The $0.75 per trip cost provided a 25 percent discount from the cash fare. The discounted ticket books were named SuperSaver Ten.
- Free transfer with prepaid (ticket) fare
- Continuation of the $0.10 transfer with a cash fare
- Discontinuation of the weekly pass
- Discontinuation of the 45-ride ticket books

GRTC aggressively marketed the deep discount program and the new fare structure during February to April 1992. The transit agency's goals for the marketing program included:

- Increase the number of ticket outlet locations
- Make purchasing tickets more convenient
- Design collateral material to explain the new fare structure

The marketing effort included the following aspects:

- **Newspaper advertising.** GRTC designed three print advertisements to explain the new fare structure to regular and occasional riders. A large advertisement was placed in the front section of local newspapers. This advertisement presented the new GRTC fare structure effective February 2, 1992 and emphasized the savings possible with the SuperSaver tickets. A smaller advertisement, or teaser, was placed in a later section to direct the reader back to the larger advertisement in the front section. For smaller newspapers, a medium sized advertisement was developed. Examples of GRTC's advertisements are included in Appendix B.
- **Television commercial advertising.** GRTC secured broadcast sponsorship from WWBT 12 to reach a broader audience. WWBT 12 produced, free of charge, a television commercial that aired for eight weeks beginning in February 1992 at the time of the fare change. The television station aired three versions (30, 20 and 15

seconds) at various times during the day and evening. In exchange, GRTC agreed to place the station's logo on all collateral advertising material. GRTC valued the sponsorship package at $10,000.

- **SuperSaver Operator's Contest.** GRTC held a contest to involve operators in the promotion of the SuperSaver program. Operators were given $1.00 discount coupons to distribute to all cash paying customers. The coupons could be used toward the purchase of ticket books at all outlets selling SuperSaver. The operators wrote their badge numbers on the coupons so that they could be identified if a coupon they handed out was drawn for a prize. Prizes included two $50.00 checks, two $100.00 checks, one $200.00 check and one $500.00 check.

  GRTC printed 45,000 coupon brochures that included SuperSaver program information, the discount coupon, and a space on the coupon for the operator's badge number. Copies of the brochures are included in Appendix B. Operators distributed the brochures during two days in February 1992, during morning shifts one day and evening shifts the next day. Two hundred and seventy-five operators distributed the brochures and passengers redeemed more than 20,000 coupons.

- **Direct Mail Campaign.** GRTC believed that direct mail was the best way to distribute information to a large, diverse audience. From March to June 1992, GRTC used Val-Pak direct mail marketing and REACH Magazine to distribute discount coupons for ticket book purchases. Approximately 500,000 households in the Richmond/Henrico County area were targeted between Val-Pak and REACH.

  GRTC purchased a special mailing list to target households with annual incomes under $30,000 in the GRTC service area. A special brochure, including an abbreviated system map, a listing of area outlets, and a discount coupon, was mailed to this group.

  The rates of return for the discount coupons from these three sources were as follows:

  - Val-Pak 2.5 percent
  - REACH 2.0 percent
  - Solo Mailer 1.0 percent

- **Outlet materials.** GRTC produced counter tent cards and window decals for display at all outlets selling SuperSaver.

As part of the marketing effort, GRTC expanded the number of ticket sales outlets. In 1991, 60 outlets in Richmond and Henrico County sold GRTC tickets and passes, including approximately 20 private outlets at nursing homes and employers. Currently more than 175 outlets are selling GRTC tickets and passes, including grocery stores, banks and credit unions.

GRTC had some initial problems with the new outlets. Specifically, some outlets tried to add a surcharge to the GRTC fare. After receiving customer complaints about the surcharges, GRTC rectified the surcharge problem.

4.3.3 1993 Fare Changes

Because of severe recession-related ridership declines and the inability to secure additional subsidies, GRTC increased the cash fare in July 1993 to $1.25. However, ticket prices remained the same. As a result, SuperSaver customers enjoyed a 40 percent discount off the base fare. The steep discount, however, was temporary. In December 1993, GRTC reduced the discount to 20 percent by increasing the price of SuperSaver Tickets from $7.50 to $10.00, effectively eliminating the deep discount.

Besides reducing the deep discount on SuperSaver, GRTC began to charge a $0.10 transfer to ticket customers and increased the transfer to $0.15 for cash customers. The agency also charged $0.25 for the downtown trolley and raised fares for students by 25 percent and senior citizens and the disabled by 33.3 percent. Cash and ticket fares for commuter service remained unchanged.

These fare changes adversely affected the competitiveness of GRTC's services. In fact, GRTC's current base cash fare is higher than RTD's and SEPTA's, when compared with household incomes in Denver and Philadelphia. GRTC's $1.25 base fare is 25 percent more than RTD's and 20 percent less than SEPTA's. According to NPA Data Services forecasts, Richmond's estimated 1993 household income of $36,275 is 10.3 percent and 21.8 percent less than Philadelphia and Denver, respectively. As shown in the analysis that follows, the combined impact of a severe recession, a higher base fare and subsequent lower fare discount contributed to significant ridership loss.

4.4 EVALUATION OF DEEP DISCOUNT STRATEGY

4.4.1 Analytical Approach

This section evaluates the impact of GRTC's SuperSaver discount fare strategy. The analysis is based upon a review of existing data sources including GRTC ridership and revenue statistics and the results of a June 1992 survey of SuperSaver customers.

The objective of this review is to find out whether GRTC's SuperSaver strategy contributed to:

- Increased ridership, particularly among infrequent customers
- Improved revenues
- Mitigating the impact of the cash fare increase
- Maximized use of prepayment fares and reducing the use of cash
- Enhanced customer perceptions of GRTC services

The impact of GRTC's fare strategy is clouded by the downturn in the region's economy during the early 1990's. In addition, the transit agency's adjustments to the cash fare and SuperSaver discount also influenced GRTC ridership levels. As a result, the impact of these factors will be discussed.

4.4.2 Ridership

Exhibit IV.4 shows that GRTC ridership has fallen significantly during the past ten years. Overall, GRTC usage is off by 37.4 percent to 8,797,720. Ridership only increased in 1984, 1985 and 1990. Most of the 1980's ridership declines occurred after increases in the cash fare in 1985, 1988 and 1989.

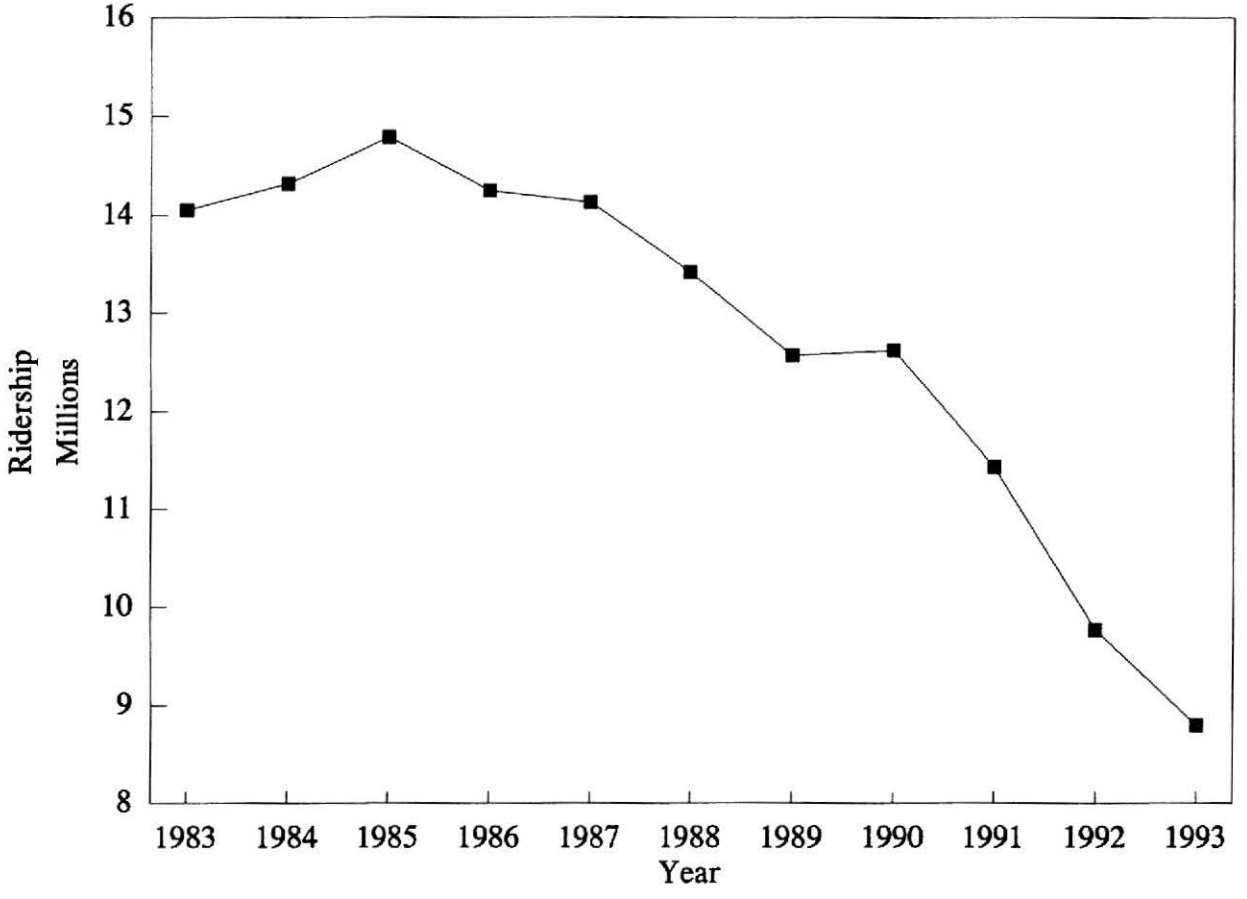
The transit agency's deep discount strategy has not reversed the downward ridership trend. The rate of decline began to worsen when ridership fell by 9.4 percent in 1991. Ridership losses accelerated after the 1992 fare changes to 14.5 percent in 1992 and 10.0 percent in 1993. This trend continued during the first six months of 1994 when ridership declined by 12.5 percent.

