

**Los Angeles County  
Metropolitan  
Transportation  
Authority  
FY 2002 On-Board Rail  
Survey Regional Weekday  
Travel Patterns Report**

**HF  
6161  
.T67  
R99  
2002**

51907721

**Los Angeles County  
Metropolitan  
Transportation  
Authority  
FY 2002 On-Board Rail  
Survey Regional Weekday  
Travel Patterns Report**

**Report to the Los Angeles  
County Metropolitan  
Transportation Authority  
One Gateway Plaza  
Los Angeles, California 90012**

by

**Rea & Parker Research  
P.O. Box 421079  
San Diego, CA 92142-1079**

**858-279-5070  
[www.rea-parker.com](http://www.rea-parker.com)**

**January, 2003**

HF  
6161  
.T67  
R99  
2002

29027

MAR 28 2003

## **Regional Weekday Travel Patterns MTA On-Board Rail Survey**

The report that follows contains 17 maps showing the travel patterns of MTA Metro Rail riders on the Blue, Red, and Green Lines.<sup>1</sup> Two maps show the morning peak origins and destinations for all rail riders. For each rail line, there are 5 maps included in this report, as follows:

- Two origin location maps (one for each direction of the rail line) that show where the rider started his or her trip in its entirety—not for the one line only;
- Two destination maps (one for each direction), again indicating the ultimate destination for the entire trip;
- One home address map for patrons who completed the on-board survey pertaining to that particular line.

One additional map is also included in this report—a map showing auto availability throughout Los Angeles County.

### **Travel Pattern Summary from On-Board Survey Report**

Before commencing with a summary discussion of these maps and their implications concerning MTA Metro Rail rider travel patterns, it is of value to reiterate certain of the findings detailed in the On-Board Survey Report that accompanies this Travel Pattern Report.

The 2002 On-Board Survey Report discussed two very important travel pattern findings. First, a remarkable number of Metro Rail riders typically ride more than one bus or train in the course of their one-way trip, with 67% of rail passengers using more than one bus or train.

Among the buses and trains used by weekday Metro Rail patrons, the vast majority are MTA rail trips (60%) and MTA bus trips (33%), leaving only 7% for other bus/rail systems. Among these other systems, Metrolink and Long Beach Transit each carry 2% of weekday Metro Rail riders' trips.

Riders of the Red Line use one train (37%) to a much greater extent than Blue or Green Line riders (27% and 30%, respectively). Green Line riders are the greatest users of 4 or more trains and/or buses for their typical trip (18%).

Second, weekday Metro Rail riders travel a median time of 65 minutes in the course of their typical bus trip, spending 35 minutes on-board buses and trains, and 10 minutes for each of the following travel components: getting to their first stop, waiting for buses and trains, and getting from their final stop. These times are quite similar to times indicated by bus riders in their on-board survey.

---

<sup>1</sup>Except for the first map, the numbers shown in the legend of each map represent sampled respondents. The color-coded densities depicted in the maps are accurate indicators of existing conditions; the absolute numbers are to scale but lower than total counts.



## **Transit Dependence in Los Angeles County**

Transit systems serve a number of constituents. Two of the most important of such groups are: 1) those residents of the County and nearby counties who are dependent upon public transportation for their travel needs, and 2) travelers and residents in the entire region, who need healthy, livable air quality and streets and roads that are as free-moving and unclogged as possible to carry necessary traffic.

The Autos Per Household map that follows shows auto dependency in Los Angeles County. White and light red areas demonstrate relatively few automobiles per household. These areas of low automobile access (and likely higher than average transit dependence) are concentrated in the following areas, with a handful of small pockets elsewhere:

- Downtown Los Angeles
- East Los Angeles
- South Central Los Angeles
- Hollywood
- Long Beach
- San Pedro

Table 1 in the Appendix shows the origins and destinations of weekday, morning peak Metro Rail riders, which are then mapped on the AM Peak Origin and AM Peak Destination maps for MTA Rail. It is clear that each of these areas is well served by Metro Rail.

Table 1 also shows that a substantial portion of Metro Rail riders originate from and/or are destined to locations outside of Los Angeles County. Table 1 indicates that 7.8% of all rail riders travel into Los Angeles County from other counties and use MTA rail lines during the course of their morning peak period travels, approximately one-half of whom travel from Orange County. Table 2 indicates that 8.1% of all MTA rail riders travel to other counties during the course of their morning travels, three-fifths of whom travel to Orange County. Not only are these proportions significantly greater than for bus riders as might be expected (8% rail compared to 1% bus), but they are also noteworthy in their symmetry of inbound and outbound riders, in contrast to the more traditionally expected pattern of a majority of riders going to Los Angeles during the morning peak.

## **Line-by-Line Analysis**

Most Metro Rail patrons originate at and/or are destined for locations relatively close to the rail line upon which they were traveling when they completed the survey. There are, however, many riders who are traveling substantial distances to and from locations quite distant from the subject line. The attached maps show that, despite the

proximity to the lines demonstrated by most rail patrons, a large number of passengers on MTA's 3 rail lines travel from significant distances and use Metro Rail in the course of those trips.

The origin/destination maps that form the core of this report confirm the travel patterns shown in the On-Board Survey report. Blue Line northbound riders during the morning peak originate close to the line in Long Beach and South Los Angeles and travel predominantly to Downtown Los Angeles, with some Red Line transfers to Hollywood and other Green Line transfers toward Los Angeles International Airport and the businesses nearby. Morning peak southbound passengers are relatively few in number and originate mostly downtown, traveling to the airport area (via the Green Line), South Los Angeles, and Long Beach. Blue Line passengers live very close to the line itself.

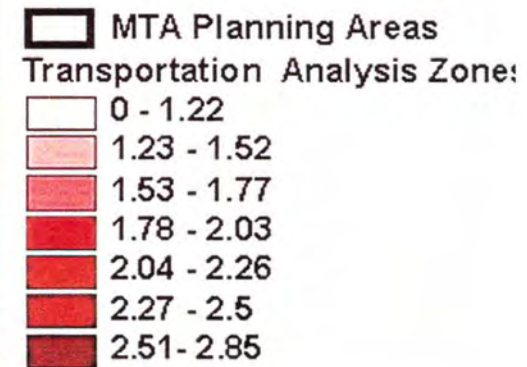
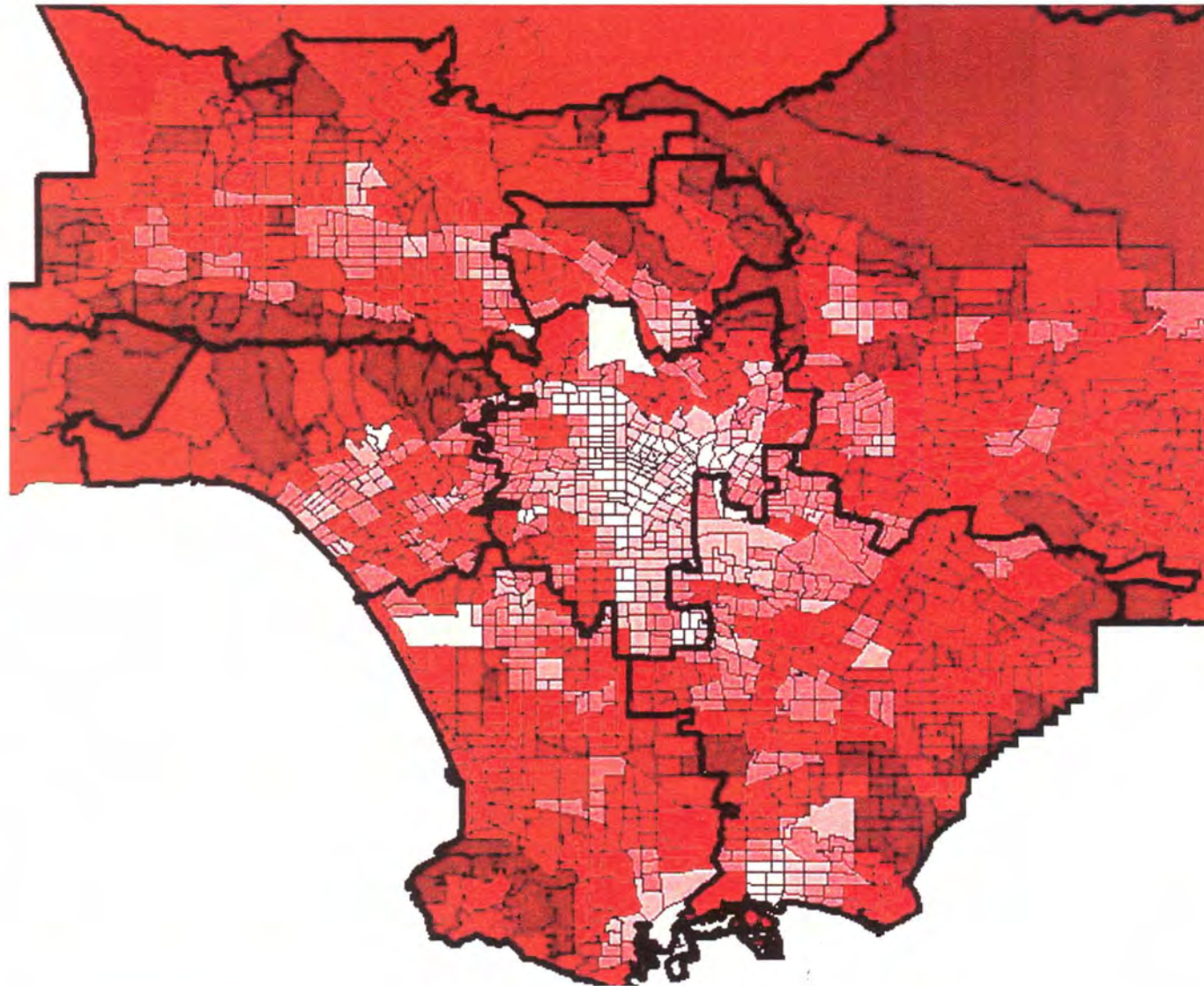
Red Line passengers, traveling east in the morning peak period are originating in the San Fernando Valley, Hollywood, and the MacArthur Park/Westlake area, destined for Downtown Los Angeles, Hollywood, the Los Angeles City College area, and Westlake/MacArthur Park. There is a considerable amount of westbound travel that both originates and ends within downtown, most likely among Metrolink riders from Union Station to work locations in the downtown area or transferring to the Blue Line at the 7<sup>th</sup> Street Metro Station. Other westbound destinations from downtown include, once again, the San Fernando Valley, Hollywood, and Westlake/ MacArthur Park. Red Line passengers reside predominantly in the MacArthur Park/ Westlake area, Hollywood, and the San Fernando Valley. There is evidence on the Red Line Origins Map that patrons travel from throughout the Valley in order to access the Red Line.

