

**EMPLOYMENT DENSITY STUDY
SUMMARY REPORT**

October 31, 2001

Prepared for:

Southern California Association of Governments

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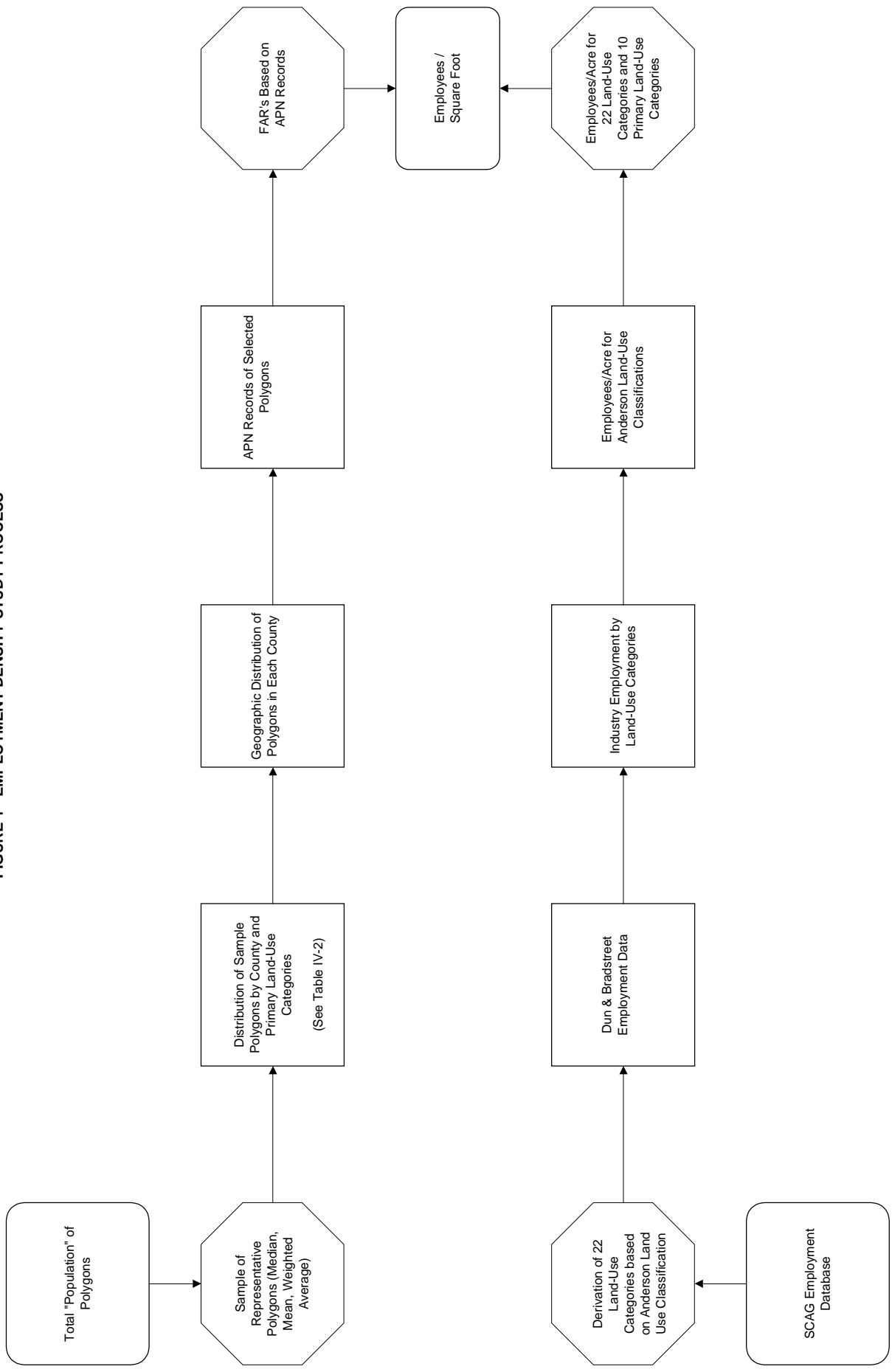
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I. INTRODUCTION

The objective of this study is to derive employment density factors for use in the Small Area Allocation Model (SAAM) currently being developed by the Southern California Association of Governments (SCAG). Specifically, the study has estimated employment densities for ten major land use categories. For purposes of this study, an employment density factor is defined as the number of employees per square feet of building space and acres of land. As detailed in this report, the consultant has utilized a “multi-step” approach to derive these employment density factors. Figure 1 on the following page provides a diagrammatic summary of the study process.

Section II of this report provides an executive summary of the major findings of the study. Section III provides the findings of an extensive review of previous studies/papers on employment density factors. Section IV provides an overview of the study methodology. Finally, Section V provides the estimated employment density factors derived by the study. Where possible, all findings are presented both at the individual county level and for the overall six-county region. The appendices fully document the technical/statistical analysis employed in this study.

FIGURE 1 - EMPLOYMENT DENSITY STUDY PROCESS



II. EXECUTIVE SUMMARY

On the following page tables II-A and II-B provide final employment density factors, presented as square feet of building spacer per employee, for ten major land use categories. The employment density factors ultimately derive from two separate variables: an (1) employees per acre density factor (derived from the SCAG employment database) and (2) a Floor Area Ratio (FAR) figure (derived from Assessors' Parcel records. Table II-A provides the density factors based on the median employees per acre and median FAR's. Table II-B provides the density factors based on a weighted average of employees per acre and a weighted averaged of FAR's. Sections IV and V provide additional data and a methodological explanation as to how these density factors were derived.¹

Both tables provide employment density factors for each county in the SCAG region and the entire SCAG region as a whole. For general application purposes, it is the consultant's opinion that the most appropriate factors are the regional employment density factors. These factors are based on a much larger sample of Assessors' Parcel records, since they are the sum of the individual records in each county. If the goal is to identify particular areas in a county, it may be appropriate to use the individual county density factors. However, it is important to recognize that these factors are drawn from a much smaller sample of parcel records, and therefore do not provide the researcher the same "level of confidence" as provided by the regional factors.

As table II-B illustrates, the density factor in the Government Offices land use category seems unusually high; in the other five counties the density factor ranges from 94 to 322 square feet per employee, compared to 1,442 square feet per employee in L.A. County. This inconsistent finding is possibly due to a small sample size of parcel records for Government Offices in L.A. County, which may have provided for an unrepresentative FAR figure for these types of buildings.²

¹ Section V also provides an additional set of density factors that resulted from a second sample of Assessors' Parcel Records and subsequent FAR's, as described further in section IV.

² It may also be the case that the FAR is representative of Government Office buildings and that the employee per acre figure is underestimated, possibly resulting from an undercount of employees in the SCAG employment database. A "low" employee per acre figure would increase the number of square feet of building space per employee in the density calculation.

Table II-A
Derivation of Square Feet per Employee Based on:
--MEDIAN EMPLOYEES PER ACRE
--MEDIAN FAR

<u>Land Use Category</u>	Los	<u>Orange</u>	<u>Riverside</u>	San	<u>Ventura</u>	<u>Imperial</u>	<u>Region</u>
	<u>Angeles</u>			<u>Bernardino</u>			
Square Feet per Employee							
Regional Retail	--	2,322	165	1,392	990	--	1,023
Other Retail/Svc.	730	450	1,148	432	412	796	585
Low-Rise Office	471	352	598	1,014	659	415	466
High-Rise Office	377	235	--	--	--	--	300
Hotel/Motel	1,179	--	5,273	1,747	--	808	1,804
R & D/Flex Space	1,717	511	1,121	1,833	277	--	527
Light Manufacturing	1,214	786	2,221	1,538	202	2,230	924
Heavy Manufacturing	--	--	--	--	--	--	--
Warehouse	1,518	1,350	819	2,111	149	3,257	1,225
Government Offices	2,182	408	1,475	851	120	407	672

Table II-B
Derivation of Square Feet per Employee Based on:
--AVERAGE EMPLOYEES PER ACRE
--AVERAGE FAR

<u>Land Use Category</u>	Los	<u>Orange</u>	<u>Riverside</u>	San	<u>Ventura</u>	<u>Imperial</u>	<u>Region</u>
	<u>Angeles</u>			<u>Bernardino</u>			
Square Feet per Employee							
Regional Retail	--	704	268	1,009	1,165	--	857
Other Retail/Svc.	424	325	629	124	271	255	344
Low-Rise Office	319	287	481	697	389	632	288
High-Rise Office	440	218	--	--	--	--	311
Hotel/Motel	--	--	3,476	2,544	--	311	1,152
R & D/Flex Space	1,796	466	867	834	269	--	344
Light Manufacturing	829	558	1,548	705	189	994	439
Heavy Manufacturing	--	--	--	--	--	--	--
Warehouse	1,518	979	581	1,195	131	450	814
Government Offices	1,442	206	208	188	94	322	261

Notes:
"--" = Data not available.

III. REVIEW OF PREVIOUS STUDIES

In attempt to review “rule of thumb” employment density factors by type of workspace or land use, the consultant conducted an extensive literature search for such information. TNCI also contacted the following organizations in an attempt to find any published information on this subject:

- ⌘ The Urban Land Institute
- ⌘ The UCLA Department of Urban Planning
- ⌘ The UCLA Graduate Research Library
- ⌘ The USC School of Policy, Planning, and Development
- ⌘ The UC Riverside Government Publications Library
- ⌘ The Harvard University JFK School of Public Policy
- ⌘ The Harvard University JFK Library
- ⌘ The UC Berkeley Department of City and Regional Planning

The search did not yield much information on employment density factors by type of workspace or land use. Of all the organizations listed above, only the ULI offers a relevant publication, conducted by Gruen Gruen + Associates in 1986, entitled “Employment and Parking in Suburban Business Parks: A Pilot Study.” This study contains survey information regarding employment density factors (square feet per employee) from 12 different business parks on the East and West Coasts of the U.S. There was also a 1997 study published in the Journal of Real Estate Research entitled “Industrial Employment Densities” that examines employment density factors for industrial property in the U.K. The study is of limited use for our purposes, however, since the data is from the U.K.

A 1990 study conducted by the Cordoba Corporation for the SCAG entitled “Land Use Density Conversion Factors for the Long-Range Corridor Study: San Bernardino and Riverside Counties” provides some information on employment density factors. The study lists the findings of a 1988 survey conducted by the Builders and Owners Management Association (BOMA) regarding employment density for office space in San Diego, Los Angeles, and Orange Counties. It also includes data from another 1990 Cordoba study that examined employment density factors by land use categories for the central business district (CBD) in Downtown Los Angeles.

Consistent with the consultant’s search process, the 1990 Cordoba study noted the lack of published information regarding “rule of thumb” employment density factors by type of workspace or land use. Appendix F provides a list of all the published materials (along with any relevant information found in the documents) TNCI obtained in its search process.

IV. OVERVIEW OF METHODOLOGY

The study process involved three “steps” or phases to empirically derive employment density factors:

1. **Definition of the land use categories to be used in the study**, based on an evaluation of the following data and GIS coverages: the SCAG land use database, available city General Plan land use categories, and the Anderson land use category definitions.
2. **Derivation of Employee/Acre Factors**, utilizing acreage data from the SCAG land use database and employment data from various sources including Dun & Bradstreet, ABI, and the State of California Employment Development Department.
3. **Derivation of (Building) Square Feet/Employee Factors**, based on application of “real world” floor-area-ratios (FAR’s) to the employee/acre factors derived in Phase 2.

Each phase of this process is described further below and is statistically documented in the appendices.

Phase 1 – Definition of Land Use Categories

The first step in this phase examined SCAG’s existing GIS-based existing land use database (circa 1990) for the entire SCAG region. This database was derived from aerial photographs and provides 100 individual land use categories at a 2-acre level of resolution. The next step involved aggregating the 100 individual land use categories into 22 land use groupings agreed upon by the Consultant and SCAG. Appendix A lists the 22 land use groupings along with the 100 component land use categories that make up each grouping.

Appendix H describes the correspondence between the General Plan land use categories and the land use groupings used for this study.

Phase 2 – Derivation of Employee/Acre Factors

After defining the 22 land use categories, the next step involved analyzing Dun & Bradstreet employment data sets provided by SCAG. These data sets provided the following variables for individual businesses within the entire SCAG region:

- ## Address
- ## Number of employees
- ## Type of industry (four digit SIC code)
- ## Land use type from GIS-based existing land use database

“Unique Polygon” (geographical area measured in acres that includes a number of businesses)

From the employment datasets, the consultant first calculated total employment by major industry sectors (at the two-digit SIC level) for the entire six-county SCAG region in each of the 22 land use categories. Table IV-1 below provides the percentage of employment by major industry sector for each land use category.

At first glance some of the figures presented IV-1 may seem puzzling. For example, the mining industry has a large concentration of employment in the land use categories of Other Retail/Services, Low-Rise Office and High-Rise Office. The critical distinction is that the figures provided above are employment by industry, not occupation. Many of these employees could be in clerical, accounting or management occupations, all of which would likely be in office-type environments.³

The employment datasets were next utilized to calculate an employment density factor (employees per acre) for each of the 100 land use categories in each County in the six-county SCAG region. The density factor was simply computed by taking the ratio of total employment to total acres in each land use category. These density factors are provided in Appendix B.

The third step in this phase involved calculating an employment density factor (employees per acre) for the 22 land use groupings—the aggregations of the 100 individual land use categories. For the 22 land use groupings, the employment density factor was calculated as a weighted average (the ratio of total employment to total employment in each land use grouping), a median (the midpoint of the individual densities in the land use grouping), a minimum (the record with the smallest density in the grouping), and a maximum (the record with the largest density in the grouping). This range of density factors is provided in Appendix C.

The final step in this phase of the project involved narrowing down the aggregated 22 land use groupings into 10 primary land use categories, agreed upon by the consultants and SCAG, that would form the basis of the study. They are listed as follows:

- # Regional Retail
- # Other Retail/Svc.
- # Low-Rise Office
- # High-Rise Office
- # Hotel/Motel
- # R & D/Flex Space
- # Light Manufacturing
- # Heavy Manufacturing
- # Warehouse
- # Government Offices

³ One surprising finding illustrated in the table is the relatively large percentage of employment across industries located in the Residential land use category. While some employment in residential areas may be explained by home-based businesses (and telecommuters, etc.), the figures provided in the table also suggest that there are resolution problems in the SCAG existing land use database. A number of unique polygons may have been designated as residential based on the predominant land use, but such polygons may also include significant commercial oriented facilities as well.

Phase 3 – Derivation of Square Feet/Employee Factors

To convert the employee per acre density factors into meaningful density factors relating to employees to square feet of building space, the study utilized floor-area-ratios (FAR's) for the 10 primary land use categories. This analysis employed a five-step process to calculate FAR's of the 10 primary land use categories. First, for each County, we selected unique polygons with employment densities around the mean. The primary rationale for this was to select a representative sample of polygons from the general polygon population. The next step was then to select individual parcel addresses within these polygons and to acquire Assessors' Parcel Records (APR's) for these addresses. The APR includes, among other data relating to a parcel, the total building area and total land area, thus allowing us to empirically calculate FAR's.

Table IV-2 (next page) provides the targeted distribution of the parcel record sample by County and land use category. The target number of records for each County and land use category corresponds to their percentage of total employment within the entire SCAG region.

**Table IV-2
Projected Distribution of Parcel Record Sample by County
and Land Use Category**

Land Use Category	Los Angeles	Orange	Riverside	San Bernardino	Ventura	Imperial	All Counties
	Target Number of Parcels / Polygons to be Sampled						
Regional Retail	50 / 10	25 / 10	25 / 10	25 / 10	25 / 10	0 / 0	150 / 100
Other Retail/Services	1,000 / 100	500 / 50	350 / 70	350 / 70	300 / 60	200 / 50	2,700 / 375
Low-Rise Office	400 / 40	300 / 30	200 / 40	200 / 40	200 / 40	100 / 25	1,400 / 190
High-Rise Office	200 / 20	200 / 20	0 / 0	0 / 0	0 / 0	0 / 0	400 / 55
Hotel/Motel	50 / 10	50 / 10	50 / 10	25 / 10	25 / 10	25 / 15	225 / 50
R & D/Flex Space	50 / 10	50 / 10	50 / 10	50 / 10	25 / 10	0 / 0	225 / 65
Light Manufacturing	750 / 75	600 / 60	200 / 40	200 / 40	350 / 70	50 / 15	2,150 / 285
Heavy Manufacturing	50 / 10	25 / 10	0 / 0	0 / 0	0 / 0	0 / 0	75 / 35
Warehouse	100 / 15	50 / 10	75 / 15	100 / 20	25 / 10	50 / 15	400 / 85
Government Offices	50 / 10	50 / 10	50 / 10	50 / 10	50 / 10	25 / 15	275 / 185
Total	2,700 / 300	1,850 / 220	1,000 / 205	1,000 / 210	1,000 / 220	450 / 135	8,000 / 1,425

The selection criteria for these polygons were further refined by accounting for employment growth in sub-regions within each County. Employment growth was examined from SCAG's employment projections between 1997 and 2025 for Regional Statistical Areas (RSA's) within each county. Thus, polygons within RSA's with a critical mass of employment or significant projected increases in employment were included in the sample (even if they did not currently have employment densities near the mean).

Based on these polygons, the consultants acquired the total number of parcel records listed in table IV-2. Due to problems with parcel record data, we were, unfortunately, only able to utilize 1,533 out of the 8,000 total parcel records. This resulted from three issues.

1. **Nonexistence of parcel record.** For many of the addresses, parcel records simply did not match up.
2. **Incomplete data.** Some parcel records do not include building area or land area, thus making it impossible to calculate FAR's
3. **Incompatibility of parcel record with land use category.** Some of the parcel records were incompatible with the polygon that it came from in terms of land use. For example, a polygon with a high-rise office land use classification may have had a parcel record (corresponding to the address in the polygon) where the land use was characterized as a hotel. Such parcel records were not utilized in FAR calculations.

Since the first attempt of selecting polygons did not result in an adequate sample of parcel records, it was necessary to select a second group of polygons. This second set of polygons was selected to get closer to the targeted number of parcel records for each land use grouping in each County listed in table IV-2. Since the first set of polygons all exhibited the mean employment density for each land use grouping, the selection of the second set in terms of employment densities was completely random.

The second set or "broader selection" of polygons was also characterized by the three problems listed above. But since it included more polygons than the first selection process, the sample yielded substantially more parcel records—2,721 total.

V. EMPLOYMENT DENSITY DATA

Tables 1 through 14 provide the final employment density factors, measured in terms of square feet of building space per employee, for each of 10 land use categories. The employment density factors are presented for each individual county and the entire SCAG region in two formats:

1. One based on the median employees per acre density and the median FAR; and
2. One based on the weighted average of employees per acre density and the weighted average FAR.

In addition, the tables also separate out the two different sets of parcel records as described in section IV. The tables labeled “NARROW POLYGON SELECTION” include data from the first set of parcel records, ones that were in polygons with employment densities (measured in terms of employees per acre) around the mean. The tables labeled “BROAD POLYGON SELECTION” include data from the second set of parcel records, ones that were in a completely random set of polygons.⁴

The tables provide the following key information for each land use category.