A comparison of month-to-month ridership trends shows usage declined significantly for each month in 1992 even after the start of deep discount fares. Ridership continued to decline sharply for all months in 1993 except June which posted a 3.3 percent gain, and for the first six months of 1994.

GRTC counts ticket purchasing customers based on when fares are sold, not when they are used. As a result, the data do not provide an entirely accurate picture of month-to-month transit usage, because customers may not always use a ticket in the same month it was purchased. However, it is assumed that annual ridership data are more reliable because monthly differences between ticket purchase and use balance out.

The sharp ridership losses during this period are mostly attributable to the impact of the region's recession. Unemployment levels in Richmond, which is the focus of GRTC's service, increased significantly in 1991 and 1992. By 1993 the jobless rate declined.

Exhibit IV.4	GRTC Total Ridership 1983-1993



In addition, the increase in the cash fare and reduction in the SuperSaver discount lessened the competitiveness of GRTC's services. It is likely that the segment of GRTC's customer base with access to a car, switched from transit to auto. Unlike large, congested, metropolitan areas such as Philadelphia and Denver, transit in Richmond is neither faster nor more convenient than the auto. According to the 1990 census, transit's share of travel within the Philadelphia and Denver regions was 11.6 percent and 4.2 percent respectively, while in the Richmond region, it was 3.7 percent. As a result, former GRTC customers who chose to travel by auto were minimally inconvenienced, if at all.

It is also likely that a significant portion of GRTC's remaining ridership base is transit dependent. These individuals are generally lower income and do not have access to an auto. They cannot afford the up-front cost necessary to enjoy the discount offered by the SuperSaver fare and, as a result, they likely pay the full one way cash fare.

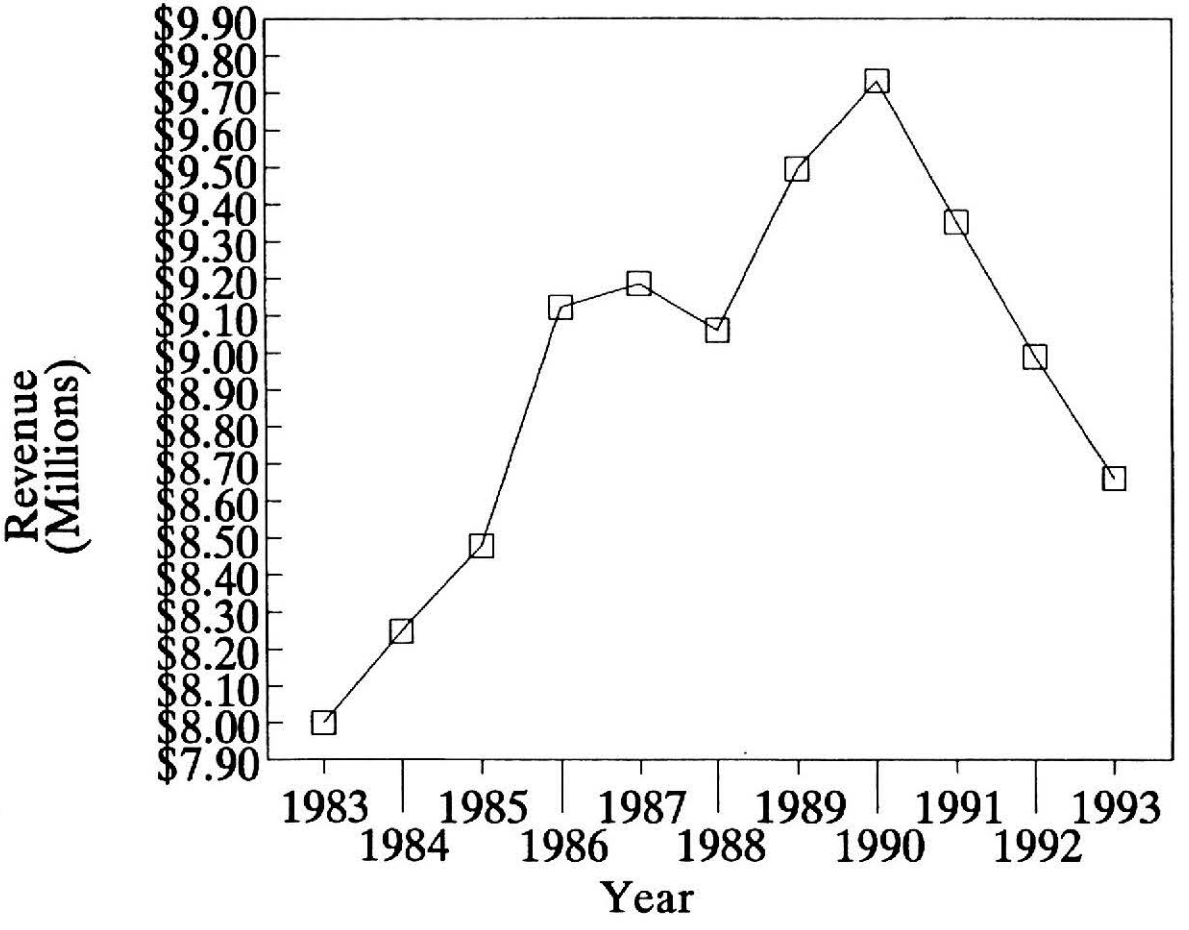
The impact of the recession and GRTC's mid and late 1993 fare changes on ridership may have been lessened if the transit agency had adopted a discount policy similar to SEPTA's. Specifically, lowering the minimum number of rides below ten on the SuperSaver ticket may have preserved the attractiveness of GRTC's services. In fact, a lower minimum would have been better targeted to the overwhelming majority of the transit agency's customer base, which, according to a 1992 survey, consisted of infrequent customers.

Although SuperSaver did not offset the negative impact of the recession, the ticket book did contribute to a reduction in cash fare use. A year before the introduction of SuperSaver, cash paying customers represented 64.7 percent of total GRTC ridership. By 1992 the percent of cash customers fell to 46.3 percent, while SuperSaver customers represented 34.4 percent. In 1993, the share of SuperSaver customers increased to 48.8 percent, while cash paying passengers fell to 37.7 percent. It is likely that the significant 1993 increase in SuperSaver customers is largely attributable to GRTC's decision to increase the price of the cash fare to $1.25 and raise the SuperSaver discount to 40 percent.

4.4.3 Revenue

Overall, despite several increases in the cash fare during the past eleven fiscal years, total GRTC revenue has increased marginally by 11.7 percent to $8,932,510. Nevertheless, since FY 1990, revenue has fallen at an increasing rate (see Exhibit IV.5). GRTC's fiscal year begins on July 1st. Total revenues fell by 3.9 percent in FY 1991 and FY 1992 and by 3.6 percent FY 1993. However, because of GRTC's reduction of the fare discounts at the end of 1993, total revenue increased by 3.1 percent in FY 1994. The revenue declines between FY 1990 and FY 1993 demonstrate that the combined impact of declining ridership and increasing discount ticket use offset any gains from additional revenue generated from higher cash fares. Revenues only increased in FY 1994 because GRTC reduced the level of SuperSaver discounts in December 1993.

Exhibit IV.5	GRTC Total Passenger Revenue Fiscal Years 1983–1993



Similar to the previously discussed ridership trends, GRTC revenues between calendar years 1991 and 1993 reflect a decrease in cash fares and an increase in SuperSaver tickets. The share of cash revenue declined from 61.9 percent in 1991 to 48.8 percent in 1992 and 42.3 percent in 1993. The percent of SuperSaver revenue grew from 28.1 percent in 1992 to 39.0 percent in 1993.

4.4.4 Customer Use and Perceptions of SuperSaver

To identify the market for SuperSaver and to measure customer use and their perceptions of the discounted ticket, GRTC undertook an on board market research survey in June 1992. A total of 1,210 responses yielded a 49 percent return rate.

The results of the survey suggested:

- SuperSaver Ten-Rides were the most popular fare type, accounting for 52 percent of users.

- A considerable shift to tickets occurred among GRTC customers; cash fares accounted for 40 percent of market.

