

IMPACT OF RTD STRIKE ON RIDERS

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TABLE OF CONTENTS

	Page
INTRODUCTION	1
CONCLUSIONS	2
STUDY RESULTS	
- Use of RTD Prior to the Strike	5
- Modes of Transportation Used During the Strike	6
- Economic Impact of the Strike on Riders	7
- Post-Strike Travel Intentions	9
- Rider Demographics	11
APPENDIX	
- Sample and Method	14
- Computation of Economic Costs of Strike	15

INTRODUCTION

During the recent RTD work stoppage, one of the recurring questions was, "What is the impact of the strike on the public?" The interest was not only in how the riding public managed to get around town without public transit, but also what economic impact the strike had on RTD riders.

To answer these and related questions, RTD Market Research proposed and implemented a survey among Los Angeles County bus riders. The primary purpose of the study was to determine how RTD riders coped during the strike. The specific objectives were to determine:

- What alternative modes of transportation were used during the strike,
- What economic impact the strike had on riders,
- What riders' intentions were regarding use of RTD buses after the strike.

The total sample size for the study was 253 bus riders. Of this, 202 persons were interviewed by telephone and 51 persons, who had no telephones, were interviewed at bus stops. (A more detailed discussion of the sampling and methodology is included in the Appendix.)

CONCLUSIONS

Overall findings from this study indicate that the riding public was impacted both economically and socially by the RTD strike. The economic impact could be measured most easily in terms of the cost of alternative transportation and lost wages. It could be measured with less confidence in terms of lost retail sales and lost recreation/entertainment sales.

Riders also reported missed school days, missed shopping trips and missed recreation and entertainment trips which indicate a loss of social mobility. The economic impact of the loss of social mobility could not be measured with data obtained from this study.

Economically, the cost of alternative transportation was about \$1,263,000 per day, while lost wages averaged about \$476,000 per day. The cost of lost retail sales was estimated to be between \$284,000 and \$568,000 per day, while lost recreation/entertainment sales were estimated at between \$127,000 and \$253,000 per day. Thus, the total measurable economic impact of the strike was at least \$2,150,000 a day and possibly as high as \$2,560,000. (A discussion of the computation and assumptions underlying these costs is included in the Appendix.)

On the issue of riders' intended use of RTD since resumption of service, survey results indicate that one in five riders plans to use RTD less often than prior to the strike. With 15% planning greater use of RTD, the conclusion is that the net effect on RTD boardings would be at least a 5% drop -- barring any dramatic events such as a resumption of long gasoline lines or gasoline rationing.

STUDY RESULTS

USE OF RTD PRIOR TO THE STRIKE

More than half of all respondents used RTD for travel to or from work, as well as for shopping purposes, prior to the RTD strike. While the bus stop sample is too small to draw firm conclusions, the findings strongly support the hypothesis that persons from households without a telephone are more transit dependent than those who have a telephone. The bus stop sample not only used the RTD more frequently and for more purposes, but they also had a greater incidence of no automobiles in their household, one of the factors correlating most closely with transit dependency.

Used RTD before strike to ride:	<u>Total Sample</u>	<u>Telephone Sample</u>	<u>Bus stop Sample</u>
To/from work	55%	51%	69%
To/from shopping	51	57	55
To/from recreation	47	46	53
To/from school	29	19	24
Mean number of RTD trips per week before strike:	<u>8.0</u>	<u>7.4</u>	<u>10.4</u>
BASE: All respondents	(253)	(202)	(51)

MODES OF TRANSPORTATION USED DURING RTD STRIKE

Not surprisingly, the automobile was the primary mode of transportation used by respondents during the strike. However, in the majority of cases, the automobile used belonged to someone other than the respondent.

Walking and bicycling were used as secondary alternatives depending on the trip purpose. Overall, respondents' second choice for shopping or recreation trips was walking. Work and school trips were made using a bicycle or walking as the alternatives to an automobile.

