

PARK AND RIDE SURVEY  
1980

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## CONCLUSIONS

1. Park and Ride patrons tend to be significantly older and more affluent than riders on regular service lines.
2. The demographic profile of Park and Ride patrons has not changed significantly over the last five years.
3. The trip profile of Park and Ride patrons is significantly different than that of regular-service riders. Park and Ride patrons tend to be five-day-a-week commuters to the CBD or Wilshire Corridor who ride only one bus to complete their trip.
4. Nearly a third of the Park and Ride patrons are not residents of Los Angeles County.
5. Park and Ride patron demographic profiles and trip patterns vary significantly by line.
6. Productivity of Park and Ride lines is relatively high and has tended to increase over time.

## BACKGROUND AND OBJECTIVES

The most recent extensive study of Park and Ride lines was conducted by Market Research near the end of 1975, at a time when major adjustments were still being made to these peak-hour commuter routes. Two Park and Ride lines had been recently cancelled and two new lines were being planned. At that time, approximately 2,000 patrons (or about 4,000 boardings per day) were riding eight Park and Ride lines.

Table I shows that ridership has fluctuated since 1975, but tended to increase overall. Ridership counts taken in 1980 have ranged from 3,800 patrons up to 4,300, an increase of from 74 to 98% over the number of patrons in 1975. Although ridership has been declining steadily since April of this year, the August count is still 7.8% higher than the count taken in August of 1979.

One measure of efficiency in the operation of Park and Ride services is the number of riders per bus trip, as illustrated in Table II. In October 1980 the number of riders per trip was 40, 48% higher than in 1975 at the time of the first Park and Ride study.

The eight Park and Ride lines operating at the time of the 1975 study used 64 buses. The nine lines in operation in 1980 use 100 buses, an increase of 56%. (Note that the 770 line has not been included in this study of Park and Ride lines because it is atypical in that service is not limited to peak hours nor to weekdays, and the line does not serve a specific park and ride facility.)

The 1975 study of Park and Ride lines found the patrons of these lines to be "transit independents who are relatively young (and) affluent. . . a totally different market segment for public transportation . . . as opposed to the traditional transit users who are thought to be the transit dependents defined as the very young, the elderly and the lower income."

In view of the dramatic increases that have occurred in Park and Ride patronage since 1975, the 1980 study of Park and Ride lines was undertaken to obtain information in three areas:

- 1) Changes in demographic characteristics of Park and Ride patrons since 1975,

- 2) Changes in trip-making characteristics of Park and Ride patrons since 1975,
- 3) Comparison between demographic and trip-making characteristics of Park and Ride patrons and patrons using other RTD services.

TABLE I

-4-

Park And Ride Patronage TrendsNumber of Riders\*  
(1975-1980)

Line	DATE OF RIDE CHECK														
	9/75	1/76	6/76	3/78	10/78	12/78	4/79	6/79	7/79	8/79	11/79	4/80	6/80	7/80	8/80
716	170	195	205	142	164	167	176	266	243	206	197	225	177	190	185
721	320	305	310	257	224	248	258	293	269	288	265	338	292	390****	414
737	110	95	100	69	95**	105	156	188	203	187	180	224	193	207	173
755	335	435	435	332	380	352	380	497	544	488	507	567	495	533	476
757	440	555	595	704	660	651	816	833	739	745	993	833	859	770	750
758	495	485	440	255	295***	243	298	308	294	274	277	298	289	236	216
760	225	360	395	390	404	447	573	616	666	639	664	777	719	614	662
762	-	-	-	-	-	-	312	361	370	379	406	590	561	488	512
764	80	90	195	199	198	178	254	257	338	306	343	447	435	434	397
<u>TOTAL</u>	2,175	2,520	2,675	2,348	2,420	2,391	3,223	3,619	3,666	3,512	3,832	4,299	4,020	3,862	3,785
<u>% CHANGE</u>	-	+15.8%	+6.2%	-12.2%	+3.1%	-1.2%	+34.8%	+12.3%	+1.3%	-4.2%	+9.1%	+12.2%	-6.5%	-3.9%	-2.0%
<u>MEAN</u>	272	315	334	294	303	299	358	402	407	390	426	478	447	429	421

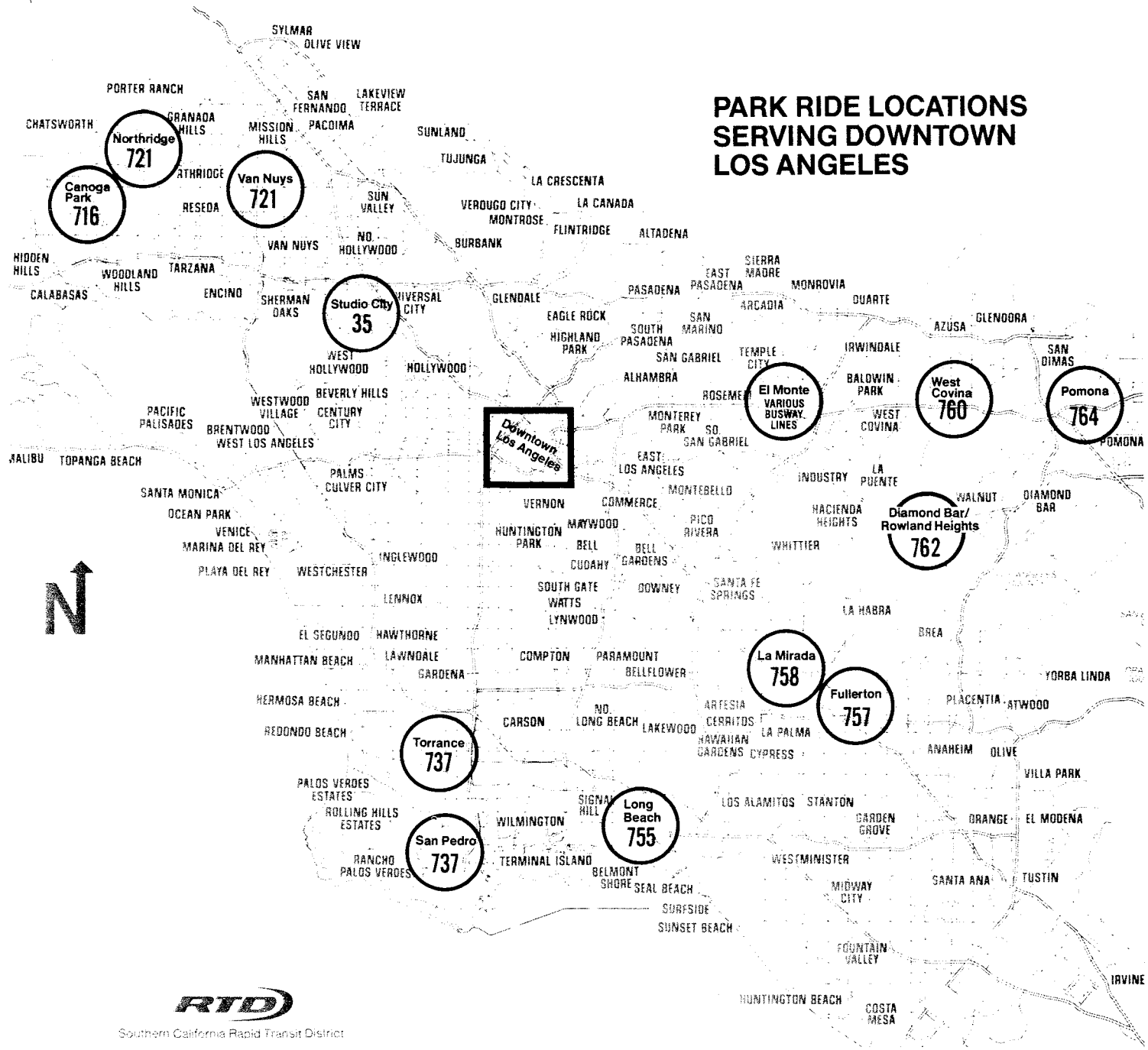
\*  $\frac{1}{2}$  Boardings  
 \*\* Date of Ride Check = 6/78  
 \*\*\* Date of Ride Check = 9/78  
 \*\*\*\* Line 121 was merged with Line 721 on 6/29/80