1. **Number of records**: the total number of parcel records that the FAR was calculated from.
2. **FAR**: The ratio of building area and land area (measured in terms of square feet). Presented as the median FAR and the weighted average FAR.
3. **Employees per Acre**: the ratio of employees and total acres of land. Presented as the median employees per acre and the weighted average employees per acre.
4. **Net Gross Adjustment Factor**: factor to “net out” roads and other non-building related areas that were included in the polygons, which provided the area acreages in the employees per acre density factors.
5. **Building Efficiency**: factor utilized to exclude any non-work related space in a building (i.e., common areas).⁵

⁴ For Imperial County the Assessor’s office does not include building area and land area in parcel records. Therefore, in order to calculate employment density factors for Imperial county we relied upon FAR data from rural areas in Riverside and San Bernardino Counties. This prevented us from providing Imperial County employment density factors in the two formats—narrow and broad—since they had to be combined to generate an adequate sample size of parcel records.

⁵ These factors were derived from previous retail, office, and industrial development projects that the consultant has completed. They should be regarded as rough estimates of building efficiency factors, not definitive factors that apply to every type of retail, office, or industrial building spaces.

6. **Square Feet per Employee**: the product of square feet per employee (the reciprocal of employees per acre, converted to square feet), the FAR, the Net Gross Adjustment Factor, and the Building Efficiency Factor.

BROAD POLYGON SELECTION

Table 1A

Derivation of Square Feet per Employee Based on:

--MEDIAN EMPLOYEES PER ACRE

--MEDIAN FAR

FIVE COUNTY REGION

Net/Gross Adjustment Factor:

0.75

Land Use Category	# of Records	FAR	Employees/Acre	Building Efficiency	Square Feet/Employee
Regional Retail	27	0.59	14.99	0.80	1,023
Other Retail/Svc.	1013	0.28	13.49	0.85	585
Low-Rise Office	349	0.36	22.91	0.90	466
High-Rise Office	46	1.19	116.32	0.90	300
Hotel/Motel	16	0.61	11.04	N/A	1,804
R & D/Flex Space	70	0.31	18.13	0.95	527
Light Manufacturing	1047	0.35	11.63	0.95	924
Heavy Manufacturing	0	--	17.05	N/A	--
Warehouse	121	0.42	10.63	0.95	1,225
Government Offices	32	0.37	16.23	0.90	672

Table 2A

Derivation of Square Feet per Employee Based on:

--AVERAGE EMPLOYEES PER ACRE

--AVERAGE FAR

FIVE COUNTY REGION

Net/Gross Adjustment Factor:

0.75

Land Use Category	# of Records	FAR	Employees/Acre	Building Efficiency	Square Feet/Employee
Regional Retail	27	0.65	19.71	0.80	857
Other Retail/Svc.	1013	0.27	21.98	0.85	344
Low-Rise Office	349	0.43	43.95	0.90	288
High-Rise Office	46	1.86	175.49	0.90	311
Hotel/Motel	16	1.17	33.07	N/A	1,152
R & D/Flex Space	70	0.23	20.53	0.95	344
Light Manufacturing	1047	0.25	17.83	0.95	439
Heavy Manufacturing	0	--	31.14	N/A	--
Warehouse	121	0.30	11.40	0.95	814
Government Offices	32	0.46	51.67	0.90	261

NARROW POLYGON SELECTION

Table 1B

Derivation of Square Feet per Employee Based on:

--MEDIAN EMPLOYEES PER ACRE

--MEDIAN FAR

FIVE COUNTY REGION

Net/Gross Adjustment Factor:

0.75

Land Use Category	# of Records	FAR	Employees/Acre	Building Efficiency	Square Feet/Employee
Regional Retail	24	0.46	14.99	0.80	798
Other Retail/Svc.	445	0.39	13.49	0.85	813
Low-Rise Office	222	0.47	22.91	0.90	600
High-Rise Office	35	1.14	116.32	0.90	289
Hotel/Motel	6	0.45	11.04	N/A	1,333
R & D/Flex Space	45	0.36	18.13	0.95	609
Light Manufacturing	695	0.41	11.63	0.95	1,089
Heavy Manufacturing	1	0.89	17.05	N/A	1,700
Warehouse	50	0.44	10.63	0.95	1,274
Government Offices	10	0.47	16.23	0.90	843

Table 2B

Derivation of Square Feet per Employee Based on:

--AVERAGE EMPLOYEES PER ACRE

--AVERAGE FAR

FIVE COUNTY REGION

Net/Gross Adjustment Factor:

0.75

Land Use Category	# of Records	FAR	Employees/Acre	Building Efficiency	Square Feet/Employee
Regional Retail	24	0.71	19.71	0.80	948
Other Retail/Svc.	445	0.41	21.98	0.85	514
Low-Rise Office	222	0.47	43.95	0.90	315
High-Rise Office	35	1.83	175.49	0.90	306
Hotel/Motel	6	0.46	33.07	N/A	459
R & D/Flex Space	45	0.38	20.53	0.95	569
Light Manufacturing	695	0.29	17.83	0.95	501
Heavy Manufacturing	1	0.89	31.14	N/A	931
Warehouse	50	0.35	11.40	0.95	960
Government Offices	10	0.48	51.67	0.90	272

BROAD POLYGON SELECTION

Table 3A

Derivation of Square Feet per Employee Based on:

--MEDIAN EMPLOYEES PER ACRE

--MEDIAN FAR

LOS ANGELES COUNTY

Net/Gross Adjustment Factor:

0.75

Land Use Category	# of Records	FAR	Employees/Acre	Building Efficiency	Square Feet/Employee
Regional Retail	0	--	18.45	0.80	--
Other Retail/Svc.	431	0.41	15.71	0.85	730
Low-Rise Office	117	0.49	30.75	0.90	471
High-Rise Office	29	2.00	156.07	0.90	377
Hotel/Motel	7	0.62	17.14	N/A	1,179
R & D/Flex Space	3	1.40	25.31	0.95	1,717
Light Manufacturing	327	0.55	14.17	0.95	1,214
Heavy Manufacturing	0	--	42.95	N/A	--
Warehouse	8	0.62	12.65	0.95	1,518
Government Offices	5	1.25	16.78	0.90	2,182

Table 4A

Derivation of Square Feet per Employee Based on:

--AVERAGE EMPLOYEES PER ACRE

--AVERAGE FAR

LOS ANGELES COUNTY

Net/Gross Adjustment Factor:

0.75

Land Use Category	# of Records	FAR	Employees/Acre	Building Efficiency	Square Feet/Employee
Regional Retail	0	--	18.86	0.80	--
Other Retail/Svc.	431	0.39	25.76	0.85	424
Low-Rise Office	117	0.60	55.28	0.90	319
High-Rise Office	29	3.60	240.77	0.90	440
Hotel/Motel	7	1.21	51.91	N/A	--
R & D/Flex Space	3	1.31	22.61	0.95	1,796
Light Manufacturing	327	0.49	18.49	0.95	829
Heavy Manufacturing	0	--	48.18	N/A	--
Warehouse	8	0.63	12.96	0.95	1,518
Government Offices	5	3.12	63.63	0.90	1,442

NARROW POLYGON SELECTION

Table 3B

Derivation of Square Feet per Employee Based on:

--MEDIAN EMPLOYEES PER ACRE

--MEDIAN FAR

LOS ANGELES COUNTY

Net/Gross Adjustment Factor:

0.75

Land Use Category	# of Records	FAR	Employees/Acre	Building Efficiency	Square Feet/Employee
Regional Retail	13	0.78	18.45	0.80	1,102
Other Retail/Svc.	228	0.47	15.71	0.85	836
Low-Rise Office	82	0.51	30.75	0.90	487
High-Rise Office	28	2.22	156.07	0.90	418
Hotel/Motel	3	0.46	17.14	N/A	877
R & D/Flex Space	10	0.56	25.31	0.95	688
Light Manufacturing	216	0.47	14.17	0.95	1,040
Heavy Manufacturing	1	0.89	42.95	N/A	675
Warehouse	20	0.45	12.65	0.95	1,094
Government Offices	1	1.57	16.78	0.90	2,745

Table 4B

Derivation of Square Feet per Employee Based on:

--AVERAGE EMPLOYEES PER ACRE

--AVERAGE FAR

LOS ANGELES COUNTY

Net/Gross Adjustment Factor:

0.75

Land Use Category	# of Records	FAR	Employees/Acre	Building Efficiency	Square Feet/Employee
Regional Retail	13	1.76	18.86	0.80	2,437
Other Retail/Svc.	228	0.47	25.76	0.85	511
Low-Rise Office	82	0.56	55.28	0.90	299
High-Rise Office	28	2.50	240.77	0.90	305
Hotel/Motel	3	0.47	51.91	N/A	298
R & D/Flex Space	10	1.36	22.61	0.95	1,862
Light Manufacturing	216	0.45	18.49	0.95	749
Heavy Manufacturing	1	0.89	48.18	N/A	602
Warehouse	20	0.49	12.96	0.95	1,172
Government Offices	1	1.57	63.63	0.90	724

BROAD POLYGON SELECTION

Table 5A

Derivation of Square Feet per Employee Based on:

--MEDIAN EMPLOYEES PER ACRE

--MEDIAN FAR

ORANGE COUNTY

Net/Gross Adjustment Factor:

0.75

Land Use Category	# of Records	FAR	Employees/Acre	Building Efficiency	Square Feet/Employee
Regional Retail	17	0.95	10.68	0.80	2,322
Other Retail/Svc.	234	0.24	14.87	0.85	450
Low-Rise Office	121	0.35	28.87	0.90	352
High-Rise Office	17	0.38	47.61	0.90	235
Hotel/Motel	0	--	14.01	N/A	--
R & D/Flex Space	12	0.36	21.93	0.95	511
Light Manufacturing	245	0.40	15.99	0.95	786
Heavy Manufacturing	0	--	51.99	N/A	--
Warehouse	56	0.46	10.59	0.95	1,350
Government Offices	20	0.37	26.73	0.90	408

Table 6A

Derivation of Square Feet per Employee Based on:

--AVERAGE EMPLOYEES PER ACRE

--AVERAGE FAR

ORANGE COUNTY

Net/Gross Adjustment Factor:

0.75

Land Use Category	# of Records	FAR	Employees/Acre	Building Efficiency	Square Feet/Employee
Regional Retail	17	0.78	28.87	0.80	704
Other Retail/Svc.	234	0.26	22.58	0.85	325
Low-Rise Office	121	0.42	43.24	0.90	287
High-Rise Office	17	0.54	72.52	0.90	218
Hotel/Motel	0	--	35.06	N/A	--
R & D/Flex Space	12	0.36	23.92	0.95	466
Light Manufacturing	245	0.41	22.60	0.95	558
Heavy Manufacturing	0	--	31.09	N/A	--
Warehouse	56	0.40	12.63	0.95	979
Government Offices	20	0.31	44.42	0.90	206

NARROW POLYGON SELECTION

Table 5B

Derivation of Square Feet per Employee Based on:

--MEDIAN EMPLOYEES PER ACRE

--MEDIAN FAR

ORANGE COUNTY

Net/Gross Adjustment Factor:

0.75

Land Use Category	# of Records	FAR	Employees/Acre	Building Efficiency	Square Feet/Employee
Regional Retail	4	0.28	10.68	0.80	694
Other Retail/Svc.	123	0.33	14.87	0.85	617
Low-Rise Office	67	0.50	28.87	0.90	507
High-Rise Office	7	0.43	47.61	0.90	263
Hotel/Motel	0	--	14.01	N/A	--
R & D/Flex Space	8	0.39	21.93	0.95	559
Light Manufacturing	212	0.43	15.99	0.95	839
Heavy Manufacturing	0	--	51.99	N/A	--
Warehouse	13	0.38	10.59	0.95	1,118
Government Offices	5	0.31	26.73	0.90	336

Table 6B

Derivation of Square Feet per Employee Based on:

--AVERAGE EMPLOYEES PER ACRE

--AVERAGE FAR

ORANGE COUNTY

Net/Gross Adjustment Factor:

0.75

Land Use Category	# of Records	FAR	Employees/Acre	Building Efficiency	Square Feet/Employee
Regional Retail	4	0.38	28.87	0.80	341
Other Retail/Svc.	123	0.51	22.58	0.85	623
Low-Rise Office	67	0.48	43.24	0.90	324
High-Rise Office	7	0.49	72.52	0.90	200
Hotel/Motel	0	--	35.06	N/A	--
R & D/Flex Space	8	0.36	23.92	0.95	469
Light Manufacturing	212	0.42	22.60	0.95	576
Heavy Manufacturing	0	--	31.09	N/A	--
Warehouse	13	0.37	12.63	0.95	901
Government Offices	5	0.36	44.42	0.90	239

BROAD POLYGON SELECTION

Table 7A

Derivation of Square Feet per Employee Based on:

--MEDIAN EMPLOYEES PER ACRE

--MEDIAN FAR

SAN BERNARDINO COUNTY

Net/Gross Adjustment Factor:

0.75

Land Use Category	# of Records	FAR	Employees/Acre	Building Efficiency	Square Feet/Employee
Regional Retail	5	0.36	6.74	0.80	1,392
Other Retail/Svc.	46	0.09	5.84	0.85	432
Low-Rise Office	36	0.34	9.87	0.90	1,014
High-Rise Office	0	--	--	0.90	--
Hotel/Motel	3	0.50	9.27	N/A	1,747
R & D/Flex Space	5	0.33	5.60	0.95	1,833
Light Manufacturing	61	0.24	4.88	0.95	1,538
Heavy Manufacturing	0	--	4.91	N/A	--
Warehouse	40	0.35	5.14	0.95	2,111
Government Offices	3	0.36	12.57	0.90	851

Table 8A

Derivation of Square Feet per Employee Based on:

--AVERAGE EMPLOYEES PER ACRE

--AVERAGE FAR

SAN BERNARDINO COUNTY

Net/Gross Adjustment Factor:

0.75

Land Use Category	# of Records	FAR	Employees/Acre	Building Efficiency	Square Feet/Employee
Regional Retail	5	0.36	9.32	0.80	1,009
Other Retail/Svc.	46	0.04	9.98	0.85	124
Low-Rise Office	36	0.40	16.80	0.90	697
High-Rise Office	0	--	--	0.90	--
Hotel/Motel	3	0.82	10.50	N/A	2,544
R & D/Flex Space	5	0.33	12.22	0.95	834
Light Manufacturing	61	0.16	6.92	0.95	705
Heavy Manufacturing	0	--	5.25	N/A	--
Warehouse	40	0.23	6.02	0.95	1,195
Government Offices	3	0.15	24.11	0.90	188

NARROW POLYGON SELECTION

Table 7B

Derivation of Square Feet per Employee Based on:

--MEDIAN EMPLOYEES PER ACRE

--MEDIAN FAR

SAN BERNARDINO COUNTY

Net/Gross Adjustment Factor:

0.75

Land Use Category	# of Records	FAR	Employees/Acre	Building Efficiency	Square Feet/Employee
Regional Retail	5	0.29	6.74	0.80	1,140
Other Retail/Svc.	59	0.25	5.84	0.85	1,168
Low-Rise Office	29	0.32	9.87	0.90	956
High-Rise Office	0	--	--	0.90	--
Hotel/Motel	1	0.65	9.27	N/A	2,293
R & D/Flex Space	12	0.35	5.60	0.95	1,943
Light Manufacturing	97	0.41	4.88	0.95	2,605
Heavy Manufacturing	0	--	4.91	N/A	--
Warehouse	15	0.43	5.14	0.95	2,616
Government Offices	4	0.72	12.57	0.90	1,676

Table 8B

Derivation of Square Feet per Employee Based on:

--AVERAGE EMPLOYEES PER ACRE

--AVERAGE FAR

SAN BERNARDINO COUNTY

Net/Gross Adjustment Factor:

0.75

Land Use Category	# of Records	FAR	Employees/Acre	Building Efficiency	Square Feet/Employee
Regional Retail	5	0.25	9.32	0.80	702
Other Retail/Svc.	59	0.25	9.98	0.85	683
Low-Rise Office	29	0.34	16.80	0.90	599
High-Rise Office	0	--	--	0.90	--
Hotel/Motel	1	0.65	10.50	N/A	2,023
R & D/Flex Space	12	0.31	12.22	0.95	783
Light Manufacturing	97	0.32	6.92	0.95	1,420
Heavy Manufacturing	0	--	5.25	N/A	--
Warehouse	15	0.23	6.02	0.95	1,179
Government Offices	4	0.91	24.11	0.90	1,106

BROAD POLYGON SELECTION

Table 9A

Derivation of Square Feet per Employee Based on:

--MEDIAN EMPLOYEES PER ACRE

--MEDIAN FAR

RIVERSIDE COUNTY

Net/Gross Adjustment Factor:

0.75

Land Use Category	# of Records	FAR	Employees/Acre	Building Efficiency	Square Feet/Employee
Regional Retail	3	0.12	19.24	0.80	165
Other Retail/Svc.	220	0.28	6.74	0.85	1,148
Low-Rise Office	33	0.28	13.89	0.90	598
High-Rise Office	0	--	15.22	0.90	--
Hotel/Motel	6	0.61	3.78	N/A	5,273
R & D/Flex Space	22	0.40	11.18	0.95	1,121
Light Manufacturing	54	0.40	5.63	0.95	2,221
Heavy Manufacturing	0	--	--	N/A	--
Warehouse	10	0.30	11.26	0.95	819
Government Offices	3	0.57	11.36	0.90	1,475

Table 10A

Derivation of Square Feet per Employee Based on:

--AVERAGE EMPLOYEES PER ACRE

--AVERAGE FAR

RIVERSIDE COUNTY

Net/Gross Adjustment Factor:

0.75

Land Use Category	# of Records	FAR	Employees/Acre	Building Efficiency	Square Feet/Employee
Regional Retail	3	0.21	20.68	0.80	268
Other Retail/Svc.	220	0.28	12.26	0.85	629
Low-Rise Office	33	0.38	23.26	0.90	481
High-Rise Office	0	0.00	15.22	0.90	--
Hotel/Motel	6	1.26	11.82	N/A	3,476
R & D/Flex Space	22	0.40	14.21	0.95	867
Light Manufacturing	54	0.39	7.79	0.95	1,548
Heavy Manufacturing	0	--	--	N/A	--
Warehouse	10	0.31	16.32	0.95	581
Government Offices	3	0.32	44.94	0.90	208

NARROW POLYGON SELECTION

Table 9B

Derivation of Square Feet per Employee Based on:

--MEDIAN EMPLOYEES PER ACRE

--MEDIAN FAR

RIVERSIDE COUNTY

Net/Gross Adjustment Factor:

0.75

Land Use Category	# of Records	FAR	Employees/Acre	Building Efficiency	Square Feet/Employee
Regional Retail	2	0.20	19.24	0.80	275
Other Retail/Svc.	29	0.45	6.74	0.85	1,844
Low-Rise Office	14	0.26	13.89	0.90	541
High-Rise Office	0	--	15.22	0.90	--
Hotel/Motel	2	0.23	3.78	N/A	2,007
R & D/Flex Space	6	0.31	11.18	0.95	854
Light Manufacturing	19	0.39	5.63	0.95	2,161
Heavy Manufacturing	0	--	--	N/A	--
Warehouse	2	0.50	11.26	0.95	1,390
Government Offices	0	--	11.36	0.90	--