Green Line passengers heading west in the morning are destined for the airport and El Segundo employment centers and originate, in large part, from Norwalk. Eastbound reverses the pattern, with relatively light passenger loads, however. Green Line patrons tend to live in South Central Los Angeles, but do show some spread all the way from Inglewood and Hawthorne to Norwalk.

Metro Rail and Metro Bus tend to work seamlessly as one, and bus riders who can efficiently incorporate the rail into their trips seem to do so. The On-Board Bus Survey found that 6% of weekday bus riders also use the Metro Rail in the course of their transit trip. That would represent approximately 75,000 bus/rail riders (6% of 1.25 million weekday bus passengers). The On-Board Rail Survey found that 33% of rail riders also use MTA buses. That would represent approximately the same 75,000 riders (33% of 220,000 weekday riders)—a remarkable statistical confirmation of the magnitude of this rail/bus network.



# Autos per Household Los Angeles County



12/31/02 Rea & Parker Research  
Prepared by Steve Bouton  
Source: MTA Auto Dependency Data

20 0 20 Miles







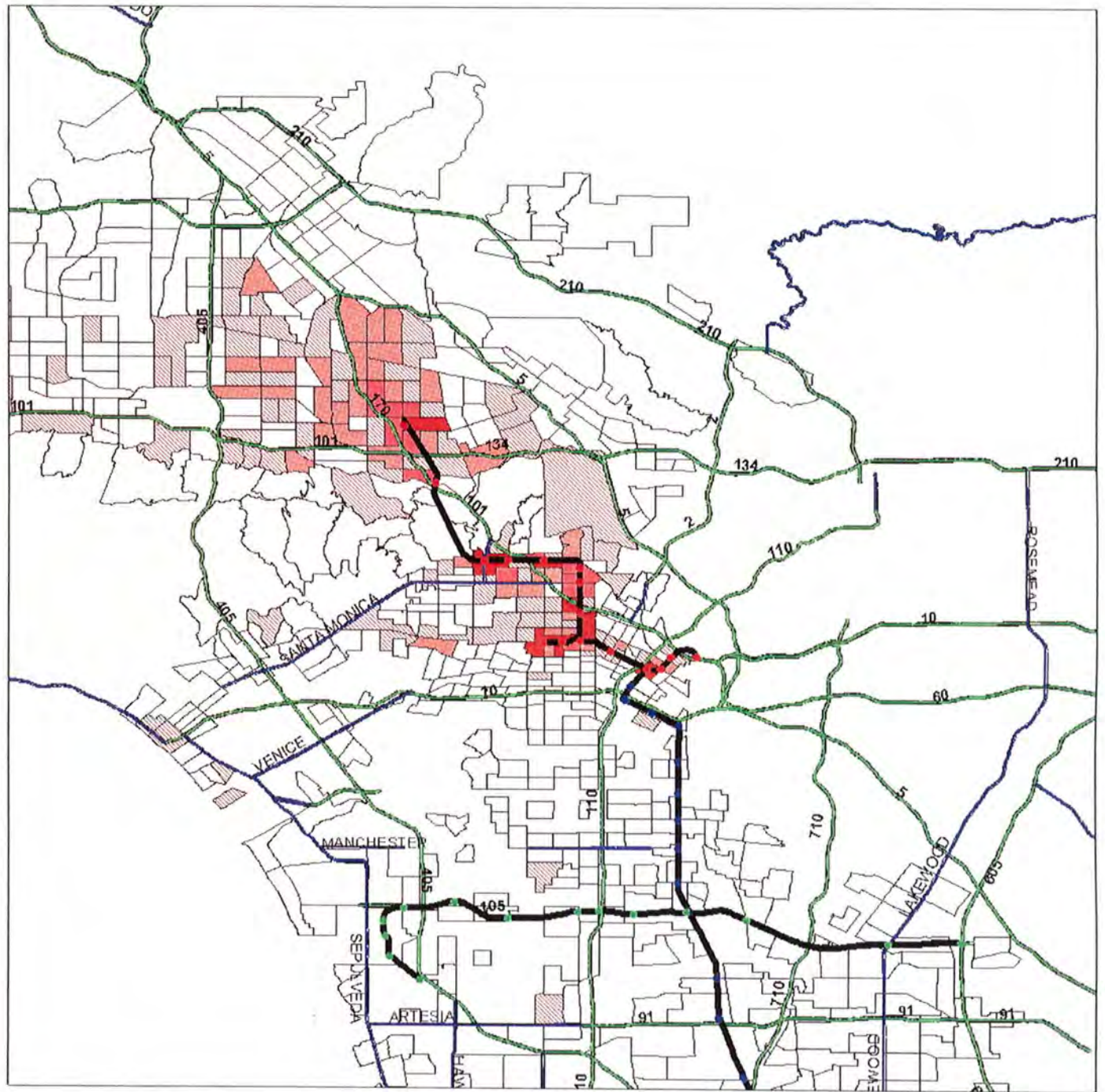






# Metro Rail Red Line East Origins

- Metro Red Line Stations
- Metro Green Line Stations
- Metro Blue Line Stations
- Metro Rail Lines
- LA Highways
- LA Freeways
- Transportation Analysis Zones
- 1 - 4
- 5 - 10
- 11 - 17
- 18 - 25
- 26 or more



12/31/02 Rea & Parker Research  
 Prepared by: Steve Bouton  
 Source MTA 2002 On-Board Rail Survey  
 Highways and Freeways 1999 Thomas Bros.  
 Used with Permission

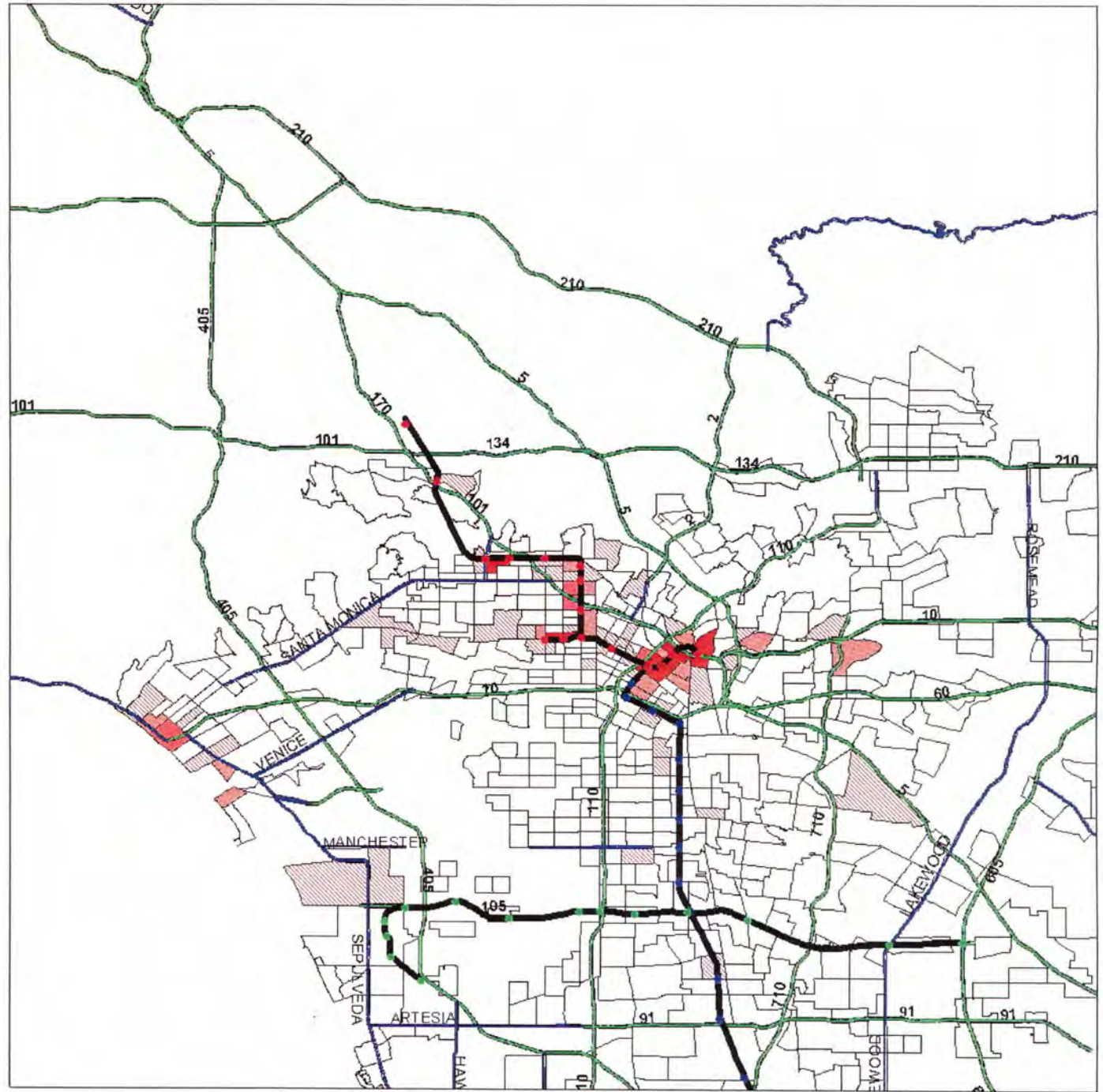
0 5 Miles





# Metro Rail Red Line East Destinations

- Metro Red Line Stations
  - Metro Green Line Stations
  - Metro Blue Line Stations
  - Metro Rail Lines
  - LA Highways
  - LA Freeways
- Transportation Analysis Zones**
- |            |            |
|------------|------------|
| White      | 1 - 4      |
| Light Gray | 5 - 10     |
| Light Red  | 11 - 17    |
| Red        | 18 - 25    |
| Dark Red   | 26 or more |