TABLE II

Park And Ride Patronage TrendsRiders Per Bus Trip  
(1975-1980)

<u>Line</u>	<u>10/75</u>	<u>10/79</u>	<u>10/80</u>
716	30	37	32
721	23	40	38
737	27	32	41
755	32	36	38
757	NA	37	42
758	24	34	35
760	35	37	45
762	NA	34	42
764	<u>19</u>	<u>38</u>	<u>40</u>
OVERALL	27	36	40

# PARK RIDE LOCATIONS SERVING DOWNTOWN LOS ANGELES



Southern California Rapid Transit District



## MAJOR FINDINGS

### DEMOGRAPHIC PROFILE

The demographic profile of Park and Ride patrons in 1980 has not changed significantly over the last five years. Ridership on these lines still consists chiefly of the affluent, middle-aged, middle class suburbanite who rides public transit out of choice, not necessity.

When compared to the mass of RTD riders who patronize regular-service lines, the Park and Ride patron is significantly richer and older, and more likely to be a male.

The median age of Park and Ride patrons in 1980 is 35.1 years, not significantly different than in 1975, but nine to ten years older than the median age of RTD's regular-service riders.

The median household income of Park and Ride patrons in 1980 is nearly \$26,000. The median income appears to have increased since 1975 at a rate somewhat less than the rate at which the Consumer Price Index has increased. That the average Park and Ride patron is more affluent than most RTD riders is beyond question. As recently as 1978 the median income of regular-service riders was found to be under \$9,000, about one-third that of Park and Ride patrons.

Automobile ownership, one measure of affluence, is reported by 97% of the Park and Ride patrons in 1980. No significant change since 1975, but this high level of auto ownership is significantly different than that reported by regular-service riders. Only about 63% have at least one car.

Ridership on Park and Ride lines in 1980 is about evenly divided between males and females. Females have shown a slight gain since 1975. The gender mix on Park and Rides is significantly different than that on regular-service lines, where 58% of the rider are women.

### TRIP PROFILE

There have been few significant changes in the trip patterns of Park and Ride patrons since 1975. Most riders use the Park and Ride lines on work trips to the Los Angeles CBD or the Wilshire area five days a week. Most Park and Ride patrons get to the bus by automobile in the morning and walk to their office after they leave the bus, and most use a pass to board the bus.

Not only does the typical Park and Ride patron differ demographically from the regular-service rider, the trip patterns of the two are also vastly different.

As in 1975, 98% of the 1980 Park and Ride respondents said they were riding the bus to work. Only about half the trips on regular-service lines are work trips.

In 1980, 94% of the Park and Ride patrons rode the bus at least four days a week, 83% rode five days. Percentages in both these categories are up slightly over 1975 levels. Only about 80% of regular-service riders said they ride the bus four or more days per week, and 71% ride at least five days a week.

Park and Ride patrons in 1980 account for an average of 54 boardings per month. Regular-service riders make an average of 81 boardings per month.

The average number of boardings per month varies by type of fare, with cash-paying riders tending to account for the lowest average number of boardings.

At least 60% of the Park and Ride patrons in 1980 used a pass to board the bus, and 31% paid cash. The situation is reversed among regular-service riders, 62% of whom pay cash fares and 36% use a pass.

Since 1975 significantly more Park and Ride patrons have begun to walk to their Park and Ride bus (14%) or transfer from a local bus (5%), but 81% still access the bus by car. The access pattern to regular-service lines is considerably different. At least 60% of the riders access on foot and 35% transfer from other buses. Only about 4% get to the bus by car.

After they get off the Park and Ride bus, 79% of the Park and Ride patrons in 1980 said they walk to their destinations, a percentage which is not significantly different than in 1975. The percentage of respondents transferring to another bus declined four points, to 16%, in 1980. Only 65% of regular-service riders walk to their destinations and 32% transfer to another bus.

Up to 76% of the Park and Ride patrons need to ride only one bus to complete their trips from origin to destination. The average number of buses ridden to complete a one-way trip is 1.31 among Park and Ride patrons and 2.02 among regular-service riders.

In 1980, 70% of the Park and Ride patrons were residents of Los Angeles County, 22% were from Orange County, and 7% were from San Bernardino County.

Up to 48% of the Park and Ride patrons from Los Angeles County live in the San Gabriel Valley, 24% in the San Fernando Valley, and 23% in South Bay.

Of the Park and Ride patrons who live in Orange County, 81% live in the north county.

Of the San Bernardino County residents among the Park and Ride patrons, 65% live in the west county.

Over 82% of the Park and Ride patrons were destined for the Los Angeles CBD, nearly half of these going to the high-rise area around Arco Towers.

Nearly 11% of the Park and Ride patrons were bound for the Wilshire district.

At least 98% of the Park and Ride patrons were destined for points in the CBD or within five miles of the CBD.

Linked trip lengths reported by Park and Ride patrons ranged from 13 miles to 120 miles. The median was 24.2 miles.

## DEMOGRAPHIC CHARACTERISTICS OF PARK AND RIDE PATRONS

### AGE OF RIDERS

The 1980 study of Park and Ride lines confirms the 1975 findings that patrons of these lines tend to be in their mid-30's. In 1975 the median age of the surveyed riders was 36.6 years, not significantly different than the 35.1 median age found in the 1980 study. The age range encountered among riders in 1980 was from 14 to 85. A comparison of results from the two studies, as shown in Table III, indicates that ridership growth has been greatest in the 30 to 39 and over-62 age groups. In 1980, 62% of the Park and Ride patrons are under 40 years of age, approximately the same proportion found in this age bracket in 1975. The proportion of riders above 62 years of age has nearly doubled since 1975, going from 2% to just under 4%.

In 1975 the median age of patrons by line ranged from a low of 32.5 on the 716 line to 41 years on the 737. Three interesting phenomena are expressed in the 1980 data: 1) the low end of the median age range has advanced 2.7 years, up to 35.2 years (on both the 755 and the 762 lines), 2) the top end of the range has remained the same at 41 years of age, and 3) the 716 line, which formerly carried the youngest Park and Ride patrons, now carries the oldest, the median age on this line having shifted from 32.5 years to 41.1.