Table 10B

Derivation of Square Feet per Employee Based on:

--AVERAGE EMPLOYEES PER ACRE

--AVERAGE FAR

RIVERSIDE COUNTY

Net/Gross Adjustment Factor:

0.75

Land Use Category	FAR	Employees/Acre	Building Efficiency	Square Feet/Employee	
Regional Retail	2	0.24	20.68	0.80	306
Other Retail/Svc.	29	0.36	12.26	0.85	814
Low-Rise Office	14	0.23	23.26	0.90	292
High-Rise Office	0	--	15.22	0.90	--
Hotel/Motel	2	0.24	11.82	N/A	662
R & D/Flex Space	6	0.30	14.21	0.95	663
Light Manufacturing	19	0.38	7.79	0.95	1,505
Heavy Manufacturing	0	--	--	N/A	--
Warehouse	2	0.50	16.32	0.95	953
Government Offices	0	--	44.94	0.90	--

NARROW POLYGON SELECTION

Table 11A

Derivation of Square Feet per Employee Based on:

--MEDIAN EMPLOYEES PER ACRE

--MEDIAN FAR

VENTURA COUNTY

Net/Gross Adjustment Factor:

0.75

Land Use Category	# of Records	FAR	Employees/Acre	Building Efficiency	Square Feet/Employee
Regional Retail	2	0.50	13.19	0.80	990
Other Retail/Svc.	81	0.20	13.26	0.85	412
Low-Rise Office	49	0.32	14.21	0.90	659
High-Rise Office	0	--	--	0.90	--
Hotel/Motel	0	--	12.05	N/A	--
R & D/Flex Space	28	0.08	9.39	0.95	277
Light Manufacturing	360	0.07	10.92	0.95	202
Heavy Manufacturing	0	--	2.94	N/A	--
Warehouse	7	0.07	14.01	0.95	149
Government Offices	1	0.11	27.90	0.90	120

Table 12A

Derivation of Square Feet per Employee Based on:

--AVERAGE EMPLOYEES PER ACRE

--AVERAGE FAR

VENTURA COUNTY

Net/Gross Adjustment Factor:

0.75

Land Use Category	# of Records	FAR	Employees/Acre	Building Efficiency	Square Feet/Employee
Regional Retail	2	0.53	11.93	0.80	1,165
Other Retail/Svc.	81	0.17	17.68	0.85	271
Low-Rise Office	49	0.27	20.34	0.90	389
High-Rise Office	0	--	--	0.90	--
Hotel/Motel	0	--	19.92	N/A	--
R & D/Flex Space	28	0.12	13.70	0.95	269
Light Manufacturing	360	0.09	14.63	0.95	189
Heavy Manufacturing	0	--	4.43	N/A	--
Warehouse	7	0.06	13.74	0.95	131
Government Offices	1	0.11	35.69	0.90	94

NARROW POLYGON SELECTION

Table 11B

Derivation of Square Feet per Employee Based on:

--MEDIAN EMPLOYEES PER ACRE

--MEDIAN FAR

VENTURA COUNTY

Net/Gross Adjustment Factor:

0.75

Land Use Category	# of Records	FAR	Employees/Acre	Building Efficiency	Square Feet/Employee
Regional Retail	0	--	13.19	0.80	--
Other Retail/Svc.	6	0.06	13.26	0.85	125
Low-Rise Office	30	1.00	14.21	0.90	2,062
High-Rise Office	0	--	--	0.90	--
Hotel/Motel	0	--	12.05	N/A	--
R & D/Flex Space	9	0.06	9.39	0.95	197
Light Manufacturing	151	0.08	10.92	0.95	231
Heavy Manufacturing	0	--	2.94	N/A	--
Warehouse	0	--	14.01	0.95	--
Government Offices	0	--	27.90	0.90	--

Table 12B

Derivation of Square Feet per Employee Based on:

--AVERAGE EMPLOYEES PER ACRE

--AVERAGE FAR

VENTURA COUNTY

Net/Gross Adjustment Factor:

0.75

Land Use Category	# of Records	FAR	Employees/Acre	Building Efficiency	Square Feet/Employee
Regional Retail	0	--	11.93	0.80	--
Other Retail/Svc.	6	0.08	17.68	0.85	127
Low-Rise Office	30	0.49	20.34	0.90	713
High-Rise Office	0	--	--	0.90	--
Hotel/Motel	0	--	19.92	N/A	--
R & D/Flex Space	9	0.10	13.70	0.95	217
Light Manufacturing	151	0.10	14.63	0.95	210
Heavy Manufacturing	0	--	4.43	N/A	--
Warehouse	0	--	13.74	0.95	--
Government Offices	0	--	35.69	0.90	--

Table 13**Derivation of Square Feet per Employee Based on:****--MEDIAN EMPLOYEES PER ACRE****--MEDIAN FAR****IMPERIAL COUNTY**

Net/Gross Adjustment Factor:

0.75

Land Use Category	# of Records	FAR	Employees/Acre	Building Efficiency	Square Feet/Employee
Regional Retail	--	--	--	0.80	--
Other Retail/Services	103	0.24	8.53	0.85	796
Low-Rise Office	18	0.27	19.12	0.90	415
High-Rise Office	--	--	--	0.90	--
Hotel/Motel	3	0.50	20.03	N/A	808
R & D/Flex Space	--	0.35	--	0.95	--
Light Manufacturing	43	0.21	2.87	0.95	2,230
Heavy Manufacturing	--	--	--	N/A	--
Warehouse	21	0.32	3.03	0.95	3,257
Government Offices	3	0.37	26.44	0.90	407

Table 14**Derivation of Square Feet per Employee Based on:****--AVERAGE EMPLOYEES PER ACRE****--AVERAGE FAR****IMPERIAL COUNTY**

Net/Gross Adjustment Factor:

0.75

Land Use Category	# of Records	FAR	Employees/Acre	Building Efficiency	Square Feet/Employee
Regional Retail	1	--	--	0.80	--
Other Retail/Services	103	0.14	15.07	0.85	255
Low-Rise Office	18	0.38	17.90	0.90	632
High-Rise Office	--	--	--	0.90	--
Hotel/Motel	3	0.31	32.20	N/A	311
R & D/Flex Space	18	--	--	0.95	--
Light Manufacturing	43	0.15	4.80	0.95	994
Heavy Manufacturing	--	--	--	N/A	--
Warehouse	21	0.23	16.17	0.95	450
Government Offices	3	0.31	28.15	0.90	322

APPENDIX A

**LAND USE CODES AND
CATEGORY GROUPINGS**

**Table A-1
Anderson Land Use Codes and Descriptions**

<u>Code</u>	<u>Description</u>
1000	Urban or Built up
1100	Residential
1110	Single Family Residential
1111	High Density Single Family Residential
1112	Low Density Single Family Residential
1121	Mixed Multi-Family Residential
1122	Duplexes, Triplexes, and 2 or 3-unit Condominiums and Townhouses
1123	Low Rise Apartments, Condominiums, and Townhouses
1124	Medium-Rise Apartments and Condominiums
1125	High Rise Apartments and Condominiums
1130	Mobile Homes and Trailer Parks
1131	Trailer Parks and Mobile Home Courts, High Density
1132	Mobile Home Courts and Subdivisions, Low Density
1140	Mixed Residential
1151	Rural Residential High Density
1152	Rural Residential Low Density
1200	Commercial and Services
1210	General Office Use
1211	Low to Medium Rise major Office Use
1212	High-Rise Major Office Use
1213	Skyscrapers
1220	Retail Stores and Commercial Services
1221	Regional Shopping Center
1222	Retail Centers (Non-Strip with contiguous interconnected off-street parking)
1223	Modern Strip Development
1224	Older Strip Development
1230	Other Commercial
1231	Commercial Storage
1232	Commercial Recreation
1233	Hotels and Motels
1234	Attended Pay Public Parking Facilities
1240	Public Facilities
1241	Government Offices
1242	Police and Sheriff Stations
1243	Fire Stations
1244	Major Medical Health Care Facilities
1245	Religious Facilities
1246	Other Public Facilities
1247	Non-Attended Public Parking Facilities
1250	Special Use Facilities
1251	Correctional Facilities
1252	Special Care Facilities
1253	Other Special Use Facilities
1260	Educational Institutions
1261	Pre-Schools/Day Care Centers
1262	Elementary Schools
1263	Junior High Schools
1264	Senior High Schools

<u>Code</u>	<u>Description</u>
1265	Colleges and Universities
1266	Trade Schools
1270	Military Installation
1271	Base (Built-Up Area)
1272	Vacant Area
1273	Air Field
1300	Industrial
1310	Light Industrial
1311	Manufacturing, Assembly, and Industrial Services
1312	Motion Picture and Television Studio Lots
1313	Packing Houses and Grain Elevators
1314	Research and Development
1320	Heavy Industrial
1321	Manufacturing
1322	Petroleum Refining and Processing
1323	Open Storage
1324	Major Metal Processing
1325	Chemical Processing
1330	Extraction
1331	Mineral Extraction - Other Than Oil and Gas
1332	Mineral Extraction - Than Oil and Gas
1340	Wholesaling and Warehousing
1400	Transportation, Communication, and Utilities
1410	Transportation
1411	Airports
1412	Railroads
1413	Freeways and Major Roads
1414	Park and Ride Lots
1415	Bus Terminals and Yards
1416	Truck Terminals
1417	Harbor Facilities
1418	Navigation Aids
1420	Communication Facilities
1430	Utility Facilities
1431	Electrical Power Facilities
1432	Solid Waste Disposal Facilities
1433	Liquid Waste Disposal Facilities
1434	Water Storage Facilities
1435	Natural Gas and Petroleum Facilities
1436	Water Transfer Facilities
1437	Improved Flood Waterways and Structures
1438	Mixed Wind Energy Generation and Percolation Basin
1440	Maintenance Yards
1450	Mixed Transportation
1460	Mixed Transportation and Utility
1500	Mixed Commercial and Industrial
1600	Mixed Urban
1700	Under Construction
1800	Open Space and Recreation
1810	Golf Courses
1820	Local Parks and Recreation

<u>Code</u>	<u>Description</u>
1830	Regional Parks and Recreation
1840	Cemeteries
1850	Wildlife Preserves and Sanctuaries
1860	Specimen Gardens and Arboreta
1870	Beach Parks
1880	Other Open Space and Recreation
1900	Urban Vacant
2000	Agriculture
2100	Cropland and Improved Pasture Land
2110	Irrigated Cropland and Improved Pasture Land
2120	Non-Irrigated Cropland and Improved Pasture Land
2200	Orchards and Vineyards
2300	Nurseries
2400	Dairy and Intensive Livestock, And Associated Facilities
2500	Poultry Operations
2600	Other Agriculture
2700	Horse Ranches
3000	Vacant
3100	Vacant Undifferentiated
3200	Abandoned Orchards and Vineyards
3300	Vacant With Limited Improvements
3400	Beaches (Vacant)
4000	Water
4100	Water, Undifferentiated
4200	Harbor Water Facilities
4300	Marina Water Facilities
4400	Water Within a Military Installation
4500	Area of Inundation (High Water)

**Table A-2
GROUPING OF LAND USE CATEGORIES**

COMMERCIAL	INDUSTRIAL
1 Regional Retail	7 R & D/Flex Space
1221 Regional Shopping Center	1314 Research and Development
2 Other Retail/Services	1500 Mixed Commercial and Industrial
1222 Retail Centers (Non-Strip with contiguous parking)	8 Light Manufacturing
1223 Modern Strip Development	1311 Manufacturing, Assembly, and Industrial Services
1224 Older Strip Development	1312 Motion Picture and Television Studio Lots
3 Low-Rise Office	9 Heavy Manufacturing
1211 Low to Medium Rise major Office Use	1321 Manufacturing
4 High-Rise Office	10 Warehouse
1212 High-Rise Major Office Use	1340 Wholesaling and Warehousing
1213 Skyscrapers	11 Misc. Industrial
5 Hotel/Motel	1313 Packing Houses and Grain Elevators
1233 Hotels and Motels	1322 Petroleum Refining and Processing
6 Misc. Commercial	1323 Open Storage
1231 Commercial Storage	1324 Major Metal Processing
1232 Commercial Recreation	1325 Chemical Processing
1234 Attended Pay Public Parking Facilities	1331 Mineral Extraction - Other Than Oil and Gas
	1332 Mineral Extraction - Than Oil and Gas

Table A-2 (Continued)
LAND USE CATEGORIES

PUBLIC/OTHER

- 12 Government Offices**
- 1241 Government Offices
- 13 Primary/Secondary School**
- 1261 Pre-Schools/Day Care Centers
- 1262 Elementary Schools
- 1263 Junior High Schools
- 1264 Senior High Schools
- 14 Colleges & Universities**
- 1265 Colleges and Universities
- 1266 Trade Schools
- 15 Transportation**
- 1411 Airports
- 1412 Railroads
- 1415 Bus Terminals and Yards
- 1416 Truck Terminals
- 1417 Harbor Facilities
- 16 Utilities**
- 1431 Electrical Power Facilities
- 1432 Solid Waste Disposal Facilities
- 1433 Liquid Waste Disposal Facilities
- 1434 Water Storage Facilities
- 1435 Natural Gas and Petroleum Facilities
- 1436 Water Transfer Facilities
- 1437 Improved Flood Waterways and Structures
- 1438 Mixed Wind Energy Generation and Percolation Basin
- 17 Other Institutional**
- 1242 Police and Sheriff Stations
- 1243 Fire Stations
- 1245 Religious Facilities
- 1246 Other Public Facilities
- 1251 Correctional Facilities
- 1252 Special Care Facilities
- 1253 Other Special Use Facilities
- 18 Hospitals**
- 1244 Major Medical Health Care Facilities
- 19 Agriculture**
- 2110 Irrigated Cropland and Improved Pasture Land
- 2120 Non-Irrigated Cropland and Improved Pasture Land
- 2200 Orchards and Vineyards
- 2300 Nurseries
- 2400 Dairy and Intensive Livestock, And Associated Facilities
- 2500 Poultry Operations
- 2600 Other Agriculture
- 2700 Horse Ranches
- 20 Open Space**
- 1810 Golf Courses
- 1820 Local Parks and Recreation
- 1830 Regional Parks and Recreation
- 1840 Cemeteries
- 1850 Wildlife Preserves and Sanctuaries
- 1860 Specimen Gardens and Arboreta
- 1870 Beach Parks
- 1880 Other Open Space and Recreation
- 1900 Urban Vacant
- 3000 Vacant
- 3100 Vacant Undifferentiated
- 3200 Abandoned Orchards and Vineyards
- 3300 Vacant With Limited Improvements
- 3400 Beaches (Vacant)
- 4000 Water
- 4100 Water, Undifferentiated
- 4200 Harbor Water Facilities
- 4300 Marina Water Facilities
- 4400 Water Within a Military Installation
- 4500 Area of Inundation (High Water)
- 21 All Other**
- 1247 Non-Attended Public Parking Facilities
- 1271 Base (Built-Up Area)
- 1272 Vacant Area
- 1273 Air Field
- 1420 Communication Facilities
- 1600 Mixed Urban
- 1700 Under Construction
- 1440 Maintenance Yards
- 1450 Mixed Transportation
- 1460 Mixed Transportation and Utility
- 1413 Freeways and Major Roads
- 1414 Park and Ride Lots
- 1418 Navigation Aids

APPENDIX B

EMPLOYMENT DENSITIES BY ANDERSON CODE

Table B-1
Employment Densities (employees per acre)
by Anderson Code
ALL COUNTIES

Code	Description	LA	Orange	Ventura	Riverside	SB	Imperial	All
1111	High Density Single Family Residential	1.35	1.60	1.56	0.57	0.59	1.19	1.15
1112	Low Density Single Family Residential	0.57	0.67	0.60	0.44	0.38	0.36	0.48
1121	Mixed Multi-Family Residential	2.75	3.07	--	0.79	1.09	--	2.70
1122	Duplexes, Triplexes and 2/3 Unit Condos and Townhouses	2.49	3.85	0.84	0.73	0.62	0.26	1.23
1123	Low-Rise Apartments, Condominiums, and Townhouses	4.32	3.15	2.99	1.08	1.48	6.11	3.65
1124	Medium-Rise Apartments and Condominiums	7.55	7.98	3.16	2.78	4.98	--	7.26
1125	High-Rise Apartments and Condominiums	21.47	--	--	--	--	--	21.47
1131	Trailer Parks and Mobile Home Courts, High Density	2.31	2.87	1.81	0.42	0.91	5.70	1.22
1132	Trailer Parks and Mobile Home Courts, Low Density	0.91	0.59	--	0.29	2.21	--	0.42
1140	Mixed Residential	2.98	4.40	3.62	0.94	2.60	4.55	2.93
1151	Rural Residential High Density	1.18	0.51	0.21	0.36	0.14	0.23	0.53
1152	Rural Residential Low Density	0.33	0.49	2.97	0.22	0.13	6.25	0.33
1211	Low to Medium Rise major Office Use	55.28	43.24	20.47	23.26	16.80	17.90	44.18
1212	High-Rise Major Office Use	198.82	72.52	--	15.22	--	--	198.48
1213	Skyscrapers	731.93	--	--	--	--	--	731.93
1221	Regional Shopping Center	18.86	28.87	11.58	20.68	9.32	--	17.11
1222	Retail Centers (Non-Strip with contiguous interconnected off-street parking)	20.18	16.98	14.02	12.91	12.60	12.30	17.22
1223	Modern Strip Development	22.87	23.52	19.22	11.33	8.58	12.13	18.85
1224	Older Strip Development	32.68	35.40	19.15	16.37	14.64	25.84	31.16
1231	Commercial Storage	8.38	12.15	19.43	6.56	6.52	2.83	8.18
1232	Commercial Recreation	11.11	8.25	5.29	3.60	5.42	0.27	9.76
1233	Hotels and Motels	51.91	35.06	18.22	11.82	10.50	32.20	31.99
1234	Attended Pay Public Parking Facilities	68.77	95.84	--	--	--	--	68.77
1241	Government Offices	63.63	44.42	37.67	44.94	24.11	28.15	53.04
1242	Police and Sheriff Stations	53.34	119.74	24.42	48.68	40.51	--	49.98
1243	Fire Stations	46.39	50.78	15.19	14.67	13.41	132.27	34.12
1244	Major Medical Health Care Facilities	40.90	50.40	63.01	41.16	10.68	30.77	38.89
1245	Religious Facilities	13.04	11.20	6.83	8.78	8.14	31.23	11.52
1246	Other Public Facilities	22.44	28.22	22.14	6.89	18.66	10.53	20.43
1247	Non-Attended Public Parking Facilities	44.01	55.36	12.22	11.92	13.60	5.94	37.34
1251	Correctional Facilities	6.59	--	7.23	--	8.41	--	6.83
1252	Special Care Facilities	14.24	32.24	15.48	15.19	21.58	--	14.87
1253	Other Special Use Facilities	17.93	12.04	8.22	6.99	22.68	26.92	15.86
1261	Pre-Schools/Day Care Centers	14.18	11.96	32.34	11.13	8.26	--	17.52
1262	Elementary Schools	7.89	6.07	5.16	7.00	6.59	2.90	7.41
1263	Junior High Schools	5.31	3.74	2.01	7.46	5.10	2.87	5.13
1264	Senior High Schools	4.96	3.06	3.38	3.29	3.35	3.50	4.39
1265	Colleges and Universities	8.41	5.38	5.12	1.32	2.14	--	6.91
1266	Trade Schools	16.55	4.66	9.11	--	29.95	--	15.68
1271	Base (Built-Up Area)	10.28	4.29	9.06	0.50	0.50	9.45	6.52
1272	Vacant Area	0.01	1.28	0.41	--	1.60	--	0.18
1273	Air Field	--	0.00	--	--	0.03	--	0.03
1311	Manufacturing, Assembly, and Industrial Services	18.23	22.60	14.58	7.79	6.92	4.80	16.34
1312	Motion Picture and Television Studio Lots	35.10	--	69.67	--	--	--	35.22
1313	Packing Houses and Grain Elevators	6.92	6.12	7.36	3.85	12.66	3.74	6.07
1314	Research and Development	13.34	0.36	4.60	--	--	--	13.19