12/31/02 Rea & Parker Research  
 Prepared by: Steve Bouton  
 Source MTA 2002 On-Board Rail Survey  
 Highways and Freeways 1999 Thomas Bros.  
 Used with Permission

0 5 Miles







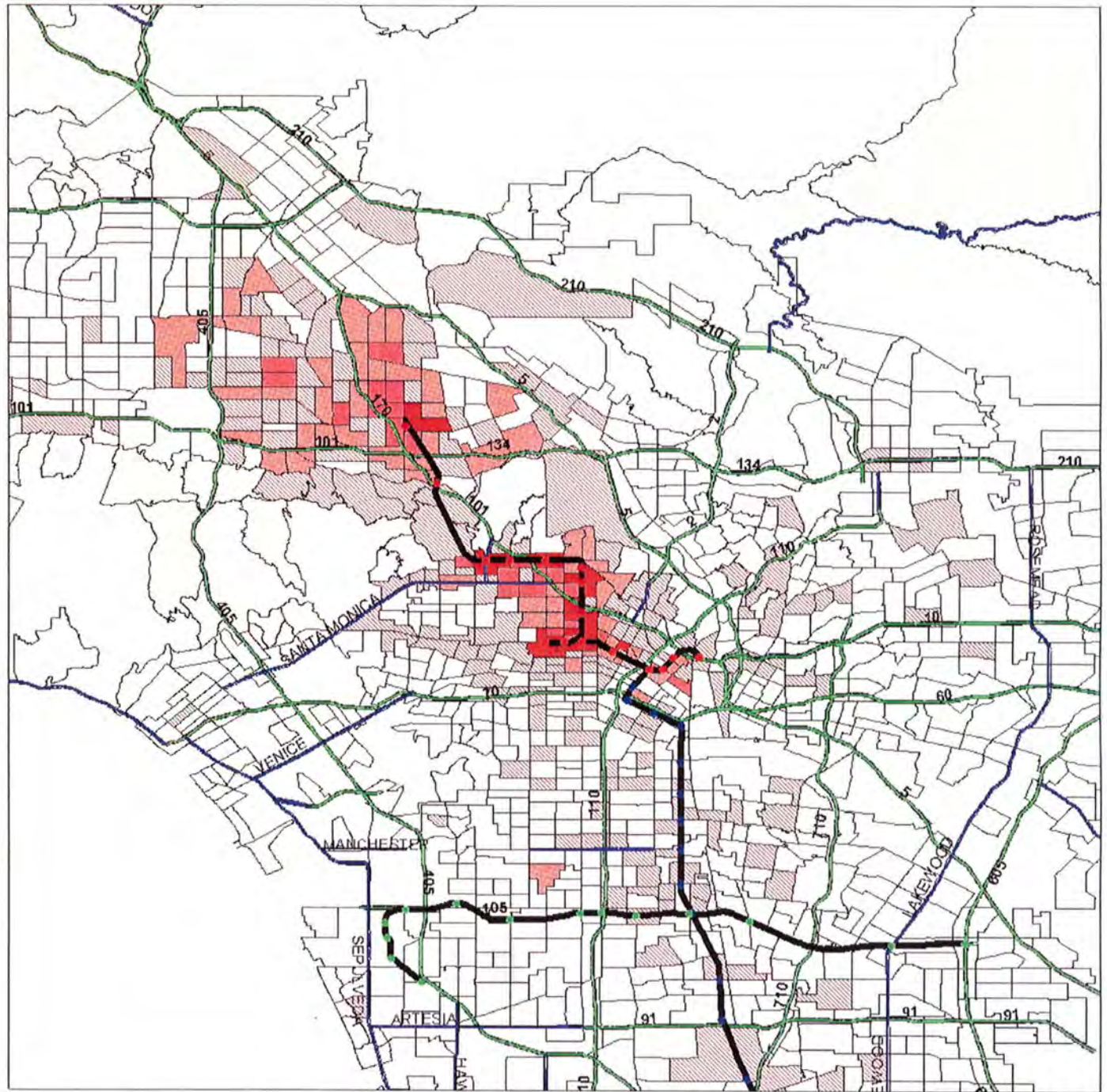






# Metro Rail Red Line Home Addresses

- Metro Red Line Stations
- Metro Green Line Stations
- Metro Blue Line Stations
- Metro Rail Lines
- LA Highways
- LA Freeways
- Transportation Analysis Zones
- 1 - 4
- 5 - 10
- 11 - 17
- 18 - 25
- 26 or more



12/31/02 Rea & Parker Research  
 Prepared by: Steve Bouton  
 Source MTA 2002 On-Board Rail Survey  
 Highways and Freeways 1999 Thomas Bros.  
 Used with Permission

0 5 Miles



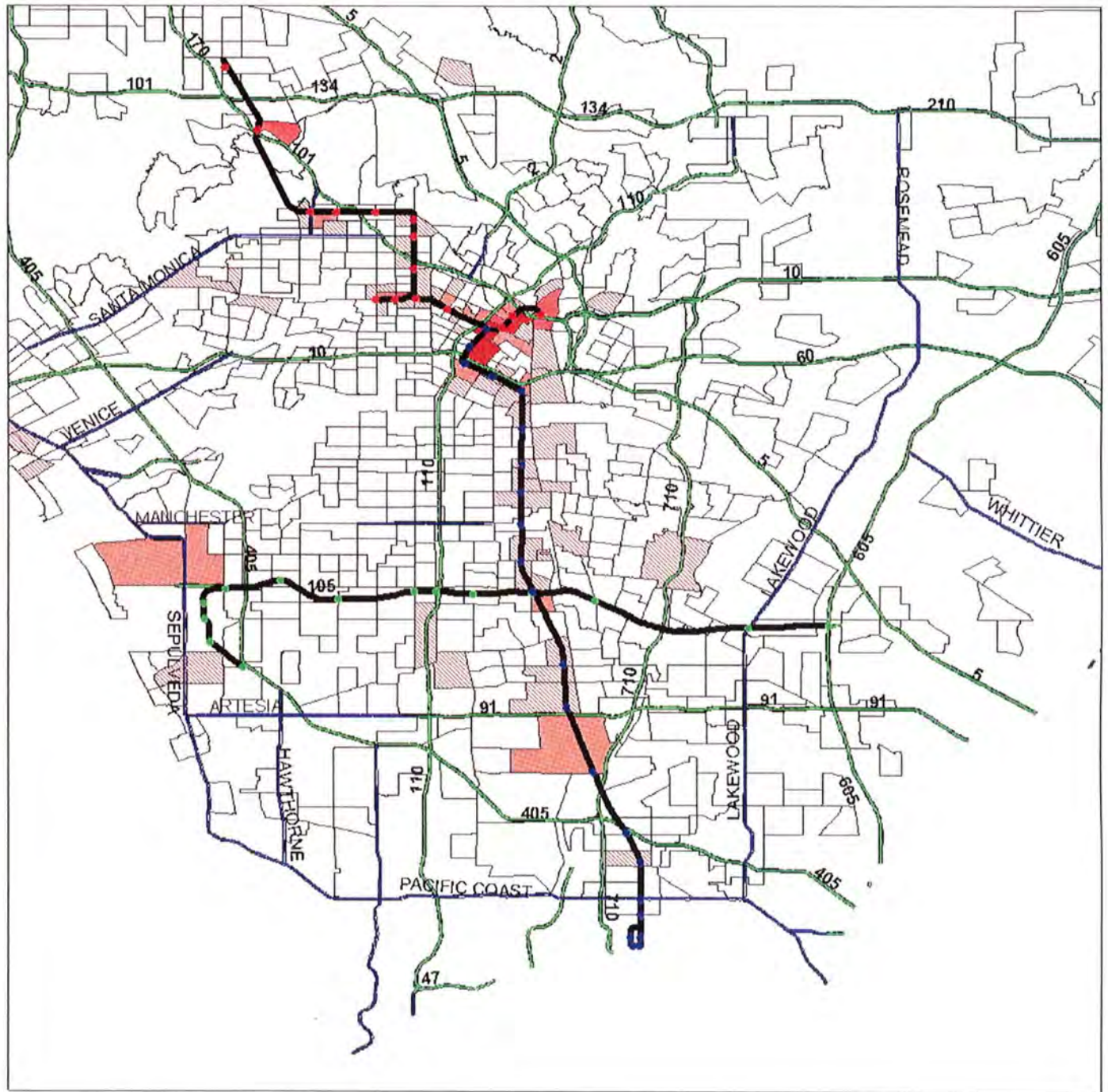






# Metro Rail Blue Line North Destinations

- Metro Blue Line Stations
  - Metro Red Line Stations
  - Metro Green Line Stations
  - Metro Rail Lines
  - LA Highways
  - LA Freeways
- Transportation Analysis Zones
- |  |            |
|--|------------|
|  | 1 - 4      |
|  | 5 - 10     |
|  | 11 - 17    |
|  | 18 - 25    |
|  | 26 or more |



12/31/02 Rea & Parker Research  
 Prepared by: Steve Bouton  
 Source MTA 2002 On-Board Rail Survey  
 Highways and Freeways 1999 Thomas Bros.  
 Used with Permission