When the 1975 Park and Ride survey was conducted there were only sparse demographic data available to describe RTD riders on a comprehensive scale. In the intervening years, however, extensive system-wide surveys have been conducted employing standardized questionnaires and research methodologies. The result has been the compilation of a large base of data which allows comparisons to be drawn among various market segments -- a capability which did not yet exist in 1975.

Major studies in 1978 and 1979, in which responses were received from nearly 12,300 riders on 56 regular-service lines, indicate that the median age of RTD riders is approximately 26. The nine to ten year difference between the median age of regular-service riders and the more mature Park and Ride patrons is significant and confirms emphatically one of the many major differences between the two groups.

TABLE III

Age of Park And Ride Patrons  
(1975-1980)

Line	(1975)							(1980)								
	Under 30	30-39	40-49	50-61	62+	Total	Median	# of R's	Under 30	30-39	40-49	50-61	62+	Total	Median	# of R's
716	45%	21%	17%	17%	-	100%	32.5	47	18%	29%	25%	20%	8%	100%	41.1	163
721	30	32	18	19	1	100	36.3	134	26	33	22	17	2	100	37.4	295
737	16	31	25	23	5	100	41.0	80	32	25	28	11	4	100	37.3	127
755	32	27	18	18	5	100	36.7	129	35	29	16	16	4	100	35.2	459
757	-	-	-	-	-	-	-	-	28	30	18	19	5	100	37.3	502
758	26	33	22	16	3	100	37.3	414	12	42	21	22	3	100	39.0	105
760	40	27	20	12	1	100	33.8	281	33	31	20	12	4	100	35.4	447
762	-	-	-	-	-	-	-	-	27	44	16	11	2	100	35.2	413
764	23	29	34	14	-	100	39.0	84	29	37	20	12	2	100	35.8	362
OVERALL	30%	30%	22%	16%	2%	100%	36.6	1169	29%	33%	19%	15%	4%	100%	35.1	2873

## RIDER GENDER

The 1975 Park and Ride study data in Table IV suggest a slight male dominance which has apparently dissipated over the last five years. In 1975 53% of the riders on the Park and Ride lines were male. In 1980 the ridership is more evenly divided, with female riders in the majority at 51%.

There is a wide range of gender mix by line. In 1975 male ridership ranged from 60% on the 737 line to 48% on the 760. By 1980 the range of male ridership was from 62% on the 716 to only 39% on the 760. As ridership has been doubling on the 760 line over the last five years, the number of new female riders attracted to the service has been significantly higher than the number of new male riders. Disproportionate increases in female ridership can also be seen on the 737, 755, and 758 lines. Only the two Park and Ride lines serving the San Fernando Valley, the 716 and 721 lines, have shown larger increases in the number of male riders than in the number of female riders. Comparable data were not available for the 757 and 762 lines.

Considered as a unit, however, the Park and Ride lines are quite different in respect to gender mix than RTD's regular service lines. System-wide studies have shown that on the whole riders on regular-service lines are likely to be female. Women predominate on the buses, accounting for about 58% of the ridership.

TABLE IV  
Gender of Park and Ride Patrons  
(1975-1980)

<u>Line</u>	<u>Male</u>	<u>Female</u>	<u>Total</u>	<u>No. of R's</u>	<u>Male</u>	<u>Female</u>	<u>Total</u>	<u>No. of R's</u>
716	57%	43%	100%	47	62%	38%	100%	146
721	53	47	100	133	58	42	100	267
737	60	40	100	80	43	57	100	114
755	56	44	100	129	53	47	100	423
757	-	-	-	-	51	49	100	451
758	54	46	100	414	47	53	100	100
760	48	52	100	280	39	61	100	411
762	-	-	-	-	40	60	100	376
764	51	49	100	84	51	49	100	328
OVERALL	53%	47%	100%	1,167	49%	51%	100%	2,616

## HOUSEHOLD INCOME

Since 1975 the average income of Park and Ride patrons has increased 30%. The median income five years ago was \$19,763, as compared to \$25,738 in 1980. By way of comparison, the Consumer Price Index for Los Angeles County rose 39.3% from 1975 through 1979. The median household effective buying income\* rose 41.5% during the same period, from \$13,205 in 1975 to \$18,680 in 1979.

Median incomes by bus line fall into a relatively narrow \$930 range -- from \$25,400 among riders on the 755 line to \$26,330 on the 716 line. The range in 1975 was a much broader \$3,627 -- from \$16,667 on the 721 line to a high of \$20,294 among riders on the 737 line.

The 1975 Park and Ride study indicated that only 25.7% of the respondents were in an income category above \$25,000 per year. By 1980 the percentage of riders in this category had grown to 58.6%.

There is little doubt that on average the Park and Ride clientele is more affluent than regular-service riders. Market Research studies of system-wide ridership indicate that the median household income in 1978 was only \$8,423. The 1978 Service Awareness Study reported median family incomes of \$7,440 among moderate users of public transportation and \$7,916 among heavy users.

More recent median income figures will be available when the 1981 Service Awareness Study and a new series of system-wide on-board surveys are completed.

\*Median Household Effective Buying Income: Personal income less personal tax and nontax payments. Personal income is the aggregate of wages and salaries, other labor income (such as employer contributions to private pension funds), proprietors' income, rental income, dividends paid by corporations, personal interest income from all sources, and transfer payments (such as pensions and welfare assistance). Deducted from this total are personal taxes (federal, state, and local), nontax payments (such as fines, fees, penalties), and personal contributions for social insurance.



Household Income of Park and Ride Patrons

(1975-1980)

## INCOME

	Under \$5,000	\$5,000 9,999	\$10,000 14,999	\$15,000 19,999	\$20,000 24,999	\$25,000+	Total	Median	No. of R's
1975									
716	2.3%	20.5%	15.9%	15.9%	20.5%	25.0%	100.1%	\$17,857	44
721	1.6	11.9	21.4	21.4	19.0	24.6	99.9	16,667	126
737	-	5.1	25.6	17.9	21.8	29.5	99.9	20,294	78
755	1.6	18.5	18.5	16.1	21.8	23.4	99.9	18,500	124
757	-	-	-	-	-	-	-	-	-
758	2.3	9.0	17.3	22.6	22.3	26.6	100.1	19,750	399
760	2.7	9.8	11.8	25.1	23.5	27.1	100.0	20,125	255
762	-	-	-	-	-	-	-	-	-
764	-	16.9	26.5	18.1	19.3	19.3	100.1	17,000	83
OVERALL	1.9%	11.4%	17.9%	21.4%	21.8%	25.7%	100.1%	\$19,763	1,109
1980									
716	.6%	2.5%	5.6%	10.0%	13.1%	68.1%	99.9%	\$26,330	160
721	2.2	3.3	8.8	10.7	13.2	61.8	100.0	25,950	272
737	.8	4.2	7.5	11.7	15.0	60.8	100.0	25,890	120
755	.7	3.9	14.5	12.1	14.3	54.6	100.1	25,400	456
757	2.1	2.3	11.4	13.1	12.8	58.1	99.8	25,715	474
758	1.0	4.8	2.9	14.4	10.6	66.3	100.0	26,230	104
760	1.4	2.4	12.6	11.9	12.9	58.7	99.9	25,740	419
762	2.0	3.8	9.5	10.5	15.6	58.6	100.0	25,730	391
764	1.5	4.4	10.7	12.1	16.9	54.4	100.0	25,407	338
OVERALL	1.5%	3.4%	10.6%	11.8%	14.0%	58.6%	99.9%	\$25,738.5	2,734

## NUMBER OF CARS IN HOUSEHOLD

"Considered as a whole, the typical Park 'n' Ride passenger is using the service by choice, not necessity," states the report on the 1975 Park and Ride survey. Data from that study indicated that 98% of the Park and Ride users had at least one car in the household. A quarter of the riders surveyed had one car, 59% had two cars and 14% had three or more cars. Only 2% said their household had no car available.

