MARKET FACTS

EFFECTS OF PROPOSED FARE INCREASES ON RIDERSHIP

A Report To:

Southern California Rapid Transit District

Submitted by: SDR/SN
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BACKGROUND AND OBJECTIVES

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In July, 1982, the Southern California Rapid Transit District lowered the base fare for a one-way bus trip from 85¢ to 50¢. The fare decrease was made possible through funding generated by Proposition A.

Prior to the fare cut, ridership was at approximately 1.3 million average daily boardings. After the price reduction was instituted, ridership increased to its current level of 1.5 million average daily boardings. Estimated ridership by July, 1985, is projected to average 1.8-1.9 million daily.

In July, 1985, (SCRTD Fiscal Year 1986), some of the Proposition A funds will be allocated to construction of the new Metrorail. As a result, bus fare subsidies will be reduced and fares may be increased. The new bus fare could rise to at least 75¢ and go even as high as $1.25. In addition, the County Commission wants the SCRTD to cut service at the time of the rate increase in order to minimize operating costs.

The SCRTD is interested in determining what type of positioning strategy would optimize retainment of their ridership base and curtail revenue losses once the new fares go into effect.

This research presents a plan for conducting a two-phased consumer research study that will accomplish that goal.

The specific objectives of this research were to:

1) develop a positioning strategy that will minimize ridership loss and curtail declines in fare revenues

2) evaluate the effect of various possible fare levels on the RTD's ridership base

3) determine the minimum that the SCRTD must do in terms of improving service and equipment at different fare levels to maximize strategy

4) ascertain the impact of rate increases on regular riders, both by type (transit dependent vs. discretionary) and by demography.

SUMMARY OF FINDINGS

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° In interpreting trade-off analysis, it is important to keep in mind that the model assumes total knowledge and awareness by the public of each offering. Therefore, effective communication of any service increases by the RTD is essential.

° In addition, to the extent that an advertising campaign makes people perceive current RTD offerings more favorably, ridership levels will be positively affected.

° Five attributes were examined in the trade-off analysis. They are:

- ° Fare level
- ° Increased evening and weekend service
- ° Increased attention to passenger comfort and maintenance
- ° Fume emission
- ° Security on buses

° No simulations were conducted with increased levels of security as they had virtually no effect on ridership. If uniformed security can't be on all buses at all times (which clearly isn't feasible), intermittent levels of uniformed security do not appear to make riding the RTD more attractive.

° The service increase having the greatest impact on ridership is increased evening and weekend service.

° If no service increases were offered and RTD fares were raised, a fare of 75¢ would maximize RTD revenues.

° If evening and weekend service was increased on those bus lines which currently have only hourly service, then a fare of 85¢ could be charged.

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° Transit dependent riders (those riding 6-7 days a week) are more likely than discretionary riders to be positively affected by increased evening and weekend service.

° Discretionary riders (those paying cash), however, are more likely than transit dependents to respond to increased attention to passenger comfort/preventive maintenance and a decrease in fume emission.

° Transit dependents are far more likely than discretionary riders to "definitely not ride" the RTD at a fare level of 85¢. Although they may still have to ride the bus, this may be indicative of their extreme displeasure once fares go beyond 75¢ and no increases in service are offered to them.

° Discretionary riders are more likely to pay cash for a bus ride, while transit dependents are more likely to use a bus pass.

° Females are somewhat more likely than males to be transit dependent and therefore, take more bus trips per week than do males.

° Discretionary riders largely just use the bus for transportation to and from work, while transit dependents also use the bus to go shopping and for entertainment trips.

° Those improvements respondents felt were the most urgent for the RTD to make were:

- ° Better coordination of bus schedules at transfer points
- ° Less crowding/more seating on buses
- ° By and large, respondents felt that the RTD bus drivers were knowledgeable and that there were already enough express/limited RTD routes, as these were not rank ordered as being improvements the RTD should implement quickly.
- ° Overwhelmingly, respondents did not appear to want graduated fares.

CONCLUSIONS AND RECOMMENDATIONS

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° If the RTD is to raise fares and not raise consumer perceptions of RTD service, the fare which will generate the maximum revenue is 75¢. If fares are raised beyond 75¢, losses in ridership will exceed increased revenues generated by the higher fare and total revenues will begin to decrease.

° It is anticipated that a 75¢ fare will result in a 5-25% increase in revenues.

° Any increases in service should focus on a more frequent evening and weekend service on those lines where buses currently only run hourly.

° In addition, current advertising efforts should stress the frequency of evening and weekend service on most lines, and how often buses really do run during "off" hours.

° If actual increases in evening and weekend service are effected and/or consumer perceptions of evening and weekend service are raised, the RTD could raise their fares to 85¢. However, the cost of increasing service and/or advertising must be measured against the revenue increases. It is estimated that revenues would increase 15-40% (from current levels) at a fare of 85¢ if the maximum wait for evening and weekend service was decreased from 1 hour to 45 minutes, and 32-50% at a fare of 85¢ if the maximum wait for evening and weekend service was decreased from 1 hour to 30 minutes. However, a fare increase to 75¢ with no increases in evening and weekend service would result in a revenue increase of 5-25% from current levels. To the extent that it costs less than 10% of current revenues to effect a 45 minute maximum wait or 25% of current revenues to effect a 30 minute maximum wait on evenings and weekends, then this increased service should be offered/advertised and fares should be raised to 85¢.

° Other points the RTD should concentrate on (and/or strive to improve consumers' perceptions of) are better coordination of bus schedules at transfer points and less crowding/more seating on buses. These are the two changes (outside of the trade-off attributes) that the public sees as the most urgent.

° If this study is to be repeated prior to an increase in bus fares, then six attributes should be included in the trade-off analysis. They are:

- ° Fare
- ° Evening and weekend service
- ° Increased attention to passenger comfort/preventive maintenance
- ° Decrease in fume emissions
- ° Coordination of bus schedules at transfer points
- ° Crowding/or availability of seating on buses

FOREWORD

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For the purpose of this study, Discretionary and Transit Dependent riders are defined as follows:

Discretionary - Those riders who either own an automobile, van, truck or other form of motorized transportation or who have use of such a vehicle either all or most of the time.

Transit Dependent - Those riders who do not own a motorized vehicle and who do not have frequent use of such a vehicle.

Confidence testing was performed on the figures in the following report, and throughout this report, the following notation will be used:

◯ indicates that this number is significantly higher than its counterpart(s) at the 90% level of confidence. That is, one can be 90% confident that the differences between the two numbers are due to actual differences in opinion or behavior and not to coincidence or to random chance.

□ indicates that this number is significantly lower than its counterpart(s) with a 90% level of confidence that this difference is meaningful and not due to chance.

The report that follows summarizes the most pertinent findings of this study and is divided into two sections; one to discuss riding habits and demographics, and one to discuss the trade off analysis.

TRADE-OFF ANALYSIS

In addition to ordinary tabulations, a trade-off analysis was included in the project to provide price elasticity information. This analysis examined the impact of various service attributes' impact of ridership at various fare levels.

The attributes included in this analysis were selected after a series of focus group discussions were held. A complete description of these attributes are included in the questionnaire appended to this report. A summary follows:

Maximum Waiting Time - Weekends & Evenings

- As currently offered - up to 1 hour on some lines
- A maximum wait of 45 minutes on all lines
- A maximum wait of 30 minutes on all lines

Attention to passenger comfort and vehicle maintenance

- As currently offered
- Increased attention to passenger comfort - e.g., better maintenance of air conditioning and heating
- Increased attention to passenger comfort and more frequent preventive maintenance to insure against buses breaking down

Fumes

- As currently emitted
- A 25% reduction in fumes emitted by buses
- A 50% reduction in fumes emitted by buses

Security

- Undercover security on some bus lines (as currently done)
- Uniformed security on high crime lines
- Uniformed security on all lines

In addition, 6 fare levels (interpolated from the linear levels included in the actual trade-off task) were examined in this analysis.

Fares

- Current fare - 50¢
- 60¢
- 75¢
- 85¢
- $1.00
- $1.25

Two pieces of data were developed for each simulated fare and service offering which follows: They are:

- The decrease in likelihood of ridershp at that service and fare offering
- The percentage of respondents who are expected to "definitely not ride" at that service and fare offering.

When interpreting the data, it must be remembered that a decrease in likelihood of ridership does not translate 1:1 into a drop in ridership. Each respondent would have a threshold below which they would not ride, however, this would differ respondent-by-respondent. In addition, circumstances outside of the RTD's control (e.g., the price of gasoline, the location of respondent's destinations, etc.) would make this threshold vary at different times for any individual respondent. However, the expected decrease in ridership would certainly be greater than those respondents simulated as a "definitely would not ride" for that fare and service offering. Therefore, we have included minimum and maximum estimates of ridership decreases for each fare and service offering simulated on the following pages. The minimum is the percentage of "definitely won't rides".

The maximum is an approximate mean of the "definitely won't rides" and the decrease in likelihood of ridership for that service and fare offering. Although these are somewhat arbitrary estimates, included only to develop revenue estimates, it should be noted that all simulations have been analyzed in this manner. Therefore, the revenue estimates developed are relatively accurate. That is, since they were all calculated in the same manner, given that the drop in rider- ship would be consistent with decreases in likelihood of riding (in some unknown proportion), the offering showing maximum revenues would still produce maximum revenues even if the decrease in ridership is slightly less/greater than the maximum decreases shown.

In addition, in interpreting these data, the reader should understand that the model assumes total knowledge and awareness by the public of each offering. That is to say that the simulated offering for an increase in fares with increased service assumes everybody understands that service increase. Therefore, perceived increases in service can raise ridership levels as well as actual service increases. For example, if an advertising campaign emphasizes how often buses run on weekends and during evening hours and people have a perception of more frequent service, this perception may increase ridership as well as implementing more frequent service would. The public believes RTD buses emit too many fumes. Rather than decreasing fumes by 25%, the RTD could, for example, address this issue by telling respondents how little buses pollute compared to the automobiles they replace. To the extent that the public views RTD buses as less polluting, then utilities for ridership will increase proportionately to those simulated for increased service on this attribute.

The following five tables show the effect of fare increases on ridership at various fare levels (60¢, 75¢, 85¢, $1.00, $1.25). In addition, they show how ridership increases/ decreases as increased service offerings are implemented at each fare level. An increased service offering becomes a viable alternative when the increased offering costs the RTD less than the additional revenue it is estimated to bring in. For example, on the first table (60¢ fares), with a decrease in ridership estimated at 6-12%, the RTD would increase their revenues by 5.6-12.8% (estimated $105.60-$112.80 for every current $100 of revenue) at the higher fare. Decreasing the maximum wait on weekends and evenings to 45 minutes would result in no loss of ridership at the increased fare and therefore, revenues would increase by 20% ($120.00 for every current $100 of revenue). To the extent that it costs less than the difference in these offerings (maximum of $14.40 - minimum of $7.20 for every current $100 of revenue, i.e., a total of 7%-14% of current revenues) to increase evening and weekend service, then it is a good idea to offer the increased service. If it costs the RTD more than the difference in revenues shown, then the RTD should not increase service in that manner.

It should be noted that no simulations were conducted with increased levels of security as they had virtually no impact on ridership estimates. Current security measures were seen as being as good as uniformed security intermittently riding buses either on high crime lines or on all lines. To the extent that uniformed security can't be on all buses at all times (which clearly isn't feasible), the institution of uniformed security guards does not make riding the RTD more attractive.

The following 5 tables examine the effect of 5 fare increases individually with and without increased service being offered. It is clear that at all increased fare levels, the increased service that most positively affects ridership is increased evening and weekend service.