0 5 Miles



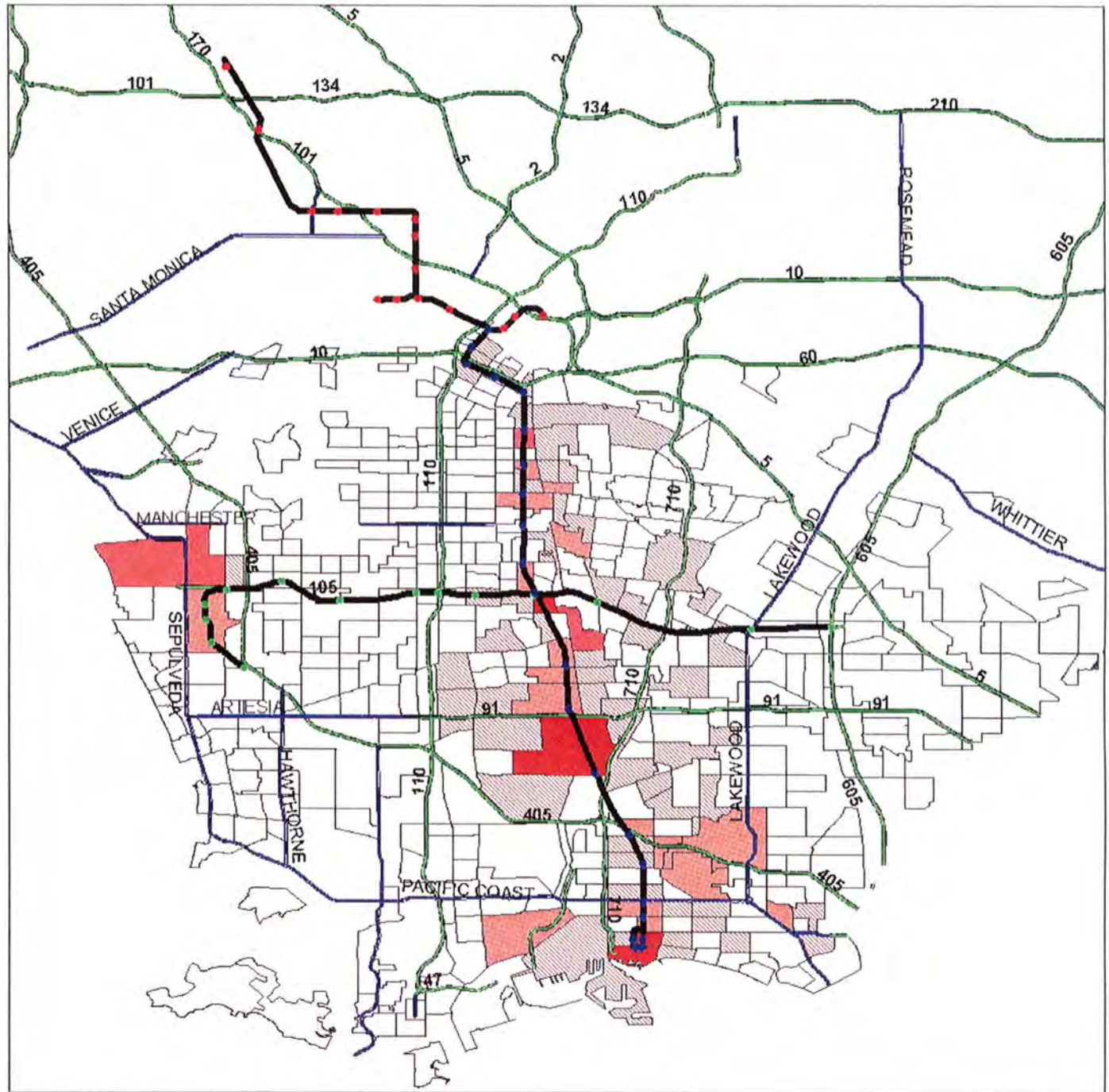






# Metro Rail Blue Line South Destinations

- Metro Blue Line Stations
  - Metro Red Line Stations
  - Metro Green Line Stations
  - Metro Rail Lines
  - LA Highways
  - LA Freeways
- Transportation Analysis Zones
- |             |            |
|-------------|------------|
| White       | 1 - 4      |
| Light Gray  | 5 - 10     |
| Medium Gray | 11 - 17    |
| Dark Gray   | 18 - 25    |
| Red         | 26 or more |



12/31/02 Rea & Parker Research  
 Prepared by: Steve Bouton  
 Source MTA 2002 On-Board Rail Survey  
 Highways and Freeways 1999 Thomas Bros.  
 Used with Permission

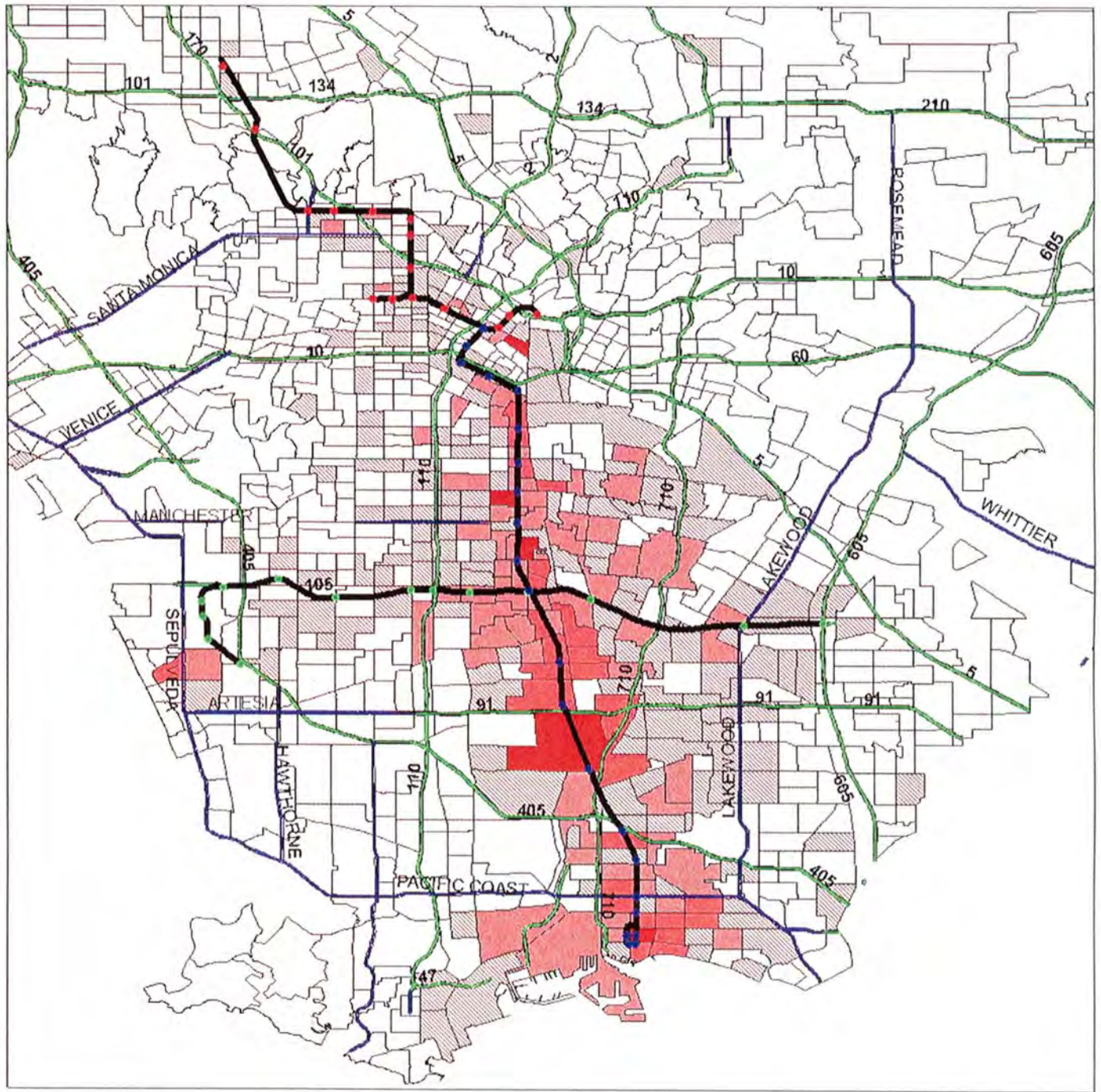
0 5 Miles





# Metro Rail Blue Line Home Addresses

- Metro Blue Line Stations
- Metro Red Line Stations
- Metro Green Line Stations
- Metro Rail Lines
- LA Highways
- LA Freeways
- Transportation Analysis Zones
- 1 - 4
- 5 - 10
- 11 - 17
- 18 - 25
- 26 or more



12/31/02 Rea & Parker Research  
 Prepared by: Steve Bouton  
 Source MTA 2002 On-Board Rail Survey  
 Highways and Freeways 1999 Thomas Bros.  
 Used with Permission