Table VI shows that there has been no significant change in the high level of automobile ownership among Park and Ride patrons. Data from the 1980 survey indicate that 97% of the Park and Ride households have at least one car -- 28% report one car, 52% said they had two cars and 17% had three or more. Only 3% had no car available.

Among regular-service riders, only 63% report having at least one car in the household. Up to 35% have only one car, 19% have two and only 9% have three or more cars. Thirty-seven percent of the regular-service riders surveyed reported that there was no car available in the household.

A strong relationship between the number of cars and the number of people in the household can be seen in Table VII. As would be expected, the number of cars per household tends to increase as the number of household residents goes up. Among one-person households, 84% have one car. In two-person households, over 70% have at least two cars. The percentage of multi-car households continues to rise as household size increases, so that 76% of the three-person households own two or more cars, 84% of the four-person households, 85% of the five-person households and 88% of the six-person households report having at least two cars. The relationship between number of cars and number of residents in a household is not perfect, however, for among households of seven or more persons, ownership of two or more cars declines to 73%.

TABLE VI

Number Of Cars In Households Of Park And Ride Patrons

(1975-1980)

<u>Line</u>	<u>(1975)</u>					<u># of R's</u>	<u>(1980)</u>					<u># of R's</u>
	<u>None</u>	<u>One</u>	<u>Two</u>	<u>Three+</u>	<u>Total</u>		<u>None</u>	<u>One</u>	<u>Two</u>	<u>Three+</u>	<u>Total</u>	
716	0%	34%	51%	15%	100%	47	1%	24%	57%	18%	100%	173
721	2	27	54	17	100	134	3	26	50	21	100	311
737	0	20	67	14	101	81	0	22	53	25	100	138
755	2	33	58	6	99	127	3	36	49	12	100	478
757	-	-	-	-	-	-	5	29	48	18	100	528
758	1	22	60	17	100	413	0	22	59	19	100	112
760	2	25	59	14	100	281	2	26	54	19	101	471
762	-	-	-	-	-	-	3	27	56	14	100	428
764	4	25	57	14	100	84	4	24	55	18	101	376
<u>OVERALL</u>	2%	25%	59%	14%	100%	1,167	3%	28%	52%	17%	100%	3,015

TABLE VII

Number of Cars By Household Size

(1980)

<u>Number of Persons</u>	(Number of Cars)				<u>Total</u>	<u>No. of R's</u>
	<u>None</u>	<u>One</u>	<u>Two</u>	<u>Three or More</u>		
1	9.3%	83.9%	6.4%	.3%	99.9%	311
2	2.7	26.8	61.8	8.6	99.9	1,030
3	2.2	22.1	53.2	22.6	100.1	602
4	.9	14.9	62.2	22.1	100.1	585
5	1.1	14.4	56.7	27.8	100.0	263
6	-	12.3	46.9	40.8	100.0	130
7 or more	3.1	23.4	32.8	40.6	99.9	64
OVERALL	2.7%	27.7%	52.7%	17.0%	100.1%	2,985

## TRIP-RELATED CHARACTERISTICS OF PARK AND RIDE PATRONS

### FREQUENCY OF RTD BUS USE

Table VIII shows that the frequency of bus use among Park and Ride patrons has remained virtually the same since 1975. At that time 92% of the respondents said they rode the bus at least four days a week. In 1980, 93% indicated riding the bus four or more days per week.

System-wide surveys of regular-service ridership in 1978 indicated a somewhat lower percentage of frequent riders who use the bus at least four days a week. Only about 80% of the riders were in this frequent use category.

A comparison of the 1980 Park and Ride data with data obtained from the 1979 survey of regular-service lines indicates a significant difference in the average number of boardings made each month by patrons of the two types of service. Table IX was derived from a three-way crosstabulation of the following survey variables: 1) Frequency of bus use, 2) Number of buses ridden to complete trip from origin to destination, and 3) Type of fare paid to board the bus. The following formula was used to compute the average number of boardings per month:

$$\text{Boardings} = \frac{\text{Frequency} \times (2 \times \text{Buses})}{\text{Riders}} 4.36$$

Where

Frequency = Days per week respondent rides the RTD  
Buses = Number of buses ridden to complete surveyed trip  
Riders = Number of respondents

The number of buses is multiplied by 2 on the assumption that most riders will complete a round trip in a given day. The 4.36 multiplier is used to expand weekly boarding figures to a monthly total. The mean number of monthly boardings derived from this operation is a minimum number, for the formula does not take into account additional bus trips a respondent might take in an average day or on weekends.

Table IX shows that Park and Ride patrons account for a minimum average of 59.9 boardings per month, as opposed to regular-service riders who board at least 80.5 buses per month, or 49% more than Park and Ride patrons.

As would be expected, the average number of boardings tends to vary by the type of fare paid. Riders who pay cash fares appear to account for fewer boardings per month than those who use some kind of pass. The average number of boardings per month made by

Park and Ride patrons who pay cash is only 45.6, as compared to 75.9 boardings made by the average cash-paying regular-service rider.

Riders who used a pass to board a Park and Ride line accounted for 56.7 boardings per month on average. Regular-service riders using a pass board 87.3 buses, or 54% more. By way of comparison, the Service Analysis Section estimated the average number of pass uses per month to be 75 at the time the Market Research data was obtained. The estimated number of boardings per month obtained from the on-board surveys is 16% higher than that provided by the Service Analysis Section estimate. Much of the difference between the two estimates can be accounted for by the vastly different methodologies used and by the different mix of bus lines sampled.

TABLE VIII  
FREQUENCY OF BUS USE

Line	Days per Week (1975)						Total	# of R's	Line	Days per Week (1980)						Total	# of R's
	Five+	Four	Three	Two	One	Less Than				Five+	Four	Three	Two	One	Less Than		
716	79%	13%	8%	-	-	-	100.0%	47	716	77.8%	15.3%	5.1%	.6%	-	1.1%	99.9%	176
721	87	7	2	2	1	1	100.0	134	721	78.9	14.1	4.8	.6	.6%	1.0	100.0	313
737	69	19	4	4	-	4	100.0	83	737	86.3	11.5	2.2	-	-	-	100.0	139
755	70	20	5	1	1	3	99.0	130	755	74.8	16.6	6.4	1.5	.4	.2	99.9	481
757	-	-	-	-	-	-	-	-	757	83.7	9.2	3.6	1.5	.4	1.7	100.1	533
758	82	10	4	1	1	1	99.0	414	758	92.0	6.2	1.8	-	-	-	100.0	113
760	80	10	4	3	*	3	100.0	280	760	87.1	7.4	3.4	.8	.4	.8	99.9	474
762	-	-	-	-	-	-	-	-	762	87.1	6.8	3.5	1.4	.2	.9	99.9	427
764	83	13	1	-	-	3	100.0	84	764	86.3	7.7	4.5	.5	-	1.1	100.1	379
Overall	80%	12%	4%	2%	1%	2%	101.0%	1,172	Overall	83.2%	10.4%	4.2%	1.0%	.3%	.9%	100.0%	3,035