TOTAL RESPONDENTS

Effects of Decreases in Ridership at a Fare of 60¢:

Assumed Decrease	Revenues Per Current $100:
0%	$120.00
2%	$117.60
4%	$115.20
6%	$112.80
8%	$110.40
10%	$108.00
12%	$105.60
14%	$103.20
16%	$100.80
18%	$ 98.40
20%	$ 96.00

Raise Fares to 60¢:	Decrease* in Average Likelihood %	Definitely** Won't Ride %	Estimates of Decrease in Ridership %	Revenues Per Current $100 Estimated Maximum	Revenues Per Current $100 Estimated Minimum
Do nothing to increase attractiveness of service:	17	6	6 - 12	$112.80	$105.60
Steps to increase attractiveness of service:					
Decrease maximum wait to 45 minutes (Evenings and weekends)	5	2	0	$120.00	$120.00
Decrease maximum wait to 30 minutes (Evenings and weekends)	11†	1	0 - 6†	$127.20	$120.00
Increased attention to passenger comfort (A/C; Heat)	11	6	6 - 8	$112.80	$110.40
More frequent preventive maintenance (and increased attention to passenger comfort)	6	4	2 - 5	$117.60	$114.00
Decrease fumes by 25%	9	4	4 - 7	$115.20	$111.60
Decrease fumes by 50%	6	6	4 - 6	$115.20	$112.80

Confidence Intervals

* 4% (at 90%) ** 2% (at 90%)

† Increase

TOTAL RESPONDENTS

Effects of Decreases in Ridership at a Fare of 75¢:

Assumed Decrease	Revenues Per Current $100:
0%	$150.00
2%	$147.00
4%	$144.00
6%	$141.00
8%	$138.00
10%	$135.00
12%	$132.00
14%	$129.00
16%	$126.00
18%	$123.00
20%	$120.00
22%	$117.00
24%	$114.00
26%	$111.00
28%	$108.00
30%	$105.00
32%	$102.00
34%	$ 99.00
36%	$ 96.00

Raise Fares to 75¢:	Decrease* In Average Likelihood %	Definitely** Won't Ride %	Estimates of Decrease in Ridership %	Revenues Per Current $100 Estimated Maximum	Revenues Per Current $100 Estimated Minimum
Do nothing to increase attractiveness of service:	42	16	16 - 30	$126.00	$105.00
Steps to increase attractiveness of service:					
Individual:					
Decrease maximum wait to 45 minutes (eves. and weekends)	31	9	9 - 20	$136.50	$120.00
Decrease maximum wait to 30 minutes (eves. and weekends)	17	7	6 - 12	$141.00	$132.00
Increased attention to passenger comfort (A/C; Heat)	37	12	12 - 24	$132.00	$114.00
More frequent preventive maintenance (and A/C; Heat)	34	13	12 - 24	$132.00	$114.00
Decrease fumes by 25%	36	12	12 - 24	$132.00	$114.00
Decrease fumes by 50%	31	13	12 - 22	$132.00	$117.00
Combinations:					
Max Wait 45; more A/C; 25% fumes	17	6	6 - 12	$141.00	$132.00
Max Wait 45; more A/C; 50% fumes	12	6	6 - 9	$141.00	$136.50
Max Wait 45; Preventive maintenance; 25% fumes	11	5	5 - 8	$142.50	$138.00
Max Wait 30; more A/C; (same fumes)	11	3	3 - 7	$145.50	$139.50
Max Wait 30; more A/C; 25% fumes	2	3	0	$150.00	$150.00
Max Wait 30; 25% fumes; (same maint)	8	3	3 - 6	$145.50	$141.00
Max Wait 30; 50% fumes; (same maint)	5	6	2 - 6	$147.00	$141.00

Confidence Interval

* 4% (at 90%) ** 3.5% (at 90%)

TOTAL RESPONDENTS

Effects of Decreases in Ridership at a Fare of 85¢:

Assumed Decrease	Revenues Per Current $100:
0%	$170.00
2%	$166.60
4%	$163.20
6%	$159.80
8%	$156.40
10%	$153.40
12%	$149.60
14%	$146.20
16%	$142.80
18%	$139.40
20%	$136.00
22%	$132.60
24%	$129.20
26%	$125.80
28%	$122.40
30%	$119.00
32%	$115.60
34%	$112.20
36%	$108.80
38%	$105.40
40%	$102.00
42%	$ 98.60
44%	$ 95.20

Raise Fares to 85¢:	Decrease* in Average Likelihood %	Definitely** Won't Ride %	Estimates of Decrease in Ridership %	Revenues Per Current $100 Estimated Maximum	Revenues Per Current $100 Estimated Minimum
Do nothing to increase attractiveness of service:	53	27	27 - 40	$124.10	$102.00
Steps to increase attractiveness of service:					
Individual:					
Decrease maximum wait to 45 minutes (eves. and weekends)	45	18	18 - 32	$139.40	$115.60
Decrease maximum wait to 30 minutes (eves. and weekends)	33	11	11 - 22	$151.30	$132.60
Increased attention to passenger comfort (A/C; Heat)	50	25	25 - 38	$127.50	$105.40
More frequent preventive maintenance (and A/C; Heat)	47	20	20 - 34	$136.00	$112.20
Decrease fumes by 25%	48	20	20 - 34	$136.00	$112.20
Decrease fumes by 50%	45	22	20 - 34	$136.00	$112.20
Combinations:					
Preventive maint; 25% fumes; (same service)	39	17	17 - 28	$141.10	$122.40
Preventive maint; 50% fumes; (same service)	37	17	17 - 28	$141.10	$122.40
Max Wait 45; 25% fumes; (same maint)	39	15	15 - 27	$144.50	$124.10
Max Wait 45; 50% fumes; (same maint)	34	14	14 - 24	$146.20	$129.20
Max Wait 45; More A/C; 25% fumes	33	11	11 - 22	$151.30	$132.60
Max Wait 45; More A/C; 50% fumes	30	11	11 - 21	$151.30	$134.30
Max Wait 45; Preventive maint; 25% fumes	28	10	10 - 19	$153.00	$137.70
Max Wait 45; Preventive maint; 50% fumes	25	9	9 - 17	$154.70	$141.10
Max Wait 30; 25% fumes; (same maint)	27	9	9 - 18	$154.70	$139.40
Max Wait 30; 50% fumes; (same maint)	22	10	10 - 16	$153.00	$142.80
Max Wait 30; More A/C; 25% fumes	20	6	6 - 13	$159.80	$147.90
Max Wait 30; More A/C; 50% fumes	16	8	8 - 12	$156.40	$149.60
Max Wait 30; Preventive maint; 25% fumes	16	4	4 - 10	$163.20	$153.00
Max Wait 30; Preventive maint; 50% fumes	11	6	6 - 9	$159.80	$154.70

Confidence Interval
* 4% (at 90%) ** 3.5% (at 90%)

TOTAL RESPONDENTS

Effects of Decreases in Ridership at a Fare of $1.00:

Assumed Decrease	Revenues Per Current $100:
0%	$200.00
2%	$196.00
4%	$192.00
6%	$188.00
8%	$184.00
10%	$180.00
12%	$176.00
14%	$172.00
16%	$168.00
18%	$164.00
20%	$160.00
22%	$156.00
24%	$152.00
26%	$148.00
28%	$144.00
30%	$140.00
32%	$136.00
34%	$132.00
36%	$128.00
38%	$124.00
40%	$120.00
42%	$116.00
44%	$112.00
46%	$108.00
48%	$104.00
50%	$100.00
52%	$ 96.00

Raise Fares to $1.00:	Decrease* In Average Likelihood %	Definitely Won't Ride %	**Estimates of Decrease in Ridership %	Revenues Per Current $100 Estimated Maximum	Estimated Minimum
Do nothing to increase attractiveness of service:	62	40	40 - 51	$120.00	$ 98.00
Steps to increase attractiveness of service:					
Individual:					
Decrease maximum wait to 45 minutes (eves. and weekends)	58	34	34 - 46	$132.00	$108.00
Decrease maximum wait to 30 minutes (eves. and weekends)	48	28	28 - 38	$144.00	$124.00
Increased attention to passenger comfort (A/C; Heat)	61	38	38 - 50	$124.00	$100.00
More frequent preventive maintenance (and A/C; Heat)	58	36	36 - 47	$128.00	$106.00
Decrease fumes by 25%	61	35	35 - 48	$130.00	$104.00
Decrease fumes by 50%	58	34	34 - 46	$132.00	$108.00
Combinations:					
More A/C; 25% fumes; (same service)	56	34	34 - 45	$132.00	$110.00
More A/C; 50% fumes; (same service)	55	31	31 - 43	$138.00	$114.00
Max Wait 45; 25% fumes; (same maint)	57	24	24 - 40	$152.00	$120.00
Max Wait 45; 50% fumes; (same maint)	50	25	25 - 38	$150.00	$124.00
Max Wait 45; More A/C; (same fumes)	55	31	31 - 43%	$138.00	$114.00
Max Wait 45; Preventative maint; (same fumes)	52	29	29 - 40	$142.00	$120.00
Max Wait 45; More A/C; 25% fumes	48	25	25 - 36	$150.00	$128.00
Max Wait 45; More A/C; 50% fumes	45	26	25 - 36	$150.00	$128.00
Max Wait 45; Preventive maint; 25% fumes	45	22	22 - 37	$156.00	$132.00
Max Wait 45; Preventive maint; 50% fumes	42	22	22 - 33	$156.00	$134.00
Max Wait 30; 25% fumes; (same maint)	44	23	22 - 33	$156.00	$134.00
Max Wait 30; 50% fumes; (same maint)	41	21	21 - 31	$158.00	$138.00
Max Wait 30; More A/C; (same fumes)	45	26	26 - 35	$148.00	$130.00
Max Wait 30; Preventive maint;(same fumes)	42	21	21 - 31	$162.00	$138.00
Max Wait 30; More A/C; 25% fumes	39	19	19 - 29	$162.00	$142.00
Max Wait 30; More A/C; 50% fumes	36	19	19 - 27	$162.00	$146.00
Max Wait 30; Preventive maint; 25% fumes	36	18	18 - 27	$164.00	$146.00
Max Wait 30; Preventive maint; 50% fumes	33	15	15 - 24	$170.00	$152.00

Confidence Intervals
* 4% (at 90%) ** 5% (at 90%)

TOTAL RESPONDENTS

Effects of Decreases in Ridership at a Fare of $1.25:

Assumed Decrease	Revenues Per Current $100:
0%	$250.00
2%	$245.00
4%	$240.00
6%	$235.00
8%	$230.00
10%	$225.00
12%	$220.00
14%	$215.00
16%	$210.00
18%	$205.00
20%	$200.00
22%	$195.00
24%	$190.00
26%	$185.00
28%	$180.00
30%	$175.00
32%	$170.00
34%	$165.00
36%	$160.00
38%	$155.00
40%	$150.00
42%	$145.00
44%	$140.00
46%	$135.00
48%	$130.00
50%	$125.00
52%	$120.00
54%	$115.00
56%	$110.00
58%	$105.00
60%	$100.00
62%	$ 95.00