- Although GRTC carried out an aggressive marketing campaign, the survey results suggested new riders were disproportionately paying their fares with cash. This group used GRTC services infrequently during weekdays. The survey data showed that infrequent and new customers used discount coupons less than other groups. These findings showed that the SuperSaver program did not attract many new customers and did not appear to increase use among infrequent users. As a result, this adversely influenced any potential ridership increases.

- Higher frequency users took advantage of SuperSaver more than other groups. This indicated that the fare discount marketing program did not optimally reach infrequent users, representing more than 70 percent of GRTC's customer base. However, the survey found that low frequency customers grew in terms of their share of the total market. The survey results indicated that there was some penetration of the low frequency market. In addition, the share of higher frequency travelers may have declined due to the recession. The analysis of the survey data suggested that infrequent riders were attracted to some degree by the discount offer. The GRTC report recommended the need to increase SuperSaver use among this group.

- SuperSaver riders generally increased their transit use or had stable use while cash riders more likely reduced their use of GRTC services.

- Older riders were more likely to use SuperSaver, while younger riders (under 34 years old) were more likely to use cash. In addition, cash customers reported higher income levels than ticket users.

- Over 90 percent of respondents rated GRTC services excellent, good, or average. A "satisfaction index" showed that those who moved to using tickets had higher assessments of GRTC than those who did not.

- The analysis of the survey recommended that to build ridership levels GRTC should focus its marketing effort on increasing SuperSaver use among infrequent and new customers. The report recommended the use of out-of-system advertising such as direct mail to potential customers.

4.4.5 External Factors Influencing Ridership

As noted earlier, GRTC introduced its deep discount fare strategy during a severe recession in the Richmond area economy. Prior to the recession, Richmond's unemployment rate remained at 5 percent. The percent of jobless had climbed to 7.8 percent and 9 percent in 1991 and 1992, respectively. Unemployment declined to 6.3 percent in 1993. Henrico County was also adversely affected by the recession, but not to the same extent as Richmond. Unemployment increased from 2.4 percent in 1989 to 4.3 percent and 5.4 percent in 1991 and 1992, respectively. By 1993 the percent of unemployed workers fell to 3.9 percent in Henrico County.

The significant increase in unemployment, particularly in Richmond, the focus of GRTC's service, contributed heavily to the transit agency's ridership losses. Between 1989 and 1993 Richmond employment fell by 8.8 percent to 97,423, while the number of jobs in Henrico County grew by 3.5 percent to 125,283. The recession adversely influenced work and discretionary travel by transit. As noted in the transit agency's 1992 market research survey, the vast majority of GRTC's customers are infrequent users. These individuals may be using transit for work trips to part-time jobs, or for discretionary travel, which both are sensitive to economic changes. In addition, structural changes in the region's economy, namely the movement of jobs out of Richmond and into other areas such as Henrico County also contributed to declining GRTC usage. In addition, the recession's adverse impact on retail activity, including the closing of a downtown department store, may also have adversely affected the number of discretionary transit trips. As a result, the success of GRTC's deep discount fare strategy was significantly limited by the structural shift in the Richmond economy and the transit agency's large share of infrequent customers sensitive to economic changes.

In response to declining ridership, GRTC reduced service (as measured by revenue vehicle miles) by 4.8 percent between 1991 and 1993. Service reductions may have lessened the competitiveness of GRTC's services and thus contributed to further ridership declines.

The higher base fare, reduced discount and lower route frequencies adversely affected the quality and attractiveness of GRTC's services. Customers with access to a car may have chosen to switch from transit to auto. As noted earlier, unlike large, congested metropolitan areas where transit is time competitive with the auto, highway congestion is less severe in a smaller city like Richmond. As a result, commuters who switched from transit to auto were more than likely not inconvenienced by significant highway congestion, or lack of parking.

As discussed above, ridership also declined because of the severe recession and structural changes in the Richmond economy. A significant portion of GRTC's remaining ridership market may be transit dependent; they generally have lower incomes and limited access to a car. These individuals cannot overall afford the up-front cost of a discounted multi-trip fare instrument.

Because of these external factors, gauging the full impact of SuperSaver on GRTC performance is difficult. Severe unemployment and structural changes in the Richmond economy may have offset any of the positive benefits of GRTC's deep discount fare program.

4.5 SUMMARY OF FINDINGS

This section evaluated the impact of the SuperSaver discount fare program on GRTC performance. Overall, the influence of GRTC's SuperSaver was overshadowed by a severe recession and the movement of jobs away from the focus of the transit agency's services. Further, an increased cash fare, lowered ticket discount and reduced serviced levels adversely affected the competitiveness of GRTC's services. In particular:

- Ridership losses did not slow after the introduction of deep discount fares. In fact they accelerated. In 1991 ridership fell by 9.4 percent, while it declined by 14.5 percent and 10.0 percent in 1992 and 1993, respectively. During the first six months of 1994 ridership declined by 12.5 percent.

- GRTC revenues continued to fall at essentially the same rate after implementing the discounted fare program. Total revenues fell by 3.9 percent in FY 1991 and 1992 and by 3.6 percent in FY 1993. However, revenues increased by 3.1 percent in FY 1994 because GRTC lowered the discount for SuperSaver. The revenue decline between FY 1991 and FY 1993 reflects the impact of decreased ridership levels and increased discounted ticket use that offset any added revenue from the higher cash fare. Revenues only increased in FY 1994 because of the reduced SuperSaver discount.

- Ridership, revenue and market research data show that SuperSaver is popular among GRTC's customers. The percent of cash paying customers fell from 64.7 percent in 1991 to 37.7 percent in 1993. The share of SuperSaver customers grew from 34.4 percent during the first year the discounted ticket was offered to 48.8 percent in 1993. A 1992 market research survey showed that although there was some penetration of the infrequent rider group, representing the majority of customers, tickets were used by more frequent

customers, while new and infrequent customers primarily used cash. Cash paying customers reported that they reduced their use of GRTC services after the 1992 fare changes. The survey found that continued cash use among infrequent and new users limited the potential for ridership growth.

- GRTC set up its deep discount program at the start of a severe recession focused in the City of Richmond, where the recession adversely affected transit ridership. In addition, most of GRTC's customers are infrequent users. These individuals are likely using GRTC services for travel to part-time jobs, or discretionary trips, both of which are sensitive to economic changes. To address a severe revenue decline, GRTC raised the cash fare in mid 1993 and lowered the SuperSaver discount at the end of the year. Unlike SEPTA's fare strategy, customers were not provided the opportunity to make a small up-front purchase to enjoy a fare discount. Ridership losses might have been less severe if GRTC had lowered the minimum ride purchase requirement for its SuperSaver ticket, making the ticket more attractive and putting it within reach of GRTC's infrequent, transit-dependent customers.

- The fare changes contributed to the further decline of GRTC usage. Based on local average household incomes, GRTC's cash fare was higher than SEPTA's and RTD's. Possibly some GRTC customers with access to a car switched from transit to the auto. Unlike large metropolitan areas such as Philadelphia and Denver, traffic and parking constraints are less severe in a small city like Richmond. As a result, auto travel to the central business district is an option for commuters.

5. CONCLUSIONS

Deep discount fares were adopted by RTD, SEPTA and GRTC primarily as a strategy for increasing transit use among infrequent customers, mitigating the impact of cash fare increases on ridership and promoting the use of prepaid tickets. Ridership changes following the implementation of the deep discount fare strategy significantly varied among the three transit agencies. RTD posted ridership increases, SEPTA's rate of ridership decline slowed and GRTC suffered severe losses. As noted in the analysis, regional economic and demographic conditions significantly influenced ridership trends for these three agencies. However, deep discount fares did appear to contribute to boosting RTD ridership levels above the rate attributable to economic growth and softened the combined impact of a severe recession and a high base cash fare on SEPTA patronage levels. In GRTC's case, the severity of the recession and structural changes in the Richmond job market more than offset any of the positive benefits of the deep discount fare program. In addition, GRTC was unable to attract enough new and infrequent customers to use its discounted fares.

Despite the different experiences among the three agencies, several key findings may be drawn from the analysis to help other transit agencies develop and implement deep discount fares:

- **Although ridership is primarily influenced by underlying economic and demographic conditions, a properly executed deep discount fare strategy can further promote ridership increases, or mitigate ridership losses while increasing revenues. An attractive fare and a comprehensive marketing campaign are essential for a deep discount fare strategy to succeed.**

  The success of RTD's fare strategy was largely attributable to the combined impact of a competitively priced fare and an aggressive marketing campaign that included expanded sales outlets, direct mail, discount coupon incentives, in-system advertising and promotional television spots. RTD targeted households with infrequent transit riders for direct mail FareSaver discount coupons. To ensure employee support, RTD offered bus drivers and telephone information center operators the opportunity to win prizes for distributing discount coupons.

  RTD fare-related ridership gains were also, to a lesser extent, attributable to its innovative Eco Pass program, which included free, or low cost annual passes to employees who worked for companies participating in the program. Employers participated in the program because they believed it gave employees a valuable benefit. In addition, the per pass cost to employers was low because RTD adopted the group insurance pricing concept by using available transit services and expected use to calculate the price of the pass.