Code	Description	LA	Orange	Ventura	Riverside	SB	Imperial	All
1321	Manufacturing	48.18	31.09	2.94	--	5.25	--	30.78
1322	Petroleum Refining and Processing	1.72	23.78	--	9.77	--	--	1.75
1323	Open Storage	7.04	11.92	6.00	4.18	2.71	3.50	4.86
1324	Major Metal Processing	--	--	--	--	0.40	--	0.40
1325	Chemical Processing	19.41	18.21	5.38	17.36	15.73	3.06	18.21
1331	Mineral Extraction - Other Than Oil and Gas	1.85	1.26	0.42	0.88	0.46	--	1.24
1332	Mineral Extraction - Than Oil and Gas	1.14	0.27	0.31	--	--	--	0.94
1340	Wholesaling and Warehousing	12.96	12.63	18.84	16.32	6.02	16.17	11.18
1411	Airports	4.77	7.13	2.37	0.46	0.30	0.35	3.54
1412	Railroads	7.34	3.77	14.18	0.94	0.25	1.00	3.80
1413	Freeways and Major Roads	4.94	4.99	1.66	0.97	1.54	1.13	3.39
1414	Park and Ride Lots	57.39	24.55	37.96	1.43	29.59	--	54.26
1415	Bus Terminals and Yards	14.67	14.09	40.20	24.36	0.86	12.76	16.22
1416	Truck Terminals	20.78	32.76	10.11	19.41	8.89	--	16.15
1417	Harbor Facilities	2.85	12.15	--	--	--	--	2.85
1420	Communication Facilities	23.98	--	--	2.13	43.82	--	24.31
1431	Electrical Power Facilities	2.89	2.44	2.09	0.52	0.40	0.23	1.30
1432	Sold Waste Disposal Facilities	0.47	0.04	1.25	36.52	0.28	--	1.65
1433	Liquid Waste Disposal Facilities	2.85	3.00	4.04	0.36	1.63	--	2.19
1434	Water Storage Facilities	5.82	22.22	2.38	1.83	5.11	0.77	4.80
1435	Natural Gas and Petroleum Facilities	6.10	17.83	5.53	2.21	3.64	25.87	5.81
1436	Water Transfer Facilities	9.75	61.09	--	0.03	29.39	0.21	0.40
1437	Improved Flood Waterways and Structures	2.07	1.78	0.84	0.50	1.06	--	1.41
1438	Mixed Wind Energy Generation and Percolation Basin	--	--	--	--	--	2.30	2.30
1440	Maintenance Yards	15.76	12.88	13.07	8.17	9.23	8.63	13.19
1450	Mixed Transportation	10.06	1.88	8.05	2.76	4.25	0.10	7.05
1460	Mixed Transportation and Utility	1.31	--	--	1.60	--	0.39	0.48
1500	Mixed Commercial and Industrial	37.44	36.57	15.07	14.21	12.22	--	25.47
1600	Mixed Urban	18.84	12.57	11.76	2.06	0.75	--	17.12
1700	Under Construction	2.74	1.55	1.94	0.84	0.42	0.08	1.32
1810	Golf Courses	1.44	1.37	0.72	1.09	0.71	0.06	1.19
1820	Local Parks and Recreation	5.71	4.77	3.52	2.30	13.84	3.89	6.55
1830	Regional Parks and Recreation	0.65	6.35	2.74	0.02	--	--	1.48
1840	Cemeteries	1.17	4.74	0.96	2.49	0.91	--	1.18
1850	Wildlife Preserves and Sanctuaries	1.71	0.66	0.34	0.03	--	0.01	0.54
1860	Specimen Gardens and Arboreta	0.75	--	--	73.67	--	--	1.12
1870	Beach Parks	0.56	--	--	--	--	--	0.53
1880	Other Open Space and Recreation	14.55	13.71	2.43	2.16	24.98	1.01	8.27
1900	Urban Vacant	8.69	10.31	5.94	2.99	2.33	0.93	4.16
2110	Irrigated Cropland and Improved Pasture Land	0.36	4.30	0.44	0.10	0.20	0.03	0.13
2120	Non-Irrigated Cropland and Improved Pasture Land	3.99	--	0.19	0.11	0.16	--	0.13
2200	Orchards and Vineyards	0.72	0.90	0.12	0.08	0.62	0.25	0.15
2300	Nurseries	2.95	2.42	0.79	0.31	1.16	--	2.09
2400	Dairy and Intensive Livestock, And Associated Facilities	8.71	--	--	0.27	0.23	--	0.28
2500	Poultry Operations	5.89	--	--	3.14	0.93	--	1.56
2600	Other Agriculture	4.08	0.84	3.59	1.46	2.87	1.21	2.13
2700	Horse Ranches	2.82	0.72	0.69	1.38	0.39	--	1.47
3100	Vacant Undifferentiated	0.05	0.19	0.05	0.03	0.02	0.01	0.03
3200	Abandoned Orchards and Vineyards	0.78	0.89	0.56	1.14	2.61	--	2.33
3300	Vacant With Limited Improvements	2.62	19.15	0.08	0.92	0.44	0.00	0.60
3400	Beaches (Vacant)	1.42	--	5.39	--	--	--	4.80
4100	Water, Undifferentiated	1.70	0.63	0.75	0.00	--	--	0.99
4200	Harbor Water Facilities	0.00	--	--	--	--	--	0.00
4300	Marina Water Facilities	0.76	5.39	11.07	--	--	--	7.09

APPENDIX C

**RANGE OF EMPLOYMENT DENSITIES
BY COUNTY**

**Table C-1
Range of Employment Densities (Employees Per Acre)
By County**

Land Use Category	Los Angeles					Orange					Ventura					
	Min	Max	Average	Median	Min	Max	Average	Median	Min	Max	Average	Median	Min	Max	Average	Median
COMMERCIAL																
1. Regional Retail	0.04	345.38	18.86	18.45	1.85	116.24	28.87	10.68	3.86	33.27	11.93	13.19				
2. Other Retail/Svc.	0.07	3,107.16	25.76	15.71	0.12	602.04	22.58	14.87	0.07	146.37	17.68	13.26				
3. Low-Rise Office	0.08	2,470.15	55.28	30.75	0.19	487.12	43.24	28.87	0.13	130.30	20.34	14.21				
4. High-Rise Office	0.15	1,117.60	240.77	156.07	0.22	549.35	72.52	47.61	--	--	--	--				
5. Hotel/Motel	0.13	914.08	51.91	17.14	0.34	1,044.62	35.06	14.01	1.54	73.33	19.92	12.05				
6. Misc. Commercial	0.02	1,216.62	17.46	7.16	0.11	1,360.08	9.05	6.91	0.50	90.15	7.93	6.33				
INDUSTRIAL																
7. R & D/Flex Space	0.06	367.24	22.61	25.31	0.01	183.30	23.92	21.93	0.12	53.75	13.70	9.39				
8. Light Manufacturing	0.06	1,589.73	18.49	14.17	0.58	2,577.66	22.60	15.99	0.05	171.60	14.63	10.92				
9. Heavy Manufacturing	12.23	72.22	48.18	42.95	21.88	82.10	31.09	51.99	2.94	2.94	4.43	2.94				
10. Warehouse	0.07	145.51	12.96	12.65	0.18	143.67	12.63	10.59	0.74	83.52	13.74	14.01				
11. Misc. Industrial	0.01	257.63	2.93	4.24	0.03	123.51	1.92	6.26	0.06	46.19	1.15	3.52				
PUBLIC/OTHER																
12. Government Offices	0.03	636.36	63.63	16.78	0.33	1,515.58	44.42	26.73	0.60	109.94	35.69	27.90				
13. Primary/Secondary School	0.02	522.45	6.44	5.35	0.02	327.50	4.42	3.89	0.05	173.20	4.25	3.25				
14. Colleges & Universities	0.01	337.65	8.67	8.18	0.15	154.29	5.36	5.67	1.33	83.29	6.09	6.94				
15. Transportation	0.01	630.76	5.90	6.35	0.86	155.13	8.82	11.03	0.56	141.23	3.84	8.97				
16. Utilities	0.02	266.55	2.81	2.25	0.01	230.29	2.34	3.72	0.05	21.29	1.89	1.25				
17. Other Institutional	0.12	5,000.00	15.77	7.10	0.11	482.10	19.03	5.94	0.23	197.82	11.06	6.65				
18. Hospitals	0.04	2,171.53	40.90	27.66	0.30	464.25	50.40	28.39	0.30	111.05	23.06	68.82				
19. Agriculture	0.00	2,272.73	0.71	20.64	0.00	247.32	2.64	3.11	0.00	45.85	0.26	0.32				
20. Open Space	0.00	921.18	0.16	1.19	0.00	3,597.23	0.52	2.11	0.00	146.17	0.11	0.74				
21. All Other	0.01	2,133.61	5.57	3.98	0.00	120.89	3.22	1.02	0.00	66.80	2.99	1.22				
22. Residential	0.00	1,538.04	1.65	1.16	0.01	203.92	1.90	1.08	0.01	132.78	1.55	0.87				

**Table C-1 (Cont.)
Range of Employment Densities (Employees Per Acre)
By County**

Land Use Category	San Bernardino			Riverside			Imperial			
	Min	Max	Average	Min	Max	Average	Min	Max	Average	Median
COMMERCIAL										
1. Regional Retail	3.83	20.14	9.32	15.22	48.43	20.68	19.24	--	--	--
2. Other Retail/Svc.	0.08	272.16	9.98	0.03	172.71	12.26	6.74	0.31	129.65	15.07
3. Low-Rise Office	0.29	301.08	16.80	0.30	353.14	23.26	13.89	0.93	24.25	17.90
4. High-Rise Office	--	--	--	15.22	15.22	15.22	15.22	--	--	--
5. Hotel/Motel	0.53	110.43	10.50	0.12	161.15	11.82	3.78	1.61	54.71	32.20
6. Misc. Commercial	0.13	99.51	5.93	0.20	33.51	5.68	2.84	0.27	3.47	0.38
INDUSTRIAL										
7. R & D/Flex Space	0.75	85.16	12.22	0.21	54.89	14.21	11.18	--	--	--
8. Light Manufacturing	0.05	286.57	6.92	0.09	74.18	7.79	5.63	0.09	146.47	4.80
9. Heavy Manufacturing	3.83	5.99	5.25	--	--	--	--	--	--	--
10. Warehouse	0.16	56.71	6.02	0.09	82.76	16.32	11.26	0.17	53.05	16.17
11. Misc. Industrial	0.03	170.72	1.71	0.00	53.07	2.86	3.30	0.15	22.40	3.63
PUBLIC/OTHER										
12. Government Offices	0.07	136.11	24.11	0.33	256.87	44.94	11.36	13.65	39.22	28.15
13. Primary/Secondary School	0.02	69.57	4.79	0.02	51.42	5.42	5.01	0.09	8.57	3.15
14. Colleges & Universities	0.07	50.18	2.61	0.04	8.12	1.32	0.25	--	--	--
15. Transportation	0.03	102.03	1.41	0.07	58.08	1.20	0.74	0.03	12.76	0.66
16. Utilities	0.00	124.36	0.89	0.00	57.71	0.59	1.23	0.00	52.39	0.22
17. Other Institutional	0.18	114.73	12.17	0.20	139.35	10.57	3.28	0.35	195.75	33.23
18. Hospitals	0.04	71.27	10.68	0.26	77.93	41.16	6.76	0.50	73.44	30.77
19. Agriculture	0.00	40.25	0.34	0.00	141.26	0.12	0.18	0.00	5.89	0.03
20. Open Space	0.00	346.67	0.05	0.00	851.85	0.07	0.57	0.00	50.80	0.05
21. All Other	0.01	170.31	1.25	0.00	63.45	1.14	0.55	0.00	24.89	1.26
22. Residential	0.01	162.96	0.57	0.01	159.98	0.54	0.31	0.02	131.94	1.37

**Table C-1 (Cont.)
Range of Employment Densities (Employees Per Acre)
By County**

Land Use Category	Entire Region*				
	Min	Max	Average	Median	
COMMERCIAL					
1. Regional Retail	0.04	345.38	19.71	14.99	
2. Other Retail/Svc.	0.03	3107.16	21.98	13.49	
3. Low-Rise Office	0.08	2470.15	43.95	22.91	
4. High-Rise Office	0.15	1117.60	175.49	116.32	
5. Hotel/Motel	0.12	1044.62	33.07	11.04	
6. Misc. Commercial	0.02	1360.08	13.40	6.42	
INDUSTRIAL					
7. R & D/Flex Space	0.01	367.24	20.53	18.13	
8. Light Manufacturing	0.05	2577.66	17.83	11.63	
9. Heavy Manufacturing	3.83	82.10	31.14	17.05	
10. Warehouse	0.06	145.51	11.40	10.63	
11. Misc. Industrial	0.00	257.63	2.41	3.62	
PUBLIC/OTHER					
12. Government Offices	0.03	1515.58	51.67	16.23	
13. Primary/Secondary School	0.02	522.45	5.65	4.87	
14. Colleges & Universities	0.01	337.65	6.93	6.63	
15. Transportation	0.01	630.76	4.88	5.53	
16. Utilities	0.00	266.55	1.86	1.77	
17. Other Institutional	0.11	5000.00	15.20	5.95	
18. Hospitals	0.04	2171.53	37.70	25.25	
19. Agriculture	0.00	2272.73	0.34	0.43	
20. Open Space	0.00	3597.23	0.12	0.99	
21. All Other	0.00	2133.61	3.48	1.51	
22. Residential	0.00	1538.04	1.40	0.83	

*Does not include Imperial County

APPENDIX D

**EMPLOYMENT BY LAND USE
PERCENTAGE BREAKDOWN BY INDUSTRY**

APPENDIX E

CALCULATION OF IMPLICIT FLOOR AREA RATIOS (FAR'S)

**Table E-1
 Calculation of Implicit Floor-Area-Ratios (FAR's)
 For Selected Land Use Categories
 By County**

Land Use Category	Net/Gross Adjustment Factor:	75%	Implied FAR's by County:					
			Los Angeles			Orange		
			Average	Median	High	Average	Median	High
		Assumed Square Feet of Building Space Per Employee						
COMMERCIAL								
1. Regional Retail		500	0.29	0.28	5.29	0.44	0.16	1.78
2. Other Retail/Svc.		500	0.39	0.24	47.55	0.35	0.23	9.21
3. Low-Rise Office		250	0.42	0.24	18.90	0.33	0.22	3.73
4. High-Rise Office		250	1.84	1.19	8.55	0.55	0.36	4.20
5. Hotel/Motel		600	0.95	0.31	16.79	0.64	0.26	19.19
INDUSTRIAL								
7. R & D/Flex Space		500	0.35	0.39	5.62	0.37	0.34	2.81
8. Light Manufacturing		700	0.40	0.30	34.06	0.48	0.34	55.23
9. Heavy Manufacturing		400	0.59	0.53	0.88	0.38	0.64	1.01
10. Warehouse		1000	0.40	0.39	4.45	0.39	0.32	4.40
PUBLIC/OTHER								
12. Government Offices		250	0.49	0.13	4.87	0.34	0.20	11.60

**Table E-1 (Continued)
 Calculation of Implicit Floor-Area-Ratios (FAR's)
 For Selected Land Use Categories
 By County**

Land Use Category	Net/Gross Adjustment Factor:	75%	Implied FAR's by County:					
			Riverside			San Bernardino		
			Average	Median	High	Average	Median	High
		Assumed Square Feet of Building Space Per Employee						
COMMERCIAL								
1. Regional Retail		500	0.32	0.29	0.74	0.14	0.10	0.31
2. Other Retail/Svc.		500	0.19	0.10	2.64	0.15	0.09	4.17
3. Low-Rise Office		250	0.18	0.11	2.70	0.13	0.08	2.30
4. High-Rise Office		250	0.12	0.12	0.12	N/A	N/A	N/A
5. Hotel/Motel		600	0.22	0.07	2.96	0.19	0.17	2.03
INDUSTRIAL								
7. R & D/Flex Space		500	0.22	0.17	0.84	0.19	0.09	1.30
8. Light Manufacturing		700	0.17	0.12	1.59	0.15	0.10	6.14
9. Heavy Manufacturing		400	N/A	N/A	N/A	0.06	0.06	0.07
10. Warehouse		1000	0.50	0.34	2.53	0.18	0.16	1.74
PUBLIC/OTHER								
12. Government Offices		250	0.34	0.09	1.97	0.18	0.10	1.04

Table E-1 (Continued)
Calculation of Implicit Floor-Area-Ratios (FAR's)
For Selected Land Use Categories
By County

Land Use Category	Net/Gross Adjustment Factor:	75%	Implied FAR's by County:								
			Ventura			Imperial					
			Average	Median	High	Average	Median	High			
		Assumed Square Feet of Building Space Per Employee									
COMMERCIAL											
1. Regional Retail		500	0.18	0.20	0.51	N/A	N/A	N/A	N/A	N/A	N/A
2. Other Retail/Svc.		500	0.27	0.20	2.24	0.23	0.13	1.98	0.23	0.13	1.98
3. Low-Rise Office		250	0.16	0.11	1.00	0.14	0.15	0.19	0.14	0.15	0.19
4. High-Rise Office		250	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A
5. Hotel/Motel		600	0.33	0.22	1.35	0.59	0.37	1.00	0.59	0.37	1.00
INDUSTRIAL											
7. R & D/Flex Space		500	0.21	0.14	0.82	N/A	N/A	N/A	N/A	N/A	N/A
8. Light Manufacturing		700	0.31	0.23	3.68	0.10	0.06	3.14	0.10	0.06	3.14
9. Heavy Manufacturing		400	0.04	0.04	0.04	N/A	N/A	N/A	N/A	N/A	N/A
10. Warehouse		1000	0.58	0.43	2.56	0.50	0.09	1.62	0.50	0.09	1.62
PUBLIC/OTHER											
12. Government Offices		250	0.29	0.21	0.84	0.22	0.20	0.30	0.22	0.20	0.30

APPENDIX F
REVIEW OF PREVIOUS STUDIES

MEMORANDUM

TO: Southern California Association of Governments (SCAG) **DATE:** December 5, 2000

FROM: The Natelson Company, Inc. (TNCI) **FILE:** #3740

ATTN: Mr. Steve Weiner

SUBJECT: **TASK 2 OF EMPLOYMENT DENSITY STUDY—
REVIEW OF RELEVANT PREVIOUS STUDIES**

In attempt to review “rule of thumb” employment density factors by type of workspace or land use, The Natelson Company, Inc. (TNCI) conducted an extensive literature search for such information. TNCI also contacted the following organizations in an attempt to find any published information on this subject:

The Urban Land Institute
The UCLA Department of Urban Planning
The UCLA Graduate Research Library
The USC School of Policy, Planning, and Development
The UC Riverside Government Publications Library
The Harvard University JFK School of Public Policy
The Harvard University JFK Library
The UC Berkeley Department of City and Regional Planning

The search did not yield a substantial amount of information on employment density factors by type of workspace or land use. Of all the organizations listed above, only the ULI offers a relevant publication, conducted by Gruen Gruen + Associates in 1986, entitled “Employment and Parking in Suburban Business Parks: A Pilot Study.” This study contains survey information regarding employment density factors (square feet per employee) from 12 different business parks on the East and West Coasts of the United States. There was also a 1997 study published in the Journal of Real Estate Research entitled “Industrial Employment Densities” that examines employment density factors for industrial property in the U.K. The study may be of limited use for our purposes, however, since the data is from the U.K.