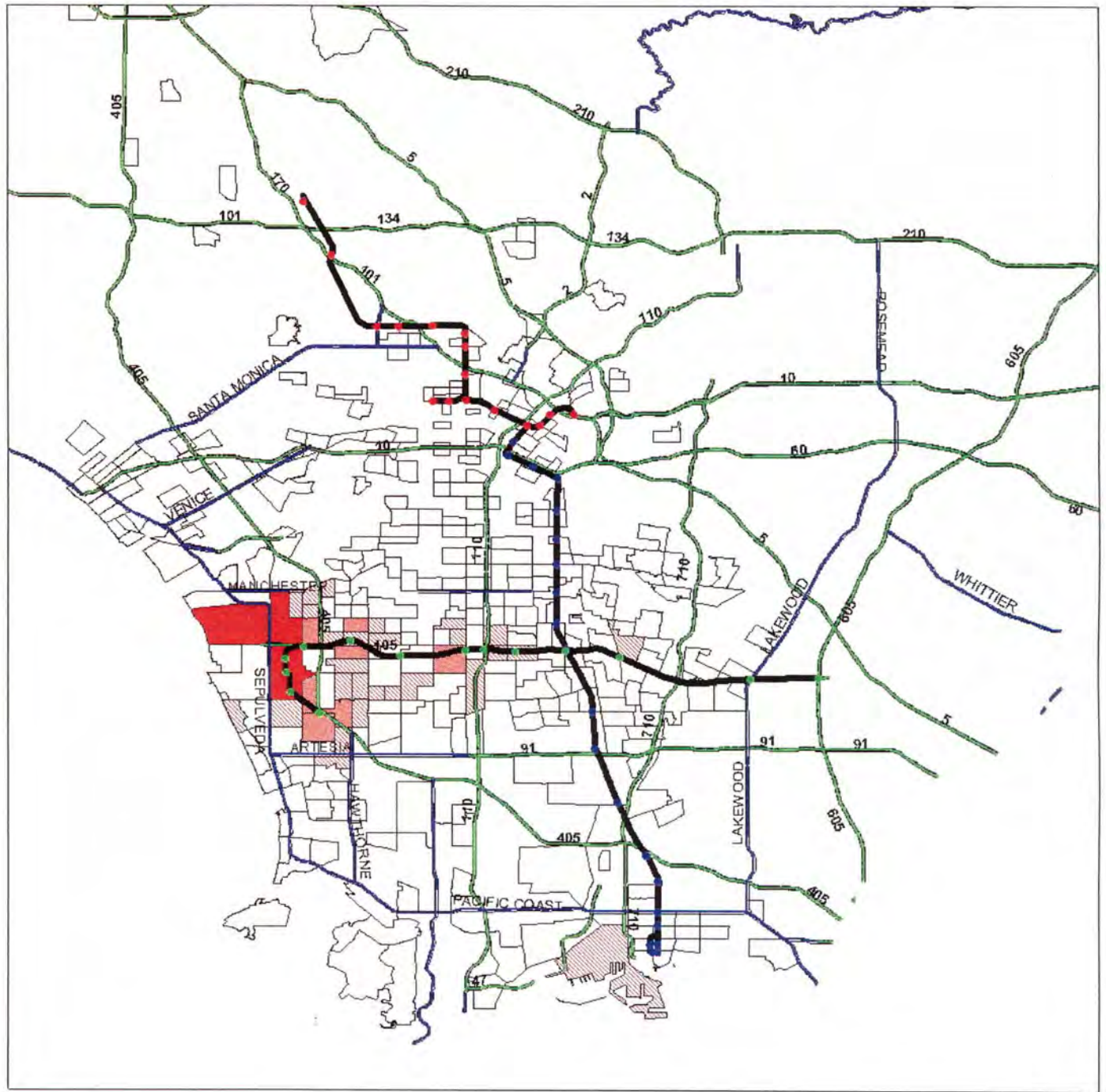
0 5 Miles



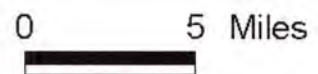


# Metro Rail Green Line East Origins

- Metro Red Line Stations
- Metro Green Line Stations
- Metro Blue Line Stations
- Metro Rail Lines
- LA Highways
- LA Freeways
- Transportation Analysis Zones
- 1 - 4
- 5 - 10
- 11 - 17
- 18 - 25
- 26 or more



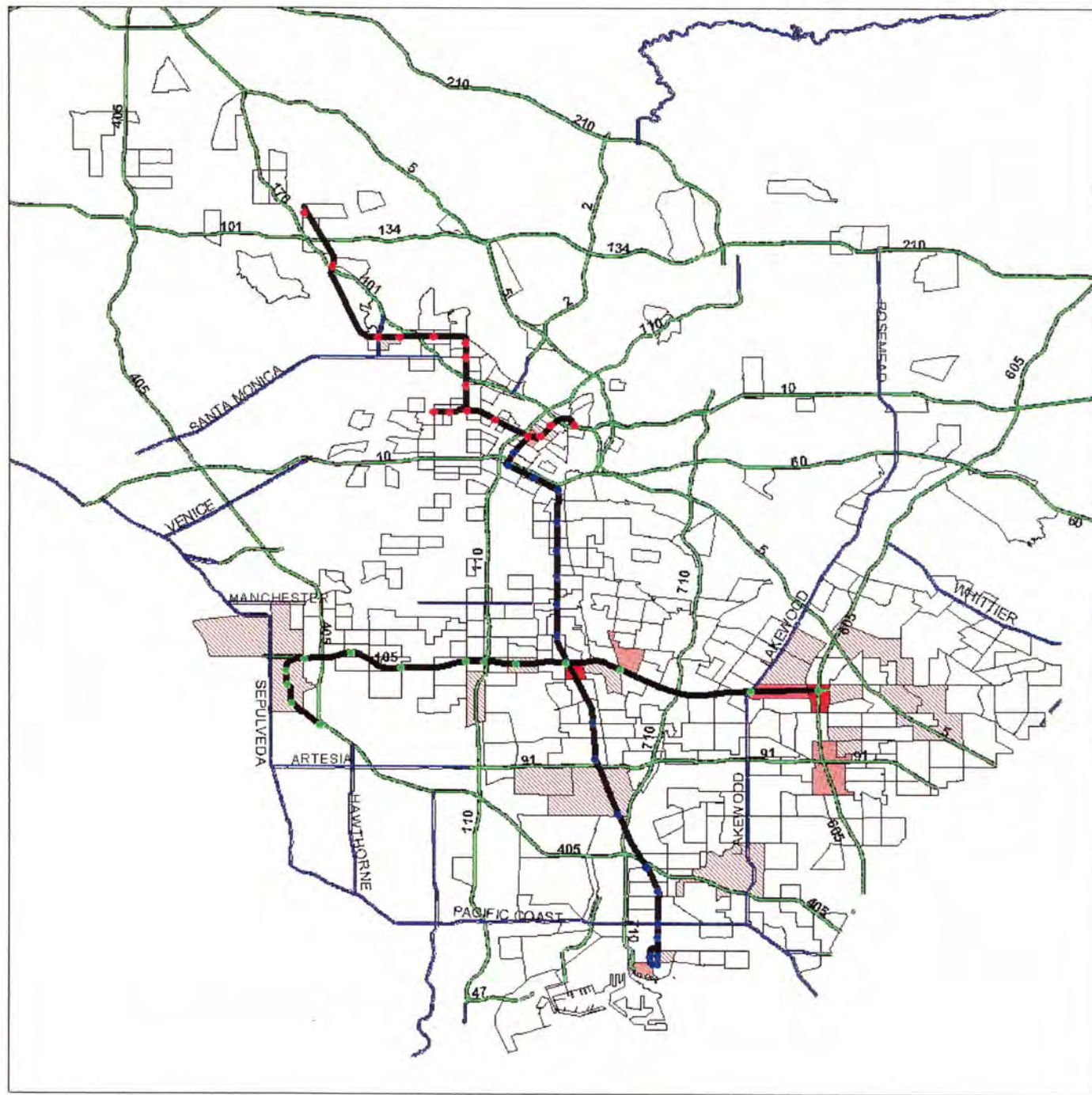
12/31/02 Rea & Parker Research  
 Prepared by: Steve Bouton  
 Source MTA 2002 On-Board Rail Survey  
 Highways and Freeways 1999 Thomas Bros.  
 Used with Permission





# Metro Rail Green Line East Destinations

- Metro Red Line Stations
  - Metro Green Line Stations
  - Metro Blue Line Stations
  - Metro Rail Lines
  - LA Highways
  - LA Freeways
- Transportation Analysis Zones**
- |  |            |
|--|------------|
|  | 1 - 4      |
|  | 5 - 10     |
|  | 11 - 17    |
|  | 18 - 25    |
|  | 26 or more |



12/31/02 Rea & Parker Research  
 Prepared by: Steve Bouton  
 Source MTA 2002 On-Board Rail Survey  
 Highways and Freeways 1999 Thomas Bros.  
 Used with Permission