  SEPTA's discounted token program combined an attractive 30 percent discount and a low minimum purchase requirement. This provided the opportunity for low income customers

who could not afford the cost of a multi-ride pass to make a small investment to receive a discount. To ensure increased use of tokens, SEPTA expanded the number of private retail sales outlets and installed token vending machines in its rapid rail stations. Customers recognized SEPTA's efforts to improve the availability of tokens and stated in a recent survey that token sales locations were convenient and that tokens were always available. However, most customers who took advantage of the token discounts were regular SEPTA customers and not new riders. This may be attributable to a lack of an aggressive marketing campaign focused on infrequent and potential customers. In addition, SEPTA's ability to attract new customers may have been hampered in part by the recession's impact that reduced the number of employed workers and consequently the number of potential transit customers.

GRTC's fare program included a marketing program that included many elements used by RTD. However, GRTC's marketing effort did not draw many new and infrequent users to the bus system. Most new and infrequent users reported they continued to use cash. Cash customers said that they reduced their use of GRTC services after the fare changes. Cash customer ridership significantly declined after a 25 percent increase in the cash fare in July 1993. It does not appear that increasing the discount from 25 percent to 40 percent on GRTC's deep discount ticket helped to rebuild ridership. Instead, regular customers switched to tickets and infrequent/new cash customers reduced their use of GRTC services. As a result, fare revenue and ridership continued to decline. GRTC's decision to reduce the discount to 20 percent contributed to further ridership losses during the first six months of 1994. Similar to SEPTA, GRTC's inability to attract new customers also may have been influenced in part by the Richmond region's severe recession. GRTC's market research data showed that most of its customers were infrequent users, making two or fewer trips a week. These customers may be using GRTC's services for travel to part-time jobs, or discretionary trips, both of which are sensitive to economic downturns. In contrast, SEPTA's market research surveys showed that a majority of respondents were frequent token and pass customers.

In addition, GRTC's ability to attract additional customers may also be attributable to the overall competitiveness of its services. Unlike larger metropolitan areas such as Philadelphia and Denver, central business district oriented transit services in small cities similar to Richmond do not have a significant time and cost advantage over the auto. This is because highway congestion, parking and general access to the central business district is not as constrained in small cities as it is in larger cities. According to the 1990 census, transit's share of travel within the Philadelphia and Denver regions was 11.6 percent and 4.2 percent, respectively, while it was 3.7 percent in the Richmond region. Because of these factors, it is somewhat more difficult for GRTC to compete with the auto, increase its market share and successfully use pricing to attract additional ridership.

- **A transit agency's deep discount marketing plan should be focused on attracting infrequent and new customers.** As part of the planning for its deep discount fare

strategy, RTD focused on increasing transit use among infrequent customers. RTD found in its early market research that infrequent customers comprised 34 percent of total weekday customers and predominantly used cash to pay their fares. RTD concluded that a prepaid deep discount fare would induce infrequent customers to switch from cash to tickets and provide an incentive to increase transit use by purchasing a multi-ride fare. As noted above, RTD targeted infrequent customer households with direct mail discount coupons. RTD's 1989 discount ticket survey found that 20 percent of ticket book purchasers increased the number of transit trips they took after purchasing the ticket books. It is unclear from RTD's survey analysis how many from this group were infrequent customers. However, RTD did report that the more frequent the number of trips, the greater the potential for purchase. RTD reported that 84 percent of purchases were by customers who had ridden the bus at least once a week. As a result, the survey results showed that RTD's fare program captured both infrequent (one to four trips per week) and frequent (five or more trips per week) customers.

As noted above, SEPTA's and GRTC's fare programs did not achieve a significant increase in the number of infrequent customers. Most SEPTA token users reported they were long term (more than three years) and frequent transit (using more than ten tokens a week) customers. Although the recession adversely affected the market for new customers, SEPTA might have attracted infrequent and new customers if it had carried out an aggressive out-of-system marketing campaign similar to RTD's.

Although GRTC did conduct a comprehensive marketing campaign, a relatively small percent of infrequent customers used discounted tickets according to the transit agency's 1992 on board survey. As a group, infrequent and new customers were disproportionate in noting reduced transit use. The market research also found that cash payment was common for all ridership groups, even for high frequency users despite the savings available. However, discounted tickets were used most by GRTC's frequent customers. The analysis recommended that the marketing program be geared more to infrequent and new customers who generally were younger (less than 34 years old) and had higher annual incomes ($25,000 to $50,000). GRTC's initial direct mail campaign was geared toward households with incomes less than $30,000. However, other elements of its marketing campaign were more broad based.

GRTC may have increased ticket sales by structuring its deep discount fare more toward its infrequent customers. Specifically, GRTC could have adopted SEPTA's approach and offered a SuperSaver ticket with a lower minimum ride requirement such as a two, or five-ride ticket, in addition to the ten-trip fare.

- **Implementation of deep discount fares significantly reduces the share of cash revenue.** Each of the three transit agencies reported a significant decline in the percent of cash as total revenue. Reduced cash revenue handling provides transit agencies with several benefits including reducing the risk of theft and lowering costs related to revenue counting,

storage and security. In addition, prepayment of fares improves revenue flows and provides float to a transit agency because it receives an up-front fare before the customer uses the agency's services.

- **Competing fares may adversely affect the success of a deep discount fare program. As a result, transit agencies should ensure its fares are priced for specific markets and do not overlap.** The analysis showed that the share of FareSaver revenue declined after RTD introduced Eco Pass. This is because given the opportunity, a FareSaver customer would likely switch to using an Eco Pass because it is usually free to employees of employers participating in the RTD program. In contrast, SEPTA token sales were not adversely affected by the availability of daily, weekly and monthly passes. This is because the two fare media are priced for separate markets. Passes are attractive for customers who use SEPTA for commuting and discretionary travel, while tokens are priced for riders who use SEPTA exclusively for commuting. In contrast to general experience, CTD token use increased, while pass use declined. SEPTA attributes this, in part, to customers switching from passes to tokens because of a reduction in discretionary travel. GRTC discontinued its pass when it introduced the Super Saver program to eliminate price competition.

- **Transit agencies should ensure that discounts are large enough to both attract new riders and encourage prepaid fares over cash, but do not adversely affect revenue flows.** To maintain a 60 percent fare operating ratio, GRTC raised its cash fare from $1.00 to $1.25, but did not change the price of its SuperSaver tickets. As a result, the discount off the cash fare increased from 25 percent to 40 percent. Presumably, GRTC did not raise the SuperSaver fare as a strategy for offsetting the impact of the cash fare increase. However, the revenue loss persisted after the fare change because ridership continued to decline because of the recession and movement by customers from the full cash fare to the discounted ticket. Due to these continuing losses, GRTC reduced the ticket discount to 20 percent in December 1993, and revenues increased in FY 1994.

- **Deep discount fares contribute to greater customer satisfaction and improved perceptions of transit service.** Market research conducted by all three agencies demonstrated strong satisfaction with the discounted fares. RTD and SEPTA customers used discounted fares because of the savings and convenience. SEPTA customers indicated that they saved up to $5.00 a week by using discounted tokens. The quality GRTC's service was rated higher overall by SuperSaver customers than by cash paying riders.

The above analysis demonstrates that a properly executed deep discount fare program can yield several benefits for a transit agency. Deep discounted fares can contribute to ridership increases, or, in some instances mitigate losses, reduce handling cash revenue, improve revenue flows and enhance customer satisfaction. When implemented with a cash fare increase, they can maintain or increase ridership, while simultaneously increasing an agency's revenues.

APPENDIX A

DENVER RTD FARESAVER MARKETING MATERIALS

1. **Summary of 1989 Fare Changes**
2. **FareSaver Discount Coupon**
3. **Bus Driver Incentive Brochure**
4. **Telephone Information Center Operator Incentive Brochure**
5. **Newspaper Advertisement Discount Coupon**
6. **Television Promotional Spot Scripts #1 and #2**
7. **Summary of Advertising Campaign for October 1989 RTD Board Meeting**
8. **On Board FareSaver Discount Coupon**

Just a Reminder:

Fares are changing September 1,1989

Details inside!

Regional Transportation District
1600 Blake Street
Denver, Colorado 80202

MKT-634 8/89

Denver Metro Fares:

Service	Current fare	New fare
Denver Local		
FareSaver Ticketbook	$ 6.75	$ 7.25
Peak cash	.75	1.00
Off-peak cash	.50	.50
Senior cash	.10	.15
Disabled cash	.10	.25
Regular pass	25.50	27.50
Student pass	21.50	23.00
Senior/disabled pass	18.00	19.00
Express		
FareSaver Ticketbook	11.25	12.00
Cash fare	1.25	1.50
Senior cash	.10	.15
Disabled cash	.10	.25
Regular pass	42.50	46.00
Student pass	36.00	39.00
Senior/disabled pass	26.00	27.50
Regional		
FareSaver Ticketbook	18.00	19.50
Cash fare	2.00	2.50
Senior cash	.10	.15
Disabled cash	.10	.25
Regular pass	68.00	74.00
Student pass	58.00	63.00
Senior/disabled pass	44.00	46.50
Circulator		
FareSaver Ticketbook	—	4.75
Cash fare	.50	.50
Senior cash	.10	.15
Disabled cash	.10	.25
Regular pass	17.00	18.50
Student pass	14.50	15.75
Senior/disabled pass	9.00	9.00
SeniorRide	.35	.50
HandyRide	.35	1.00
BroncoRide		
park-n-Ride	3.50	4.00
Federal Shuttle	1.00	2.00
Auraria Shuttle	.50	1.00
park-n-Ride Pass	22.00	25.00
Federal Shuttle Pass	6.40	13.00

A roll of $1.00 brass tokens (50) $45.00.
A roll of $.25 silver tokens (50) $11.25

Seniors and **Disabled** cash fares apply to off-peak hours only.