A 1990 study conducted by the Cordoba Corporation for the Southern California Association of Governments entitled “Land Use Density Conversion Factors for the Long-Range Corridor Study: San Bernardino and Riverside Counties” provides some information on employment density factors. The study lists the findings of a 1998 survey conducted by the Builders and Owners Management Association (BOMA) regarding employment density for office space in San Diego, Los Angeles, and Orange Counties. It also includes data from another 1990 Cordoba study that examined employment density factors by land use categories for the central business district (CBD) in Downtown Los Angeles.

Consistent with the TNCI search process, the 1990 Cordoba study noted the lack of published information regarding “rule of thumb” employment density factors by type of workspace or land use. The following is a list of all the published materials (along with any relevant information found in the documents) TNCI obtained in its search process.

Selected academic journal articles

Title: The density gradient for manufacturing industry
Author: Kemper and Schmenner
Journal: Journal of Urban Economics
Date: 1974
Pages: 410-427
Volume: 1

Title: Do office-commercial firms value access to service employment centers? A hedonic analysis within polycentric Los Angeles
Author: Sivitanidou, Rena
Journal: Journal of Urban Economics
Date: 1996
Pages: 125-149
Volume: 40

Title: Population and employment densities: Structure and change
Author: Small and Song
Journal: Journal of Urban Economics
Date: 1994
Pages: 292-313
Volume: 36

Title: The distribution of population and employment in a polycentric city: The case of Los Angeles
Author: Gordon, Richardson, and Wong
Journal: Environment and Planning A
Date: 1986
Pages: 161-173
Volume: 18

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Title: Suburban Subcenters and Employment Density in Metropolitan Chicago
Author: McMillen,-Daniel-P. and McDonald,-John-F
Journal: Journal-of-Urban-Economics
Date: 1998
Pages: 157-180
Volume: 43

Title: Employment Density Functions: A Theory for E. S. Mills' Conundra
Author: Couch, John-D.
Journal: Journal of Regional Science
Date: Aug. 1978
Pages: 293-301
Volume: 18(2)

Title: A Nonparametric Analysis of Employment Density in a Polycentric City
Author: McMillen,-Daniel-P.; McDonald,-John-F
Journal: Journal of Regional Science
Date: November 1997
Pages: 591-612
Volume: 37(4)

Title: Factor Substitution, Employment Density and Suburbanization
Author: Fallis,-George
Journal: Journal of Urban Economics
Date: April 1979
Pages: 156-175
Volume: 6(2)

Title: Estimation and Recent Behavior of Urban Population and Employment Density Gradients
Author: Macauley, Molly K.
Journal: Journal of Urban Economics
Date: September 1985
Pages: 251-260
Volume: 18(2)

Title: Population and Employment Density Functions Revisited: A Spatial Interaction Approach
Author: Guldmann,-Jean-Michel; Wang,-Fahui
Journal: Papers in Regional Science
Date: April 1998
Pages: 189-211
Volume: 77(2)

Title: The Effects of Zoning on Population and Employment Density
Author: Frew,-James-R.; Jud,-G.-Donald; Wingler,-Tony-R.
Journal: Journal of Real Estate Finance and Economics
Date: June 1990
Pages: 155-163
Volume: 3(2)

Title: Industrial Employment Densities
Author: R. Thompson
Journal: Journal of Real Estate Research
Date: 1997
Pages: 309-319
Volume: 14(3)

Mean Employment Densities (square feet per employee) by Year of Survey			
Property Type	1992	1994	1996
Factories	385	376	390
Factory/Warehouses	525	419	439
Warehouses	647	630	615
Long-term Storage	1,278	1,275	1,296
Workshops	396	372	354

Note: These data may be of limited use for the SCAG study since they are from the U.K.

Working Papers

Title: Postwar Trends in Metropolitan Employment Growth: Decentralization and Deconcentration
Author: Carlino and Chaterjee
Institution: Federal Reserve Bank of Philadelphia
Date: August 1999
Pages: 29

Title: Using Quantile Smoothing Splines to Identify Employment Subcenters in a Multicentric Urban Area
Institution: University of Houston, Department of Economics; University of Illinois, Department of Economics
Date: April 13, 2000
Pages: 32

Selected Studies

Title: The Service Sector in Urban Revitalization: Sectoral Composition, Employment Density Gradients, and Central City Fiscal Capacity
Author: Gurwitz, Aaron S.
Publisher: Rand, Santa Monica, CA 90206. Prepared for Department of Housing and Urban Development
Date: June 1982
Pages: 29

Title: U.S. Occupational Employment and Density: A Spatial Analysis
Author: Jimmy W. Carrel
Publisher: University of Florida, Masters Thesis
Date: 1994
Pages: 103

Studies from SCAG

Title: Employment and Parking in Suburban Business Parks
 Author: Gruen Gruen + Associates
 Publisher: Urban Land Institute
 :
 Date: 1986
 Pages: 30

Employment Density by Type of Workspace				
	Square Feet per Employee			
Workplace Type	# of Tenants	Mean Density	Median Density	Standard Deviation
Office	244	347	300	256
R & D Laboratory	35	485	400	299
Assembly/Production/Light Industrial	54	624	500	431
Industrial Service	36	724	500	773
Warehouse	116	2,746	1,800	3,270
Retail Sales	4	197	1551	129
Commercial Service	5	1,643	384	2,997
Restaurant	1	388	n.a.	n.a.
Health Club/Recreational	1	920	n.a.	n.a.
Training Facilities/Schools/Child Care	9	699	444	557

Employment Density by Type of Building				
	Square Feet per Employee			
Building Type	# of buildings	Mean Density	Median Density	Standard Deviation
Light Industrial	32	910	600	855
Rail-Served Industrial	5	4,602	4,750	2,038
Low-Quality Hybrid	20	704	556	91
Medium-Quality Hybrid	31	583	319	667
High-Quality Hybrid	2	253	n.a.	105
Low-Rise Office	33	322	312	132
Mid-Rise Office	1	380	n.a.	n.a.
Commercial Retail Center	7	381	389	41

Notes: Survey information from six business parks on the East coast (Philadelphia region) and six from the West coast (East Bay and Santa Clara County)

Title: Land Use Density Conversion Factors for the Long-Range Corridor Study, San Bernardino and Riverside Counties
 Author: Cordoba Corporation
 Date: August 20, 1990
 Pages: 55

Average Office Space Per Employee (in square feet)			
Location	San Diego County	Los Angeles County	Orange County
Downtown Office Space	249	242	*
Suburban Office Space	288	200	224

Source: Builders and Owners Management Association (BOMA), 1988 Survey.

Employment Generation Factors By Land Use Categories		
Central Business District - Los Angeles		
Land Use Category	Square Feet Per Employee	Employees Per 1,000 Sq. Ft.
Commercial/Retail	333	3.00
Commercial/Non-retail (Office)	225	4.44
Industrial	333	3.00
Wholesale	500	2.00
Warehouse	500	2.00

Title: Estimating Land and Floor Area Implicit in Employment Projections
 Author: Ide Associates, Inc.
 Date: July 1970
 Pages: 12+

To the degree we are made aware of any additional studies, we will any relevant data to this summary as our study progresses.

Roger A. Dale, Principal
 (3740\120500.mem)

APPENDIX G

**CORRESPONDENCE TO GENERAL PLAN
LAND USE CATEGORIES**

Correspondence General Plan Land Use Categories

The purpose of this section is to explain the process of calculating the general plan land use (GPLU) employment density. Tables 1 to 6 represent the GPLU employment density for each of the six counties within the Southern California Association of Government (SCAG) region. The six counties consist of Los Angeles County, Orange County, San Bernardino County, Riverside County, Ventura County, and Imperial County. These tables are developed to assist the SCAG in refining the employment allocation process for the Small Area Allocation Model (SAAM). The tables are designed to provide an empirical basis for allocating employment to areas based on the general plan land use designations of the target areas.

The tables include the GPLU categories associated with each county in the SCAG region. The existing land use categories that lie within each GPLU category are also provided in the tables. Overall, ten existing land use categories are listed in the tables. The ten existing land use categories are based on the SCAG's existing land use descriptions. The existing land use descriptions are defined by SCAG as part of its 1993 GIS-based land use survey of the region.

The GIS-based existing land use and GPLU maps, as well as the Dun and Bradstreet 1997 employment database, for each of the six counties have been used in the process of deriving the GPLU employment density. The GPLU maps, however, do not encompass all of the existing land use land area. Complete GPLU coverages are only available for two of the six counties. The two counties that have complete GPLU coverages are Imperial County and Orange County. The GPLU maps for Riverside County encompass approximately 90 percent of the county's existing land use map. The San Bernardino County GPLU map encompasses approximately 92 percent of the county's existing land use map. The Los Angeles County GPLU maps incorporate approximately 37 percent of the county's existing land use map. The GPLU maps for Ventura county encompass approximately 0.02 percent of the county's existing land use map.

The process of generating employment density by GPLU consists of several steps. First, the number of employees, as provided by the Dun and Bradstreet 1997 employment database, in each existing land use category is determined for each of the counties. The number of employees in each existing land use category is derived by matching the location of the employment with the existing land use maps. The resulting employment by existing land use data is used to determine the employment density for each existing land use category. The employment density for the existing land use categories are calculated by dividing the number of employees in each existing land use category by the land area (in acres) of each existing land use category.

Once the employment database is joined to the existing land use maps, the resulting data is joined to the GPLU maps. The purpose of combining the resulting data with the GPLU maps is to determine the number of employees in each GPLU category, as well as to determine the existing land uses that are within each GPLU category.

Aside from calculating the employment density by existing land use categories and combining the employment data with the existing land use and GPLU maps, a sample of employment addresses have been taken from the Dun and Bradstreet employment database. The sample addresses have been used to obtain APN records such that the approximate floor area ratio (FAR) for each existing land use category could be calculated. The existing FAR has been calculated by dividing the square footage of the building by the parcel land area on which the employment addresses are located. The existing FAR for Imperial County, however, is not calculated from the APN records because the building square footage and parcel land area were not available for Imperial County. Since Imperial County is relatively low density and consists of mostly low-rise buildings, it is assumed that the FAR for each existing land use category in the County is approximately 0.5. Thus, the 0.5 FAR is used when calculating the GPLU employment density for Imperial County. It should be noted that the tables are structured such that the FARs can be adjusted in the future to better represent certain areas in Imperial County, as well as the other five counties, when updated information is available.

In addition to the existing FAR, the general plan FAR has also estimated for each of the land use categories. The general plan FAR is based on the typical FARs for the general plan land use categories in each county. Once the existing and general plan FAR have been determined, the FAR adjustment factor, which would be used to calculate the GPLU employment density, could be calculated. The FAR adjustment factor is calculated by dividing the existing FAR by the theoretical general plan FAR.

Overall, the above process has resulted in four sets of data: (1) employment density by existing land use category, (2) number of employees by existing land use category, (3) number of employees by GPLU category, and (4) FAR by existing land use category. The resulting data is used to create Tables 1 to 6. Tables 1 to 6 consists of 10 columns. The following is a description of the 10 columns:

<u>Column</u>	<u>Description</u>
1. General Plan Land Use	A list of GPLU categories in the county. ¹
2. Existing Land Use Category	The existing land use categories that correspond to the GPLU category in Column 1.
3. Area (Acres)	The proportion of existing land use land area that are within each GPLU category. The land area is provided in acres.

¹GPLU maps for different regions of Los Angeles, Riverside, and Ventura Counties are provided by SCAG. The GPLU descriptions differ for each region in the three counties.. To keep the GPLU categories consistent within each county, similar GPLU descriptions in the regions were summarized into one category. For example, in Ventura County, the GPLU description "General Commercial" and "Neighborhood Commercial" are summarized into one GPLU category called "Commercial."

4. Employees
The number of employees within each existing land use category.
5. Distribution
The percentage of employees distributed among each existing land use category. This was calculated by dividing the number of employees in the existing land use category by the total number of employees in the GPLU category in Column 4.
6. Existing Employment Density (Employees per Acre)
The existing land use employment density. The employment density for this column is based on the average number of employees per acre in each existing land use category.
7. Existing - Weighted Average
The weighted average of the existing employment density. The weighted average is calculated by multiplying the employment distribution (Column 5) with the existing land use employment density (Column 6).
8. FAR - Adjusted
The FAR adjustment factor. The FAR adjustment factor is calculated by dividing the existing FAR, which is derived by the APN records, by the assumed theoretical buildout (or general plan) FAR.
9. GPLU Employment Density (Employees per Acre)
Employment density by GPLU. This is calculated by multiplying the existing land use employment density (Column 6) by the FAR adjustment factor (Column 8).
10. GPLU Weighted Average
The weighted average of the GPLU employment density. The GPLU employment density (Column 9) is weighted by the number of employees in each existing land use category. The weighted average of the GPLU employment density is calculated by multiplying the GPLU employment density (Column 9) by the employment distribution (Column 5).

TABLE 1: IMPERIAL COUNTY GENERAL PLAN EMPLOYMENT DENSITY

GENERAL PLAN LAND USE	EXISTING LAND USE CATEGORY	AREA (Acres)	ACREAGE DISTRIBUTION	EXISTING EMPLOYMENT DENSITY		FAR - ADJUST	GPLU EMPLOYMENT DENSITY	
				(Employees / Acre)	WEIGHTED AVERAGE		(Employees / Acre)	WEIGHTED AVERAGE
Urban Area/Brawley	Other Retail/Services	168,589.74	100.00%	22.58	22.58	1.50	509.86	509.86
	<i>Total</i>	168,589.74	100.00%		22.58			509.86
Urban Area/Calexico	Warehouse	69,303.81	100.00%	12.63	12.63	1.00	159.52	159.52
	<i>Total</i>	69,303.81	100.00%		12.63			
Urban Area/EI Centro	Government Offices	42,999.10	5.27%	16.23	0.86	2.00	13.89	0.73
	Hotel/Motel	34,815.40	4.27%	35.06	1.50	1.00	52.50	2.24
	Light Manufacturing	224,935.55	27.59%	22.6	6.24	1.20	140.93	38.89
	Low-Rise Office	58,302.60	7.15%	43.24	3.09	2.00	133.72	9.56
	Other Retail/Services	454,134.71	55.71%	22.58	12.58	1.50	284.04	158.23
	<i>Total</i>	815,187.36	100.00%		0.86			0.73

EXISTING TO BUILDOUT FAR - IMPERIAL CO

LAND USE CATEGORY	EMP/AC
Government Offices	16.230
Heavy Manufacturing	31.090
High-Rise Office	72.520
Hotel/Motel	35.060
Light Manufacturing	22.600
Low-Rise Office	43.240
Other Retail/Services	22.580
R & D/Flex Space	23.920
Regional Retail	28.870
Warehouse	12.630

IMPERIAL CO. FLOOR AREA RATIO EXISTING AVE VS BUILDOUT AVE

LAND USE CATEGORY	ADJUST	E_FAR	BO_FAR
Government Offices	2.000	0.50	1.00
Heavy Manufacturing	1.000	0.50	0.60
High-Rise Office	4.000	0.50	2.00
Hotel/Motel	1.000	0.50	0.00
Light Manufacturing	1.200	0.50	0.60
Low-Rise Office	2.000	0.50	1.00
Other Retail/Services	1.500	0.50	0.75
R & D/Flex Space	1.000	0.50	0.50
Regional Retail	2.000	0.50	1.00
Warehouse	1.000	0.50	0.50

TABLE 2A: LOS ANGELES COUNTY - ARROYO VERDUGO GENERAL PLAN EMPLOYMENT DENSITY

GENERAL PLAN LAND USE	EXISTING LAND USE CATEGORY	AREA (Acres)	ACREAGE DISTRIBUTION	EXISTING EMPLOYMENT DENSITY		FAR - ADJUST	GPLU EMPLOYMENT DENSITY	
				(Employees / Acre)	WEIGHTED AVERAGE		(Employees / Acre)	WEIGHTED AVERAGE
Commercial	High-Rise Office	9,831.98	1.79%	240.77	4.31	0.56	133.76	2.39
	Hotel/Motel	13,241.11	2.41%	51.91	1.25	1.00	51.91	1.25
	Low-Rise Office	49,829.69	9.06%	55.28	5.01	1.67	92.13	8.35
	Other Retail/Services	312,199.00	56.78%	25.76	14.63	1.92	49.54	28.13
	Regional Retail	29,063.08	5.29%	18.49	0.98	1.00	18.49	0.98
	Warehouse	8,551.07	1.56%	12.96	0.20	0.79	10.29	0.16
	Light Manufacturing	127,133.48	23.12%	18.49	4.28	1.22	22.64	5.23
Total/	549,849.40	100.00%		30.65				41.10
Industrial	Light Manufacturing	601,191.42	89.31%	18.49	16.51	1.22	22.64	20.22
	Low-Rise Office	12,662.00	1.88%	55.28	1.04	1.67	92.13	1.73
	Other Retail/Services	24,791.43	3.68%	25.76	0.95	1.92	49.54	1.82
	R & D/Flex Space	34,514.20	5.13%	22.61	1.16	0.38	8.63	0.44
	Total/	673,159.05	100.00%		19.66			24.22
Manufacturing	R & D/Flex Space	8,803.90	100.00%	22.61	22.61	0.38	8.63	8.63
	Total/	8,803.90	100.00%		22.61			8.63
High Density Residential	Government Offices	9,141.25	100.00%	63.63	63.63	0.32	20.39	20.39
	Total/	9,141.25	100.00%		63.63			20.39
Medium Density Residential	Hotel/Motel	12,804.65	100.00%	51.91	51.91	1.00	51.91	51.91
	Total/	12,804.65	100.00%		51.91			51.91
Public Facility	Other Retail/Services	6,061.41	5.84%	25.76	1.50	1.92	49.54	2.89
	Government Offices	6,049.70	5.83%	63.63	3.71	0.32	20.39	1.19
	R & D/Flex Space	91,682.00	88.33%	22.61	19.97	0.38	8.63	7.62
	Total/	103,793.11	100.00%		25.18			11.70