Raise Fares to $1.25:	Decrease* In Average Likelihood %	Definitely** Won't Ride %	Estimates of Decrease in Ridership %	Revenues Per Current $100 Estimated Maximum	Revenues Per Current $100 Estimated Minimum
Do nothing to increase attractiveness of service:	70	53	53 - 62	$117.50	$ 95.00
Steps to increase attractiveness of service:					
Individual:					
Decrease maximum wait to 45 minutes	66	49	49 - 58	$127.50	$105.00
Decrease maximum wait to 30 minutes	59	49	49 - 54	$127.50	$115.00
Increased attention to passenger comfort (A/C; Heat)	69	53	53 - 61	$117.50	$ 97.50
More frequent preventive maintenance (and increased passenger comfort)	67	52	52 - 60	$120.00	$100.00
Decrease fumes by 25%	69	52	52 - 61	$120.00	$ 97.50
Decrease fumes by 50%	67	49	49 - 58	$127.50	$105.00
Combinations:					
More A/C; 25% Fumes; (same service)	67	48	48 - 58	$130.00	$105.00
More A/C; 50% Fumes; (same service)	64	47	47 - 56	$132.50	$110.00
Max Wait 45; 25% Fumes (same maintenance)	64	44	44 - 54	$140.00	$115.00
Max Wait 45; 50% Fumes (same maintenance)	62	44	44 - 53	$140.00	$117.50
Max Wait 45; More A/C; (same fumes)	64	47	47 - 56	$132.50	$110.00
Max Wait 45; Preventive maintenance; (same fumes)	62	46	46 - 54	$135.00	$115.00
Max Wait 45; More A/C; 25% fumes	61	42	42 - 52	$145.00	$120.00
Max Wait 45; More A/C; 50% fumes	59	42	42 - 51	$145.00	$122.50
Max Wait 45; Preventive maintenance; 25% fumes	59	42	42 - 51	$145.00	$122.50
Max Wait 45; Preventive maintenance; 50% fumes	56	42	42 - 49	$145.00	$127.50
Max Wait 30; 25% Fumes; (same maintenance)	58	42	42 - 50	$145.00	$125.00
Max Wait 30; 50% Fumes; (same maintenance)	55	41	41 - 48	$147.50	$130.00
Max Wait 30; More A/C; (same fumes)	58	44	44 - 51	$140.00	$122.50
Max Wait 30; Preventive maintenance; (same fumes)	56	42	42 - 49	$145.00	$127.50
Max Wait 30; More A/C; 25% fumes	55	38	38 - 47	$155.00	$132.50
Max Wait 30; More A/C; 50% fumes	53	41	41 - 47	$147.50	$132.50
Max Wait 30; Preventive maintenance; 25% fumes	53	37	37 - 45	$157.50	$137.50
Max Wait 30; Preventive maintenance; 50% fumes	50	39	39 - 45	$152.50	$137.50

Confidence Intervals
* 4.5% (at 90%) ** 5% (at 90%)

The following two tables summarize the results of the previous five tables. Looking at the estimated revenues, it becomes clear that a 75¢ fare with no increase in services will maximize RTD revenues. If service incrases are implemented (particularly increased evening and weekend service), a fare of 85¢ will maximize revenues. This, however, is only a good idea to the extent that it costs less to implement than the difference in revenue estimates shown on this table.

TOTAL RESPONDENTS - DECREASES IN LIKELIHOODS/DEFINITELY WON'T RIDES (SUMMARY TABLE)

	At 60¢		At 75¢		At 85¢		At $1.00		At $1.25	
	Decrease in Average Likelihood	Definitely Won't Ride	Decrease in Average Likelihood	Definitely Won't Ride	Decrease in Average Likelihood	Definitely Won't Ride	Decrease in Average Likelihood	Definitely Won't Ride	Decrease in Average Likelihood	Definitely Won't Ride
	%	%	%	%	%	%	%	%	%	%
Do nothing to increase attractiveness of service:	17	6	42	16	53	27	62	40	70	53
Individual Changes:										
Decrease maximum wait to 45 minutes	5	2	31	9	45	18	58	34	66	49
Decrease maximum wait to 30 minutes	11†	1	17	7	33	11	48	28	59	49
Increased attention to passenger comfort (A/C; Heat)	11	6	37	12	50	25	61	38	69	53
Increased preventive maintenance (and A/C; Heat)	6	4	34	13	47	20	58	36	67	52
Decrease fumes by 25%	9	4	36	12	48	20	61	35	69	52
Decrease fumes by 50%	6	6	31	13	45	22	58	34	67	49

† increase

TOTAL RESPONDENTS - REVENUES PER CURRENT $100
(SUMMARY TABLE)

	At 60¢		At 75¢		At 85¢		At $1.00		At $1.25	
	Estimated Maximum	Estimated Minimum	Estimated Maximum	Estimated Minimum	Estimated Maximum	Estimated Minimum	Estimated Maximum	Estimated Minimum	Estimated Maximum	Estimated Minimum
Do nothing to increase attractiveness of service:	$112.80	$105.60	$126.00	$105.00	$124.10	$102.00	$120.00	$ 98.00	$117.50	$ 95.00
Individual Changes:										
Decrease maximum wait to 45 minutes	$120.00	$120.00	$136.50	$120.00	$139.40	$115.60	$132.00	$108.00	$127.50	$105.00
Decrease maximum wait to 30 minutes	$127.20	$120.00	$141.00	$132.00	$151.30	$132.60	$144.00	$124.00	$127.50	$115.00
Increased attention to passenger comfort (A/C; Heat)	$112.80	$110.40	$132.00	$114.00	$127.50	$105.40	$124.00	$100.00	$117.50	$ 97.50
Increased preventive maintenance (and A/C; Heat)	$117.60	$114.00	$132.00	$114.00	$136.00	$112.20	$128.00	$106.00	$120.00	$100.00
Decrease fumes by 25%	$115.20	$111.60	$132.00	$114.00	$136.00	$112.20	$130.00	$104.00	$120.00	$ 97.50
Decrease fumes by 50%	$115.20	$112.80	$132.00	$117.00	$136.00	$112.20	$132.00	$108.00	$127.50	$105.00

The following two tables show decreases in likelihood of riding and levels of "definitely won't rides" at 75¢ and 85¢ (suggested increased fare levels) by subgroup.

At 75¢, cash riders are more likely to "definitely not ride" than those using passes. In addition, at 75¢, Discretionary riders and those riding 5 days a week or less often are less likely to respond to increased evening and weekend service than their counterparts. However, Transit Dependents are less likely than Discretionary riders to respond to increased attention to passenger comfort/more frequent preventive maintenance and a decrease in fumes.

At 85¢, Transit Dependents are far more likely to "definitely not ride" than Discretionary riders, although both show about 50% decreases in likelihood of riding. As at 75¢, Transit Dependents are more likely than Discretionary riders to respond to increased evening and weekend service. Those riding with passes are more likely to respond to increases in passenger comfort/preventive maintenance and fumes than those paying cash.

FARES RAISED TO 75¢

Raise fares to 75¢:	TOTAL RESPONDENTS		TYPE OF RIDER: DISCRETIONARY		TYPE OF RIDER: TRANSIT DEPENDENT		FREQUENCY OF RIDING: 5 OR LESS DAYS PER WEEK		FREQUENCY OF RIDING: 6 + DAYS PER WEEK		FARE BASIS: CASH		FARE BASIS: ALL PASSES	
	Decrease In Average Likelihood	Definitely Won't Ride	*Decrease In Average Likelihood	** Definitely Won't Ride	*Decrease In Average Likelihood	** Definitely Won't Ride	*Decrease In Average Likelihood	** Definitely Won't Ride	*Decrease In Average Likelihood	** Definitely Won't Ride	*Decrease In Average Likelihood	** Definitely Won't Ride	*Decrease In Average Likelihood	** Definitely Won't Ride
	%	%	%	%	%	%	%	%	%	%	%	%	%	%
Do nothing to increase attractiveness of service:	42	16	42	15	44	17	41	16	44	16	41	(19)	44	[13]
Steps to increase attractiveness of service:														
Decrease maximum wait to 45 minutes (evenings and weekends)	31	9	32	8	29	11	31	(12)	34	[6]	32	9	34	9
Decrease maximum wait to 30 minutes (evenings and weekends)	17	7	(22)	6	[8]	9	(20)	7	[12]	6	17	5	16	9
Increased attention to passenger comfort (A/C; Heat)	37	12	38	[10]	37	(15)	39	12	38	12	36	12	39	11
More frequent preventative maintenance (and A/C; Heat)	34	13	32	[11]	35	(15)	33	14	34	10	33	14	34	11
Decrease fumes by 25%	36	12	34	[10]	39	(15)	34	[9]	38	(16)	36	12	35	11
Decrease fumes by 50%	31	13	29	[8]	35	(20)	30	12	34	14	32	14	32	11

Confidence Intervals

* 7.5% (at 90%) ** 4% (at 90%)

FARES RAISED TO 85¢

Raise fares to 85¢:	TOTAL RESPONDENTS		TYPE OF RIDER				FREQUENCY OF RIDING				FARE BASIS			
			DISCRETIONARY		TRANSIT DEPENDENT		5 OR LESS DAYS PER WEEK		6 + DAYS PER WEEK		CASH		ALL PASSES	
	Decrease In Average Likeli-hood %	Defin-itely Won't Ride %	*Decrease In Average Likeli-hood %	** Defin-itely Won't Ride %	*Decrease In Average Likeli-hood %	** Defin-itely Won't Ride %	*Decrease In Average Likeli-hood %	** Defin-itely Won't Ride %	*Decrease In Average Likeli-hood %	** Defin-itely Won't Ride %	*Decrease In Average Likeli-hood %	** Defin-itely Won't Ride %	*Decrease In Average Likeli-hood %	** Defin-itely Won't Ride %
Do nothing to increase attractiveness of service:	53	27	52	[24]	55	(34)	52	26	55	29	53	27	53	28
Steps to increase attractiveness of service:														
Decrease maximum wait to 45 minutes (evenings and weekends)	45	18	46	18	44	17	44	17	48	18	45	17	45	19
Decrease maximum wait to 30 minutes (evenings and weekends)	33	11	(37)	12	[26]	9	34	12	31	10	35	8	32	15
Increased attention to passenger comfort (A/C; Heat)	50	25	51	22	50	28	50	23	50	27	(50)	(23)	[39]	[11]
More frequent preventative maintenance (and A/C; Heat)	47	20	46	19	48	22	45	22	48	18	(47)	(22)	[34]	[11]
Decrease fumes by 25%	48	20	46	18	52	24	47	17	50	24	(50)	19	[35]	11
Decrease fumes by 50%	45	22	43	21	48	24	(58)	19	[48]	27	(45)	(22)	[32]	[11]

Confidence Intervals

* 9% (at 90%) ** 9% (at 90%)

DETAIL OF
TABULAR FINDINGS

The following two tables show the riding habits of Discretionary and Transit Dependent riders. Of the total sample, 60% are Discretionary riders who have use of an alternate means of transportation, while 38% depend upon the bus system for transportation.

Respondents who ride the bus 5 days a week or less are significantly more likely to be Discretionary riders than to be Transit Dependent riders, as will be shown in a forthcoming table. These Discretionary riders primarily use the bus as transportation to and from work.

While there are no significant differences in the remaining cells, there are some directional differences with regard to demographics. Discretionary riders are directionally more likely to be men while Transit Dependent riders are more apt to be women. Blacks and Hispanics tend to be Discretionary riders as are those with incomes of $20,000 and over.

The tendency for Blacks and Hispanics to be Discretionary riders in this study conflicts with findings of previous surveys. This is most likely due to the fact that respondents were screened for participation in this study as opposed to just tabulating riding habits. Presumably, more upscale Blacks and Hispanics (and the ones more likely to have alternate means of transportation) were willing (and able) to participate, resulting in the findings seen here.

TYPE OF RIDER

	Total	--------RIDERSHIP--------- Discretionary	Transit Dependent	--RIDING FREQUENCY--- 5 Days or Less	6 or more Days	-TYPE OF FARE- Cash	All Other
	%	%	%	%	%	%	%
Discretionary Rider	60	100	-	(72)	[44]	64	57
Transit Dependent Rider	38	-	100	[25]	(56)	32	43
Not Identifiable	2	-	-	3	-	3	-
(Number of Respondents)	(159)	(96)	(60)	(95)	(64)	(90)	(76)

TYPE OF RIDER

		GENDER		AGE			RACE		INCOME		
	Total	Male	Female	18-24	25-34	35+	Whites	Black/ Hispanic	Under $10,000	$10,000- $19,999	$20,000 & Over
	%	%	%	%	%	%	%	%	%	%	%
Discretionary rider	60	67	55	59	59	62	54	63	54	60	69
Transit dependent rider	38	33	42	39	40	36	45	36	46	36	31
Not Identifiable	2	-	4	2	1	2	1	1	-	5	-
Number of Respondents	(159)	(70)	(86)	(44)	(58)	(55)	(69)	(70)	(56)	(42)	(52)

A little more than one-half (57%) of the respondents in this sample use cash to pay their fares, while 38% use a regular monthly pass, and 10% use some other type of pass.