\* Less than .1%

TABLE IX

Average Number of Boardings Per Month by Type of Fare

	<u>Park and Ride (1980)</u>			<u>Regular Service (1979)</u>		
	<u>Estimated # of Monthly Boardings</u>	<u># of R's</u>	<u>Mean # of Boardings</u>	<u>Estimated # of Monthly Boardings</u>	<u># of R's</u>	<u>Mean # of Boardings</u>
Cash/Transfer	40,949	898	45.6	242,316	3,191	75.9
All Passes	98,090	1,730	56.7	193,559	2,217	87.3
Regular Pass	1,979	31	63.8	102,883	1,151	89.4
Express Pass	85,133	1,529	55.7	13,499	163	82.8
Student Pass	5,319	84	63.3	51,679	577	89.6
Senior Citizen Pass	4,822	75	64.3	19,821	257	77.1
Handicap Pass	837	11	76.1	5,677	69	82.3
Other	15,853	246	64.4	4,090	57	71.8
All Fares	154,892	2,874	53.9	439,965	5,465	80.5



### TRIP PURPOSE

Table X reveals that, as in the 1975 study, the overwhelming trip purpose among Park and Ride patrons is travel to and from work. Ninety-eight percent of the respondents in 1975 and again in 1980 were riding the Park and Ride bus on work trips.

System-wide, only about 50% of the trips on regular-service lines are reported as work trips, and another 28% are school trips.

TABLE X

Trip Purpose

<u>Line</u>	(1975)								(1980)							
	<u>Work</u>	<u>School</u>	<u>Soc/ Rec</u>	<u>Shopping</u>	<u>Medical</u>	<u>Other</u>	<u>Total</u>	<u># of R's</u>	<u>Work</u>	<u>School</u>	<u>Soc/ Rec</u>	<u>Shopping</u>	<u>Medical</u>	<u>Other</u>	<u>Total</u>	<u># of R's</u>
716	100%	-	-	-	-	-	100%	46	98.9%	.6%	-	.6%	-	-	100.1%	175
721	100	-	-	-	-	-	100	134	97.8	1.9	-	-	-	.3%	100	314
737	96	2.0%	-	-	-	1.0%	99	81	99.3	.7	-	-	-	-	100	137
755	97	-	-	-	-	3.0	100	130	97.9	1.5	.2	-	-	.4	100	480
757	-	-	-	-	-	-	-	-	97.7	1.1	.6	.2	.2	.2	100	529
758	98	1.0	-	-	-	1.0	100	412	97.3	1.8	-	-	-	.9	100	113
760	96	2.0	-	-	-	2.0	100	281	97.3	1.5	.4	.2	.2	.4	100	473
762	-	-	-	-	-	-	-	-	97.7	1.6	-	.2	.2	.2	99.9	428
764	100	-	-	-	-	-	100	84	97.9	1.6	.5	-	-	-	100	379
Overall	98%	1.0%				1.0%	100%	1,168	97.8%	1.4%	.3%	.1%	.1%	.3%	100%	3,028

TYPE OF FARE

Table XI shows that 60% of the respondents to the 1980 Park and Ride survey used a pass to board the bus. Fare data is not available from the 1975 survey.

On regular service lines, only about 30 to 36% of the respondents indicated use of a pass.

TABLE XI

Type of Fare  
(1980)

<u>Line</u>	<u>Cash</u>	<u>Transfer</u>	<u>Regular Pass</u>	<u>Express Pass</u>	<u>Student Pass</u>	<u>S.C. Pass</u>	<u>H.C. Pass</u>	<u>Other</u>	<u>Total</u>	<u># of R's</u>
716	28.7%	-	.6%	53.8%	2.3%	5.3%	.6%	8.8%	100.1%	171
721	31.9	.3	1.3	52.6	4.2	2.6	1.0	6.1	100.0	310
737	30.4	.7	2.9	58.7	-	2.9	-	4.3	99.9	138
755	41.8	.4	-	47.1	3.4	3.8	-	3.6	100.1	476
757	21.2	1.3	1.7	46.2	.8	2.5	.6	25.8	100.1	528
758	31.3	-	.9	64.3	.9	.9	-	1.8	100.0	112
760	26.8	.4	.6	57.6	4.7	3.9	-	6.0	100.0	467
762	34.2	.2	1.2	53.9	3.3	1.4	.7	5.2	100.1	427
764	32.4	.6	1.4	59.4	3.1	1.4	-	1.7	100.0	352
Overall	30.9%	.5%	1.1%	53.1%	2.8%	2.8%	.3%	8.4%	99.9%	2,981

## MODE OF ACCESS

Table XII shows that in 1980 a significantly larger percentage of Park and Ride patrons reported walking to the bus than in 1975. In 1975, only 3% of the respondents said they walked to the bus. In 1980 the percentage had jumped to nearly 14%. Some of this increase can be accounted for by the large number of riders walking to the 762 line, which was not surveyed in 1975. Even on those lines which were surveyed in both 1975 and 1980, however, there is a significant increase in pedestrian access to the Park and Ride lines. As a result, the percentage of Park and Ride users driving or being driven to the bus decreased from 95% in 1975 to 81% in 1980.

The percentage of regular-service riders who walk to the bus is 60%. Only 4% of the respondents report getting to the bus by car, but over 35% transferred from another bus.

TABLE XII  
Mode of Access

(1975)								(1980)						
<u>Line</u>	<u>Drive</u>	<u>Be Driven</u>	<u>Walk</u>	<u>Bus</u>	<u>Other</u>	<u>Total</u>	<u># of R's</u>	<u>Line</u>	<u>Drive</u>	<u>Be Driven</u>	<u>Walk</u>	<u>Bus</u>	<u>Other</u>	<u># of R's</u>
716	82.0%	11.0%	4.0%	-	2.0%	100%	45	716	71.2%	11.3%	11.3%	6.2%	-	177
721	80.0%	13.0%	4.0%	2.0%	1.0%	100%	134	721	59.3%	12.5%	19.9%	8.3%	-	312
737	77.0%	16.0%	7.0%	-	-	100%	83	737	79.1%	16.5%	3.6%	.7%	-	139
755	76.0%	9.0%	10.0%	2.0%	3.0%	100%	128	755	62.7%	9.2%	24.4%	3.5%	.2%	480
757	-	-	-	-	-	-	-	757	77.2%	8.6%	3.0%	10.7%	.6%	534
758	80.0%	20.0%	-	-	-	100%	411	758	88.5%	8.8%	1.8%	-	.9%	113
760	79.0%	16.0%	1.0%	2.0%	1.0%	99%	278	760	75.8%	8.4%	9.3%	6.1%	.4%	475
762	-	-	-	-	-	-	-	762	55.1%	12.1%	30.1%	1.9%	.7%	428
764	86.0%	12.0%	-	2.0%	-	100%	84	764	85.6%	9.6%	4.8%	-	-	375
<u>OVERALL</u>								<u>OVERALL</u>						
	79%	16.0%	3.0%	1.0%	1.0%	100%	1,163		70.8%	10.2%	13.7%	4.9%	.3%	3,035

## MODE OF EGRESS

The percentage of Park and Ride patrons who walk to their destinations after leaving the bus has not changed significantly since the 1975 survey. At that time, 78% of the respondents said they walked to their destinations, while 79% of the 1980 respondents reported walking from the bus.