EXISTING TO BUILDOUT FAR - LA ArroyoVerdugo

LAND USE CATEGORY	EMP/AC
Government Offices	63.630
Heavy Manufacturing	48.180
High-Rise Office	240.770
Hotel/Motel	51.910
Light Manufacturing	18.490
Low-Rise Office	55.280
Other Retail/Services	25.760
R & D/Flex Space	22.610
Regional Retail	18.490
Warehouse	12.960

LA ArroyoVerdugo FLOOR AREA RATIO EXISTING AVE VS BUILDOUT AVE

LAND USE CATEGORY	ADJUST	E_FAR	BO_FAR
Government Offices	0.321	3.12	1.00
Heavy Manufacturing	1.000	0.00	0.60
High-Rise Office	0.556	3.60	2.00
Hotel/Motel	1.000	1.21	0.00
Light Manufacturing	1.224	0.49	0.60
Low-Rise Office	1.667	0.60	1.00
Other Retail/Services	1.923	0.39	0.75
R & D/Flex Space	0.382	1.31	0.50
Regional Retail	1.000	0.00	1.00
Warehouse	0.794	0.63	0.50

TABLE 2B: LOS ANGELES COUNTY - GATEWAY GENERAL PLAN EMPLOYMENT DENSITY

GENERAL PLAN LAND USE	EXISTING LAND USE CATEGORY	AREA (Acres)	ACREAGE DISTRIBUTION	EXISTING EMPLOYMENT DENSITY		FAR - ADJUST	GPLU EMPLOYMENT DENSITY	
				(Employees / Acre)	WEIGHTED AVERAGE		(Employees / Acre)	WEIGHTED AVERAGE
Mixed Use	High-Rise Office	77,161.93	21.42%	240.77	51.58	0.56	28.66	6.14
	R & D/Flex Space	189,497.05	52.62%	22.61	11.90	0.38	4.54	2.39
	Heavy Manufacturing	8,836.15	2.45%	48.18	1.18	1.00	1.18	0.03
	Hotel/Motel	84,654.18	23.51%	51.91	12.20	1.00	12.20	2.87
	Total	360,149.31	100.00%		76.87			
Commercial	Other Retail/Services	4,468,779.76	92.38%	25.76	23.80	1.92	45.76	42.27
	Regional Retail	368,870.30	7.62%	18.49	1.41	1.00	1.41	0.11
	Total	4,837,650.06	100.00%		25.21			65.23
Industrial	Low-Rise Office	23,281.84	1.79%	55.28	0.99	1.67	1.65	0.03
	Light Manufacturing	844,502.22	65.11%	18.49	12.04	1.22	14.74	9.60
	R & D/Flex Space	7,099.04	0.55%	22.61	0.12	0.38	0.05	0.00
	Warehouse	422,171.43	32.55%	12.96	4.22	0.79	3.35	1.09
	Total	1,297,054.53	100.00%		17.37			10.72
Public Facility	Government Offices	86,693.47	100.00%	63.63	63.63	0.32	20.39	20.39
	Total	86,693.47	100.00%		63.63			20.39
Single Family Residential	Other Retail/Services	396,723.65	100.00%	25.76	25.76	1.92	49.54	49.54
	Total	396,723.65	100.00%		25.76			49.54

EXISTING TO BUILDOUT FAR - LA GATEWAY

LAND USE CATEGORY	EMP/AC
Government Offices	63.630
Heavy Manufacturing	48.180
High-Rise Office	240.770
Hotel/Motel	51.910
Light Manufacturing	18.490
Low-Rise Office	55.280
Other Retail/Services	25.760
R & D/Flex Space	22.610
Regional Retail	18.490
Warehouse	12.960

EXISTING TO BUILDOUT FAR - LA GATEWAY

LAND USE CATEGORY	EMP/AC
Government Offices	63.630
Heavy Manufacturing	48.180
High-Rise Office	240.770
Hotel/Motel	51.910
Light Manufacturing	18.490
Low-Rise Office	55.280
Other Retail/Services	25.760
R & D/Flex Space	22.610
Regional Retail	18.490
Warehouse	12.960

TABLE 2C: LOS ANGELES COUNTY - LOS ANGELES CITY GENERAL PLAN EMPLOYMENT DENSITY

GENERAL PLAN LAND USE	EXISTING LAND USE CATEGORY	AREA (Acres)	ACREAGE DISTRIBUTION	EXISTING EMPLOYMENT DENSITY (Employees / Acre)		FAR - ADJUST	GPLU EMPLOYMENT DENSITY (Employees / Acre)		GPLU-WEIGHTED AVERAGE
				EXISTING-WEIGHTED AVERAGE	EXISTING-WEIGHTED AVERAGE		EXISTING-WEIGHTED AVERAGE	EXISTING-WEIGHTED AVERAGE	
Commercial									
	Hotel/Motel	197,901.81	2.34%	51.91	1.22	1.00	51.91	1.22	1.22
	Low-Rise Office	720,196.00	8.52%	55.28	4.71	1.67	92.13	7.85	7.85
	Other Retail/Services	6,764,299.56	80.03%	25.76	20.62	1.92	49.54	39.65	39.65
	High-Rise Office	320,432.47	3.79%	240.77	9.13	0.56	133.76	5.07	5.07
	Regional Retail	449,446.75	5.32%	18.49	0.98	1.00	18.49	0.98	0.98
	Total	8,452,276.58	100.00%		36.65			54.77	
Residential									
	Light Manufacturing	249,800.54	100.00%	18.49	18.49	1.22	22.64	22.64	22.64
	Total	249,800.54	100.00%		18.49			22.64	
Manufacturing									
	Light Manufacturing	8,829,352.03	81.57%	18.49	15.08	1.22	22.64	18.47	18.47
	Other Retail/Services	717,462.32	6.63%	25.76	1.71	1.92	49.54	3.28	3.28
	R & D/Flex Space	511,749.77	4.73%	22.61	1.07	0.38	8.63	0.41	0.41
	Warehouse	765,435.09	7.07%	12.96	0.92	0.79	10.29	0.73	0.73
	Total	10,823,999.22	100.00%		18.78			22.89	
Public/Quasi-Public Open Space									
	Government Offices	95,815.00	100.00%	63.63	63.63	0.32	20.39	20.39	20.39
	Total	95,815.00	100.00%		63.63			20.39	

LA CITY FLOOR AREA RATIO EXISTING AVE VS BUILDOUT AVE

LAND USE CATEGORY	ADJUST	E_FAR	BO_FAR
Government Offices	0.321	3.12	1.00
Heavy Manufacturing	1.000	0.00	0.60
High-Rise Office	0.556	3.60	2.00
Hotel/Motel	1.000	1.21	0.00
Light Manufacturing	1.224	0.49	0.60
Low-Rise Office	1.667	0.60	1.00
Other Retail/Services	1.923	0.39	0.75
R & D/Flex Space	0.382	1.31	0.50
Regional Retail	1.000	0.00	1.00
Warehouse	0.794	0.63	0.50

EXISTING TO BUILDOUT FAR - LA CITY

LAND USE CATEGORY	EMP/AC
Government Offices	63.630
Heavy Manufacturing	48.180
High-Rise Office	240.770
Hotel/Motel	51.910
Light Manufacturing	18.490
Low-Rise Office	55.280
Other Retail/Services	25.760
R & D/Flex Space	22.610
Regional Retail	18.490
Warehouse	12.960

TABLE 2D: LOS ANGELES COUNTY - LOS VIRGINES GENERAL PLAN EMPLOYMENT DENSITY

GENERAL PLAN LAND USE	EXISTING LAND USE CATEGORY	AREA (Acres)	ACREAGE DISTRIBUTION	EXISTING EMPLOYMENT DENSITY		FAR - ADJUST	GPLU EMPLOYMENT DENSITY	
				(Employees / Acre)	WEIGHTED AVERAGE		(Employees / Acre)	WEIGHTED AVERAGE
Commercial	Government Offices	23,400.45	2.98%	63.63	1.90	0.32	20.39	0.61
	Light Manufacturing	105,446.88	13.42%	18.49	2.48	1.22	22.64	3.04
	Low-Rise Office	309,040.61	39.34%	55.28	21.75	1.67	92.13	36.25
	Other Retail/Services	284,572.36	36.23%	25.76	9.33	1.92	49.54	17.95
	R & D/Flex Space	63,009.25	8.02%	22.61	1.81	0.38	8.63	0.69
	Total	785,469.55	100.00%		37.27			58.54
Open Space and Recreation	Low-Rise Office	11,668.64	48.28%	55.28	26.69	1.67	92.13	44.48
	Other Retail/Services	12,498.76	51.72%	25.76	13.32	1.92	49.54	25.62
	Total	24,167.40	100.00%		40.01			70.10
Residential 1 unit/acre	Low-Rise Office	1,072.34	100.00%	55.28	55.28	1.67	92.13	92.13
	Total	1,072.34	100.00%		55.28			92.13
Residential 1-4.99 du	Low-Rise Office	2,158.31	47.60%	55.28	26.32	1.67	92.13	43.86
	Other Retail/Services	2,375.54	52.40%	25.76	13.50	1.92	49.54	25.96
	Total	4,533.85	100.00%		39.81			69.82
Residential 5-11.99 du	Low-Rise Office	3,829.96	100.00%	55.28	55.28	1.67	92.13	92.13
	Total	3,829.96	100.00%		55.28			92.13
Specific Plan/Planned Development	Hotel/Motel	5,692.15	38.92%	51.91	20.20	1.00	51.91	20.20
	Low-Rise Office	5,518.60	37.73%	55.28	20.86	1.67	92.13	34.76
	Other Retail/Services	3,416.29	23.36%	25.76	6.02	1.92	49.54	11.57
	Total	14,627.04	100.00%		47.07			66.53
Transportation & Utilities	Other Retail/Services	1,368.71	100.00%	25.76	25.76	1.92	49.54	49.54
	Total	1,368.71	100.00%		25.76			49.54

LA LOS VIRGINES FLOOR AREA RATIO EXISTING AVE VS BUILDOUT AVE

LAND USE CATEGORY	ADJUST	E_FAR	BO_FAR
Government Offices	0.321	3.12	1.00
Heavy Manufacturing	1.000	0.00	0.60
High-Rise Office	0.556	3.60	2.00
Hotel/Motel	1.000	1.21	0.00
Light Manufacturing	1.224	0.49	0.60
Low-Rise Office	1.667	0.60	1.00
Other Retail/Services	1.923	0.39	0.75
R & D/Flex Space	0.382	1.31	0.50
Regional Retail	1.000	0.00	1.00
Warehouse	0.794	0.63	0.50

EXISTING TO BUILDOUT FAR - LA LOS VIRGINES

LAND USE CATEGORY	EMP/AC
Government Offices	63.630
Heavy Manufacturing	48.180
High-Rise Office	240.770
Hotel/Motel	51.910
Light Manufacturing	18.490
Low-Rise Office	55.280
Other Retail/Services	25.760
R & D/Flex Space	22.610
Regional Retail	18.490
Warehouse	12.960

TABLE 2E: LOS ANGELES COUNTY - NORTH LOS ANGELES GENERAL PLAN EMPLOYMENT DENSITY

GENERAL PLAN LAND USE	EXISTING LAND USE CATEGORY	AREA (Acres)	EXISTING EMPLOYMENT DENSITY (Employees / Acre)		ACREAGE DISTRIBUTION	EXISTING-WEIGHTED AVERAGE		GPLU EMPLOYMENT DENSITY (Employees / Acre)		GPLU-WEIGHTED AVERAGE
			DENSITY	DENSITY		AVERAGE	AVERAGE	DENSITY	DENSITY	
Business Park	Hotel/Motel	19,305.90	100.00%	51.91	51.91	1.00	51.91	51.91	51.91	51.91
	Total	19,305.90	100.00%	51.91	51.91					51.91
Commercial	Government Offices	10,002.23	1.27%	63.63	0.81	0.32	20.39	20.39	0.26	0.26
	Hotel/Motel	31,132.20	3.95%	51.91	2.05	1.00	51.91	51.91	2.05	2.05
	Light Manufacturing	27,557.95	3.50%	18.49	0.65	1.22	22.64	22.64	0.79	0.79
	Low-Rise Office	42,550.76	5.40%	55.28	2.98	1.67	92.13	92.13	4.97	4.97
	Other Retail/Services	676,885.33	85.89%	25.76	22.12	1.92	49.54	49.54	42.55	42.55
	Total	788,128.47	100.00%		28.61					50.62
Health Care	Low-Rise Office	12,893.17	100.00%	55.28	55.28	1.67	92.13	92.13	92.13	92.13
	Total	12,893.17	100.00%	55.28	55.28					92.13
Heavy Industrial	Light Manufacturing	88,964.70	89.92%	18.49	16.63	1.22	22.64	22.64	20.36	20.36
	Low-Rise Office	3,809.50	3.85%	55.28	2.13	1.67	92.13	92.13	3.55	3.55
	Other Retail/Services	6,165.74	6.23%	25.76	1.61	1.92	49.54	49.54	3.09	3.09
	Total	98,939.94	100.00%		20.36					26.99
Light Industrial	Government Offices	10,897.26	3.13%	63.63	1.99	0.32	20.39	20.39	0.64	0.64
	Light Manufacturing	240,756.31	69.13%	18.49	12.78	1.22	22.64	22.64	15.65	15.65
	Other Retail/Services	68,212.39	19.59%	25.76	5.05	1.92	49.54	49.54	9.70	9.70
	Warehouse	28,378.51	8.15%	12.96	1.06	0.79	10.29	10.29	0.84	0.84
	Total	348,244.46	100.00%		20.88					26.83
Med Industrial	Light Manufacturing	16,110.97	100.00%	18.49	18.49	1.22	22.64	22.64	22.64	22.64
	Total	16,110.97	100.00%	18.49	18.49					22.64
Res MR1: 6.6-15	Light Manufacturing	1,070.14	6.50%	18.49	1.20	1.22	22.64	22.64	1.47	1.47
	Other Retail/Services	15,404.03	93.50%	25.76	24.09	1.92	49.54	49.54	46.32	46.32
	Total	16,474.17	100.00%		25.29					47.79
Res MR2: 15.1-30	Government Offices	6,713.68	35.89%	63.63	22.83	0.32	20.39	20.39	7.32	7.32
	Light Manufacturing	1,625.52	8.69%	18.49	1.61	1.22	22.64	22.64	1.97	1.97
	Other Retail/Services	10,369.36	55.43%	25.76	14.28	1.92	49.54	49.54	27.46	27.46

TABLE 2E: LOS ANGELES COUNTY - NORTH LOS ANGELES GENERAL PLAN EMPLOYMENT DENSITY

GENERAL PLAN LAND USE	EXISTING LAND USE CATEGORY	AREA (Acres)	ACREAGE DISTRIBUTION	EXISTING EMPLOYMENT DENSITY (Employees / Acre)		FAR - ADJUST	GPLU EMPLOYMENT DENSITY (Employees / Acre)	
				EXISTING-WEIGHTED AVERAGE	EXISTING-WEIGHTED AVERAGE		WEIGHTED AVERAGE	WEIGHTED AVERAGE
	<i>Total</i>	18,708.55	100.00%		38.72			36.74
Res NU2: 0.4	Other Retail/Services	8,601.44	100.00%	25.76	25.76	1.92	49.54	49.54
	<i>Total</i>	8,601.44	100.00%		25.76			49.54
Res NU3: 1.0	Government Offices	1,574.96	100.00%	63.63	63.63	0.32	20.39	20.39
	<i>Total</i>	1,574.96	100.00%		63.63			20.39
Office/Professional	Low-Rise Office	5,463.45	100.00%	55.28	55.28	1.67	92.13	92.13
	<i>Total</i>	5,463.45	100.00%		55.28			92.13
Public Facility	Government Offices	18,618.80	94.37%	63.63	60.05	0.32	20.39	19.25
	Light Manufacturing	1,109.80	5.63%	18.49	1.04	1.22	22.64	1.27
	<i>Total</i>	19,728.60	100.00%		61.09			20.52
Subregional Commercial	Other Retail/Services	102,848.75	100.00%	25.76	25.76	1.92	49.54	49.54
	<i>Total</i>	102,848.75	100.00%		25.76			49.54
Res UR2: 3.1-4.5	Government Offices	137.14	0.55%	63.63	0.35	0.32	20.39	0.11
	Low-Rise Office	5,405.77	21.66%	55.28	11.97	1.67	92.13	19.96
	Other Retail/Services	19,413.42	77.79%	25.76	20.04	1.92	49.54	38.54
	<i>Total</i>	24,956.33	100.00%		32.36			58.60

EXISTING TO BUILDOUT FAR - N LA

LAND USE CATEGORY	EMP/AC
Government Offices	63.630
Heavy Manufacturing	48.180
High-Rise Office	240.770
Hotel/Motel	51.910
Light Manufacturing	18.490
Low-Rise Office	55.280
Other Retail/Services	25.760
R & D/Flex Space	22.610
Regional Retail	18.490
Warehouse	12.960

N LA FLOOR AREA RATIO EXISTING AVE VS BUILDOUT AVE

LAND USE CATEGORY	ADJUST	E_FAR	BO_FAR
Government Offices	0.321	3.12	1.00
Heavy Manufacturing	1.000	0.00	0.60
High-Rise Office	0.556	3.60	2.00
Hotel/Motel	1.000	1.21	0.00
Light Manufacturing	1.224	0.49	0.60
Low-Rise Office	1.667	0.60	1.00
Other Retail/Services	1.923	0.39	0.75
R & D/Flex Space	0.382	1.31	0.50
Regional Retail	1.000	0.00	1.00
Warehouse	0.794	0.63	0.50