Boulder Metro Fares:

Service	Current fare	New fare
Boulder Local		
FareSaver Ticketbook	$ —	$ 4.75
Cash fare	.50	.60
Senior cash	.10	.15
Disabled cash	.10	.25
Regular pass	17.00	18.50
Student pass	14.50	15.75
Senior/disabled pass	12.00	12.75
Longmont		
FareSaver Ticketbook	—	2.25
Cash fare	.25	.35
Senior cash	.10	.15
Disabled cash	.10	.25
Regular pass	8.50	9.25
Student pass	7.25	8.00
Senior/disabled pass	7.25	7.75
Regional		
FareSaver Ticketbook	18.00	19.50
Cash fare	2.00	2.50
Senior cash	.10	.15
Disabled cash	.10	.25
Regular pass	68.00	74.00
Student pass	58.00	63.00
Senior/disabled pass	44.00	46.50
SeniorRide	.35	.50
HandyRide	.35	1.00
BroncoRide		
park-n-Ride	3.50	4.00
Federal Shuttle	1.00	2.00
Auraria Shuttle	.50	1.00
park-n-Ride Pass	22.00	25.00
Federal Shuttle Pass	6.40	13.00

A roll of $1.00 brass tokens (50) $45.00.
A roll of $.25 silver tokens (50) $11.25

Seniors and **Disabled** cash fares apply to off-peak hours only.

Special offer! Act fast!

Save up to $3.75 on RTD's new **FareSaver** *10-Ride Ticketbooks this November, December and January. And give yourself, your car and Better Air a break this winter. Discount offer good limited time only (see coupons bottom right).* **FareSaver** *rides good through 1990!*

Substantial savings!

New **FareSaver** *tickets from RTD lower bus fares: You get 10 rides for the price of eight - - the equivalent of two rides free (except Circulator Ticketbooks).*

But for a limited time, you'll get an extra $1.25 off each of three **FareSaver** *Ticketbooks. That can be a savings of 40% and more off cash fares!*

Take advantage of safe winter travel at cool savings! Fill out and redeem coupons at bottom right. Next time you ride, no need to carry - - or worry about - - exact change. And remember: Your ticketbooks are good through 1990, so you'll have plenty of time to use them all!

Coupons redeemable

***By Mail,** with check or money order payable to RTD:*

RTD **FareSaver** *Special*
P.O. Box 9769
Denver, Colorado 80209

***In person,** at any of these locations:*

- *King Soopers, Safeway and Vickers*
- *RTD Boulder Station 14th & Walnut*
- *RTD Civic Center Station Broadway & Colfax*
- *RTD Longmont Station 815 S. Main*
- *RTD Market Street Station 16th & Market*

Route & Schedule Information 778-6000

Special coupon savings!

New Fares

Service	Regular 10-Ride FareSaver	10-Ride FareSaver w/coupon	Total* Savings
Denver Local Peak	$ 7.25	$ 6.00	$ 4.00
Express	12.00	10.75	4.25
Regional	13.50	12.25	6.75
Boulder Local	4.75	3.50	2.50
Longmont Local	2.25	1.00	2.50
Circulator	4.75	3.50	1.50

* *Total savings based on these cash fares in effect September 1, 1989:*

Denver Local Peak	$ 1.00
Express	1.50
Regional	2.50
Boulder Local	.60
Longmont Local	.35
Circulator	.50

Cash in all three coupons and triple your total savings!

9KUSA RTD
Making a difference.

RTD November Fare$aver

$1.25 Off!

- Valid for purchase during November 1989
- One coupon per ticketbook
- Valid only if both sides completed
- Not redeemable for cash or good with any other offer
- Void if reproduced

Name (please print)
Address
City Zip
Day phone (optional)

RTD December Fare$aver

$1.25 Off!

- Valid for purchase during December 1989
- One coupon per ticketbook
- Valid only if both sides completed
- Not redeemable for cash or good with any other offer
- Void if reproduced

Name (please print)
Address
City Zip
Day phone (optional)

RTD January Fare$aver

$1.25 Off!

- Valid for purchase during January 1990
- One coupon per ticketbook
- Valid only if both sides completed
- Not redeemable for cash or good with any other offer
- Void if reproduced

Name (please print)
Address
City Zip
Day phone (optional)

How to Win

$500

Watch for details of the ***Fare$aver*** *contest for RTD bus drivers!*
And win one of 50 prizes!

Gift certificates for these stores:
Joslin's,
May D&F,
Gart Bros.,
Dave Cook,
Sears,
J.C. Penney,
Fred Schmid

First Prize:
$500 Gift Certificate
Second Prize:
$350 Gift Certificate
Third Prize:
$250 Gift Certificate

Plus...
Another 47 prizes:
$100 Gift Certificates

Watch for news on how to win with your August 29 paycheck!

RTD

How to Win

$250

Participate in the ***Fare$aver*** *contest for TIC Operators!*
And win one of 7 prizes!

Send those $1.25-off ***Fare$aver*** *flyers to cash customers every day!*

First Prize:
$250 Gift Certificate
Second Prize:
$200 Gift Certificate
Third Prize:
$150 Gift Certificate

Plus...
Another 4 prizes:
$100 Gift Certificates

Gift certificates at :
Joslin's, May D&F, Gart Bros, Dave Cook, Sears, J.C. Penney, Fred Schmid

RTD

Introducing Fare$aver!

With a bonus $1.25 off!

Sooner or later this winter you'll want to give yourself, your car and Better Air a break. That's when you'll want **FareSaver**, *RTD's new 10-Ride Ticketbook with two free rides.**

**excluding Circulator service*

Through October 15 take an extra bonus on your **FareSaver** *– an introductory $1.25 off – with completed coupon below.*

For safe winter travel at cool savings, redeem soon at any King Soopers, Safeway or Vickers – or mail coupon today.

With **FareSaver** *you won't need to worry about exact change. And rides are good throughout 1990, so you'll have plenty of time to use them all!*

Please hurry! Special offer expires soon!

For route and schedule information, phone 778-6000, daily until 8 pm.

Special coupon savings!

New Fares

Service	Regular 10-Ride FareSaver	10-Ride FareSaver w/coupon	Total Savings*
Denver Local Peak	$ 7.25	$ 6.50	$ 4.00
Express	12.00	10.75	4.25
Regional	19.50	18.25	6.75
Boulder Local	4.75	3.50	2.50
Longmont Local	2.25	1.00	2.50
Circulator	4.75	3.50	1.50

*Total savings based on these cash fares in effect Sept. 1, 1989:

Denver Local Peak	$ 1.00	Boulder Local	$ .80
Express	1.50	Longmont Local	.35
Regional	2.50	Circulator	.50

How to redeem coupon

In person, at any of these locations:

- **King Soopers, Safeway and Vickers**
- **RTD Civic Center Station Broadway & Colfax**
- **RTD Market Street Station 16th & Market**
- **RTD Boulder Station 14th & Walnut**
- **RTD Longmont Station 515 S. Main**

By Mail, *with completed coupon below send check or money order payable to RTD to:*

RTD **FareSaver Special**
P.O. Box 9769
Denver, Colorado 80209

To save $1.25 on your Fare$aver 10-Ride Ticketbook fill out and redeem this coupon today!

Yes! I'll take $1.25 off!

I want to lower my bus fares by completely filling out and redeeming this coupon by **October 15, 1989.** *I understand this offer is not good with any other discounts, is limited to one coupon per ticketbook purchase, and is not redeemable for cash. Void if reproduced.*

Name:

Address:

City:

State: Zip:

Day Phone (optional)

RTD

*I take the number of one-way trips per week circled (excluding trips on the 16th Street Mall Shuttle):

0 3 6 9 12 15 18 20+
1 4 7 10 13 16 19
2 5 8 11 14 17 20

*I usually pay my fares with (circle one):

Cash Tokens
10-Ride Ticketbook Pass

*The route(s) I ride most often is (are) listed below:

Local Route(s):

Express Route(s):

Regional Route(s):

Other Route(s):

*I'm purchasing the FareSaver Ticketbook circled:

Local Regional Circulator
Express Longmont Boulder

9KUSA Making a difference. Rocky Mountain News RTD

30-second FareSaver promo spot #1
9KUSA TV/Dave Sweeney
runs Tuesday, September 5 through Sunday, September 10

Announcer: 9 NEWS Dave Sweeney, Ambassador of the air.