The percentage of respondents transferring to another bus declined from 20% in 1975 to 16% in 1980.

Among regular-service riders, 65% reported walking from the bus, and 32% said they would transfer to another bus. Fewer than 3% were going to drive or ride in an automobile after leaving the bus.

TABLE XIII

MODE OF EGRESS

(1975)						(1980)					
<u>Line</u>	<u>Walk</u>	<u>Bus</u>	<u>Other</u>	<u>Total</u>	<u>R's</u>	<u>Line</u>	<u>Walk</u>	<u>Bus</u>	<u>Other</u>	<u>Total</u>	<u>R's</u>
716	77.0%	17.0%	6.0%	100.0%	47	716	82.4%	13.1%	4.5%	100.0%	176
721	89.0%	8.0%	3.0%	100.0%	133	721	85.9%	9.6%	4.4%	99.9%	311
737	82.0%	18.0%	-	100.0%	83	737	79.1%	13.4%	7.4%	99.9%	134
755	81.0%	16.0%	3.0%	100.0%	129	755	76.6%	18.9%	4.5%	100.0%	470
757	-	-	-	-	-	757	73.7%	23.0%	3.3%	100.0%	518
758	67.0%	33.0%	*	100.0%	411	758	66.1%	32.1%	1.8%	100.0%	112
760	86.0%	12.0%	2.0%	100.0%	278	760	81.9%	13.9%	4.2%	100.0%	453
762	-	-	-	-	-	762	76.9%	18.7%	4.6%	100.1%	410
764	87.0%	13.0%	-	100.0%	84	764	87.3%	6.5%	6.2%	100.0%	323
OVERALL	78.0%	20.0%	2.0%	100.0%	1,165	TOTAL	79.3%	16.4%	4.3%	100.0%	2,915

\* Less than 1%



### LINKED TRANSIT TRIPS

According to Table XIV, 76% of the respondents to the 1980 Park and Ride survey rode only one bus to complete their trips from origin to destination. Another 19% took two buses and 5% said they had to ride three or more buses. The mean number of buses ridden by Park and Ride patrons is 1.31.

Transfer patterns exhibited by Park and Ride patrons represent a significant deviation from the patterns of regular-service riders. A comparison of the 1980 Park and Ride survey results with a 1979 study of 22 regular-service lines shows that an uncommonly high percentage of Park and Ride patrons use only one bus to complete their trips. Among regular-service riders only 31% reported riding a single bus to complete their trips. Another 46% said they took two buses, 16% rode three buses and 7% rode four or more. The mean number of buses ridden by regular-service riders is 2.02, 54% higher than the number ridden by Park and Ride patrons.

TABLE XIV

Number of Buses Ridden to Complete Trip

<u>Line</u>	<u>One</u>	<u>Two</u>	<u>Three</u>	<u>Four</u>	<u>Five+</u>	<u>Total</u>	<u># of R's</u>
716	80.0%	13.9	5.5	.6	-	100.0%	165
721	78.1%	17.5	4.0	-	.3	99.9%	302
737	83.3%	15.2	1.5	-	-	100.0%	132
755	74.7%	21.8	2.9	.4	.2	100.0%	455
757	69.1%	21.7	6.6	2.1	.4	99.9%	512
758	71.3%	26.9	.9	.9	-	100.0%	108
760	79.7%	16.0	2.6	1.1	.6	100.0%	462
762	80.3%	16.3	2.7	.5	.2	100.0%	411
764	74.7%	19.9	3.8	.5	1.1	100.0%	367
OVERALL	76.2%	18.9%	3.7%	.8%	.4%	100.0%	2,914

## TRIP ORIGINS

Table XV shows reported trip origins by county. Of the 2,777 respondents providing trip origin data, 70% began their trips in Los Angeles County. Of these Los Angeles County residents, nearly 48% came from the San Gabriel Valley areas (including Pomona and Diamond Bar) and 24% were from the San Fernando Valley. Residents of these areas comprised 95% of Park and Ride patrons from Los Angeles County and 66% of all Park and Ride patrons.

The 607 riders from Orange County accounted for nearly 22% of the Park and Ride patrons surveyed. Just over 81% of these Orange County residents live in the northern part of the county (Santa Ana and all communities north of Santa Ana). The remaining 19% of the Orange County residents live south of Santa Ana.

San Bernardino County residents comprised almost 7% of the Park and Ride patronage. Most of the riders from this county, 65%, live west of Ontario and Upland, relatively close to the Los Angeles County line. The remaining 35% live east of the Ontario-Upland area.

There were relatively few respondents starting their trips in Ventura or Riverside counties. Only about 1% of the total ridership live in Ventura County, 83% of them in Simi Valley or Susana Knolls, relatively near the Los Angeles County line. Just under 17% of the Ventura County riders come from points further west than Simi.

Riverside County accounted for less than one-half of one percent of the riders. Half of these riders came from a point east of Corona and Norco.

Table A-1 in the Appendix breaks down trip origins by community and county.

TABLE XV  
Trip Origins

L. A. County

<u>Trip Origins</u>	<u>No.</u>	<u>% of County Origins</u>	<u>% of All Origins</u>
San Gabriel Valley	928	47.8%	33.4%
South Bay	464	23.9	16.7
San Fernando Valley	449	23.1	16.2
Other	102	5.3	3.7
SUBTOTAL	1,943	100.1%	70.0%

Orange County

North of Santa Ana	492	81.1%	17.7%
South of Santa Ana	115	18.9	4.1
SUBTOTAL	607	100.0%	21.8%

San Bernardino County

West of Ontario	121	65.1%	4.4%
East of Ontario	65	34.9	2.3
SUBTOTAL	186	100.0%	6.7%

Ventura County

East Simi	25	83.3%	.9%
West Simi	5	16.7	.2
SUBTOTAL	30	100.0%	1.1%

Riverside County

West of Corona	5	50.0%	.2%
East of Corona	5	50.0	.2
SUBTOTAL	10	100.0%	.4%

San Diego County

	1	100.0%	.04%
SUBTOTAL	1	100.0%	.04%

OVERALL 2,777 100.0%

## TRIP DESTINATIONS

Table XVI shows the destinations reported by 2,954 respondents. Over 82% of the respondents said they were bound for points within the Los Angeles Central Business District (CBD). The CBD has been defined to include seven zip code areas (90012, 90013, 90014, 90015, 90017, 90021 and 90071). The CBD is bounded roughly by the Golden State Freeway on the north and Washington Boulevard on the south. The eastern boundary is the Los Angeles River, and the boundary on the west is Burlington Avenue.

Of the 2,435 respondents destined for the CBD, nearly 48% were going to points west of Grand, between Third and Ninth Streets -- the area dominated by Arco Towers and other high-rise office buildings. Another 28% were going to the Civic Center area. The remaining 24.5% of these respondents were going to other parts of the CBD.