TABLE 2F: LOS ANGELES COUNTY - SAN GABRIEL GENERAL PLAN EMPLOYMENT DENSITY

GENERAL PLAN LAND USE CATEGORY	EXISTING LAND USE CATEGORY	AREA (Acres)	ACREAGE DISTRIBUTION	EXISTING EMPLOYMENT DENSITY		GPLU EMPLOYMENT DENSITY	
				(Employees / Acre)	WEIGHTED AVERAGE	(Employees / Acre)	WEIGHTED AVERAGE
					FAR - ADJUST		
Commercial							
	Government Offices	90,219.71	1.12%	63.63	0.71	0.32	20.39
	High-Rise Office	35,097.62	0.43%	240.77	1.05	0.56	133.76
	Hotel/Motel	216,511.47	2.68%	51.91	1.39	1.00	51.91
	Light Manufacturing	503,809.03	6.24%	18.49	1.15	1.22	22.64
	Low-Rise Office	810,746.19	10.05%	55.28	5.55	1.67	92.13
	Other Retail/Services	5,977,478.19	74.08%	25.76	19.08	1.92	49.54
	R & D/Flex Space	47,513.18	0.59%	22.61	0.13	0.38	8.63
	Regional Retail	363,023.80	4.50%	18.49	0.83	1.00	18.49
	Warehouse	24,550.82	0.30%	12.96	0.04	0.79	10.29
	Total	8,068,950.01	100.00%		29.95		50.49
Industrial							
	Government Offices	78,156.12	0.76%	63.63	0.48	0.32	20.39
	High-Rise Office	432.05	0.00%	240.77	0.01	0.56	133.76
	Hotel/Motel	14,603.28	0.14%	51.91	0.07	1.00	51.91
	Light Manufacturing	6,695,480.43	64.80%	18.49	11.98	1.22	22.64
	Low-Rise Office	493,125.76	4.77%	55.28	2.64	1.67	92.13
	Other Retail/Services	564,150.05	5.46%	25.76	1.41	1.92	49.54
	R & D/Flex Space	296,412.94	2.87%	22.61	0.65	0.38	8.63
	Warehouse	2,189,955.75	21.20%	12.96	2.75	0.79	10.29
	Total	10,332,316.38	100.00%		19.99		24.43
Open Space & Rec							
	Hotel/Motel	29,006.52	14.79%	51.91	7.68	1.00	51.91
	Light Manufacturing	102,466.97	52.24%	18.49	9.66	1.22	22.64
	Low-Rise Office	33,390.92	17.02%	55.28	9.41	1.67	92.13
	Other Retail/Services	31,293.16	15.95%	25.76	4.11	1.92	49.54
	Total	196,157.57	100.00%		30.85		43.09
Public Facilities							
	Government Offices	131,111.05	33.67%	63.63	21.42	0.32	20.39
	Hotel/Motel	1,723.29	0.44%	51.91	0.23	1.00	51.91
	Light Manufacturing	89,401.10	22.96%	18.49	4.24	1.22	22.64
	Low-Rise Office	37,874.77	9.73%	55.28	5.38	1.67	92.13
	Other Retail/Services	127,171.52	32.65%	25.76	8.41	1.92	49.54
	Warehouse	2,170.45	0.56%	12.96	0.07	0.79	10.29
	Total	389,452.18	100.00%		39.76		37.49

TABLE 2F: LOS ANGELES COUNTY - SAN GABRIEL GENERAL PLAN EMPLOYMENT DENSITY

GENERAL PLAN LAND USE CATEGORY	EXISTING LAND USE CATEGORY	AREA (Acres)	ACREAGE DISTRIBUTION	EXISTING EMPLOYMENT DENSITY		EXISTING-WEIGHTED AVERAGE		GPLU EMPLOYMENT DENSITY		GPLU-WEIGHTED AVERAGE	
				(Employees / Acre)	(Employees / Acre)	EXISTING-WEIGHTED AVERAGE	FAR - ADJUST	(Employees / Acre)	(Employees / Acre)	WEIGHTED AVERAGE	WEIGHTED AVERAGE
Res 12/ac											
Government Offices		26,768.43	3.77%	63.63	2.40	0.32	20.39	0.77			
Hotel/Motel		17,331.47	2.44%	51.91	1.27	1.00	51.91	1.27			
Light Manufacturing		94,123.92	13.27%	18.49	2.45	1.22	22.64	3.00			
Low-Rise Office		61,368.58	8.65%	55.28	4.78	1.67	92.13	7.97			
Other Retail/Services		495,173.69	69.79%	25.76	17.98	1.92	49.54	34.57			
R & D/Flex Space		5,504.02	0.78%	22.61	0.18	0.38	8.63	0.07			
Warehouse		9,271.87	1.31%	12.96	0.17	0.79	10.29	0.13			
Total		709,541.97	100.00%		29.22			47.78			
Res 1-4.99/ac											
Light Manufacturing		74,402.25	10.22%	18.49	1.89	1.22	22.64	2.31			
Other Retail/Services		288,579.48	39.63%	25.76	10.21	1.92	49.54	19.63			
Government Offices		27,310.15	3.75%	63.63	2.39	0.32	20.39	0.76			
Low-Rise Office		40,458.89	5.56%	55.28	3.07	1.67	92.13	5.12			
Other Retail/Services		288,579.48	39.63%	25.76	10.21	1.92	49.54	19.63			
Warehouse		8,864.78	1.22%	12.96	0.16	0.79	10.29	0.13			
Total		728,195.02	100.00%		27.92			47.59			
Res 5-1.99/ac											
Government Offices		8,945.70	1.72%	63.63	1.09	0.32	20.39	0.35			
Hotel/Motel		6,177.28	1.19%	51.91	0.62	1.00	51.91	0.62			
Light Manufacturing		130,432.47	25.08%	18.49	4.64	1.22	22.64	5.68			
Low-Rise Office		30,397.35	5.84%	55.28	3.23	1.67	92.13	5.38			
Other Retail/Services		331,412.74	63.72%	25.76	16.41	1.92	49.54	31.56			
R & D/Flex Space		5,689.36	1.09%	22.61	0.25	0.38	8.63	0.09			
Warehouse		7,088.47	1.36%	12.96	0.18	0.79	10.29	0.14			
Total		520,143.37	100.00%		26.42			43.83			
Specific Plan/Planned Development											
Government Offices		46,649.36	2.23%	63.63	1.42	0.32	20.39	0.46			
High-Rise Office		36,507.89	1.75%	240.77	4.21	0.56	133.76	2.34			
Hotel/Motel		28,430.16	1.36%	51.91	0.71	1.00	51.91	0.71			
Light Manufacturing		449,973.16	21.55%	18.49	3.98	1.22	22.64	4.88			
Low-Rise Office		320,612.40	15.36%	55.28	8.49	1.67	92.13	14.15			
Other Retail/Services		1,140,174.80	54.61%	25.76	14.07	1.92	49.54	27.05			
R & D/Flex Space		34,412.26	1.65%	22.61	0.37	0.38	8.63	0.14			
Regional Retail		9,708.15	0.46%	18.49	0.09	1.00	18.49	0.09			

TABLE 2F: LOS ANGELES COUNTY - SAN GABRIEL GENERAL PLAN EMPLOYMENT DENSITY

GENERAL PLAN LAND USE	EXISTING LAND USE CATEGORY	AREA (Acres)	ACREAGE DISTRIBUTION	EXISTING EMPLOYMENT DENSITY (Employees / Acre)		FAR - ADJUST	GPLU EMPLOYMENT DENSITY (Employees / Acre)		GPLU- WEIGHTED AVERAGE
				EXISTING- WEIGHTED AVERAGE	EXISTING- WEIGHTED AVERAGE				
	Warehouse	21,442.47	1.03%	12.96	0.13	0.79	10.29	0.11	
	<i>Total</i>	2,087,910.65	100.00%		33.47			49.91	
Transportation	Light Manufacturing	74,932.39	100.00%	18.49	18.49	1.22	22.64	22.64	
	<i>Total</i>	74,932.39	100.00%		18.49			22.64	
Waterways & Floods	Low-Rise Office	718.94	4.82%	55.28	2.67	1.67	92.13	4.44	
	Other Retail/Services	14,188.56	95.18%	25.76	24.52	1.92	49.54	47.15	
	<i>Total</i>	14,907.50	100.00%		27.18			51.59	

LA SAN GABRIEL FLOOR AREA RATIO EXISTING AVE VS BUILDOUT AVE

LAND USE CATEGORY	ADJUST	E_FAR	BO_FAR
Government Offices	0.321	3.12	1.00
Heavy Manufacturing	1.000	0.00	0.60
High-Rise Office	0.556	3.60	2.00
Hotel/Motel	1.000	1.21	0.00
Light Manufacturing	1.224	0.49	0.60
Low-Rise Office	1.667	0.60	1.00
Other Retail/Services	1.923	0.39	0.75
R & D/Flex Space	0.382	1.31	0.50
Regional Retail	1.000	0.00	1.00
Warehouse	0.794	0.63	0.50

EXISTING TO BUILDOUT FAR - LA SAN GABRIEL

LAND USE CATEGORY	EMP/AC
Government Offices	63.630
Heavy Manufacturing	48.180
High-Rise Office	240.770
Hotel/Motel	51.910
Light Manufacturing	18.490
Low-Rise Office	55.280
Other Retail/Services	25.760
R & D/Flex Space	22.610
Regional Retail	18.490
Warehouse	12.960

TABLE 2G: LOS ANGELES COUNTY - SOUTH BAY GENERAL PLAN EMPLOYMENT DENSITY

GENERAL PLAN LAND USE	EXISTING LAND USE CATEGORY	AREA (Acres)	ACREAGE DISTRIBUTION	EXISTING EMPLOYMENT DENSITY		GPLU EMPLOYMENT DENSITY	
				(Employees / Acre)	WEIGHTED AVERAGE	(Employees / Acre)	WEIGHTED AVERAGE
					FAR - ADJUST		
Airport	Other Retail/Services	5,747.50	100.00%	25.76	1.92	49.54	49.54
	Total	5,747.50	100.00%	25.76		49.54	49.54
Commercial	Other Retail/Service	4,264,922.90	67.62%	55.28	1.67	92.13	62.30
	Light Manufacturing	772,961.68	12.25%	18.49	1.22	22.64	2.77
	Low-Rise Office	682,013.17	10.81%	55.28	1.67	92.13	9.96
	R & D/Flex Space	74,170.05	1.18%	22.61	0.38	8.63	0.10
	Government Offices	34,340.83	0.54%	63.63	0.32	20.39	0.11
	Hotel/Motel	74,544.59	1.18%	51.91	1.00	51.91	0.61
	Regional Retail	347,922.98	5.52%	18.49	1.00	18.49	1.02
	High-Rise Office	56,662.74	0.90%	240.77	0.56	133.76	1.20
	Total	6,307,538.95	100.00%	50.03			78.08
Civic Center	Government Offices	2,011.60	100.00%	63.63	0.32	20.39	20.39
	Total	2,011.60	100.00%	63.63			20.39
Institutional-Education	Government Offices	2,365.96	20.60%	63.63	0.32	20.39	4.20
	Low-Rise Office	5,248.30	45.70%	55.28	1.67	92.13	42.10
	Other Retail/Services	3,871.10	33.70%	25.76	1.92	49.54	16.70
	Total	11,485.36	100.00%	47.05			63.00
Industrial	Light Manufacturing	2,458,838.13	67.51%	18.49	1.22	22.64	15.28
	Government Offices	3,513.12	0.10%	63.63	0.06	20.39	0.02
	Hotel/Motel	3,368.37	0.09%	51.91	1.00	51.91	0.05
	Low-Rise Office	154,207.36	4.23%	55.28	1.67	92.13	3.90
	Other Retail/Services	447,428.57	12.28%	25.76	1.92	49.54	6.09
	Warehouse	205,822.63	5.65%	12.96	0.79	10.29	0.58
	R & D/Flex Space	369,039.69	10.13%	22.61	0.38	8.63	0.87
	Total	3,642,217.87	100.00%	21.12			26.79
Mixed Use	Other Retail/Services	39,433.86	13.34%	25.76	1.92	49.54	6.61
	Hotel/Motel	3,854.28	1.30%	51.91	1.00	51.91	0.68
	Low-Rise Office	70,734.57	23.93%	55.28	1.67	92.13	22.04
	R & D/Flex Space	181,604.77	61.43%	22.61	0.38	8.63	5.30
	Total	295,627.48	100.00%	31.23			34.63

TABLE 2G: LOS ANGELES COUNTY - SOUTH BAY GENERAL PLAN EMPLOYMENT DENSITY

GENERAL PLAN LAND USE	EXISTING LAND USE CATEGORY	AREA (Acres)	EXISTING EMPLOYMENT DENSITY (Employees / Acre)		ACREAGE DISTRIBUTION	EXISTING-WEIGHTED AVERAGE		GPLU EMPLOYMENT DENSITY (Employees / Acre)		GPLU-WEIGHTED AVERAGE
			DENSITY	DENSITY		AVERAGE	AVERAGE	DENSITY	DENSITY	
Hospital-Medical / Residential	Low-Rise Office	8,075.54	100.00%	55.28	100.00%	55.28	1.67	92.13	92.13	
	Total	8,075.54	100.00%	55.28	100.00%	55.28			92.13	
Open Space/Parks	Government Offices	1,762.35	4.66%	63.63	4.66%	2.96	0.32	20.39	0.95	
	Other Retail/Services	9,047.47	23.91%	25.76	23.91%	6.16	1.92	49.54	11.85	
	Light Manufacturing	21,988.06	58.12%	18.49	18.49	10.75	1.22	22.64	13.16	
	Warehouse	5,034.12	13.31%	12.96	12.96	1.72	0.79	10.29	1.37	
	Total	37,832.00	100.00%		21.60				27.32	
Recreation	Other Retail/Services	34,661.43	100.00%	25.76	100.00%	25.76	1.92	49.54	49.54	
	Total	34,661.43	100.00%		25.76				49.54	
Public / Quasi-Public Facilities	Light Manufacturing	153,929.50	44.34%	18.49	44.34%	8.20	1.22	22.64	10.04	
	Other Retail/Services	94,775.07	27.30%	25.76	27.30%	7.03	1.92	49.54	13.52	
	Government Offices	84,144.35	24.24%	63.63	24.24%	15.42	0.32	20.39	4.94	
	Low-Rise Office	8,846.77	2.55%	55.28	2.55%	1.41	1.67	92.13	2.35	
	Hotel/Motel	5,489.56	1.58%	51.91	1.58%	0.82	1.00	51.91	0.82	
	Total	347,185.24	100.00%		32.88				31.67	
Parking	Low-Rise Office	2,969.89	100.00%	55.28	100.00%	55.28	1.67	92.13	92.13	
	Total	2,969.89	100.00%		55.28				92.13	
Low Density Residential	Government Offices	3,464.79	1.30%	63.63	1.30%	0.83	0.32	20.39	0.27	
	Light Manufacturing	54,291.24	20.36%	18.49	20.36%	3.76	1.22	22.64	4.61	
	Low-Rise Office	13,940.22	5.23%	55.28	5.23%	2.89	1.67	92.13	4.82	
	Other Retail/Services	187,245.67	70.23%	25.76	70.23%	18.09	1.92	49.54	34.79	
	Regional Retail	3,279.93	1.23%	18.49	1.23%	0.23	1.00	18.49	0.23	
	R & D/Flex Space	1,626.66	0.61%	22.61	0.61%	0.14	0.38	8.63	0.053	
	Warehouse	2,778.55	1.04%	12.96	1.04%	0.14	0.79	10.29	44.76	
Total	266,627.07	100.00%		26.07						
Medium Density	Hotel/Motel	4,965.36	1.74%	51.91	1.74%	0.90	1.00	51.91	0.90	
	Light Manufacturing	62,640.52	21.97%	18.49	21.97%	4.06	1.22	22.64	4.97	
	Low-Rise Office	8,054.92	2.82%	55.28	2.82%	1.56	1.67	92.13	2.60	
	Other Retail/Services	208,772.54	73.22%	25.76	73.22%	18.86	1.92	49.54	36.27	

TABLE 2G: LOS ANGELES COUNTY - SOUTH BAY GENERAL PLAN EMPLOYMENT DENSITY

GENERAL PLAN LAND USE	EXISTING LAND USE CATEGORY	AREA (Acres)	ACREAGE DISTRIBUTION	EXISTING EMPLOYMENT DENSITY		FAR - ADJUST	GPLU EMPLOYMENT DENSITY	
				(Employees / Acre)	WEIGHTED AVERAGE		(Employees / Acre)	WEIGHTED AVERAGE
	Government Offices	713.84	0.25%	63.63	0.16	0.32	20.39	0.05
	<i>Total</i>	285,147.17	100.00%		25.55			44.80
Multiple Residence	Light Manufacturing	14,721.53	24.58%	18.49	4.54	1.22	22.64	5.56
	Other Retail/Services	40,671.00	67.90%	25.76	17.49	1.92	49.54	33.64
	Low Rise Office	13.54	0.02%	18.49	0.00	1.22	22.64	0.01
	Hotel/Motel	3,216.85	5.37%	51.91	2.79	1.00	51.91	2.79
	<i>Total</i>	1,272.57	2.12%	63.63	1.35	0.32	20.39	0.43
	<i>Total</i>	59,895.49	100.00%		26.18			42.43
Residential-Business	Light Manufacturing	436.27	100.00%	18.49	18.49	1.22	22.64	22.64
	<i>Total</i>	436.27	100.00%		18.49			22.64
High Density Residential	Other Retail/Services	77,807.92	80.27%	25.76	20.68	1.92	49.54	39.77
	Light Manufacturing	19,122.73	19.73%	18.49	3.65	1.22	22.64	4.47
	<i>Total</i>	96,930.65	100.00%		24.33			44.23

EXISTING TO BUILDOUT FAR - SOUTH BAY

LAND USE CATEGORY	EMP/AC
Government Offices	63.630
Heavy Manufacturing	48.180
High-Rise Office	240.770
Hotel/Motel	51.910
Light Manufacturing	18.490
Low-Rise Office	55.280
Other Retail/Services	25.760
R & D/Flex Space	22.610
Regional Retail	18.490
Warehouse	12.960

SOUTH BAY FLOOR AREA RATIO EXISTING AVE VS BUILDOUT AVE

LAND USE CATEGORY	ADJUST	E_FAR	BO_FAR
Government Offices	0.321	3.12	1.00
Heavy Manufacturing	1.000	0.00	0.60
High-Rise Office	0.556	3.60	2.00
Hotel/Motel	1.000	1.21	0.00
Light Manufacturing	1.224	0.49	0.60
Low-Rise Office	1.667	0.60	1.00
Other Retail/Services	1.923	0.39	0.75
R & D/Flex Space	0.382	1.31	0.50
Regional Retail	1.000	0.00	1.00
Warehouse	0.794	0.63	0.50