Dave: On September 10th, every Rocky Mountain News will be equipped with a lightweight, easy to use air cleaner. This coupon. And it's free. It's been put here by Channel 9 and RTD, and it will save you $1.25 off this new FareSaver book. With the FareSaver you already get two free rides. With this coupon you save even more...and keep this much pollution out of your air.

So look for this coupon, it's free. But it's worthless without you.

Join Channel 9 and RTD and make a difference in the air we breathe.

30-second FareSaver promo spot #2
9KUSA TV/Dave Sweeney
runs Monday, September 11 through early October.

Announcer: 9 News Dave Sweeney, Ambassador of the air.

Dave: Nobody is saying never drive. Just think about when you have to drive---and drive only when you have to.

Car pool when you can. Combine trips. Keep your car tuned up, and running right.

And leave your car at home sometimes and take the bus.

This is the new FareSaver ticketbook. In it you get two free rides. And every time you ride the bus, you help keep this out of our air.

Think about it, and join Channel 9 and RTD and help make a difference in the air your breathe.

For Blue Sheet
October 10, 1989 Board Meeting

Rocky Mountain News, 9KUSA-TV Offer FareSaver Support

At no expense to RTD, the Rocky Mountain News and 9KUSA-TV have contributed over $50,000 in print space and air time to support the introduction of FareSaver. The News provided free a full-page Sunday, September 10 ad, attached. Channel 9, market-share leader, supported that ad with 30 free 30-second spots, inviting viewers to pick up the Sunday News for the special discount offer on FareSaver. Dave Sweeney, KUSA weatherman, was the spokesperson for the spot that in six days reached an estimated 946,000 different 18+ metro adults. This script, Promo Spot #1, is attached.

A second 9KUSA ad, a generic FareSaver promo, is airing through mid-October, when yet another free 30-second spot over 9KUSA will support RTD's in-home mailing through "Carol Wright" to 210,000 households. This second script, Promo Spot #2, is also attached.

All told, it is believed the value of such advertising may approach $100,000, while reaching some 80% of the total 18+ metro market.

August Ridership Up Almost 5%

August weekday revenue boardings are up an estimated 4.84% over August 1988. Twelve-month August 31, 1989 weekday revenue boardings, September 1988 through August 1989, show approximately a 3.45% increase, compared to the September 1987 through August 1988 period.

to save you $1.25!
your bus driver wants
$1.25 off your new
Fare$aver
Ticketbook!
Driver
Badge #:
9KUSA
Making a difference.
RTD
9KUSA
Making a difference.
RTD

Good news for our cash customers!

- You can lower your fare by switching to a new **Fare$aver** 10-Ride Ticketbook!
- You get 10 Rides for the price of eight (except Circulator Ticketbook)
- Rides good through **1989!**
- Through **October 15, 1989** take an extra $1.25 off your **Fare$aver** Ticketbook. Just fill out attached coupon and present at time of purchase.
- Coupon redeemable through **October 15, 1989** at all King Soopers, Safeway and Vickers plus these RTD outlets:

- Civic Center Station
  Broadway & Colfax
- Market Street Station
  1601 Market
- Boulder Station
  14th & Walnut
- Longmont Station
  815 S. Main

Coupon also redeemable by mail:
Send filled-out coupon with check or money-order payable to RTD to:
RTD Fare$aver
P.O. Box 9769
Denver, Colorado 80209

New Fares

Service	Regular 10-Ride Fare$aver	10-Ride Fare$aver w/coupon	Tot. Savings
Denver Local Peak	$ 7.25	$ 6.00	$ 4.0
Express	12.00	10.75	4.2
Regional	19.50	18.25	6.7
Boulder Local	4.75	3.50	2.5
Longmont Local	2.25	1.00	2.5
Circulator	4.75	3.50	1.5

*Total savings based on these cash fares in effect September 1, 1989:

Denver Local Peak	$ 1.0
Express	1.5
Regional	2.5
Boulder Local	.6
Longmont Local	.35
Circulator	.50

To save $1.25 on your Fare$aver 10-Ride Ticketbook fill out and redeem this coupon today!

Yes! I'll take $1.25 off!

I want to lower my bus fares by completely filling out and redeeming this coupon by **October 15, 1989.** I understand this offer is not good with any other discounts, is limited to one coupon per ticketbook purchase, and is not redeemable for cash. Void if reproduced.

Name: _____

Address: _____

City: _____

State: _____ Zip: _____

Day Phone (optional) _____

- I take the number of one-way trips per week circled (excluding trips on the 16th Street Mall Shuttles):

0 1 2 3 4 5 6 7 8 9 10 11 12 13 14 15 16 17 18 19 20+

- I usually pay my fares with (circle one):

Cash Tokens 10-Ride Ticketbook Pass

- The route(s) I ride most often is (are) listed below:

Local Route(s): _____

Express Route(s): _____

Regional Route(s): _____

Other Route(s): _____

- I'm purchasing the **Fare$aver** Ticketbook circled:

Local Regional Circulator
Express Longmont Boulder

MKT-514 8/89

APPENDIX B

GRTC SUPERSAVER MARKETING MATERIALS

1. **Newspaper Advertisements**
2. **Discount Coupon Incentives**
3. **Bus Operator Incentive**
4. **Sales Outlet Brochure**
5. **Summaries of Marketing Campaign Efforts, including Television Advertisements, Bus Operator Incentive and Direct Mail Campaign**

Newspaper Advertisement

PAY LESS. RIDE MORE.

With GRTC's New SUPER SAVER TICKETS,

save 25% to 60% on every ride!

New GRTC fares take effect February 2, 1992.
Cash fares are higher but the real news is the 'deep discounts' on GRTC's new SuperSaver Tickets. All riders—adults, students, senior citizens and disabled—can get big savings with SuperSaver Tickets. And you don't need to ride often to save.
Buy SuperSaver Tickets at over 90 sales outlets.

SUPER SAVER TICKET

SUPER SAVER TICKETS

	No. of Tickets	Cost/Ride	Price
SuperSaver-Ten	10	75¢	$7.50
Senior Citizen/Disabled	10	37½¢	$3.75
Student	20	50¢	$10.00
Commuter Express	10	$1.25	$12.50
Transfer with Supersaver Ticket			Free

CASH FARES

Base Fare	$1.00
Transfer with Cash	10¢
Commuter Express	$1.50
Trolley	Free
Special Service	$1.50
City-County Zone	25¢-45¢
JOBS Bus	$1.00

For more info, call 358-GRTC

GRTC
Greater Richmond Transit Company

WWBT 12 On Your Side

NEW GRTC FARES
Effective Sunday, February 2, 1992

New GRTC fares take effect February 2, 1992.
Cash fares are higher but the real news is the "deep discounts" on GRTC's new SuperSaver Tickets. All riders—adults, students, senior citizens and disabled —can get big savings with SuperSaver Tickets. And you don't need to ride often to save.
Buy SuperSaver Tickets at over 90 sales outlets.

SUPER SAVER TICKETS

	No. of Tickets	Cost/Ride	Price
SuperSaver-Ten	10	75¢	$7.50
Senior Citizen/Disabled	10	37½¢	$3.75
Student	20	50¢	$10.00
Commuter Express	10	$1.25	$12.50
Transfer with SuperSaver Ticket			Free

CASH FARES

Base Fare	$1.00
Transfer with Cash	10¢
Commuter Express	$1.50
Trolley	Free
Special Service	$1.50
City-County Zone	25¢-45¢
JOBS Bus	$1.00

For more information, call
358-GRTC

GRTC
Greater Richmond Transit Company

WWBT 12 On Your Side

NEW GRTC FARES
Effective Sunday, February 2, 1992

CASH FARE: $1.00

For complete fare information, including our new SuperSaver Tickets, see our ad in the front section of this paper.

GRTC
Greater Richmond Transit Company

PAY LESS. RIDE MORE.

save 20% to 60%

GRTC

SUPER SAVER TICKET

For more information, call 358-GRTC

save $1.00 on GRTC Super Saver Tickets APRIL off

Coupon must be filled out to be valid.

NAME

ADDRESS

CITY ZIP

TELEPHONE

I ride GRTC: Often ☐ Sometimes ☐ Never ☐

I need transportation for (check all that apply): Work ☐ Shopping ☐ School ☐ Personal errands ☐

I've been riding GRTC for: Never Rode ☐ 1 year or less ☐ 1 to 2 years ☐ 2 years or more ☐

Age: Under 18 ☐ 18-34 ☐ 35-50 ☐ 51-64 ☐ 65 or more ☐

Offer valid for $1 off one Adult, Senior Citizen/Disabled/Student, or Commuter Express SuperSaver Ticket purchased during April 1995. One coupon per purchase. Void if reproduced.

GRTC

save $1.00 on GRTC Super Saver Tickets MAY off

Coupon must be filled out to be valid.

NAME

ADDRESS

CITY ZIP

TELEPHONE

I ride GRTC: Often ☐ Sometimes ☐ Never ☐

I need transportation for (check all that apply): Work ☐ Shopping ☐ School ☐ Personal errands ☐

I've been riding GRTC for: Never Rode ☐ 1 year or less ☐ 1 to 2 years ☐ 2 years or more ☐

Age: Under 18 ☐ 18-34 ☐ 35-50 ☐ 51-64 ☐ 65 or more ☐

Offer valid for $1 off one Adult, Senior Citizen/Disabled/Student, or Commuter Express SuperSaver Ticket purchased during May 1995. One coupon per purchase. Void if reproduced.