Mode used during RTD strike:	<u>Trip Purpose</u>			
	<u>Work</u>	<u>Shopping</u>	<u>School</u>	<u>Recreation</u>
Automobile	<u>73%</u>	<u>58%</u>	<u>63%</u>	<u>50%</u>
Own car	30	16	16	17
Someone else's	40	42	47	32
Shared	3	-	-	1
Bicycle	11	4	16	8
Walked	15	28	14	12
Hitchhiked	8	9	4	7
Taxi	6	9	2	6
All other	5	11	12	24
BASE: Total qualifying	(139)	(144)	(51)	(120)

ECONOMIC IMPACT OF THE RTD STRIKE ON RIDERS

The RTD strike had a direct economic impact on riders which could be measured in two ways. One measure was the additional costs incurred for alternative transportation. Although one in three respondents claimed to have had no transportation costs during the strike, the average weekly cost for travel among the 68% who incurred transportation costs was \$20. Using the \$20 monthly pass as the comparable cost of public transit, riders spent an additional \$15.38 a week for transportation during the RTD strike. (Using the \$4 senior citizen pass or \$14 student pass as the comparable cost of public transit would greatly increase the cost of alternative transportation for those affected.)

A second measure of direct economic impact on riders was the amount of pay lost, if any, because of the strike. In this instance, one in seven respondents (14%) lost some pay as a result of missing some work time during the strike. The average total pay lost -- for those who did lose pay -- was \$124.

The indirect economic impact of the strike could not be measured as easily by this study. These indirect costs, including loss of mobility, missed classes, and passed up shopping or recreational trips, have been estimated at between \$127,000 and \$253,000 per day of the strike for lost recreation/entertainment sales and between \$284,000 and \$568,000 per day for lost retail sales.

Estimated weekly
cost of transpor-
tation during RTD
strike:

All trip
purposes

Nothing	32%
\$ 1 - \$ 9.99	16
10 - 19.99	18
20 - 29.99	18
30 or more	16

Activity missed as a
result of strike:

Total
sample

Work	30%
School	41%
Recreation	58%
Shopping	60%

BASE: All respondents (253)

Amount of pay lost
for missed work time:

None	14%
\$ 1 - \$ 49	26
50 - 99	17
100 - 149	12
150 - 199	7
200 - 249	12
250 or more	12

BASE: Total
qualifying (42)

POST-STRIKE TRAVEL INTENTIONS

At the time of the survey, four out of five respondents had returned to bus riding. Households without a telephone showed a greater likelihood of bus usage resumption.

The majority of respondents (65%) said they intend to ride RTD buses as often as they did prior to the strike. While 15% said they would be riding RTD more often than they had before the strike, 20% intended to ride less often than they had in the past.

Riding bus again after strike?	<u>Total Sample</u>	<u>Telephone Sample</u>	<u>Bus Stop Sample</u>
Yes	82%	79%	96%
No	<u>18</u>	<u>21</u>	<u>4</u>
Use car	15	17	4
Use bike	2	3	-
Walk	1	1	-
BASE: All respondents (253)		(202)	(51)

Reasons for intention to ride RTD less often than prior to strike: Total

Drive my own car now/more convenient to drive	25%
Bus schedules inconvenient/long headways	16
Ride bike/walk to work/school	16
Less things to do/less places to go/ stay home more	16
Using car pool/ride with others	10
Concerned they will go out on strike again/can't trust them	10
Wait too long for bus/bus not dependable	8
Too dangerous/not safe	4
Can get along without buses	4
Drivers have bad attitude	4
Bus charges too high/too expensive	4
All other reasons	14

BASE: Total qualifying (51)

Reasons for intention to ride RTD more often than prior to strike:

Like/need to go places	33%
To go to work/school	23
Can go shopping/keep appointments	15
Gasoline costs too high/save gas	15
Bus is cheaper/less expensive	13
Enjoy riding bus/like the bus	5
All other reasons	18

BASE: Total qualifying (39)

RIDER DEMOGRAPHICS

The following tables show the demographics of the study sample:

Number of persons in household who regularly ride RTD:	<u>Total Sample</u>
1	52%
2	26
3	15
4	6
5 or more	<u>1</u>
	100%

Number of persons in household:	
1	17%
2	23
3	15
4	17
5	14
6	9
7 or more	<u>5</u>
	100%

Number of automobiles in working condition in household:	
None	29%
1	36
2	23
3 or more	<u>12</u>
	100%

Respondent Age:	
16-18	20%
19-24	17
25-34	19
35-44	14
45-54	11
55-64	7
65 or older	<u>12</u>
	100%

Total Annual Family Income:	Total <u>Sample</u>
Under \$5,000	14%
\$ 5,000- 7,499	13
\$ 7,500- 9,999	11
\$10,000-14,999	14
\$15,000-19,999	8
\$20,000-24,999	3
\$25,000 or more	11
Refused	<u>26</u>
	100%

BASE: All Respondents (253)

APPENDIX

SAMPLE AND METHOD

For purposes of this study, an RTD rider was defined as any Los Angeles resident, 16 years of age or older, who made at least one round trip (or two one-way trips) per week by RTD buses prior to the strike.