The next most frequent destination cited has been defined as the Wilshire Corridor. This area consists of ten zip code areas along the route of Wilshire Boulevard from Westlake to Westwood (90005, 90010, 90020, 90024, 90036, 90048, 90057, 90210, 90211, 90212). Nearly 11% of the destinations reported were along this corridor. Of the 321 respondents ending their trips in this corridor, at least 92% were going to locations along, or within four blocks of, Wilshire Boulevard east of Highland.

Table A-I in the Appendix lists trip destinations by zip code and area.

TABLE XVI

Park And Ride Trip Destinations

<u>Destination</u>	<u>Number of Respondents</u>	<u>Percent of Respondents</u>
CBD	2,435	82.4%
Wilshire Corridor To Westwood	321	10.9
East of CBD	68	2.3
Southwest of CBD	50	1.7
Northwest of CBD to West Hollywood	35	1.2
Southeast of CBD	20	.7
Southbay & Long Beach	8	.3
Orange County	7	.2
San Gabriel Valley	6	.2
San Fernando Valley	<u>4</u>	<u>.1</u>
Total	2,954	100.1%

### LINKED TRIP LENGTH

Data from the 1980 Park and Ride survey show that over 98% of the trip destinations reported were in the CBD or within five miles of the CBD. The average linked trip lengths shown in Table XVII, therefore, reflect the distance between the community of origin and the CBD.

Linked trip lengths ranged from a low of 13 miles to a high of 120 miles, but the average falls nearer the low end of that scale. Overall, the median trip length was calculated at 24.2 miles. Half the respondents travelled less than this distance and half travelled more.

Among respondents beginning their trips in Los Angeles County, the median distance travelled was 23.7 miles. The median distance from home to the CBD was 25.7 miles for Orange County residents. Park and Ride patrons living in Ventura County travelled an average of 37.8 miles, and those from San Bernardino County travelled 39.5 miles on average. With the exception of the lone respondent from San Diego, the Park and Ride patrons travelling the furthest were those from Riverside County who averaged 50.5 miles.

Table A-II in the Appendix lists the average distances from specific communities of origin to the Los Angeles CBD.

TABLE XVII

Average Linked Trip Length  
By County of Trip Origin

(Average Trip Length in Miles)

<u>County</u>	<u>Mean</u>	<u>Median</u>	<u>Mode</u>	<u>Number of Respondents</u>
Los Angeles	24.3	23.7	23.9	1,943
Orange	29.2	25.7	25.8	607
San Bernardino	42.5	39.5	42.5	186
Ventura	39.9	37.8	39.5	30
Riverside	53.7	50.5	45.0	10
San Diego	120.0	120.0	120.0	1
OVERALL	26.8	24.2	23.7	2,777



## METHODOLOGY

The study design for the 1980 Park and Ride Survey was similar to that of the 1975 survey in that it called for the distribution of questionnaires on all inbound morning trips. Only about 90% of the inbound trips were actually surveyed, however, about the same proportion of trips surveyed in 1975. The chief reason for this shortfall in 1980 was that night dispatchers at the RTD divisions failed to distribute packets of questionnaires to drivers on the earliest line 757, 758 and 760 pullouts.

The chief difference in the study design of the two survey lies in the method of questionnaire distribution and collection. In 1975 the RTD Mobile Information Team distributed and collected the questionnaires. In 1980 drivers distributed questionnaires to all boarding passengers. Temporary employees were hired to collect questionnaires at each line's first stop in the CBD. Drivers on the 757 and 758 line had to collect completed questionnaires, however, because an unauthorized RTD staff member sent the temporary employees home when the first two buses arrived sans questionnaires.

The 3,033 patrons who responded to the 1980 survey represent approximately 75% of all Park and Ride patrons on an average day. In 1975, 1,173 riders, about 65% of the total at that time, responded to the survey. Table XVIII displays trip coverage and survey response by line.

The questionnaire distributed during the 1980 survey was the RTD's standard bilingual on-board questionnaire which collects data on the following sixteen variables:

- Mode of Access
- Mode of Egress
- Boarding Point
- Alighting Point
- Trip Origin
- Trip Destination
- Transfers
- Trip Frequency
- Trip Purpose
- Type of Fare
- Home Address
- Age
- Gender
- Number of Cars in Household
- Number of Persons in Household
- Household Income

TABLE XVIII

-40-

Park and Ride Survey Distribution and Response  
1975-1980

Line	Riders						Trips					
	1975			1980			1975			1980		
	No. of Riders	No. Surveyed	% Surveyed	No. of Riders	No. Surveyed	% Surveyed	No. of Scheduled Trips	No. Surveyed	% Surveyed	No. of Scheduled Trips	No. Surveyed	% Surveyed
716	180	46	25.6%	177	177	100.0%	6	5	83.3%	6	6	100.0%
721	280	133	47.5	292	312	100.0	12	10	83.3	7	7	100.0
737	106	83	78.3	193	139	72.0	4	4	100.0	5	5	100.0
755	378	130	34.4	495	480	97.0	12	11	91.7	13	13	100.0
757	-	-	-	859	534	62.2	-	-	-	20	16	80.0
758	495	415	83.8	289	113	39.1	21	19	90.5	8	4	50.0
760	281	282	100.0	719	475	66.1	8	8	100.0	17	14	82.4
762	-	-	-	561	428	76.3	-	-	-	13	13	100.0
764	76	84	40.7	435	375	86.2	4	4	100.0	11	11	100.0
TOTAL	1796	1173	65.3%	4020	3033	75.4%	67	61	91.0%	100	89	89.0%
MEAN	257	168	65.4%	447	337	75.4%	9.6	8.7	90.6%	11.1	9.9	89.2%

APPENDIX

Trip Destinations By Zip Code

<u>Southeast of CBD</u>		<u>South Bay &amp; Long Beach</u>		<u>CBD</u>		<u>Wilshire Corridor to Westwood</u>	
<u>Zip</u>	<u>R's</u>	<u>Zip</u>	<u>R's</u>	<u>Zip</u>	<u>R's</u>	<u>Zip</u>	<u>R's</u>
90002	1	90047	1	90012	681	90005	29
90011	13	90277	1	90013	246	90010	210
90058	4	90802	1	90014	183	90020	26
90255	1	90803	2	90015	149	90024	2
90701	<u>1</u>	90804	1	90017	720	90036	9
Subtotal	20	90812	1	90021	20	90048	9
		90813	<u>1</u>	90071	<u>436</u>	90057	31
		Subtotal	8	Subtotal	2,435	90067	2
						90070	1
						90211	<u>2</u>
						Subtotal	321
 <u>Northwest of CBD</u>		 <u>Orange County</u>		 <u>East of CBD</u>		 <u>San Fernando Valley</u>	
<u>to Hollywood</u>							
<u>Zip</u>	<u>R's</u>	<u>Zip</u>	<u>R's</u>	<u>Zip</u>	<u>R's</u>	<u>Zip</u>	<u>R's</u>
90004	5	90620	1	90023	1	91307	1
90026	10	92621	1	90031	6	91364	1
90027	5	92632	1	90032	19	91367	1
90028	11	92633	<u>4</u>	90033	39	91411	<u>1</u>
90029	2	Subtotal	7	90063	2	Subtotal	4
90038	1			90640	<u>1</u>		
90069	<u>1</u>			Subtotal	68		
Subtotal	35					 <u>San Gabriel Valley</u>	
 <u>Southwest of CBD</u>							
90006	6	90066	2			90042	1
90007	30	90301	1			91101	1
90019	4	90305	1			91206	1
90034	2	90045	<u>1</u>			91740	1
90037	3	Subtotal	50			91754	1
						91766	<u>1</u>
						Subtotal	6