Discretionary riders are directionally more likely to pay with cash than are Transit Dependent riders. Since Discretionary riders have access to alternate forms of transportation, they probably find it more economical to pay for each ride separately rather than to buy a monthly pass.

Transit Dependent riders are significantly more likely to buy a regular pass which, given their riding habits, can be more economical and more convenient than paying with cash.

Lending support to these findings are the figures for riding frequency. Those who ride the bus 5 days a week or less are significantly more likely to pay in cash, while those who ride 6 or 7 days a week are significantly more apt to use a regular pass.

Of the respondents who use a pass, 9% claim to also pay in cash. These respondents may use cash to pay for additional zone charges.

Males are significantly more likely to pay cash than are women, and respondents under age 35 are more likely to pay cash than those age 35 or over.

FARE TYPES

	Total	RIDERSHIP: Discretionary	RIDERSHIP: Transit Dependent	RIDING FREQUENCY: 5 Days or Less	RIDING FREQUENCY: 6 or more Days	TYPE OF FARE: Cash	TYPE OF FARE: All Other
	%	%	%	%	%	%	%
Cash	57	60	48	66	42	100	9
Regular Pass	38	32	48	25	56	6	79
Express Pass	5	6	3	6	3	-	10
College/Vocational Pass	2	3	2	2	3	1	5
Student Pass	2	3	-	1	3	1	4
Handicapped Pass	1	-	2	-	2	-	1
(Number of Respondents)	(159)	(96)	(60)	(95)	(64)	(90)	(76)

FARE TYPES

	Total	GENDER		AGE			RACE		INCOME		
		Male	Female	18-24	25-34	35+	Whites	Black/ Hispanic	Under $10,000	$10,000- $19,999	$20,000 & Over
	%	%	%	%	%	%	%	%	%	%	%
Cash	57	66	50	66	64	42	58	58	61	57	52
Regular pass	38	29	44	27	34	49	33	38	34	43	38
Express pass	5	4	6	-	5	9	7	1	-	5	12
College/vocational pass	2	3	2	9	-	-	1	4	5	-	2
Student pass	2	1	2	2	2	2	1	1	4	-	-
Handicapped pass	1	1	-	-	-	2	1	-	2	-	-
(Number of Respondents)	(159)	(70)	(86)	(44)	(58)	(55)	(69)	(70)	(56)	(42)	(52)

In total, respondents rode an RTD bus an average of 5.1 days in the week prior to being interviewed. 40% of the respondents rode the bus six or seven days, while 60% rode 5 days or less. As would be expected, Transit Dependent riders ride more days per week than do Discretionary riders (5.7 on average as compared to 4.8 respectively).

Those who pay their fares with bus passes ride a significantly greater number of days per week than do those who pay cash. Frequent riders are likely to appreciate the economy and convenience that a bus pass affords.

In total, respondents take an average of 11.7 trips per week on the bus. Transit Dependent riders, those who ride six or seven days per week, and those who use bus passes all make a significantly greater number of trips per week than do their counterparts.

Three-quarters of the Total Sample use the bus as transportation to and from work, one third use the bus for shopping trips, and 20% take the bus to visit friends and relatives.

As would be expected, the Transit Dependent riders use the bus for a greater number of purposes, than do Discretionary riders.

On average, respondents take 7.7 trips for work compared to 1.2 taken to school and 1.0 taken for shopping purposes.

As was seen earlier, Transit Dependent respondents, those who ride more often and those who use a pass make a significantly greater number of trips for work than do their counterparts. Frequent riders and those using passes also make more trips to do shopping than less frequent riders and those who pay cash.

RIDING HABITS

	Total	RIDERSHIP: Discretionary	RIDERSHIP: Transit Dependent	RIDING FREQUENCY: 5 Days or Less	RIDING FREQUENCY: 6 or more Days	TYPE OF FARE: Cash	TYPE OF FARE: Other
Number of Days Rode RTO in Past Week	%	%	%	%	%	%	%
1-2	10	14	5	17	-	17	-
3-4	15	19	8	25	-	21	6
5	35	38	27	58	-	31	37
6	16	12	23	-	41	13	20
7	24	17	37	-	59	17	37
Mean Number of days	5.1	4.8	5.7	4.1	6.6	4.6	5.8
Mean number of trips taken on an RTO bus in past week	11.7	10.6	13.3	9.1	15.6	9.9	14.3
Trip Purpose							
Work	74	72	77	66	86	67	83
Shopping	31	26	40	20	47	22	43
Visit friends/relatives	20	20	20	14	28	21	18
Entertainment	16	14	22	10	27	12	22
School	15	12	20	15	16	16	16
Medical/Dental Appointments	10	8	13	7	14	11	9
Church	8	7	8	3	14	4	12
Other	8	8	7	5	11	11	5
Mean Number of purposes	1.8	1.7	2.1	1.4	2.4	1.6	2.1
Mean number of trips taken for...							
Work	7.7	6.8	9.0	6.1	10.1	6.1	9.8
School	1.2	1.1	1.2	1.1	1.2	1.2	1.2
Shopping	1.0	0.8	1.2	0.5	1.6	0.6	1.4
Visit friends/relatives	0.7	0.8	0.5	0.4	1.0	0.9	0.4
All Others	0.3	0.3	0.3	0.2	0.5	0.3	0.3
Number of Respondents	(159)	(96)	(60)	(95)	(64)	(90)	(76)

Riding habits among various demographic groups show very few significant differences.

Women take a significantly greater number of trips per week on average than do men.

Those with moderate incomes ride more days per week and take more trips per week than do those with incomes of $20,000 or more.

Older riders, Whites and those with higher incomes are more likely to ride the bus to and from work and to shop, while, not surprisingly, larger proportions of younger riders and those with lower incomes ride the bus to school and to visit friends and relatives.

RIDING HABITS

	Total	GENDER		AGE			RACE		INCOME		
		Male	Female	18-24	25-34	35+	Whites	Black/ Hispanic	Under $10,000	$10,000- $19,999	$20,000 & Over
	%	%	%	%	%	%	%	%	%	%	%
Number of Days Rode RTO in Past Week											
1-2	10	11	8	11	9	9	10	7	5	2	21
3-4	15	14	16	23	12	13	(23)	[11]	20	7	13
5	35	36	35	34	38	33	29	38	30	43	35
6	16	16	17	14	19	16	17	18	23	19	10
7	24	23	23	18	22	29	20	24	21	23	21
Mean Number of days	5.1	5.0	5.2	4.8	5.2	5.3	5.0	(5.3)	5.2	(5.6)	[4.7]
Mean number of trips taken on an RTO bus in past week	11.7	[10.7]	(12.4)	12.1	11.6	11.5	1.5	11.4	11.8	(13.4)	[10.3]
Trip Purpose											
Work	74	80	70	[59]	(81)	(80)	(84)	[64]	[57]	(88)	(86)
Shopping	31	26	34	32	[21]	(40)	(35)	[21]	34	29	31
Visit friends/relatives	20	19	20	(25)	(24)	[11]	14	23	(34)	[17]	[10]
Entertainment	16	21	12	20	12	18	16	16	16	17	17
School	15	11	19	(30)	[14]	[6]	12	20	(27)	[7]	[6]
Medical/Dental Appointments	10	11	9	7	16	7	10	10	(16)	10	[6]
Church	8	4	10	9	3	11	3	11	9	7	6
Other	8	9	7	9	3	11	6	10	11	5	8
Mean Number of purposes	1.8	1.8	1.8	1.9	1.7	1.8	1.8	1.8	2.0	1.8	1.7
Mean number of trips taken for...											
Work	7.7	7.3	8.0	6.6	8.3	8.0	8.2	6.8	[6.3]	(9.8)	[8.0]
School	1.2	0.7	1.5	(2.5)	[1.0]	[0.2]	0.7	1.7	(2.0)	[0.5]	[0.3]
Shopping	1.0	[0.7]	(1.2)	[0.8]	[0.7]	(1.4)	1.1	0.6	0.9	1.2	0.8
Visit friends/relatives	0.7	0.7	0.6	0.9	0.8	0.4	0.7	0.6	(1.3)	[0.5]	[0.2]
All Others	0.3	0.3	0.3	0.3	0.3	0.3	0.3	0.4	0.4	0.3	0.2
Number of Respondents	(159)	(70)	(86)	(44)	(58)	(55)	(69)	(70)	(56)	(42)	(52)

Respondents were presented with a list of 10 improvements that RTD could make to their buses and to bus services. Respondents were asked to rank these improvements according to which ones they felt RTD should make first, second, and so on. Results of this ranking are shown in the facing table.

Two improvements were seen as clearly the most urgent. The improvement that was seen as being the most urgent was "Better coordination of schedules at transfer points". This improvement received a mean ranking of 3.0 on a 10 point scale, where 1 = "RTD should improve first" and 10 = "RTD should improve last." 41% ranked this improvement first while a full 70% ranked it as one of their top three recommended improvements.

Closely following as a much needed improvement would be to make the buses less crowded and to provide more seating. This improvement received a mean ranking of 3.6 and, though only 21% ranked this improvement first, 55% ranked this improvement either first, second or third.

The improvements which were ranked as the least urgent among respondents in this sample were those dealing with bus driver knowledge (6.1), implementing more express and limited routes (6.1) and providing graduated fares so that those travelling further would pay more (8.2). These patterns persisted, in general, across all cells, and few significant differences occurred.

Not surprisingly, those who pay cash (and therefore must pay additionally for their transfers) ranked the importance of a longer time for using transfers significantly higher than those who use a pass and, therefore, receive unlimited monthly bus travel (regular fare rides).

IMPROVEMENTS TO RTO

	Total	--------RIDERSHIP--------- Discretionary	Transit Dependent	--RIDING FREQUENCY--- 5 Days or Less	6 or more Days	-TYPE OF FARE- Cash	All Other
	%	%	%	%	%	%	%
Better coordination of schedules at transfer points							
Mean	3.0	3.2	2.8	3.1	2.8	2.8	3.3
%							
Ranked 1st	41	39	46	37	48	43	40
Ranked 1st, 2nd	62	57	68	61	63	62	62
Ranked 1st, 2nd, 3rd	70	67	75	71	70	74	64
Less crowded buses/ More seating available							
Mean	3.6	3.7	3.5	3.6	3.6	3.6	3.5
%							
Ranked 1st	21	20	23	21	22	21	25
Ranked 1st, 2nd	37	34	43	35	40	38	38
Ranked 1st, 2nd, 3rd	55	55	55	54	55	57	55
More direct bus routes							
Mean	5.1	5.0	5.3	4.9	5.4	5.3	5.0
Cleaner bus interiors							
Mean	5.4	5.4	5.4	5.4	5.5	5.7	5.2
Longer time for using transfers							
Mean	5.5	5.4	5.7	5.5	5.6	5.1	6.1
More courteous/polite bus drivers							
Mean	5.8	5.8	5.8	5.9	5.6	5.9	5.6
More information available on bus routes & schedules							
Mean	5.9	5.9	6.0	5.8	6.2	5.7	6.2
More knowledgeable drivers							
Mean	6.1	6.2	6.0	6.1	6.0	6.3	5.8
More express routes and "limited" lines							
Mean	6.1	6.2	6.0	6.2	6.0	6.4	5.9
Graduated fares according to distance traveled							
Mean	8.2	8.2	8.2	8.4	7.9	8.1	8.3
(Number of Respondents)	(159)	(96)	(60)	(95)	(64)	(90)	(76)

Mean based on 10 point scale where 1 = "Most desired improvement", and 10 = "Least desired improvement

The following table shows the ranking of various improvements among different demographic groups.