GRTC

GRTC
Greater Richmond Transit Company

WWBT 12 On Your Side

With these additional discounts for a limited time only!

save $1.00 on GRTC Super Saver Tickets JUNE off

Coupon must be filled out to be valid.

NAME

ADDRESS

CITY ZIP

TELEPHONE

I ride GRTC: Often ☐ Sometimes ☐ Never ☐

I need transportation for (check all that apply): Work ☐ Shopping ☐ School ☐ Personal errands ☐

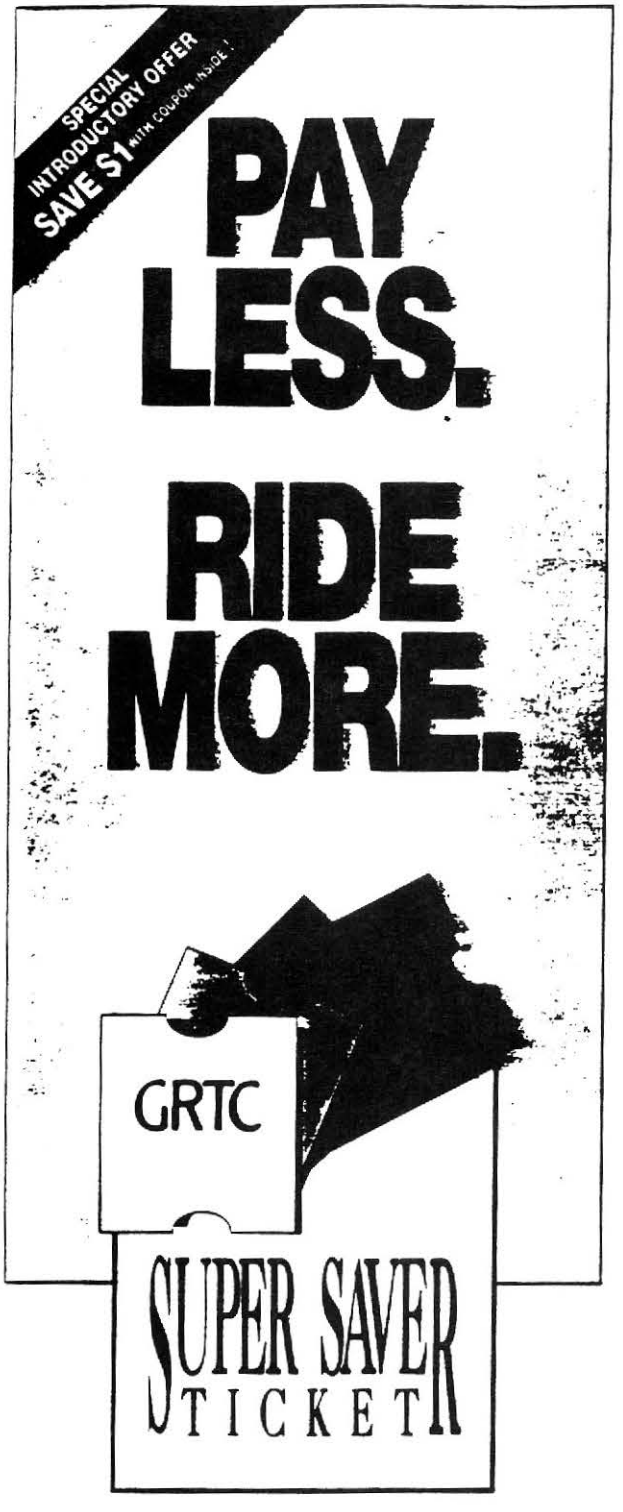
I've been riding GRTC for: Never Rode ☐ 1 year or less ☐ 1 to 2 years ☐ 2 years or more ☐

Age: Under 18 ☐ 18-34 ☐ 35-50 ☐ 51-64 ☐ 65 or more ☐

Offer valid for $1 off one Adult, Senior Citizen/Disabled/Student, or Commuter Express SuperSaver Ticket purchased during June 1995. One coupon per purchase. Void if reproduced.

GRTC

Reach Magazine



SPECIAL

SUPER SAVER

INTRODUCTORY DISCOUNT

Use this coupon and save an extra $1.00 on your first SuperSaver Ticket Book

SAVE $1.00

ON GRTC SUPER SAVER TICKETS

The following information must be completed:

NAME _____

ADDRESS _____

CITY _____ ZIP _____

TELEPHONE _____

Age: Under 18 ❑ 18-34 ❑ 35-50 ❑ 51-64 ❑ 65 or more ❑

Offer valid for one Adult, Senior Citizen/ Disabled,Student, or Commuter Express SuperSaver Ticket until 6/15/92. One coupon per purchase. Void if reproduced.

Operator No. _____

OFFICIAL BROADCAST SPONSOR
WWBT 12 On Your Side

OPERATORS !!

Perhaps your riders aren't yet convinced that SuperSaver Tickets really do offer a savings.

Perhaps they aren't convinced of the convenience using SuperSaver Tickets will provide . Well here's your golden opportunity to convince them that SuperSaver Tickets do offer a savings and are convenient to purchase and use!!

AND - a chance for you to win cash $$$ prizes in the SUPERSAVER OPERATOR CONTEST!!!

How does the contest work?

o For the contest, "Pay Less. Ride More" brochures will have a $1.00 discount coupon attached to them. This coupon brochure will be available at the Dispatchers' office. Pick up a stack before your run.
oSimply write in your name or seniority number in the space provided.
oAs riders board, give anyone *paying cash* the coupon brochure. The rider can use the $1.00-off coupon toward the purchase of tickets and save on the next ride! (However if someone using tickets asks for a coupon brochure, kindly give him or her one.)

oWe'll collect redeemed coupons from the outlets and put them in a large bin for a drawing in June.

When is the contest?

The contest will run for two days only! To give everyone a fair chance, Operators are asked to distribute the coupon brochures as follows:
Thursday, February 13: evening distribution - noon until the last run.
Friday, February 14: morning distribution - 5:00 a.m. to noon.

What are the prizes and how do I win?

Six **cash prizes** can be won -- two $50 dollar prizes, two $100 dollar prizes, one $200 and one **$500!**
In mid-June, five names will be ***drawn*** for the $50, $100, and $200 dollar prizes.

Be the Operator with the most redeemed coupons in the bin and win the ***$500 dollar prize.***

SUPERSAVER OPERATOR CONTEST - Riders pay less, your chance to win more!

Questions? Call Tracye Beard, Marketing Department, ext. 18.

Super Saver Ticket Outlets

SAVE 25 TO 60%

›owntown

›entral Fidelity Bank*
›onsolidated Bank *
›estar Bank*
P. Crowder's Deli
)5 Brook Rd.
›ominion Bank*
›deral Emp. Credit Union
›deral Bldg. Rm 9-012
›fferson National Bank*
›e Lunch Box
5 North 7th St.
›ain Street Center
0 E. Main St.
›tionsBank*
›w Farm Super Market
N. 18th St.
›te Aid Drugstores*
›gnet Bank*
›ndard Drug Co.
› & Broad Sts.

›st

›me Grocery Store
1 Mosby St.
›urch Hill Supermarket
)8 N. 22nd St.
›mmunity Pride Food*
›opy Stop Food Market
› N. 27th St.
›ky Convenience Strs.*
›k's Supermarket*
›net Bank*

West

Central Fidelity Bank*
Dominion Bank*
GRTC Dispatchers' Office
101 S. Davis Ave.
Grove Avenue Pharmacy
4911 Grove Ave.
Jefferson National Bank*
Lucky Convenience Strs.*
NationsBank*
Community Pride Food*
Rite Aid Drugstores*
Signet Bank*
Westhampton Pharmacy
5811 Grove Ave.
Crestar Bank*

North

Azalea Mall Office
Laurel Park Market
9520 Woodman Road
Jefferson National Bank*
Lucky Convenience Strs.*
Community Pride Food*
Richmond Check Cashers
116 E. Brookland Pk.
Rite Aid Drugstores*
Signet Bank *
Hermitage Pharmacy
6945 Lakeside Ave.

South

Bruce's Food Market
1601 Commerce Rd.
Buford Rd. Pharmacy
2612 Buford Rd.
Check Express
4712 W. Southside Plaza
C.J.'s Express
4007 Jeff Davis Hwy.
Come & Go Food Market
2413 Jeff Davis Hwy.
Omni Check Center
4632 Jeff Davis Hwy.
Community Pride Food*
Crestar Bank*
Gene's Supermarket
2500 Afton Ave.
Harvey's Food Center
305 Jeff Davis Hwy.
Kings Market
2102 Keswick Ave.
Lucky Convenience Strs.*
Max's Market
1123 Hull St.
NationsBank*
Nick's Supermarkets*
Pike Drug
2401 Jeff Davis Hwy.
Rite Aid Drugstores*
Signet Bank*

Tickets are also available at all Richmond and Hennico Safeway Stores

Get A Ticket To Ride

Super Saver Ticket Books From GRTC

›ase Note:

›tlets listed in bold type with an asterisk beside their names offer tickets at ›tiple locations. Please call 358-GRTC for the location nearest you.