A probability sample of Los Angeles residents was selected from a computer-generated list of telephone numbers. This method insures that unlisted numbers will also be included in the sample. However, due to the high incidence of Los Angeles households without a telephone (24% according to the telephone company), supplemental interviews were held at selected bus stops with riders who did not have a telephone. The selected bus stops were in census tracts identified as having a high proportion of no telephone households.

A total of 202 persons was interviewed by telephone and 51 persons at the bus stops for a total sample size of 253. Interviews were conducted between September 27 and October 8, 1979. Sample selection, interviewing and data processing were done by MSI International, an independent marketing and opinion research firm located in Los Angeles.

COMPUTATION OF ECONOMIC COSTS OF STRIKE

The base figure of 650,000 RTD riders per week was the number used to compute all of the costs that follow. For costs of alternative transportation and wages lost as a result of the strike, survey data were applied to this base ridership figure as follows:

COST OF ALTERNATIVE
TRANSPORTATION:

	<u>% from Survey</u>	<u>Number of RTD Riders</u>	<u>Cost</u>
No cost	32%	208,000	-0-
\$1 - \$9/week	16	104,000	\$ 520,000
\$10 - \$19/week	18	117,000	1,755,000
\$20 - \$29/week	18	117,000	2,925,000
\$30 or more	<u>16</u>	<u>104,000</u>	<u>3,640,000</u>
	100%	650,000	\$8,840,000/week

Total RTD riders/week	650,000
Less: No transportation costs	<u>-208,000</u>
Had costs for alternative transportation	442,000

$\$8,840,000 / 442,000 = \20 a week for alternative transportation

$\$8,840,000 / 7$ (days) = \$1,262,857 total cost per day for alternative transportation

WAGES LOST AS A
RESULT OF STRIKE:

From survey: Used RTD for work
trips prior to
strike = 55% x 650,000 = 357,000

Missed work time
as a result of
strike: 30% x 357,000 = 107,250

Pay lost:	None	14%	15,015	-0-
	\$1 - \$49	26	27,885	\$ 697,125
	\$50- \$99	17	18,232	1,367,400
	\$100-\$149	12	12,870	1,608,750
	\$150-\$199	7	7,508	1,313,900
	\$200-\$249	12	12,870	2,895,750
	\$250 or more	<u>12</u>	<u>12,870</u>	<u>3,539,250</u>
		100%	107,250	\$11,422,175

Total wages lost during strike \$11,422,175

Total riders missing work time = 107,250
Less: lost no wages -15,015

Lost wages because of missed
work time 92,235

$\$11,422,175 / 92,235 = \123.84 total wages lost per rider affected

$\$11,422,175 / 24$ (days of strike) = \$475,924 total cost per day

LOST RETAIL SALES AND LOST RECREATIONAL/ENTERTAINMENT SALES:

From survey: Used RTD for shopping
trips prior to strike: $51\% \times 650,000 = 331,500$
Missed shopping trips
as a result of strike: $60\% \times 331,500 = 198,900$

Two cost estimates were used to arrive at the lost retail sales. One estimate is based on a \$10 per week per rider affected, the other is based on \$20 per week per rider affected. These estimates are not supported by any survey data. They are based partially on average cost of living from the Consumer Price Index and are partially "educated" assumptions.

$$198,900 \times \$10 = \$1,989,999/7 \text{ (days)} = \$284,143/\text{day}$$

$$198,900 \times \$20 = \$3,978,000/7 \text{ (days)} = \$568,286/\text{day}$$

A similar process was used for lost recreation/entertainment sales. In this instance, the two estimates used were \$5 and \$10 per week per rider affected.

From survey: Used RTD for recreation/
entertainment trips
prior to strike: $47\% \times 650,000 = 305,500$
Missed recreation/
entertainment trips
as a result of strike: $58\% \times 305,500 = 177,190$

$$177,190 \times \$5 = \$885,950/7 \text{ (days)} = \$126,564/\text{day}$$

$$177,190 \times \$10 = \$1,771,900/7 \text{ (days)} = \$253,129/\text{day}$$