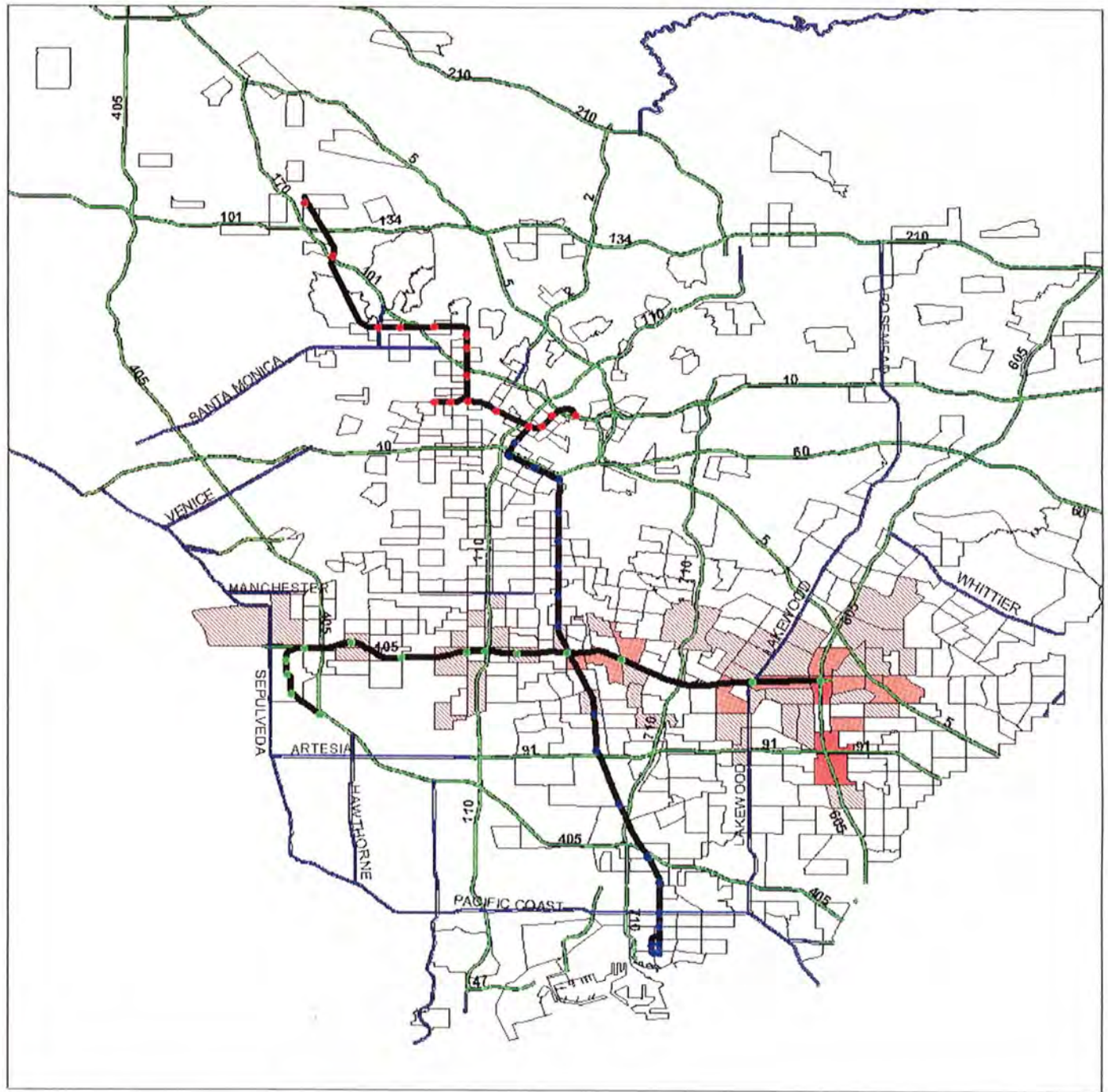
0 5 Miles





# Metro Rail Green Line West Origins

- Metro Red Line Stations
- Metro Green Line Stations
- Metro Blue Line Stations
- Metro Rail Lines
- LA Highways
- LA Freeways
- Transportation Analysis Zones
- 1 - 4
- 5 - 10
- 11 - 17
- 18 - 25
- 26 or more



12/31/02 Rea & Parker Research  
 Prepared by: Steve Bouton  
 Source MTA 2002 On-Board Rail Survey  
 Highways and Freeways 1999 Thomas Bros.  
 Used with Permission

0 5 Miles

















## **Appendix**

### **Morning Peak Origins/Destinations by Transportation Analysis Zone**







**Table 1**  
**Metro Rail Distribution of Origins and Destinations**  
**Transportation Analysis Zones (TAZ)**  
**(AM Peak)**

<b>TAZ</b>	<b>Origins</b>	<b>Destinations</b>
1	1	0
2	0	0
3	2	0
4	1	0
5	3	2
6	0	0
7	0	0
8	0	0
9	0	0
10	3	0
11	2	5
12	0	0
13	3	0
14	1	0
15	0	0
16	1	0
17	0	0
18	2	0
19	3	2
20	0	0
21	0	2
22	1	1
23	0	3
24	0	0
25	3	2
26	6	3
27	1	0
28	2	2
29	1	0
30	0	1
31	0	0
32	1	0
33	2	0
34	0	0
35	0	1
36	0	0
37	0	1
38	1	0
39	0	0
40	0	2
41	0	1
42	1	0
43	1	0
44	0	0
45	2	1
46	1	0
47	1	0

48	0	1
49	0	0
50	2	0
51	0	1
52	3	0
53	0	1
54	0	2
55	0	0
56	0	3
57	0	0
58	4	2
59	2	0
60	0	0
61	0	0
62	0	0
63	0	1
64	1	0
65	1	1
66	0	0
67	1	0
68	1	0
69	0	0
70	0	0
71	0	0
72	0	0
73	2	0
74	0	0
75	2	0
76	2	1
77	0	0
78	0	2
79	0	1
80	0	0
81	0	0
82	0	0
83	1	1
84	1	0
85	1	0
86	0	0
87	0	0
88	1	0
89	1	1
90	0	0
91	1	0
92	0	0
93	1	0
94	0	0
95	2	1
96	0	0
97	0	0
98	1	3
99	0	3
100	2	2
101	1	0
102	0	0
103	0	1
104	3	2



105	2	1
106	2	0
107	1	0
108	0	0
109	2	0
110	4	2
111	3	0
112	0	1
113	1	1
114	0	0
115	1	0
116	2	1
117	0	3
118	2	2
119	0	1
120	1	1
121	1	0
122	0	0
123	0	0
124	2	0
125	4	6
126	4	4
127	1	0
128	0	0
129	1	0
130	1	0
131	4	0
132	0	1
133	1	0
134	5	1
135	2	1
136	0	1
137	0	0
138	5	0
139	0	1
140	0	1
141	0	0
142	3	0
143	1	2
144	2	0
145	2	1
146	0	2
147	4	1
148	2	4
149	1	0
150	5	0
151	8	2
152	2	2
153	3	4
154	4	4
155	0	0
156	1	3
157	2	1
158	3	0
159	0	0
160	0	1
161	0	0

162	1	1
163	10	5
164	2	4
165	1	0
166	1	4
167	4	3
168	4	0
169	0	2
170	5	6
171	1	0
172	0	0
173	1	2
174	3	9
175	0	1
176	0	0
177	0	0
178	2	2
179	0	0
180	9	9
181	5	3
182	9	3
183	10	5
184	1	1
185	1	1
186	1	0
187	6	3
188	0	0
189	7	0
190	2	3
191	15	6
192	12	0
193	2	1
194	11	1
195	6	5
196	8	4
197	11	10
198	9	2
199	2	6
200	9	6
201	1	9
202	2	4
203	3	5
204	0	3
205	4	5
206	1	2
207	6	5
208	10	5
209	2	4
210	4	2
211	6	3
212	9	5
213	3	1
214	7	5
215	4	1
216	6	0
217	1	3
218	8	8



219	1	1
220	3	1
221	2	0
222	1	0
223	1	1
224	3	0
225	0	0
226	3	0
227	6	3
228	0	0
229	4	0
230	2	1
231	1	0
232	0	0
233	0	0
234	2	2
235	2	4
236	4	2
237	12	1
238	5	11
239	9	2
240	13	6
241	7	2
242	1	1
243	10	2
244	9	6
245	4	4
246	5	1
247	13	8
248	8	2
249	8	6
250	5	4
251	8	6
252	14	12
253	13	1
254	6	2
255	11	10
256	7	5
257	17	7
258	6	4
259	2	1
260	6	5
261	20	11
262	27	30
263	11	2
264	14	4
265	13	15
266	12	8
267	5	2
268	2	2
269	2	3
270	0	1
271	6	3
272	4	1
273	5	4
274	1	2
275	4	5

276	3	1
277	8	4
278	2	0
279	15	12
280	1	1
281	1	2
282	0	0
283	5	0
284	1	1
285	5	10
286	4	4
287	7	2
288	0	0
289	13	7
290	8	1
291	1	1
292	11	14
293	3	4
294	6	8
295	15	16
296	1	9
297	3	11
298	4	45
299	1	0
300	1	0
301	0	1
302	0	1
303	0	0
304	1	1
305	1	0
306	1	1
307	0	1
308	0	0
309	3	2
310	0	0
311	2	0
312	1	0
313	0	0
314	0	0
315	1	0
316	1	0
317	0	0
318	1	0
319	0	0
320	1	1
321	3	0
322	2	0
323	3	1
324	3	1
325	0	0
326	0	0
327	0	0
328	1	0
329	0	1
330	0	0
331	0	0
332	1	1



333	0	0
334	0	0
335	1	0
336	2	0
337	2	0
338	0	0
339	3	2
340	4	0
341	6	5
342	6	10
343	4	2
344	2	0
345	0	0
346	2	0
347	1	0
348	2	2
349	0	1
350	1	0
351	4	2
352	1	1
353	1	1
354	2	1
355	1	0
356	1	0
357	0	0
358	1	0
359	2	0
360	0	0
361	0	0
362	4	0
363	0	0
364	0	0
365	0	3
366	3	2
367	0	0
368	1	0
369	0	0
370	3	0
371	0	0
372	1	0
373	4	0
374	5	3
375	0	0
376	0	0
377	1	0
378	0	0
379	0	0
380	0	0
381	1	3
382	0	0
383	0	0
384	1	1
385	0	0
386	2	1
387	0	0
388	3	1
389	3	1

390	0	3
391	4	4
392	2	1
393	0	2
394	2	0
395	1	2
396	0	1
397	2	6
398	6	8
399	2	5
400	5	3
401	6	25
402	16	27
403	5	2
404	2	6
405	5	7
406	6	12
407	2	0
408	2	3
409	2	1
410	0	1
411	0	0
412	0	1
413	0	2
414	0	1
415	1	0
416	0	0
417	0	0
418	0	0
419	0	0
420	0	3
421	3	0
422	0	0
423	1	0
424	0	0
425	0	0
426	1	1
427	0	0
428	1	0
429	1	1
430	1	0
431	0	0
432	11	29
433	0	4
434	0	0
435	0	1
436	6	1
437	3	0
438	1	0
439	0	0
440	1	0
441	1	2
442	2	2
443	0	0
444	0	0
445	7	17
446	1	2



447	1	0
448	0	4
449	1	0
450	1	0
451	1	2
452	1	6
453	1	0
454	2	3
455	1	1
456	2	1
457	3	3
458	1	0
459	10	2
460	4	5
461	8	5
462	5	2
463	25	23
464	21	11
465	10	13
466	12	9
467	20	5
468	9	3
469	5	3
470	42	75
471	42	18
472	19	38
473	4	5
474	32	27
475	1	4
476	28	19
477	6	2
478	13	9
479	16	12
480	25	18
481	9	12
482	11	3
483	14	7
484	0	1
485	6	3
486	0	0
487	2	1
488	1	4
489	1	2
490	0	0
491	1	1
492	1	0
493	0	3
494	7	19
495	4	3
496	0	3
497	7	15
498	5	7
499	3	9
500	1	11
501	6	5
502	4	1
503	5	0