GRTC Super Savers, Easy To Buy, Simple To Use!

SuperSaver Tickets, available at over 100 ticket outlets throughout the Richmond area, are easy to buy, simple to use! Adult, student, senior citizen, and disabled bus riders can get big savings with SuperSaver Tickets. At least 25 to 60 percent off the cash fare...and transfers are free.

Whether you ride the bus twice a day or less than once a month, SuperSavers are just the ticket for you. SuperSaver Tickets can be purchased at GRTC ticket outlets or by mail. Envelopes are available aboard all GRTC buses.

Not sure where GRTC buses go? Look inside for a full route map. Then see the back panel for the ticket outlet nearest you. For more information, call 358-GRTC. Buy your SuperSaver Tickets today and get a ticket to ride.

COMPARE FARES
CASH VERSUS SUPER SAVER TICKETS

SUPER SAVER TICKET FARES

Super Saver-Ten *(10 tickets; $.75 each)*	$ 7.50
Senior Citizen/Disabled* (10 tickets; $.37 each)	$ 3.75
Students** (20 tickets; $.50 each)	$ 10.00
Commuter Express Fare *(10 tickets; $1.25 each)*	$ 12.50
Super Saver Transfers	FREE

CASH FARES

Base Fare	$ 1.00
Commuter Express Fare	$ 1.50
JOBS Bus	$ 1.00
Senior Citizen/Disabled*	$ .37
City-County Zone	$ .25 - .45

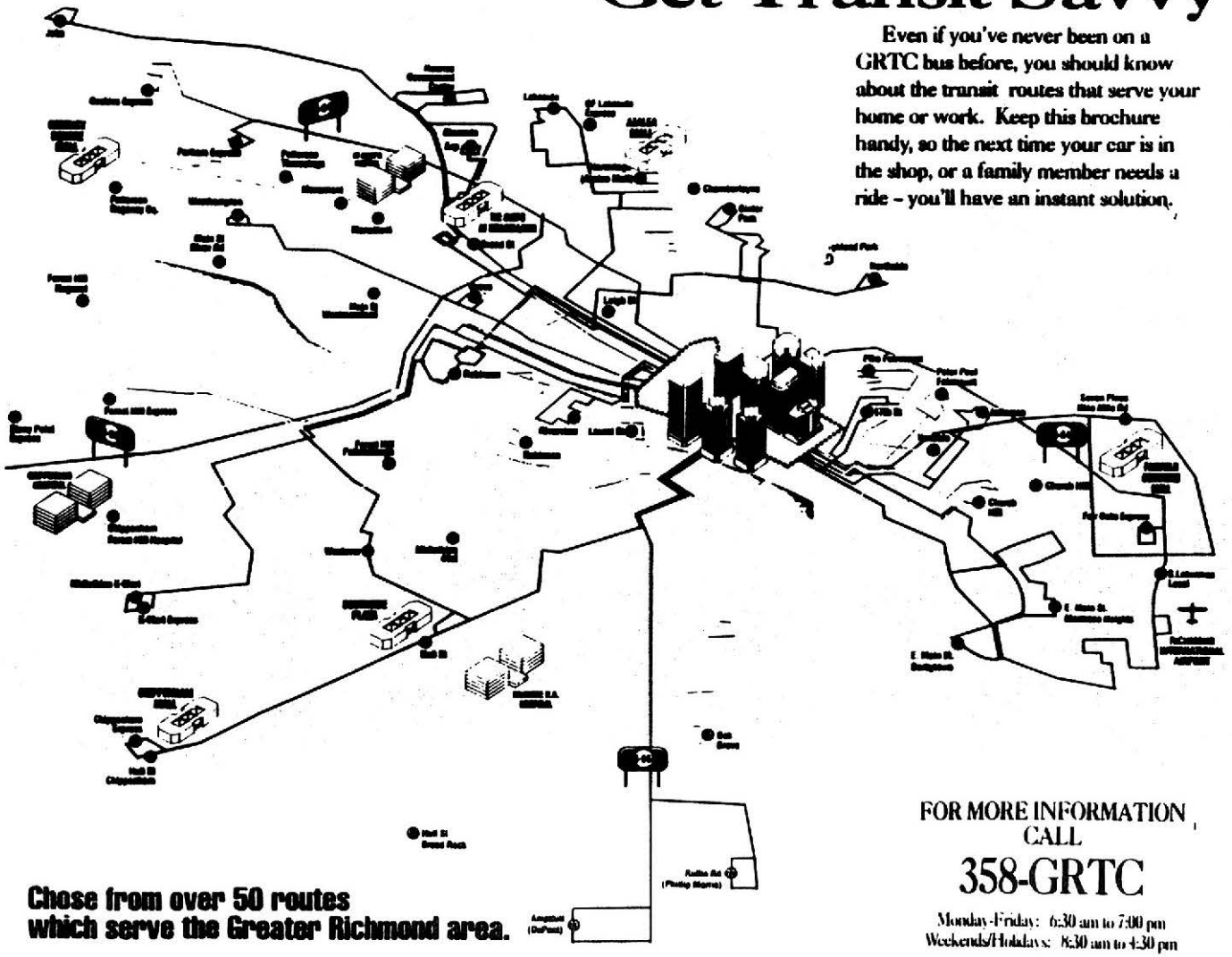
For GRTC Route and Schedule Information, call 358-GRTC, Monday - Friday, 6:30am to 7:00pm, weekends and holidays, 8:30am to 4:30pm.

**Senior/Disabled fares are not valid during rush hours Monday thru Friday; 7:30-9:30am and 4:00 to 6:00pm.*
***Student fares (grades 1-12 only) valid Monday thru Friday from 7:30am to 4:30pm only.*

Get Transit Savvy with GRTC

Even if you've never been on a GRTC bus before, you should know about the transit routes that serve your home or work. Keep this brochure handy, so the next time your car is in the shop, or a family member needs a ride – you'll have an instant solution.

Mail the coupon for the specific timetables you need, and consider purchasing SuperSaver Tickets with the special discount coupon, so that you won't even need change! Now that's Transit Savvy !!



Chose from over 50 routes which serve the Greater Richmond area.

FOR MORE INFORMATION CALL

358-GRTC

Monday-Friday: 6:30 am to 7:00 pm
Weekends/Holidays: 8:30 am to 4:30 pm

Free Timetables

Circle the timetables for the routes on the map that best serve you.

$1.00 off

Present at Sales Outlet

GRTC

Television Commercial
WWBT Channel 12 Sponsorship

To reach a broader audience, a television commercial was needed to further advertise the Super Saver Program. GRTC secured broadcast sponsorship from WWBT 12 in exchange for placing the station's logo on all collateral material. The station produced, free of charge, one television commercial that aired eight weeks beginning in February, 1992.

The commercial featured an actual GRTC operator, Carl El and employees who served as "people at the stop." Three versions were produced, 30, 20, and 15 seconds and aired at various times of the day and evening. The entire sponsorship package was worth $10,000.

Super Saver Operators' Contest

Since bus operators have the most contact with the public, the Super Saver Operators' Contest was implemented as a method of involving them in promoting the program. The contest was designed to encourage operators to distribute $1.00 discount coupons to all cash paying customers. The coupons were good toward the purchase of ticket books at all outlets. The drivers with the most coupons redeemed after the expiration date won prizes.

A total of 45,000 discount coupon brochures that consisted of Super Saver Program information, the discount coupon, and a space on the coupon for a badge number were printed. The brochures were distributed for two days in February; during morning shifts one day, evening shift the next. Out of the 45,000 distributed by 275 operators, over 20,000 were redeemed. The top winning operator had over 1,000 coupons redeemed.

Direct Mail Campaign
(March - June, 1992)

Direct mail was a large part of the program's introduction since it is the best way to distribute information and an incentive to a large, diverse audience. Val-Pak and REACH Magazine were initially used to distribute discount coupons for ticket book purchases. Although some overlap did occur, the objective was to blanket the Richmond/Henrico area as well as possible. Between Val-Pak and REACH, approximately 500,000 households were targeted.

In addition, to target households with incomes under $30,000 per year in the GRTC service area, a special mailing list was purchased from Donnelley Marketing. The special brochure mailed to this group included an abbreviated system map and an outlet listing in addition to the discount coupon.

Targeted Areas

Fan
Upper Fan/Carytown
Near West End
Broad Street Corridor
Regency/Parham Road Area
West End, River Road/University of Richmond
Far West End
Northwestern Henrico
Lakeside
Azalea Area
Eastgate
Highland Spring/Sandston
Laburnum, Fairgrounds
Church Hill/Shockoe Bottom
Southside
Forest Hill Area
Bon Air
Meadowbrook

Results

Val-Pak - Return rate - 2.5 %

REACH - Return rate - 2 %

Solo Mailer - Return rate - 1 %

*U.S. GOVERNMENT PRINTING OFFICE: 1995-602-188/20009

Evaluation of deep discount fare strategies