TABLE A-II

Trip Origins by Community  
And Mileage to LA CBD

<u>Community</u>	<u>No. of Respondents</u>	<u>% of all Respondents</u>	<u>Average No. of miles LA CBD</u>
<u>Los Angeles County</u>			
Inglewood	2	.07%	13.0
North Hollywood	1	.04%	13.3
Gardena	5	.2%	14.2
Whittier	8	.3%	14.7
Westchester/LAX	1	.04%	14.9
Sun Valley	1	.04%	15.4
Norwalk	6	.2%	15.7
Santa Monica	2	.07%	15.9
Van Nuys	39	1.4%	16.4
Encino	1	.04%	16.9
Bellflower	1	.04%	17.7
La Puente	204	7.3%	18.5
Artesia	47	1.7%	18.8
Pacoima	4	.1%	19.0
Torrance	29	1.0%	19.1
Lakewood	8	.3%	19.5
La Mirada	29	1.0%	19.6
West Covina	80	2.9%	20.0
Tarzana	1	.04%	20.1
San Fernando Valley	66	2.4%	20.8
Lomita	5	.2%	21.5
Reseda	40	1.4%	21.7
Hawaiian Gardens	1	.04%	21.8
Wilmington	14	.5%	22.3

## APPENDIX

## Table A-II

Trip Origins By CommunityAnd Mileage to LA CBD (cont'd)

<u>Community</u>	<u>No. of Respondents</u>	<u>% of all Respondents</u>	<u>Average No. of miles LA CBD</u>
<u>Los Angeles County</u> (cont'd)			
Redondo Beach	1	.04%	22.7
Covina	118	4.2%	22.9
Harbor City	11	.4%	23.1
Woodland Hills	57	2.1%	23.5
Long Beach	331	11.9%	23.9
Northridge	76	2.7%	24.0
Azuaa	32	1.2%	24.5
San Pedro	44	1.6%	25.2
Topanga	1	.04%	25.4
Canoga Park	128	4.6%	25.7
Glendora	66	2.4%	25.9
Calabasas	2	.07%	26.2
Palos Verdes	15	.5%	27.4
Walnut	53	1.9%	27.7
San Dimas	59	2.1%	29.0
Chatsworth	30	1.1%	30.5
Diamond Bar	85	3.1%	31.1
La Verne	44	1.6%	31.2
Pomona	127	4.6%	31.3
Saugus	2	.07%	31.7
Agoura	3	.1%	32.2
Claremont	60	2.2%	32.4
Canyon Country	2	.07%	40.6

APPENDIX

TABLE A-II  
Trip Origins By Community  
And Mileage to LA CBD (cont'd)

<u>Community</u>	<u>No. of Respondents</u>	<u>% of all Respondents</u>	<u>Average No. of Miles LA CBD</u>
<u>Los Angeles County</u> (cont'd)			
Lancaster	1	.04%	56.0
Subtotal	1,943	70.0 %	
Mean			24.3 miles
Median			23.7 miles
Mode			23.9 miles
<u>Orange County</u>			
Buena Park	59	2.1 %	19.2
La Habra	14	.5 %	19.6
Cypress	14	.5 %	22.0
Fullerton	92	3.3 %	22.0
Brea	9	.3 %	23.0
Los Alamitos	12	.4 %	24.6
Placentia	12	.4 %	25.4
Anaheim	120	4.3 %	25.8
Orange	32	1.2 %	28.6
Yorbalinda	14	.5 %	29.0
Garden Grove	31	1.1 %	30.8
Stanton	9	.3 %	31.8
Santa Ana	5	.2%	32.0
Seal Beach	39	1.4 %	32.2
Tustin	13	.5 %	32.8
Surfside	1	.04%	34.2

APPENDIX  
 TABLE A-II  
Trip Origins By Community  
And Mileage to LA CBD (cont'd)

<u>Community</u>	<u>No. of Respondents</u>	<u>% of all Respondents</u>	<u>Average No. of Miles LA CBD</u>
<u>Orange County (cont'd)</u>			
Sunset Beach	3	.1 %	35.0
Irvine	14	.5 %	40.1
Fountain Valley	7	.3 %	40.1
Westminster	17	.6 %	40.2
Huntington Beach	65	2.3 %	41.0
Costa Mesa	4	.1 %	49.0
Newport Beach	4	.1 %	49.5
Corona Del Mar	1	.04%	51.5
El Toro	2	.07%	52.6
Mission Viejo	3	.1 %	54.0
Laguna Beach	6	.2 %	57.5
Laguna Niguel	2	.07%	58.0
San Juan Capistrano	1	.04%	60.0
Dana Point	1	.04%	63.0
San Clemente	1	.04%	67.0
Subtotal	607	21.9 %	
Mean			29.2 miles
Median			25.7 miles
Mode			25.8 miles
<u>San Bernardino County</u>			
Chino	31	1.1 %	36.5
Montclair	24	.9 %	36.5
Ontario	27	1.0 %	38.3
Upland	39	1.4 %	42.5



APPENDIX  
 TABLE A-II  
Trip Origins By Community  
And Mileage to LA CBD (cont'd)

<u>Community</u>	<u>No. of Respondents</u>	<u>% of all Respondents</u>	<u>Average No. of Miles LA CBD</u>
<u>San Bernardino County (cont'd)</u>			
Cucamonga	27	1.0 %	38.3
Alta Loma	23	.8 %	42.5
Etiwanda	1	.04%	51.5
Fontana	8	.3 %	55.0
Rialto	3	.1 %	59.5
San Bernardino	1	.04%	65.0
Redlands	1	.04%	67.0
Yucaipa	1	.04%	78.0
Subtotal	186	6.7 %	
Mean			42.5 miles
Median			39.5 miles
Mode			42.5 miles
<u>Ventura County</u>			
Susana Knolls	10	.4 %	37.0
Simi	15	.5 %	39.5
Thousand Oaks	3	.1 %	41.0
Moorpark	1	.04%	51.5
Oxnard	1	.04%	61.0
Subtotal	30	1.1 %	
Mean			39.9 miles
Median			37.8 miles
Mode			39.5 miles
<u>Riverside County</u>			
Corona	4	.1 %	45.0
Norco	1	.04%	48.0

APPENDIX  
 TABLE A-II  
Trip Origins By Community  
And Mileage to LA CBD (cont'd)

<u>Community</u>	<u>No. of Respondents</u>	<u>% of all Respondents</u>	<u>Average No. of Miles LA CBD</u>
<u>Riverside County (cont'd)</u>			
Mira Loma	1	.04%	53.0
Riverside	3	.1 %	60.0
Calimesa	1	.04%	76.0
Subtotal	10	.4 %	
Mean			53.7 miles
Median			50.5 miles
Mode			45.0 miles
<u>San Diego County</u>			
San Diego	1	.04%	120
Subtotal	1	.04%	
Mean			120 miles
Median			N/A
Mode			120 miles
OVERALL	2,777	100.1 %	
Mean			26.8 miles
Median			24.2 miles
Mode			23.9 miles