Men ranked the urgency of schedule coordination significantly higher than did women.

Younger respondents (who tend to ride the bus more often) and those with lower incomes and, therefore, less money to spend on transportation are more concerned with being able to use transfers for a longer time than are their counterparts.

Blacks and Hispanics rated the improvement of driver courtesy and politeness significantly higher than did Whites.

While implementation of express routes and graduated fares generated the least interest, Whites were significantly more inclined to want more express routes than were Blacks and Hispanics. The more affluent respondents rated these two improvements significantly higher than did those in the lower income categories.

Interestingly, those who make $20,000 a year or over ranked increasing the number of limited lines fourth in importance out of the 10 improvements.

IMPROVEMENTS TO RTO

		GENDER		AGE			RACE		INCOME		
	Total	Male	Female	18-24	25-34	35+	Whites	Black/ Hispanic	Under $10,000	$10,000- $19,999	$20,000 & Over
Better coordination of schedules at transfer points											
Mean	3.0	(2.6)	[3.3]	3.0	2.6	3.3	2.9	2.9	3.0	2.7	3.2
%											
Ranked 1st	41	45	39	38	51	35	43	38	37	50	40
Ranked 1st, 2nd	62	66	60	62	70	55	67	56	61	60	65
Ranked 1st, 2nd, 3rd	70	78	64	69	77	65	72	67	69	72	71
Less crowded busses/More seating available											
Mean	3.6	4.0	3.4	3.9	3.5	3.6	3.8	3.5	3.4	3.8	3.6
%											
Ranked 1st	21	15	26	21	16	28	16	23	29	12	19
Ranked 1st, 2nd	37	34	38	28	39	41	31	37	45	30	33
Ranked 1st, 2nd, 3rd	55	51	57	52	54	57	49	56	59	42	60
More direct bus routes											
Mean	5.1	4.8	5.4	5.1	5.2	5.0	4.8	5.3	5.4	5.1	4.8
Cleaner bus interiors											
Mean	5.4	5.5	5.3	5.7	5.6	4.9	5.8	5.0	5.4	4.9	5.6
Longer time for using transfers											
Mean	5.5	5.8	5.4	(5.2)	5.3	[6.2]	6.0	5.3	(4.7)	(5.2)	[6.9]
More courteous/polite bus drivers											
Mean	5.8	6.0	5.6	5.6	6.0	5.7	[6.4]	(5.2)	5.5	6.0	6.1
More information available on bus routes and schedules											
Mean	5.9	5.8	6.0	5.6	6.2	5.9	5.8	6.0	5.8	5.8	6.2
More knowledgeable drivers											
Mean	6.1	6.0	6.0	6.2	5.8	6.2	5.9	6.3	6.0	6.4	5.8
More express routes and "Limited" Lines											
Mean	6.1	6.1	6.2	6.0	6.6	5.8	(5.4)	[6.8]	[6.9]	[6.7]	(5.0)
Graduate fares according to distance travelled											
Mean	8.2	7.9	8.5	8.7	8.0	8.1	8.0	8.2	[8.6]	[8.5]	(7.6)
(Number of Respondents)	(159)	(70)	(86)	(44)	(58)	(55)	(69)	(70)	(56)	(42)	(52)

Mean based on 10 point scale where 1 = "Most desired improvement" and 10 = "Least desired improvement"

MARKET FACTS

The following two tables show demographics for the various "riding habits" cells.

As was seen in a previous table, Transit Dependent riders are more likely to be women than to be men, and men are more likely to pay cash.

The average age of the sampled RTD riders is 33 years old. Those who ride six or seven days per week, and those who use passes tend to be slightly older.

The average household size among the Total Sample is 3.1. Riders who ride less frequently have a significantly larger number of household members than do those who ride often.

On average, respondents own 1.6 automobiles. 48% own only one car while 22% own 2 cars and 14% do not own an automobile.

As expected, a significantly larger proportion of Transit Dependent respondents do not own an automobile (29%) as compared to the number of Discretionary riders who do not own a car (6%). A large proportion of those who ride six or seven days (and who are presumed to be Transit Dependent riders for the most part) do not own automobiles.

44% of the respondents in this sample are Caucasian while one quarter are Black and 19% are Hispanic.

Respondents in the Total Sample have an average of 13.8 years of education. Those who ride five days or less per week have significantly more education (in mean number of years) than do more frequent riders.

Almost three-quarters of the respondents are employed, with 59% employed full-time and 13% employed part-time. 11% are students.

Respondents who use passes are significantly more likely to be employed full-time than are those who pay with cash.

The average family income among all respondents in the sample is $18,000.

DEMOGRAPHICS

	Total	RIDERSHIP: Discretionary	RIDERSHIP: Transit Dependent	RIDING FREQUENCY: 5 Days or Less	RIDING FREQUENCY: 6 or more Days	TYPE OF FARE: Cash	TYPE OF FARE: All Other
	%	%	%	%	%	%	%
Gender							
Male	45	50	39	46	44	52	36
Female	55	50	61	54	56	48	64
Age							
18-24	28	28	28	32	22	33	23
25-34	37	36	38	36	38	42	32
35 and over	35	36	33	32	40	26	45
Mean (Years)	33	34	32	32	35	31	36
Household Size							
1	19	15	24	16	23	17	20
2	30	32	29	24	39	29	32
3	20	19	22	23	16	22	19
4+	31	34	25	37	22	32	29
Mean	3.1	3.3	2.9	3.4	2.7	3.2	3.0
Number of Autos Owned							
1	48	50	42	46	50	51	43
2	22	27	14	24	17	26	18
3+	17	17	15	22	8	13	19
None	14	6	29	8	26	10	21
Mean	1.6	1.7	1.3	1.8	1.2	1.6	1.4
Ethnic Group							
White	44	40	52	46	42	46	42
Black	26	30	22	24	31	24	30
Hispanic	19	17	20	19	18	23	14
Other	10	13	5	11	10	8	15

DEMOGRAPHICS (CONTINUED)

	Total	RIDERSHIP: Discretionary	RIDERSHIP: Transit Dependent	RIDING FREQUENCY: 5 Days or Less	RIDING FREQUENCY: 6 or more Days	TYPE OF FARE: Cash	TYPE OF FARE: All Other
	%	%	%	%	%	%	%
Last Grade of School Completed							
High School Graduate or Less	34	34	35	29	41	35	29
Some College	38	40	32	40	35	39	41
College graduate or more	28	26	33	31	24	26	29
Mean (Years)	13.8	13.8	13.7	(14.1)	[13.3]	13.8	13.8
Employment Status							
Employed full time	59	55	63	57	62	[51]	(67)
Employed part time	13	14	13	13	14	14	12
Unemployed	8	9	5	5	11	8	7
Student	11	12	10	(14)	[6]	13	8
Other	7	7	9	9	5	(12)	[5]
Refused	2	3	-	2	2	2	1
Annual Family Income							
Under $10,000	35	31	43	33	39	38	33
$10,000 - $19,999	26	26	25	23	31	27	26
$20,000 or more	33	38	27	38	25	29	36
Refused	6	5	5	6	5	6	5
Mean (000's)	18	20	15	21	15	18	18
(Number of Respondents)	(159)	(96)	(60)	(95)	(64)	(90)	(76)

The following table is a cross-tabulation of the demographics:

Of the older respondents in the study, a significantly higher proportion were women. A higher proportion of the Blacks and Hispanics were women also.

Not surprisingly, younger respondents have lower incomes, while older respondents have higher incomes.

Younger respondents have significantly larger mean household sizes, probably because they still live at home with their parents. Blacks and Hispanics also have larger household sizes than Caucasians.

Respondents age 18-24 own a greater number of vehicles than do older respondents. Blacks and Hispanics own more cars, on average, than do Whites, which could account for the larger proportion of Blacks and Hispanics which are Discretionary riders.

As would be expected, Whites have higher incomes and more education than do Blacks and Hispanics.

A significantly greater proportion of older respondents, Whites, and those with higher incomes are employed full time, while younger respondents are more likely to be students and to be employed part time.

DEMOGRAPHICS

		GENDER		AGE			RACE		INCOME		
	Total	Male	Female	18-24	25-34	35+	Whites	Black/ Hispanic	Under $10,000	$10,000- $19,999	$20,000 & Over
	%	%	%	%	%	%	%	%	%	%	%
Gender											
Male	45	100	-	43	55	35	54	37	43	46	52
Female	55	-	100	57	45	65	46	63	57	54	48
Age											
18-24	28	27	29	100	-	-	26	27	36	26	21
25-34	37	46	30	-	100	-	33	38	37	40	36
35 and over	35	27	41	-	-	100	40	34	27	33	42
Mean (years)	33	32	34				35	33	31	33	34
Household Size											
1	19	16	21	9	23	22	26	13	22	21	14
2	30	29	31	20	39	29	37	27	20	38	36
3	20	23	19	23	16	24	21	21	24	14	19
4+	31	32	29	48	23	26	16	38	35	26	31
Mean	3.1	3.2	3.1	3.7	2.8	2.9	2.4	3.5	3.3	2.9	3.0
Number of Autos Owned											
1	48	50	46	29	57	51	51	49	47	56	44
2	22	25	19	40	16	14	21	22	18	20	24
3+	17	16	17	26	14	12	11	16	14	16	20
None	14	9	18	5	12	22	18	13	20	8	12
Mean	1.6	1.6	1.5	2.2	1.4	1.2	1.3	1.6	1.4	1.6	1.7
Ethnic Group											
White	44	54	37	42	40	51	100	-	47	31	57
Black	26	19	33	23	28	27	-	100	34	26	22
Hispanic	19	19	17	21	19	16	-		18	29	8
Other	10	4	2	6	2	7	2	-	2	7	4

DEMOGRAPHICS (CONTINUED)

		GENDER		AGE			RACE		INCOME		
	Total	Male	Female	18-24	25-34	35+	Whites	Black/ Hispanic	Under $10,000	$10,000- $19,999	$20,000 & Over
	%	%	%	%	%	%	%	%	%	%	%
Last grade of school completed											
High School graduate or less	34	34	33	34	29	38	29	44	44	24	17
Some college	38	37	40	50	33	34	35	37	30	48	38
College graduate or more	28	29	28	16	38	27	36	18	16	29	44
Mean (years)	13.8	13.8	13.7	13.4	14.0	13.8	14.2	13.1	12.7	14.0	15.0
Employment Status											
Employed full time	59	60	59	39	69	67	70	50	38	76	75
Employed part time	13	16	12	25	10	7	10	18	20	14	6
Unemployed	8	9	7	7	7	9	1	14	14	7	-
Student	11	10	12	25	9	2	7	11	14	2	12
Other	7	5	10	4	5	13	11	7	13	-	8
Refused	2	1	-	-	-	2	1	-	2	-	-
Annual Family Income											
Under $10,000	35	34	37	46	36	27	33	41	100	-	-
$10,000 - $19,999	26	27	26	25	29	26	19	33	-	100	-
$20,000 or more	33	39	29	25	33	40	42	22	-	-	100
Refused	6	-	8	4	2	7	6	4	-	-	-
Mean (000's)	18	20	17	16	18	20	21	15	5	15	35
(Number of Respondents)	(159)	(70)	(86)	(44)	(58)	(55)	(69)	(70)	(56)	(42)	(52)

APPENDIX

MARKET FACTS

METHODOLOGY

MARKET FACTS

The proposed research for this study was two-staged: Qualitative and Quantitative.

Stage I - Qualitative

Three focus groups were conducted by RTD to determine what attributes are important to riders and to identify meaningful levels of these attributes for the trade-off analysis.