504	1	3
505	0	1
506	7	3
507	1	2
508	0	0
509	1	3
510	0	2
511	2	2
512	0	1
513	2	2
514	2	0
515	8	14
516	9	4
517	8	3
518	8	5
519	4	14
520	47	37
521	23	12
522	9	6
523	29	43
524	17	16
525	32	33
526	11	2
527	6	4
528	29	43
529	6	3
530	18	4
531	6	5
532	13	7
533	26	6
534	59	81
535	57	90
536	4	4
537	0	2
538	1	1
539	0	2
540	1	3
541	2	1
542	0	1
543	0	0
544	0	1
545	2	1
546	1	1
547	3	1
548	0	0
549	0	0
550	2	0
551	1	0
552	12	21
553	2	1
554	2	5
555	8	7
556	1	0
557	0	0
558	4	1
559	1	0
560	2	0



561	1	1
562	3	0
563	5	5
564	8	2
565	1	2
566	2	1
567	1	0
568	2	2
569	4	1
570	12	20
571	25	15
572	22	14
573	22	10
574	3	2
575	12	2
576	4	3
577	6	3
578	2	2
579	6	3
580	7	8
581	4	3
582	8	2
583	8	5
584	4	3
585	2	1
586	1	0
587	3	1
588	1	2
589	1	1
590	0	0
591	1	0
592	0	0
593	0	2
594	0	1
595	3	1
596	0	2
597	2	1
598	0	0
599	0	0
600	5	1
601	2	2
602	3	3
603	2	0
604	0	0
605	0	3
606	1	1
607	1	1
608	1	1
609	5	2
610	2	3
611	3	3
612	5	3
613	0	2
614	8	2
615	1	4
616	7	0
617	8	0

618	4	1
619	5	0
620	5	1
621	4	4
622	7	1
623	0	2
624	2	1
625	3	3
626	6	1
627	10	3
628	0	8
629	0	0
630	5	1
631	6	5
632	1	3
633	2	0
634	5	3
635	1	4
636	4	2
637	1	1
638	8	6
639	5	3
640	1	2
641	3	1
642	3	1
643	4	2
644	3	1
645	2	6
646	8	1
647	0	0
648	0	0
649	3	1
650	4	0
651	0	0
652	1	2
653	0	0
654	2	2
655	0	1
656	1	1
657	1	1
658	5	2
659	5	1
660	1	1
661	3	3
662	1	1
663	0	1
664	4	1
665	8	2
666	6	5
667	4	1
668	2	2
669	5	1
670	6	1
671	5	4
672	2	1
673	1	2
674	1	0



675	1	0
676	0	0
677	1	1
678	1	0
679	0	0
680	3	1
681	0	1
682	3	1
683	0	0
684	2	0
685	0	0
686	0	0
687	4	2
688	1	0
689	1	0
690	28	41
691	4	11
692	7	5
693	4	1
694	2	2
695	2	1
696	1	1
697	0	1
698	3	1
699	2	1
700	1	1
701	0	2
702	3	1
703	1	0
704	0	2
705	4	1
706	4	2
707	3	3
708	3	1
709	3	1
710	0	1
711	1	1
712	4	7
713	6	2
714	3	4
715	2	2
716	2	0
717	8	1
718	3	2
719	5	6
720	11	7
721	1	5
722	5	3
723	4	12
724	78	105
725	8	3
726	1	1
727	6	2
728	11	4
729	1	1
730	7	8
731	4	0

732	9	4
733	9	4
734	5	12
735	4	2
736	6	0
737	9	2
738	10	3
739	5	6
740	2	1
741	2	2
742	4	5
743	0	0
744	1	2
745	5	9
746	1	3
747	17	19
748	9	6
749	4	1
750	2	4
751	2	3
752	12	15
753	4	1
754	2	0
755	1	0
756	0	1
757	5	4
758	3	0
759	1	2
760	1	0
761	5	4
762	3	1
763	1	1
764	0	2
765	4	3
766	1	0
767	1	1
768	7	0
769	7	3
770	8	0
771	2	2
772	2	5
773	8	2
774	3	10
775	5	1
776	6	5
777	0	2
778	0	5
779	1	1
780	0	0
781	0	0
782	0	0
783	0	2
784	10	7
785	2	1
786	1	3
787	4	1
788	0	1

789	0	0
790	1	2
791	5	2
792	2	0
793	1	1
794	1	0
795	2	1
796	0	2
797	1	0
798	0	2
799	0	0
800	0	1
801	0	0
802	1	2
803	0	0
804	0	1
805	2	2
806	1	0
807	6	2
808	1	2
809	1	0
810	2	0
811	3	0
812	2	1
813	2	11
814	2	8
815	2	0
816	4	6
817	0	0
818	11	15
819	9	6
820	12	13
821	2	0
822	3	5
823	1	1
824	2	1
825	1	0
826	3	1
827	20	32
828	1	0
829	1	0
830	2	0
831	2	1
832	0	0
833	1	1
834	0	0
835	2	1
836	0	0
837	2	3
838	0	0
839	1	0
840	1	1
841	1	0
842	2	1
843	6	1
844	1	2
845	1	6



846	1	3
847	1	1
848	1	0
849	3	3
850	1	0
851	0	0
852	1	1
853	1	0
854	1	0
855	3	1
856	1	3
857	1	2
858	16	14
859	1	2
860	5	8
861	3	5
862	1	0
863	3	4
864	1	1
865	2	1
866	2	8
867	3	2
868	1	0
869	1	2
870	2	1
871	0	0
872	3	3
873	0	0
874	2	2
875	0	0
876	32	35
877	3	2
878	9	3
879	8	9
880	2	2
881	4	3
882	1	3
883	11	2
884	7	2
885	8	5
886	8	3
887	1	0
888	4	5
889	3	2
890	6	5
891	0	0
892	0	0
893	1	10
894	5	0
895	6	1
896	0	0
897	8	10
898	1	1
899	2	1
900	5	0
901	1	5
902	4	5

903	2	1
904	5	3
905	1	0
906	6	5
907	6	2
908	7	4
909	4	1
910	3	1
911	1	0
912	4	0
913	8	7
914	0	0
915	2	0
916	5	2
917	5	1
918	5	1
919	2	2
920	10	6
921	4	4
922	7	9
923	0	0
924	11	6
925	11	8
926	8	3
927	13	6
928	6	5
929	17	9
930	14	5
931	7	2
932	4	4
933	16	12
934	6	2
935	3	5
936	8	3
937	10	9
938	8	34
939	17	16
940	4	4
941	2	2
942	7	12
943	5	16
944	0	2
945	3	0
946	0	2
947	0	0
948	0	0
949	2	0
950	2	0
951	3	0
952	4	0
953	0	2
954	1	1
955	2	2
956	0	1
957	5	1
958	5	1
959	1	2

960	4	4
961	5	14
962	3	8
963	8	3
964	1	0
965	0	0
966	7	1
967	2	5
968	0	4
969	1	3
970	1	0
971	0	5
972	0	1
973	0	0
974	4	12
975	26	14
976	5	13
977	4	3
978	0	2
979	1	3
980	2	3
981	0	2
982	7	14
983	1	1
984	48	73
985	1	6
986	1	8
987	1	8
988	7	17
989	4	4
990	2	0
991	7	6
992	4	2
993	3	1
994	3	1
995	2	3
996	0	1
997	4	2
998	3	0
999	1	0
1000	0	0
1001	3	2
1002	2	1
1003	5	0
1004	2	2
1005	0	1
1006	2	2
1007	3	1
1008	2	0
1009	2	1
1010	7	2
1011	0	0
1012	1	1
1013	1	2
1014	5	1
1015	2	1
1016	1	0



1017	2	1
1018	1	3
1019	0	0
1020	1	0
1021	1	2
1022	0	0
1023	0	1
1024	2	0
1025	1	1
1026	4	0
1027	1	0
1028	1	0
1029	2	1
1030	2	2
1031	0	2
1032	1	2
1033	0	0
1034	0	1
1035	0	1
1036	3	1
1037	2	0
1038	13	33
1039	11	7
1040	4	1
1041	2	1
1042	10	12
1043	3	4
1044	6	13
1045	1	5
1046	4	12
1047	4	5
1048	4	2
1049	6	5
1050	5	9
1051	12	12
1052	1	1
1053	4	2
1054	5	1
1055	3	0
1056	3	4
1057	9	5
1058	2	2
1059	8	8
1060	1	1
1061	0	2
1062	7	1
1063	1	1
1064	4	2
1065	4	1
1066	5	4
1067	5	2
1068	6	9
1069	7	4
1070	12	5
1071	6	1
1072	7	2
1073	1	0

1074	4	1
1075	7	4
1076	2	5
1077	13	10
1078	9	3
1079	15	3
1080	4	4
1081	4	2
1082	9	7
1083	7	2
1084	11	4
1085	3	2
1086	8	8
1087	8	4
1088	4	4
1089	10	13
1090	11	8
1091	10	8
1092	2	4
1093	4	1
1094	8	8
1095	7	3
1096	3	4
1097	5	1
1098	4	6
1099	6	4
1100	6	3
1101	3	0
1102	15	10
1103	4	6
1104	1	0
1105	2	1
1106	8	5
1107	9	2
1108	1	2
1109	7	1
1110	5	2
1111	3	0
1112	5	2
1113	4	0
1114	1	2
1115	4	2
1116	2	1
1117	5	2
1118	2	0
1119	10	5
1120	6	3
1121	1	1
1122	13	8
1123	8	7
1124	5	3
1125	9	3
1126	6	2
1127	6	1
1128	5	2
1129	16	9
1130	9	4