Stage II - Quantitative

N.W. Ayer commissioned Market Facts, Inc. to conduct a trade-off study among riders in the Los Angeles area.

A short screening interview was conducted at the following major area bus stops:

Downtown
- Broadway and 7th
- Main and 7th
- 6th and Flower

West Los Angeles sector
- Wilshire and Vermont
- Hollywood and Vermont
- Wilshire & Santa Monica
- Santa Monica & Ocean
- Hawthorne & Manchester

South Central sector
- Crenshaw & Martin Luther King
- Vermont & Martin Luther King
- Central Avenue & Florence

East Los Angeles sector
6th & Boyle

North Central sector
Broadway and Central

East Central sector
Pacific & Gage

San Fernando Valley sector
Victory and Van Nuys Blvd.
Victory & Topanga Canyon Blvd.

San Gabriel Valley sector
El Monte station

South Bay sector
Catalina & Torrance

Mid Cities sector
Whittier & Painter

Long Beach sector
Long Beach Blvd. & 7th St.

Interviewers were instructed to approach as many adults as possible at each location and to screen for the following:

1) Age - between 18 and 61 years
2) Whether a Transit Dependent or a Discretionary rider (to be defined)
3) Number of trips taken in an average week
4) Type of fare or pass used
5) Ethnic group
6) Willingness to participate in a follow-up mailed study.

MARKET FACTS

In order to achieve the maximum dispersion of rider types, screening took place during weekday rush hours (7-9 am and 4-6 pm) weekday regular hours (9-11 am and 2-4 pm) and weekend hours (10 am to 3 pm) at each location.

The mailed questionnaire was an eight page letter size document which included questions about bus riding habits and demographics as well as the trade-off task, and was accompanied by two commemorative tokens each good for a one-way trip on an RTD bus as an incentive.

In addition, respondents were sent a reminder card and were also contacted by phone to increase returns. All those who returned completed questionnaires were promised two additional bus tokens commemorating the 1984 Olympics. All contacts, both willing and unwilling to participate were tallied according to the above screening questions to determine sample parameters.

A total of 684 respondents who were willing to participate were mailed questionnaires distributed as follows:

White	252	Discretionary	412
Black	217	Transit Dependent	272
Hispanic	181		684
Other	34		
	684		

159 usable returns (96 Discretionary riders and 60 Transit Dependent riders) were processed in their entirety and a complete set of computer tabulations have been provided to the SCRTD and to N.W. Ayer to be used as an appendix to this report.

DISPERSION OF BUS LINES SAMPLED

MARKET FACTS

What follows is a list of the bus lines ridden in the past week and the proportion of respondents in this study who rode each line.

The following lines were ridden by 6% or more of the respondents:

Bus #	% Rode
004	13
001	11
020	11
022	11
021	10
308	9
204	9
164	8
040	6
060	6
105	6
210	6

MARKET FACTS

PROPORTION OF RESPONDENTS WHO RIDE VARIOUS BUS LINES

Bus Number	%	Bus Number	%	Bus Number	%
001	11	047	1	120	1
002	2	048	1	125	1
003	1	051	2	130	2
004	13	053	3	150	4
005	4	055	2	151	2
006	1	056	2	152	1
009	1	060	6	154	1
010	2	061	4	157	2
011	2	068	4	158	1
014	1	070	3	159	2
016	2	075	2	160	1
018	4	076	2	161	1
020	11	079	1	162	1
021	10	081	2	163	1
022	11	083	1	164	8
024	1	086	1	165	2
026	1	088	5	176	1
027	5	093	4	177	1
028	3	096	2	178	1
029	1	102	1	180	3
030	4	103	2	181	2
031	2	104	1	183	1
033	2	105	6	200	2
035	1	107	3	201	2
037	1	108	1	202	1
038	4	110	1	204	9
039	1	111	2	205	1
040	6	112	1	206	2
042	2	115	4	207	2
044	3	116	1	209	1
045	2	117	1	210	6

MARKET FACTS

PROPORTION OF RESPONDENTS WHO RIDE VARIOUS BUS LINES

Bus Number	%	Bus Number	%	Bus Number	%
212	3	425	2	620	1
217	3	426	2	737	1
225	1	427	1	810	1
228	1	429	1	826	1
230	1	430	1	871	2
232	1	434	1	936	1
236	1	438	1		
240	1	440	1	Number of Respondents	
242	1	441	1	(159)	
243	1	445	1		
245	2	446	1		
250	1	454	1		
251	2	456	1		
252	1	462	1		
255	1	470	1		
256	1	471	1		
260	2	480	2		
262	2	482	2		
264	1	483	1		
270	1	484	4		
304	4	486	2		
308	9	488	2		
320	4	489	1		
321	1	490	3		
322	1	491	2		
351	1	493	1		
403	1	496	1		
420	1	498	1		
422	1	560	2		
424	2	602	1		

THE QUESTIONNAIRE

(3-W933)

Dear Respondent,

Thank you for agreeing to participate in our study about public transportation. The answers you provide will help to improve the quality of public transportation in the Los Angeles area.

There are several sets of materials enclosed in this package - each of which will be thoroughly explained. Please read the instructions on the following pages and then complete the questions.

When you have finished, please return this questionnaire to us in the postage-paid envelope enclosed.

You can be sure that all your answers will be kept strictly confidential, and only used in combination with several hundred other people's answers.

To thank you for your participation, you will find enclosed two commemorative RTD tokens each good for a one-way base fare on an RTD bus.

In addition, when we receive your completed questionnaire, we will send you two tokens commemorating the 1984 Olympics in Los Angeles. Each of these commemorative tokens will also be good for a one-way base fare on any RTD bus.

Again, thank you for your help in this study.

Cordially,

Susan North

Susan North
Project Director

* If you have any questions about Market Facts in general, or this project, in particular, please feel free to call me at (213) 787-0213.

These first few questions will be about general bus ridership.

1. Thinking just about the past week, (the past seven days), how many days did you ride an RTD bus? (PLEASE "X" ONE BOX)

One day.....	☐ 1	Four days.....	☐ 4	
Two days.....	☐ 2	Five days.....	☐ 5	(13)
Three days.....	☐ 3	Six days.....	☐ 6	
		Seven days.....	☐ 7	

2. Thinking of the day(s) you rode the bus last week, how many trips did you make during the past week? Please count each round trip as two trips. For example, going to and from work in one day would be counted as two trips. Please give me your best guess. (PLEASE WRITE IN ONE NUMBER, NOT A RANGE)

Number of trips in past week _____ (14-15)

3. Of these trips, how many were for each of the purposes listed below. (PLEASE WRITE IN A NUMBER BENEATH EACH PURPOSE. IF NONE, WRITE IN "0". THESE NUMBERS ADDED ACROSS SHOULD ADD UP TO THE SAME NUMBER YOU GAVE IN QU. 2)

4. Beneath each of the purposes listed below, please "X" the box which shows the number of buses you usually ride for that purpose. Be sure to count each bus you transfer to separately.

	PURPOSES							
	Work	Shopping	School	Entertainment	To visit friends/relatives	Church	Medical/ dental apts.	Other (WRITE IN) _____
Write in number of trips.....	_____	_____	_____	_____	_____	_____	_____	_____ (30-31)
Usually ride...								
1 bus.....	☐ 1 (32)	☐ 1 (33)	☐ 1 (34)	☐ 1 (35)	☐ 1 (36)	☐ 1 (37)	☐ 1 (38)	☐ 1 (39)
2 buses.....	☐ 2	☐ 2	☐ 2	☐ 2	☐ 2	☐ 2	☐ 2	☐ 2
3 buses.....	☐ 3	☐ 3	☐ 3	☐ 3	☐ 3	☐ 3	☐ 3	☐ 3
4 or more buses..	☐ 4	☐ 4	☐ 4	☐ 4	☐ 4	☐ 4	☐ 4	☐ 4

5. Thinking of your answer in Question 2, how did you pay for the trips you made in the past week? For each way listed below, please write in the number of trips where you paid a fare that way. If you did not pay a fare that way, write in "0". (PLEASE WRITE IN A NUMBER FOR EACH. DO NOT WRITE IN A RANGE)

Cash.....	_____	(40-41)
Regular pass.....	_____	(42-43)
Student pass.....	_____	(44-45)
Express pass.....	_____	(46-47)
College/vocational pass.	_____	(48-49)
Senior citizen's pass...	_____	(50-51)
Handicapped pass.....	_____	(52-53)
TOTAL	_____	

(PLEASE BE SURE THIS TOTAL ADDS UP TO THE SAME NUMBER YOU GAVE IN QU. 2)

6. In the spaces below, please write in all the different bus lines you rode in the past week.

WRITE IN BUS LINES	
_____	(54-55)
_____	(56-57)
_____	(58-59)
_____	(60-61)
_____	(62-63)
_____	(64-65)
_____	(66-67)
_____	(68-69)
_____	(70-71)

(72-78 open)
79[-1[1]80

7. Listed below are several improvements that RTD could make to buses and bus services. If RTD raised the fares, which of these improvements would you want RTD to make first? Which should RTD make second? Please rank these improvements from 1 to 10. Put a "1" next to the improvement you feel RTD should make first, a "2" next to the improvement RTD should make second and so on, putting a "10" next to the improvement you feel RTD should make last.

PLEASE PUT A NUMBER NEXT TO EACH IMPROVEMENT, BUT USE EACH NUMBER ONLY ONCE. NO TIES OR BLANK LINES PLEASE!

	Rank	
Better coordination of schedules at transfer points so you don't miss connections.....	_____	(13-14)
Longer time for using transfers.....	_____	(15-16)
Less crowded buses/more seating available.....	_____	(17-18)
Cleaner buses on the inside.....	_____	(19-20)
More courteous/polite drivers.....	_____	(21-22)
More availability of information on bus routes and schedules.....	_____	(23-24)
More knowledgeable drivers - know more about their own routes as well as others.....	_____	(25-26)
More express routes and "limited" lines.....	_____	(27-28)
Graduated fares so people traveling farther would pay more than people only traveling a short distance.....	_____	(29-30)
More direct bus routes.....	_____	(31-32)

Now I would like to learn how you feel about RTD services and fares. With the materials you have received, you will find an envelope in which there are two sets of cards:

1) 18 white cards
2) 11 green cards

The white cards describe several characteristics of RTD service -- security, evening and weekend service, bus maintenance, exhaust fumes, and fares. Each of the 18 cards shows a different combination of RTD services and fares.

The green cards refer to how likely you would be to ride the RTD if these were the services offered at the fares shown on the card.

Let me explain the white cards a little more. As I mentioned earlier, the white cards show different combinations of services and fares. On the cards, you will see different levels of services and fares. Here is a list of the services and fares and the different levels of each.

Security

- Uniformed security on selected buses on all bus lines (each bus line patrolled an average of once a week)
- Undercover security on selected buses on some bus lines (as RTD currently does)
- Uniformed security on selected buses on high crime lines (each bus line in these areas patrolled 2-3 times a week)

Evening and Weekend Service

- Evening and weekend service as currently offered - maximum time between buses -- 60 minutes
- More frequent evening and weekend service - maximum time between buses -- 45 minutes
- More frequent evening and weekend service - maximum time between buses -- 30 minutes

PLEASE NOTE THE STATEMENT REFERRING TO EVENING/WEEKEND SERVICE.
If, for example, this statement says, "Maximum time between buses - 60 minutes" and your bus comes more often on the evening and on weekends, your bus will continue to come more often. These attributes show the longest possible wait for any bus in the system and not the schedule for your bus line. Currently, some bus lines only have hourly evening and weekend service.

Bus Maintenance

- Current levels of bus maintenance
- Increased attention to passenger comfort -- better maintenance of air conditioning/heating
- Increased attention to passenger comfort -- better maintenance of air conditioning/heating -AND- more frequent preventive maintenance -- to lessen the chance of buses breaking down

Exhaust Fumes

- Exhaust fumes as currently emitted
- Special equipment/filters/attachments -- resulting in a 25% reduction in exhaust fumes
- Special equipment/filters/attachments -- resulting in a 50% reduction in exhaust fumes

Fares

- $ .50 $ .80 $1.10
- $ .65 $ .95 $1.25

These different levels are shown in different combinations on the white cards.

Please follow the instructions starting with Step One.

STEP ONE

Place the 11 **green** cards in front of you like this:

100% means you definitely would ride the RTD if the described service were available at the fare shown, while 0% means you definitely would not ride the RTD if the described service were available at the fare shown. The percentages in between show different degrees of likelihood of riding the RTD.

STEP TWO

Please read through all 18 **white** cards in order to be familiar with the different combinations of services and fares.

STEP THREE

A. Please carefully read the description on the first **white** card.

B. Place this **white** card next to the **green** card which best describes just how likely you would be to ride the bus if these were the services offered at the fare shown on this card.

C. Please continue this same procedure for all 18 **white** cards.

Feel free to rearrange the **white** cards until each is in the pile you wish. You do **not** need to have a **white** card next to **every green** card.

D. In order for us to know how you sorted the **white** cards, please follow these instructions.

- Each green card has a number on it, a percentage.
- At the bottom left of all the white cards are the words "PILE PERCENTAGE". Pick up the white cards in the furthest left-hand pile. On each white card in this pile, write in the number that appears on the green card by this pile. Write the number on the line that says pile percentage.
- Do this for each pile you have.
- In other words, when you're done, all 18 white cards should have a number from 0% to 100% next to "PILE PERCENTAGE" depending on which pile it was in.

PLEASE LEAVE THE WHITE CARDS IN THE PILES THEY ARE NOW IN....
DO NOT COMBINE THEM ALL INTO ONE PILE UNTIL INSTRUCTED TO DO SO

STEP FOUR

A. Please take the pile which you prefer the most (the furthest left-hand) pile and put the cards in order so that the top card is the one you prefer the most and the bottom card is the one you prefer the least in this pile.

B. Repeat this procedure for all piles of cards -- even those which you have placed in the "0% Likely To Ride" pile....but remember to keep each pile separate and on the correct green card.

C. At this point you should have all 18 white cards in order with:

- The top card of the furthest left-hand pile being the combination which you most prefer and...
- The bottom card of the furthest right-hand pile being the combination which you least prefer.

Starting at the left, put each pile on top of the pile to its right. When you are done, you will have 18 cards in order with the card you prefer most on top, the card you prefer second most right behind it, and so on with the card you prefer least on the bottom. Please number these cards "1" to "18" with the top card being "1", the second card being "2", etc, and the last card being 18.

Record these numbers on the bottom right of each white card on the line that says "Ranking".

PLEASE DO NOT REPEAT A NUMBER BETWEEN "1" AND "18"....EACH WHITE CARD SHOULD HAVE A DIFFERENT NUMBER.

STEP FIVE

Please check to be sure every white card has:

* A "PILE PERCENTAGE".... Which corresponds to the pile number found on the green card.
* A "RANKING"... A number from "1" to "18" with no number repeated.

STEP SIX

Please put the cards together in the order you have ranked them in the evelope they came in and return them to us with the rest of the questionnaire.

PLEASE GO ON TO THE NEXT PAGE

I'm sure you did just fine ranking all those cards!

I have another ranking for you to do, but this one is much more simple. Listed below are six groups showing different combinations of services and fares. Please read through all of them carefully, then rank them according to your preference. Put a "1" next to the group you prefer the most, a "2" next to the group you like the second most, and so on, putting a "6" next to the group you like the least. Please do not use the same number more than once.

RANK — **RTD service that offers.....**

(33)
- o UNIFORMED SECURITY ON SELECTED BUSES ON ALL BUS LINES (EACH BUS LINE PATROLLED AN AVERAGE OF ONCE A WEEK)
- o EVENING & WEEKEND SERVICE AS CURRENTLY OFFERED MAXIMUM TIME BETWEEN BUSES - - 60 MINUTES
- o INCREASED ATTENTION TO PASSENGER COMFORT - - BETTER MAINTENANCE OF AIR CONDITIONING / HEATING
- o SPECIAL EQUIPMENT / FILTERS / ATTACHMENTS - - RESULTING IN A 25% REDUCTION IN EXHAUST FUMES
- o FARE: $ .90

RANK — **RTD service that offers.....**

(34)
- o UNDERCOVER SECURITY ON SELECTED BUSES ON SOME BUS LINES • (AS RTD CURRENTLY DOES)
- o MORE FREQUENT EVENING & WEEKEND SERVICE MAXIMUM TIME BETWEEN BUSES - - 45 MINUTES
- o CURRENT LEVELS OF BUS MAINTENANCE
- o EXHAUST FUMES AS CURRENTLY EMITTED
- o FARE: $ .60

RANK — **RTD service that offers.....**

(35)
- o UNDERCOVER SECURITY ON SELECTED BUSES ON SOME BUS LINES (AS RTD CURRENTLY DOES)
- o MORE FREQUENT EVENING & WEEKEND SERVICE MAXIMUM TIME BETWEEN BUSES - - 30 MINUTES
- o CURRENT LEVELS OF BUS MAINTENANCE
- o SPECIAL EQUIPMENT / FILTERS / ATTACHMENTS - - RESULTING IN A 25% REDUCTION IN EXHAUST FUMES
- o FARE: $ .80

RANK — **RTD service that offers.....**

(36)
- o UNIFORMED SECURITY ON SELECTED BUSES ON HIGH CRIME LINES (EACH BUS LINE IN THESE AREAS PATROLLED 2-3 TIMES A WEEK)
- o MORE FREQUENT EVENING & WEEKEND SERVICE MAXIMUM TIME BETWEEN BUSES - - 30 MINUTES
- o INCREASED ATTENTION TO PASSENGER COMFORT - - BETTER MAINTENANCE OF AIR CONDITIONING / HEATING -AND- MORE FREQUENT PREVENTIVE MAINTENANCE - - TO LESSEN THE CHANCE OF BUSES BREAKING DOWN
- o SPECIAL EQUIPMENT / FILTERS / ATTACHMENTS - - RESULTING IN A 50% REDUCTION IN EXHAUST FUMES
- o FARE: $1.10

RANK — **RTD service that offers.....**

( )
- o UNIFORMED SECURITY ON SELECTED BUSES ON ALL BUS LINES (EACH BUS LINE PATROLLED AN AVERAGE OF ONCE A WEEK)
- o MORE FREQUENT EVENING & WEEKEND SERVICE MAXIMUM TIME BETWEEN BUSES - - 45 MINUTES
- o INCREASED ATTENTION TO PASSENGER COMFORT - - BETTER MAINTENANCE OF AIR CONDITIONING / HEATING
- o SPECIAL EQUIPMENT / FILTERS / ATTACHMENTS - - RESULTING IN A 50% REDUCTION IN EXHAUST FUMES
- o FARE: $1.00

RANK — **RTD service that offers.....**

(38)
- o UNIFORMED SECURITY ON SELECTED BUSES ON HIGH CRIME LINES (EACH BUS LINE IN THESE AREAS PATROLLED 2-3 TIMES A WEEK)
- o EVENING & WEEKEND SERVICE AS CURRENTLY OFFERED MAXIMUM TIME BETWEEN BUSES - - 60 MINUTES
- o INCREASED ATTENTION TO PASSENGER COMFORT - - BETTER MAINTENANCE OF AIR CONDITIONING / HEATING -AND- MORE FREQUENT PREVENTIVE MAINTENANCE - - TO LESSEN THE CHANCE OF BUSES BREAKING DOWN
- o EXHAUST FUMES AS CURRENTLY EMITTED
- o FARE: $ .80

These few questions are for classification purposes only. These and all your other answers will be kept strictly confidential.

1. Please record your sex. ("X" ONE BOX)

Male... ☐ 1 Female... ☐ 2 (39)

2. Into which of the following age groups do you belong? ("X" ONE BOX)

18 - 24	☐	1
25 - 34	☐	2
35 - 44	☐	3
45 - 54	☐	4
55 - 61	☐	5
62 and older	☐	6

(40)

3. How many people are currently living in your household including yourself and any babies? ("X" ONE BOX)

1	☐	1
2	☐	2
3	☐	3
4	☐	4
5	☐	5
6	☐	6
7 or more	☐	7

(41)

4. How many automobiles, vans, or trucks are owned by members of your household? ("X" ONE BOX)

1	☐	1
2	☐	2
3	☐	3
4	☐	4
5	☐	5
6 or more	☐	6

(42)

5. In which ethnic group do you feel you belong? ("X" ONE BOX)

Caucasian/White	☐	1
Black/Negro	☐	2
Hispanic/Latino	☐	3
Asian/Pacific Islander	☐	4
Other_____ (WRITE IN)	☐	5

(43)

6. What is the last grade of school completed? ("X" ONE BOX)

Grammar school or less	☐	1
Some high school	☐	2
High school graduate	☐	3
Some college	☐	4
College graduate	☐	5
Some graduate school	☐	6
Graduate school degree	☐	7

(44)

7. What is your employment status? ("X" ONE BOX)

I work for someone else full time.....	☐ 1	I am retired and not employed.....	☐ 5
I work for someone else part time only..	☐ 2	I am disabled and not employed.....	☐ 6
I am self-employed.....	☐ 3	I am a student and not employed.....	☐ 7
I am temporarily unemployed.....	☐ 4	I am a full time homemaker.....	☐ 8 (45)

8. What is your total annual household income before taxes? ("X" ONE BOX)

Under $10,0000.....	☐ 1	
$10,000 to $19,999.....	☐ 2	
$20,000 to $29,999.....	☐ 3	
$30,000 to $39,999.....	☐ 4	(46)
$40,000 to $49,999.....	☐ 5	(47-78 Open)
$50,000 and over.....	☐ 6	79[-]1[2]80

Thank you very much for helping us with our survey. Please return this questionnaire in the postage paid envelope provided and enjoy your tokens!

TRADE-OFF ATTRIBUTE CARDS

B-01

RTD SERVICE WHICH OFFERS . . .

* UNDERCOVER SECURITY ON SELECTED BUSES ON SOME BUS LINES
  (AS RTD CURRENTLY DOES)

* EVENING & WEEKEND SERVICE AS CURRENTLY OFFERED
  MAXIMUM TIME BETWEEN BUSES -- 60 MINUTES

* CURRENT LEVELS OF BUS MAINTENANCE

* EXHAUST FUMES AS CURRENTLY EMITTED

* FARE: $ .50

PILE PERCENTAGE _____% RANKING _____

C-01

RTD SERVICE WHICH OFFERS . . .

* UNIFORMED SECURITY ON SELECTED BUSES ON HIGH CRIME LINES
  (EACH LINE IN THESE AREAS PATROLLED 2-3 TIMES A WEEK)

* MORE FREQUENT EVENING & WEEKEND SERVICE
  MAXIMUM TIME BETWEEN BUSES -- 45 MINUTES

* INCREASED ATTENTION TO PASSENGER COMFORT --
  BETTER MAINTENANCE OF AIR CONDITIONING / HEATING
  AND
  MORE FREQUENT PREVENTIVE MAINTENANCE --
  TO LESSEN THE CHANCE OF BUSES BREAKING DOWN

* SPECIAL EQUIPMENT / FILTERS / ATTACHMENTS --
  RESULTING IN A 25% REDUCTION IN EXHAUST FUMES

* FARE: $ .50

PILE PERCENTAGE _____% RANKING _____

E-01

RTD SERVICE WHICH OFFERS . . .