1131	14	45
1132	8	3
1133	3	3
1134	4	6
1135	5	4
1136	5	3
1137	4	7
1138	3	8
1139	1	3
1140	16	21
1141	5	1
1142	0	3
1143	5	0
1144	14	6
1145	1	0
1146	6	5
1147	7	4
1148	11	3
1149	10	8
1150	5	2
1151	3	7
1152	12	4
1153	22	15
1154	7	2
1155	2	2
1156	8	8
1157	2	5
1158	7	3
1159	1	0
1160	12	14
1161	4	7
1162	10	15
1163	2	5
1164	8	4
1165	7	2
1166	2	3
1167	2	0
1168	1	0
1169	1	1
1170	0	1
1171	0	0
1172	0	0
1173	2	1
1174	1	0
1175	3	1
1176	2	0
1177	2	2
1178	2	1
1179	1	2
1180	2	1
1181	3	1
1182	0	0
1183	0	0
1184	1	0
1185	1	2
1186	0	0
1187	3	2



1188	1	0
1189	2	2
1190	1	1
1191	0	2
1192	1	0
1193	1	0
1194	1	0
1195	1	0
1196	0	0
1197	1	0
1198	2	1
1199	2	0
1200	4	2
1201	3	0
1202	6	6
1203	1	5
1204	0	0
1205	0	4
1206	1	0
1207	1	0
1208	0	1
1209	1	1
1210	0	2
1211	1	2
1212	2	0
1213	0	0
1214	2	2
1215	0	1
1216	1	2
1217	0	2
1218	3	0
1219	2	2
1220	1	1
1221	1	6
1222	0	0
1223	7	2
1224	1	0
1225	3	1
1226	15	7
1227	5	6
1228	4	6
1229	7	3
1230	5	1
1231	6	1
1232	4	5
1233	9	3
1234	6	0
1235	1	3
1236	8	1
1237	1	1
1238	3	1
1239	1	0
1240	7	6
1241	2	3
1242	2	1
1243	16	11
1244	15	11

1245	7	5
1246	9	8
1247	5	2
1248	1	0
1249	5	2
1250	4	2
1251	1	0
1252	7	1
1253	6	2
1254	2	3
1255	0	1
1256	3	3
1257	4	0
1258	2	4
1259	16	16
1260	1	0
1261	7	0
1262	2	0
1263	3	0
1264	3	1
1265	2	4
1266	4	0
1267	5	4
1268	9	0
1269	2	0
1270	4	1
1271	2	1
1272	5	1
1273	2	0
1274	2	1
1275	0	0
1276	0	1
1277	2	1
1278	0	0
1279	3	3
1280	3	2
1281	4	3
1282	0	0
1283	3	2
1284	2	2
1285	6	4
1286	8	0
1287	3	3
1288	6	3
1289	11	20
1290	1	1
1291	8	4
1292	9	6
1293	6	7
1294	20	7
1295	10	1
1296	2	3
1297	15	13
1298	23	12
1299	9	5
1300	12	17
1301	9	11

1302	24	36
1303	7	6
1304	33	76
1305	52	100
1306	5	16
1307	37	123
1308	53	120
1309	93	258
1310	20	43
1311	36	68
1312	3	6
1313	4	4
1314	3	5
1315	12	5
1316	4	9
1317	6	3
1318	3	0
1319	0	1
1320	1	5
1321	3	5
1322	10	2
1323	1	5
1324	2	7
1325	5	4
1326	17	36
1327	2	15
1328	18	38
1329	5	6
1330	0	0
1331	2	1
1332	2	1
1333	0	1
1334	1	0
1335	1	1
1336	2	0
1337	1	3
1338	0	1
1339	1	1
1340	0	1
1341	0	0
1342	4	4
1343	5	3
1344	11	14
1345	0	0
1346	3	0
1347	2	0
1348	1	0
1349	0	3
1350	1	0
1351	4	2
1352	2	0
1353	2	0
1354	0	0
1355	3	3
1356	0	1
1357	1	1
1358	1	0



1359	1	0
1360	2	0
1361	0	1
1362	0	0
1363	1	0
1364	0	0
1365	2	0
1366	2	0
1367	3	1
1368	1	0
1369	3	1
1370	0	1
1371	0	1
1372	1	2
1373	1	0
1374	1	0
1375	2	3
1376	1	1
1377	1	2
1378	4	0
1379	3	2
1380	4	0
1381	0	0
1382	5	3
1383	1	3
1384	1	0
1385	6	5
1386	1	2
1387	0	1
1388	1	0
1389	5	6
1390	2	0
1391	5	7
1392	5	4
1393	4	4
1394	4	4
1395	2	3
1396	2	3
1397	4	1
1398	6	3
1399	6	5
1400	7	6
1401	4	2
1402	3	7
1403	3	10
1404	1	1
1405	5	0
1406	2	3
1407	0	0
1408	2	1
1409	1	3
1410	0	0
1411	2	0
1412	2	0
1413	1	0
1414	3	1
1415	7	0

1416	5	1
1417	3	0
1418	6	6
1419	4	1
1420	1	0
1421	1	1
1422	6	5
1423	2	1
1424	1	2
1425	3	4
1426	0	0
1427	1	0
1428	0	0
1429	0	0
1430	0	0
1431	1	0
1432	0	0
1433	2	0
1434	0	2
1435	2	1
1436	0	3
1437	1	1
1438	0	1
1439	0	0
1440	0	0
1441	0	0
1442	0	0
1443	1	4
1444	1	0
1445	0	2
1446	0	1
1447	2	0
1448	2	1
1449	2	2
1450	0	0
1451	0	0
1452	0	0
1453	1	2
1454	4	1
1455	2	2
1456	0	0
1457	0	0
1458	0	1
1459	0	1
1460	4	3
1461	1	1
1462	1	0
1463	0	0
1464	3	2
1465	0	0
1466	1	1
1467	3	2
1468	1	2
1469	1	0
1470	0	1
1471	0	0
1472	1	2

1473	0	1
1474	1	0
1475	2	2
1476	0	0
1477	1	1
1478	0	0
1479	1	0
1480	1	1
1481	0	0
1482	2	0
1483	1	3
1484	1	0
1485	0	0
1486	0	1
1487	2	1
1488	0	1
1489	2	0
1490	1	0
1491	2	2
1492	1	0
1493	0	0
1494	1	1
1495	2	0
1496	0	0
1497	1	0
1498	0	0
1499	1	0
1500	0	0
1501	0	0
1502	0	1
1503	0	0
1504	0	0
1505	0	1
1506	0	0
1507	1	0
1508	0	0
1509	0	1
1510	0	1
1511	5	2
1512	1	0
1513	2	3
1514	0	0
1515	1	1
1516	4	1
1517	3	2
1518	2	2
1519	0	0
1520	0	2
1521	0	1
1522	0	1
1523	3	2
1524	2	1
1525	2	0
1526	1	0
1527	1	0
1528	4	0
1529	0	0

1530	0	0
1531	0	3
1532	2	0
1533	0	0
1534	3	10
1535	0	0
1536	0	0
1537	0	0
1538	0	0
1539	0	0
1540	0	0
1541	0	2
1542	1	1
1543	0	0
1544	0	0
1545	0	0
1546	1	0
1547	0	0
1548	3	0
1549	0	2
1550	1	1
1551	0	0
1552	1	0
1553	0	0
1554	1	1
1555	0	0
1556	0	1
1557	1	1
1558	1	0
1559	2	1
1560	1	0
1561	3	1
1562	1	1
1563	1	1
1564	0	1
1565	0	1
1566	0	2
1567	0	0
1568	1	1
1569	0	1
1570	1	3
1571	2	2
1572	0	0
1573	0	1
1574	0	0
1575	2	1
1576	0	0
1577	0	0
1578	1	0
1579	0	0
1580	2	0
1581	0	0
1582	3	0
1583	2	1
1584	2	1
1585	0	1
1586	1	1



1587	5	2
1588	0	0
1589	0	0
1590	0	4
1591	1	0
1592	2	0
1593	0	0
1594	2	0
1595	0	0
1596	5	1
1597	1	0
1598	0	0
1599	3	0
1600	0	0
1601	1	0
1602	1	0
1603	1	0
1604	0	0
1605	0	2
1606	2	2
1607	0	0
1608	1	0
1609	1	1
1610	0	0
1611	0	2
1612	1	2
1613	0	0
1614	0	1
1615	0	0
1616	3	0
1617	0	0
1618	0	1
1619	1	0
1620	0	0
1621	3	1
1622	0	0
1623	0	0
1624	1	0
1625	2	1
1626	3	1
1627	6	2
1628	0	1
1629	2	1
1630	0	0
1631	0	0
1632	12	2
1633	1	0
1634	1	0
1635	1	1
1636	0	0
1637	0	0
1638	1	0
1639	1	0
1640	0	0
1641	0	0
1642	1	1
1643	1	0

1644	0	0
1645	0	0
1646	0	0
1647	0	1
1648	0	0
1649	0	2
1650	1	0
1651	3	0
1652	1	0
1653	5	3
1654	2	1
1655	0	1
1656	0	0
1657	0	0
1658	1	0
1659	1	0
1660	1	1
1661	1	2
1662	0	1
1663	1	0
1664	3	1
1665	2	2
1666	2	1
1667	4	0
1668	0	0
1669	3	1
1670	1	1
1671	2	0
1672	1	1
1673	0	0
1674	1	1
1675	1	0
1676	3	1
1677	3	2
1678	2	0
1679	2	0
1680	4	0
1681	4	2
1682	0	0
1683	2	3
1684	4	2
1685	0	1
1686	2	2
1687	0	3
1688	1	2
1689	3	1
1690	0	1
1691	2	0
1692	0	0
1693	0	0
1694	0	0
1695	0	0
1696	1	0
1697	1	0
1698	0	0
1699	0	0
1700	0	0

1701	0	0
1702	0	0
1703	0	0
1704	1	0
1705	0	0
1706	0	0
Outside LA County	510	500
<b>Total (AM Peak)</b>	<b>6,568</b>	<b>6,165</b>