* UNIFORMED SECURITY ON SELECTED BUSES ON ALL BUS LINES
  (EACH BUS LINE PATROLLED AN AVERAGE OF ONCE A WEEK)

* MORE FREQUENT EVENING & WEEKEND SERVICE
  MAXIMUM TIME BETWEEN BUSES -- 30 MINUTES

* INCREASED ATTENTION TO PASSENGER COMFORT --
  BETTER MAINTENANCE OF AIR CONDITIONING / HEATING

* SPECIAL EQUIPMENT / FILTERS / ATTACHMENTS --
  RESULTING IN A 50% REDUCTION IN EXHAUST FUMES

* FARE: $ .50

PILE PERCENTAGE _____% RANKING _____

G-01
RTD SERVICE WHICH OFFERS . . .

* UNDERCOVER SECURITY ON SELECTED BUSES ON SOME BUS LINES
  (AS RTD CURRENTLY DOES)

* MORE FREQUENT EVENING & WEEKEND SERVICE
  MAXIMUM TIME BETWEEN BUSES -- 45 MINUTES

* INCREASED ATTENTION TO PASSENGER COMFORT --
  BETTER MAINTENANCE OF AIR CONDITIONING / HEATING

* SPECIAL EQUIPMENT / FILTERS / ATTACHMENTS --
  RESULTING IN A 25% REDUCTION IN EXHAUST FUMES

* FARE: $ .65

PILE PERCENTAGE _____% RANKING _____

H-01
RTD SERVICE WHICH OFFERS . . .

* UNIFORMED SECURITY ON SELECTED BUSES ON HIGH CRIME LINES
  (EACH LINE IN THESE AREAS PATROLLED 2-3 TIMES A WEEK)

* MORE FREQUENT EVENING & WEEKEND SERVICE
  MAXIMUM TIME BETWEEN BUSES -- 30 MINUTES

* CURRENT LEVELS OF BUS MAINTENANCE

* SPECIAL EQUIPMENT / FILTERS / ATTACHMENTS --
  RESULTING IN A 50% REDUCTION IN EXHAUST FUMES

* FARE: $ .65

PILE PERCENTAGE _____% RANKING _____

I-01
RTD SERVICE WHICH OFFERS . . .

* UNIFORMED SECURITY ON SELECTED BUSES ON ALL BUS LINES
  (EACH BUS LINE PATROLLED AN AVERAGE OF ONCE A WEEK)

* EVENING & WEEKEND SERVICE AS CURRENTLY OFFERED
  MAXIMUM TIME BETWEEN BUSES -- 60 MINUTES

* INCREASED ATTENTION TO PASSENGER COMFORT --
  BETTER MAINTENANCE OF AIR CONDITIONING / HEATING
  AND
  MORE FREQUENT PREVENTIVE MAINTENANCE --
  TO LESSEN THE CHANCE OF BUSES BREAKING DOWN

* EXHAUST FUMES AS CURRENTLY EMITTED

* FARE: $ .65

PILE PERCENTAGE _____% RANKING _____

J-01
RTD SERVICE WHICH OFFERS . . .

* UNDERCOVER SECURITY ON SELECTED BUSES ON SOME BUS LINES
  (AS RTD CURRENTLY DOES)

* MORE FREQUENT EVENING & WEEKEND SERVICE
  MAXIMUM TIME BETWEEN BUSES -- 30 MINUTES

* INCREASED ATTENTION TO PASSENGER COMFORT --
  BETTER MAINTENANCE OF AIR CONDITIONING / HEATING
  AND
  MORE FREQUENT PREVENTIVE MAINTENANCE --
  TO LESSEN THE CHANCE OF BUSES BREAKING DOWN

* SPECIAL EQUIPMENT / FILTERS / ATTACHMENTS --
  RESULTING IN A 25% REDUCTION IN EXHAUST FUMES

* FARE: $ .80

PILE PERCENTAGE _____% RANKING _____

K-01
RTD SERVICE WHICH OFFERS . . .

* UNIFORMED SECURITY ON SELECTED BUSES ON HIGH CRIME LINES
  (EACH LINE IN THESE AREAS PATROLLED 2-3 TIMES A WEEK)

* EVENING & WEEKEND SERVICE AS CURRENTLY OFFERED
  MAXIMUM TIME BETWEEN BUSES -- 60 MINUTES

* INCREASED ATTENTION TO PASSENGER COMFORT --
  BETTER MAINTENANCE OF AIR CONDITIONING / HEATING

* SPECIAL EQUIPMENT / FILTERS / ATTACHMENTS --
  RESULTING IN A 50% REDUCTION IN EXHAUST FUMES

* FARE: $ .80

PILE PERCENTAGE _____% RANKING _____

L-01
RTD SERVICE WHICH OFFERS . . .

* UNIFORMED SECURITY ON SELECTED BUSES ON ALL BUS LINES
  (EACH BUS LINE PATROLLED AN AVERAGE OF ONCE A WEEK)

* MORE FREQUENT EVENING & WEEKEND SERVICE
  MAXIMUM TIME BETWEEN BUSES -- 45 MINUTES

* CURRENT LEVELS OF BUS MAINTENANCE

* EXHAUST FUMES AS CURRENTLY EMITTED

* FARE: $ .80

PILE PERCENTAGE _____% RANKING _____

O-01
RTD SERVICE WHICH OFFERS . . .

* UNIFORMED SECURITY ON SELECTED BUSES ON ALL BUS LINES
  (EACH BUS LINE PATROLLED AN AVERAGE OF ONCE A WEEK)

* MORE FREQUENT EVENING & WEEKEND SERVICE
  MAXIMUM TIME BETWEEN BUSES -- 45 MINUTES

* INCREASED ATTENTION TO PASSENGER COMFORT --
  BETTER MAINTENANCE OF AIR CONDITIONING / HEATING
  AND
  MORE FREQUENT PREVENTIVE MAINTENANCE --
  TO LESSEN THE CHANCE OF BUSES BREAKING DOWN

* SPECIAL EQUIPMENT / FILTERS / ATTACHMENTS --
  RESULTING IN A 50% REDUCTION IN EXHAUST FUMES

* FARE: $ .95

PILE PERCENTAGE _____% RANKING _____

N-01
RTD SERVICE WHICH OFFERS . . .

* UNIFORMED SECURITY ON SELECTED BUSES ON HIGH CRIME LINES
  (EACH LINE IN THESE AREAS PATROLLED 2-3 TIMES A WEEK)

* EVENING & WEEKEND SERVICE AS CURRENTLY OFFERED
  MAXIMUM TIME BETWEEN BUSES -- 60 MINUTES

* CURRENT LEVELS OF BUS MAINTENANCE

* SPECIAL EQUIPMENT / FILTERS / ATTACHMENTS --
  RESULTING IN A 25% REDUCTION IN EXHAUST FUMES

* FARE: $ .95

PILE PERCENTAGE _____% RANKING _____

M-01
RTD SERVICE WHICH OFFERS . . .

* UNDERCOVER SECURITY ON SELECTED BUSES ON SOME BUS LINES
  (AS RTD CURRENTLY DOES)

* MORE FREQUENT EVENING & WEEKEND SERVICE
  MAXIMUM TIME BETWEEN BUSES -- 30 MINUTES

* INCREASED ATTENTION TO PASSENGER COMFORT --
  BETTER MAINTENANCE OF AIR CONDITIONING / HEATING

* EXHAUST FUMES AS CURRENTLY EMITTED

* FARE: $ .95

PILE PERCENTAGE _____% RANKING _____

P-01
RTD SERVICE WHICH OFFERS . . .

* UNDERCOVER SECURITY ON SELECTED BUSES ON SOME BUS LINES
  (AS RTD CURRENTLY DOES)

* EVENING & WEEKEND SERVICE AS CURRENTLY OFFERED
  MAXIMUM TIME BETWEEN BUSES -- 60 MINUTES

* INCREASED ATTENTION TO PASSENGER COMFORT --
  BETTER MAINTENANCE OF AIR CONDITIONING / HEATING
  AND
  MORE FREQUENT PREVENTIVE MAINTENANCE --
  TO LESSEN THE CHANCE OF BUSES BREAKING DOWN

* SPECIAL EQUIPMENT / FILTERS / ATTACHMENTS --
  RESULTING IN A 50% REDUCTION IN EXHAUST FUMES

* FARE: $1.10

PILE PERCENTAGE _____% RANKING _____

S-01
RTD SERVICE WHICH OFFERS . . .

* UNIFORMED SECURITY ON SELECTED BUSES ON HIGH CRIME LINES
  (EACH LINE IN THESE AREAS PATROLLED 2-3 TIMES A WEEK)

* MORE FREQUENT EVENING & WEEKEND SERVICE
  MAXIMUM TIME BETWEEN BUSES -- 45 MINUTES

* INCREASED ATTENTION TO PASSENGER COMFORT --
  BETTER MAINTENANCE OF AIR CONDITIONING / HEATING

* EXHAUST FUMES AS CURRENTLY EMITTED

* FARE: $1.10

PILE PERCENTAGE _____% RANKING _____

T-01
RTD SERVICE WHICH OFFERS . . .

* UNIFORMED SECURITY ON SELECTED BUSES ON ALL BUS LINES
  (EACH BUS LINE PATROLLED AN AVERAGE OF ONCE A WEEK)

* MORE FREQUENT EVENING & WEEKEND SERVICE
  MAXIMUM TIME BETWEEN BUSES -- 30 MINUTES

* CURRENT LEVELS OF BUS MAINTENANCE

* SPECIAL EQUIPMENT / FILTERS / ATTACHMENTS --
  RESULTING IN A 25% REDUCTION IN EXHAUST FUMES

* FARE: $1.10

PILE PERCENTAGE _____% RANKING _____

U-01
RTD SERVICE WHICH OFFERS . . .

* UNDERCOVER SECURITY ON SELECTED BUSES ON SOME BUS LINES
  (AS RTD CURRENTLY DOES)

* MORE FREQUENT EVENING & WEEKEND SERVICE
  MAXIMUM TIME BETWEEN BUSES -- 45 MINUTES

* CURRENT LEVELS OF BUS MAINTENANCE

* SPECIAL EQUIPMENT / FILTERS / ATTACHMENTS --
  RESULTING IN A 50% REDUCTION IN EXHAUST FUMES

* FARE: $1.25

PILE PERCENTAGE _____% RANKING _____

W-01
RTD SERVICE WHICH OFFERS . . .

* UNIFORMED SECURITY ON SELECTED BUSES ON HIGH CRIME LINES
  (EACH LINE IN THESE AREAS PATROLLED 2-3 TIMES A WEEK)

* MORE FREQUENT EVENING & WEEKEND SERVICE
  MAXIMUM TIME BETWEEN BUSES -- 30 MINUTES

* INCREASED ATTENTION TO PASSENGER COMFORT --
  BETTER MAINTENANCE OF AIR CONDITIONING / HEATING
  AND
  MORE FREQUENT PREVENTIVE MAINTENANCE --
  TO LESSEN THE CHANCE OF BUSES BREAKING DOWN

* EXHAUST FUMES AS CURRENTLY EMITTED

* FARE: $1.25

PILE PERCENTAGE _____% RANKING _____

Y-01
RTD SERVICE WHICH OFFERS . . .

* UNIFORMED SECURITY ON SELECTED BUSES ON ALL BUS LINES
  (EACH BUS LINE PATROLLED AN AVERAGE OF ONCE A WEEK)

* EVENING & WEEKEND SERVICE AS CURRENTLY OFFERED
  MAXIMUM TIME BETWEEN BUSES -- 60 MINUTES

* INCREASED ATTENTION TO PASSENGER COMFORT --
  BETTER MAINTENANCE OF AIR CONDITIONING / HEATING

* SPECIAL EQUIPMENT / FILTERS / ATTACHMENTS --
  RESULTING IN A 25% REDUCTION IN EXHAUST FUMES

* FARE: $1.25

PILE PERCENTAGE _____% RANKING _____