TABLE 2H: LOS ANGELES COUNTY - WESTSIDE GENERAL PLAN EMPLOYMENT DENSITY

GENERAL PLAN LAND USE	EXISTING LAND USE CATEGORY	AREA (Acres)	ACREAGE DISTRIBUTION	EXISTING EMPLOYMENT DENSITY		GPLU EMPLOYMENT DENSITY		EXISTING-WEIGHTED AVERAGE	FAR - ADJUST	GPLU-WEIGHTED AVERAGE
				(Employees / Acre)	(Employees / Acre)	(Employees / Acre)	(Employees / Acre)			
Commercial										
	Government Offices	8,551.38	0.43%	63.63	0.28	0.32	20.39	0.09		
	High-Rise Office	62,506.02	3.17%	240.77	7.64	0.56	133.76	4.25		
	Hotel/Motel	60,041.50	3.05%	51.91	1.58	1.00	51.91	1.58		
	Light Manufacturing	190,451.25	9.67%	18.49	1.79	1.22	22.64	2.19		
	Low-Rise Office	444,997.62	22.60%	55.28	12.49	1.67	92.13	20.82		
	Other Retail/Services	1,149,020.77	58.34%	25.76	15.03	1.92	49.54	28.90		
	Regional Retail	53,873.09	2.74%	18.49	0.51	1.00	18.49	0.51		
	<i>Total</i>	1,969,441.62	100.00%		23.78			28.92		
Industrial										
	Government Offices	7,954.60	1.24%	63.63	0.79	0.32	20.39	0.25		
	Light Manufacturing	534,128.53	83.40%	18.49	15.42	1.22	22.64	18.88		
	Low-Rise Office	7,894.70	1.23%	55.28	0.68	1.67	92.13	1.14		
	Other Retail/Services	90,479.29	14.13%	25.76	3.64	1.92	49.54	7.00		
	<i>Total</i>	640,457.11	100.00%		16.21			19.14		
Open Space										
	Government Offices	2,847.05	31.26%	63.63	19.89	0.32	20.39	6.37		
	High-Rise Office	298.23	3.27%	240.77	7.88	0.56	133.76	4.38		
	Other Retail/Services	5,963.13	65.47%	25.76	16.86	1.92	49.54	32.43		
	<i>Total</i>	9,108.40	100.00%		19.89			6.37		
Public Facility										
	Government Offices	27,401.64	34.40%	63.63	21.89	0.32	20.39	7.02		
	Hotel/Motel	2,156.01	2.71%	51.91	1.40	1.00	51.91	1.40		
	Low-Rise Office	46,117.04	57.89%	55.28	32.00	1.67	92.13	53.34		
	Other Retail/Services	3,987.77	5.01%	25.76	1.29	1.92	49.54	2.48		
	<i>Total</i>	79,662.46	100.00%		21.89			7.02		
Residential										
	Government Offices	2,431.55	0.85%	63.63	0.54	0.32	20.39	0.17		
	High-Rise Office	7,933.88	2.76%	240.77	6.65	0.56	133.76	3.69		
	Hotel/Motel	7,059.90	2.46%	51.91	1.28	1.00	51.91	1.28		
	Light Manufacturing	18,098.05	6.30%	18.49	1.16	1.22	22.64	1.43		
	Low-Rise Office	32,969.32	11.47%	55.28	6.34	1.67	92.13	10.57		
	Other Retail/Services	218,856.94	76.16%	25.76	19.62	1.92	49.54	37.73		
	<i>Total</i>	287,349.63	100.00%		0.54			0.17		

EXISTING TO BUILDOUT FAR LA WESTSIDE

LAND USE CATEGORY	EMP/AC
Government Offices	63.630
Heavy Manufacturing	48.180
High-Rise Office	240.770
Hotel/Motel	51.910
Light Manufacturing	18.490
Low-Rise Office	55.280
Other Retail/Services	25.760
R & D/Flex Space	22.610
Regional Retail	18.490
Warehouse	12.960

LA WESTSIDE FLOOR AREA RATIO EXISTING AVE VS BUILDOUT AVE

LAND USE CATEGORY	ADJUST	E_FAR	BO_FAR
Government Offices	0.321	3.12	1.00
Heavy Manufacturing	1.000	0.00	0.60
High-Rise Office	0.556	3.60	2.00
Hotel/Motel	1.000	1.21	0.00
Light Manufacturing	1.224	0.49	0.60
Low-Rise Office	1.667	0.60	1.00
Other Retail/Services	1.923	0.39	0.75
R & D/Flex Space	0.382	1.31	0.50
Regional Retail	1.000	0.00	1.00
Warehouse	0.794	0.63	0.50

TABLE 3: ORANGE COUNTY GENERAL PLAN EMPLOYMENT DENSITY

GENERAL PLAN LAND USE	EXISTING LAND USE CATEGORY	AREA (Acres)	ACREAGE DISTRIBUTION	EXISTING EMPLOYMENT DENSITY (Employees / Acre)		GPLU EMPLOYMENT DENSITY (Employees / Acre)	
				EXISTING-WEIGHTED AVERAGE	FAR - ADJUST	EXISTING-WEIGHTED AVERAGE	GPLU-WEIGHTED AVERAGE
GP AGRICULTURE	Other Retail/Services	6,875.08	100.00%	22.58	2.88	65.13	65.13
	<i>Total</i>	6,875.08	100.00%	22.58			65.13
GP COMMERCIAL	Low-Rise Office	3,023,886.74	16.46%	43.24	2.38	102.95	16.94
	High-Rise Office	438,079.26	2.38%	72.52	3.70	268.59	6.40
	Regional Retail	822,901.32	4.48%	28.87	1.28	37.01	1.66
	Other Retail/Services	10,970,521.59	59.70%	22.58	2.88	65.13	38.89
	Hotel/Motel	925,380.24	5.04%	35.06	1.00	35.06	1.77
	Government Offices	132,548.61	0.72%	44.42	3.23	143.29	1.03
	Light Manufacturing	1,441,516.92	7.84%	22.60	1.46	33.07	2.59
	R & D/Flex Space	167,701.52	0.91%	23.92	1.39	33.22	0.30
	Warehouse	452,842.87	2.46%	12.63	1.25	15.79	0.39
	<i>Total</i>	18,375,379.08	100.00%	28.01			69.98
GP INDUSTRIAL	Low-Rise Office	2,578,280.46	13.77%	43.24	2.38	102.95	14.17
	High-Rise Office	313,208.44	1.67%	72.52	3.70	268.59	4.49
	Regional Retail	50,687.69	0.27%	28.87	1.28	37.01	0.10
	Other Retail/Services	854,165.45	4.56%	22.58	2.88	65.13	2.97
	Hotel/Motel	129,993.54	0.69%	35.06	1.00	35.06	0.24
	Government Offices	117,247.31	0.63%	44.42	3.23	143.29	0.90
	Light Manufacturing	12,017,215.84	64.17%	22.60	1.46	33.07	21.22
	R & D/Flex Space	585,243.11	3.13%	23.92	1.39	33.22	1.04
	Warehouse	2,080,895.58	11.11%	12.63	1.25	15.79	1.75
	<i>Total</i>	18,726,937.43	100.00%	25.45			46.89
GP MILITARY	Low-Rise Office	13,887.69	64.71%	43.24	2.38	102.95	66.62
	Warehouse	7,575.11	35.29%	12.63	1.25	15.79	5.57
	<i>Total</i>	21,462.80	100.00%	32.44			72.19
GP MIXED USE	Low-Rise Office	3,758.07	3.21%	43.24	2.38	102.95	3.30
	Other Retail/Services	59,710.55	50.92%	22.58	2.88	65.13	33.17
	Light Manufacturing	53,786.85	45.87%	22.60	1.46	33.07	15.17
	<i>Total</i>	117,255.47	100.00%	23.25			51.64
GP OPEN SPACE	Low-Rise Office	87,620.47	11.39%	43.24	1.10	47.56	5.42

TABLE 3: ORANGE COUNTY GENERAL PLAN EMPLOYMENT DENSITY

GENERAL PLAN LAND USE	EXISTING LAND USE CATEGORY	AREA (Acres)	ACREAGE DISTRIBUTION	EXISTING EMPLOYMENT DENSITY		EXISTING-WEIGHTED AVERAGE		GPLU EMPLOYMENT DENSITY	
				(Employees / Acre)	(Employees / Acre)	FAR - ADJUST	(Employees / Acre)	(Employees / Acre)	GPLU-WEIGHTED AVERAGE
	Other Retail/Services	268,560.65	34.91%	22.58	7.88	1.10	24.84	8.67	
	Hotel/Motel	18,597.63	2.42%	35.06	0.85	1.10	38.57	0.93	
	Government Offices	23,561.03	3.06%	44.42	1.36	1.10	48.86	1.50	
	Light Manufacturing	204,737.79	26.61%	22.60	6.01	1.10	24.86	6.62	
	R & D/Flex Space	141,248.57	18.36%	23.92	4.39	1.10	26.31	4.83	
	Warehouse	25,040.39	3.25%	12.63	0.41	1.10	13.89	0.45	
	<i>Total</i>	<i>769,366.52</i>	<i>100.00%</i>		<i>25.83</i>			<i>28.41</i>	
GP PUBLIC FACILITY									
	Low-Rise Office	165,157.53	22.57%	43.24	9.76	1.10	47.56	10.73	
	Other Retail/Services	135,717.51	18.54%	22.58	4.19	1.10	24.84	4.61	
	Hotel/Motel	8,918.36	1.22%	35.06	0.43	1.10	38.57	0.47	
	Government Offices	345,547.67	47.22%	44.42	20.97	1.10	48.86	23.07	
	Light Manufacturing	73,688.16	10.07%	22.60	2.28	1.10	24.86	2.50	
	Warehouse	2,800.32	0.38%	12.63	0.05	1.10	13.89	0.05	
	<i>Total</i>	<i>731,829.55</i>	<i>100.00%</i>		<i>37.67</i>			<i>41.44</i>	
GP RES LT 5 DU/AC									
	Low-Rise Office	166,710.50	15.56%	43.24	6.73	1.10	47.56	7.40	
	Other Retail/Services	729,203.95	68.04%	22.58	15.36	1.10	24.84	16.90	
	Hotel/Motel	22,822.46	2.13%	35.06	0.75	1.10	38.57	0.82	
	Government Offices	32,524.72	3.03%	44.42	1.35	1.10	48.86	1.48	
	Light Manufacturing	108,028.54	10.08%	22.60	2.28	1.10	24.86	2.51	
	Warehouse	12,386.50	1.16%	12.63	0.15	1.10	13.89	0.16	
	<i>Total</i>	<i>1,071,676.66</i>	<i>100.00%</i>		<i>26.61</i>			<i>29.27</i>	
GP RES 12 DU/AC									
	Low-Rise Office	40,535.22	11.03%	43.24	4.77	1.25	54.05	5.96	
	High-Rise Office	8,317.27	2.26%	72.52	1.64	1.25	90.65	2.05	
	Other Retail/Services	225,121.03	61.28%	22.58	13.84	1.25	28.23	17.30	
	Hotel/Motel	35,805.76	9.75%	35.06	3.42	1.25	43.83	4.27	
	Light Manufacturing	57,610.46	15.68%	22.60	3.54	1.25	28.25	4.43	
	<i>Total</i>	<i>367,389.74</i>	<i>100.00%</i>		<i>27.21</i>			<i>34.01</i>	
GP RES 5-11 DU/AC									
	Low-Rise Office	82,746.39	11.35%	43.24	4.91	1.10	47.56	5.40	
	High-Rise Office	2,478.09	0.34%	72.52	0.25	1.10	79.77	0.27	
	Other Retail/Services	394,154.32	54.05%	22.58	12.20	1.10	24.84	13.42	
	Hotel/Motel	22,690.80	3.11%	35.06	1.09	1.10	38.57	1.20	
	Government Offices	12,693.87	1.74%	44.42	0.77	1.10	48.86	0.85	

TABLE 3: ORANGE COUNTY GENERAL PLAN EMPLOYMENT DENSITY

GENERAL PLAN LAND USE	EXISTING LAND USE CATEGORY	AREA (Acres)	ACREAGE DISTRIBUTION	EXISTING EMPLOYMENT DENSITY		GPLU EMPLOYMENT DENSITY		
				(Employees / Acre)	WEIGHTED AVERAGE	(Employees / Acre)	GPLU-WEIGHTED AVERAGE	
					FAR - ADJUST			
	Light Manufacturing	103,084.62	14.13%	22.6	3.19	1.10	24.86	3.51
	R & D/Flex Space	100,962.39	13.84%	23.92	3.31	1.10	26.31	3.64
	Warehouse	10,494.30	1.44%	12.63	0.18	1.10	13.89	0.20
	<i>Total</i>	729,304.76	100.00%		25.91			28.50
GP RES LT 1 DU/AC	Low-Rise Office	1,883.87	19.00%	43.24	8.22	1.10	47.56	9.04
	Other Retail/Services	8,031.55	81.00%	22.58	18.29	1.10	24.84	20.12
	<i>Total</i>	9,915.42	100.00%		26.51			29.16
SPECIFIC PLAN/PUD	Low-Rise Office	94,476.88	22.56%	43.24	9.76	2.38	102.95	23.23
	High-Rise Office	9,175.72	2.19%	72.52	1.59	3.70	268.59	5.89
	Other Retail/Services	226,346.69	54.05%	22.58	12.21	2.88	65.13	35.21
	Hotel/Motel	17,152.50	4.10%	35.06	1.44	1.00	35.06	1.44
	Government Offices	6,032.30	1.44%	44.42	0.64	3.23	143.29	2.06
	Light Manufacturing	65,569.11	15.66%	22.60	3.54	1.46	33.07	5.18
	<i>Total</i>	418,753.19	100.00%		29.16			73.00
GP TRANSPORTATION / UTILITY	Other Retail/Services	72,875.77	40.45%	22.58	9.13	2.88	65.13	26.35
	Hotel/Motel	8,582.95	4.76%	35.06	1.67	1.00	35.06	1.67
	Light Manufacturing	72,866.97	40.45%	22.60	9.14	1.46	33.07	13.38
	Warehouse	25,830.68	14.34%	12.63	1.81	1.25	15.79	2.26
	<i>Total</i>	180,156.38	100.00%		21.76			43.66
GP WATERWAY	Low-Rise Office	4,521.42	9.86%	43.24	4.26	1.10	47.56	4.69
	Other Retail/Services	20,337.89	44.33%	22.58	10.01	1.10	24.84	11.01
	Light Manufacturing	21,015.52	45.81%	22.60	10.35	1.10	24.86	11.39
	<i>Total</i>	45,874.83	100.00%		24.63			27.09

EXISTING TO BUILDOUT FAR - ORANGE CO

LAND USE CATEGORY EMP/AC

Government Offices	44.420
Heavy Manufacturing	31.090
High-Rise Office	72.520
Hotel/Motel	35.060
Light Manufacturing	22.600
Low-Rise Office	43.240
Other Retail/Services	22.580
R & D/Flex Space	23.920
Regional Retail	28.870
Warehouse	12.630

ORANGE CO. FLOOR AREA RATIO EXISTING AVE VS BUILDOUT AVE

LAND USE CATEGORY	ADJUST	E_FAR	BO_FAR
Government Offices	3.226	0.31	1.00
Heavy Manufacturing	1.000	0.00	0.60
High-Rise Office	3.704	0.54	2.00
Hotel/Motel	1.000	0.00	0.00
Light Manufacturing	1.463	0.41	0.60
Low-Rise Office	2.381	0.42	1.00
Other Retail/Services	2.885	0.26	0.75
R & D/Flex Space	1.389	0.36	0.50
Regional Retail	1.282	0.78	1.00
Warehouse	1.250	0.40	0.50

TABLE 4: RIVERSIDE COUNTY GENERAL PLAN EMPLOYMENT DENSITY

GENERAL PLAN LAND USE	EXISTING LAND USE CATEGORY	AREA (Acres)	ACREAGE DISTRIBUTION	EXISTING EMPLOYMENT DENSITY (Employees / Acre)		FAR - ADJUST	GPLU EMPLOYMENT DENSITY (Employees / Acre)		GPLU-WEIGHTED AVERAGE
				EXISTING EMPLOYMENT DENSITY (Employees / Acre)	EXISTING-WEIGHTED AVERAGE		GPLU EMPLOYMENT DENSITY (Employees / Acre)	GPLU-WEIGHTED AVERAGE	
Agriculture	Other Retail	27,060.43	58.33%	23.26	13.57	2.63	61.21	61.21	35.70
	Light Manufacturing	19,335.38	41.67%	7.79	3.25	1.54	11.98	11.98	4.99
	<i>Total</i>	46,395.81	100.00%		16.81				40.70
Developed	Other Retail	6,888.87	100.00%	23.26	23.26	2.63	61.21	61.21	61.21
	<i>Total</i>	6,888.87	100.00%		23.26				61.21
General Commercial	Government Offices	83,867.62	1.42%	44.94	0.64	3.13	140.44	140.44	2.00
	Hotel/Motel	428,991.10	7.28%	11.82	0.86	0.00	0.00	0.00	0.00
	Light Manufacturing	165,290.68	2.80%	7.79	0.22	1.54	11.98	11.98	0.34
	Low-Rise Office	370,343.92	6.28%	23.26	1.46	2.63	61.21	61.21	3.85
	Other Retail	4,537,369.26	76.99%	23.26	17.91	2.63	61.21	61.21	47.12
	R & D/Flex Space	18,769.34	0.32%	14.21	0.05	1.25	17.76	17.76	0.06
	Regional Ret	252,027.91	4.28%	14.21	0.61	1.25	17.76	17.76	0.76
	Warehouse	37,013.78	0.63%	16.32	0.10	1.61	26.32	26.32	0.17
	<i>Total</i>	5,893,673.60	100.00%		21.84				54.29
General Industrial	Government Offices	23,825.37	0.64%	44.94	0.29	3.13	140.44	140.44	0.90
	Hotel/Motel	8,479.40	0.23%	11.82	0.03	0.00	0.00	0.00	0.00
	Light Manufacturing	1,913,263.19	51.29%	7.79	4.00	1.54	11.98	11.98	6.15
	Low-Rise Office	253,819.87	6.80%	23.26	1.58	2.63	61.21	61.21	4.17
	Other Retail	632,244.73	16.95%	23.26	3.94	2.63	61.21	61.21	10.38
	R & D/Flex Space	217,204.58	5.82%	14.21	0.83	1.25	17.76	17.76	1.03
	Warehouse	681,193.82	18.26%	16.32	2.98	1.61	26.32	26.32	4.81
	<i>Total</i>	3,730,030.96	100.00%		13.64				27.43
High Density Residential	High-Rise Of	786.95	0.21%	0	0.00	1.00	0.00	0.00	0.00
	Hotel/Motel	9,257.28	2.41%	11.82	0.29	0.00	0.00	0.00	0.00
	Light Manufacturing	44,297.97	11.56%	7.79	0.90	1.54	11.98	11.98	1.38
	Low-Rise Office	29,642.51	7.73%	23.26	1.80	2.63	61.21	61.21	4.73
	Other Retail	256,697.61	66.96%	23.26	15.58	2.63	61.21	61.21	40.99
	Warehouse	42,657.33	11.13%	16.32	1.82	1.61	26.32	26.32	2.93
	<i>Total</i>	383,339.64	100.00%		20.38				50.04
Light Commercial	Government Offices	22,669.09	1.08%	44.94	0.49	3.13	140.44	140.44	1.52
	Hotel/Motel	49,342.83	2.36%	11.82	0.28	0.00	0.00	0.00	0.00
	Light Manufacturing	78,398.30	3.75%	7.79	0.29	1.54	11.98	11.98	0.45
	Low-Rise Office	115,989.89	5.55%	23.26	1.29	2.63	61.21	61.21	3.40
	Other Retail	1,740,001.06	83.26%	23.26	19.37	2.63	61.21	61.21	50.96
	R & D/Flex Space	56,289.50	2.69%	14.21	0.38	1.25	17.76	17.76	0.48

TABLE 4: RIVERSIDE COUNTY GENERAL PLAN EMPLOYMENT DENSITY

GENERAL PLAN LAND USE	EXISTING LAND USE CATEGORY	AREA (Acres)	ACREAGE DISTRIBUTION	EXISTING EMPLOYMENT DENSITY		EXISTING-WEIGHTED AVERAGE		GPLU EMPLOYMENT DENSITY		GPLU-WEIGHTED AVERAGE
				(Employees/Acre)	(Employees/Acre)	AVERAGE	FAR - ADJUST	(Employees/Acre)	(Employees/Acre)	
Warehouse		27,271.06	1.30%	16.32	0.21	1.61	26.32	0.34		57.15
<i>Total</i>		2,089,961.74	100.00%		22.31					
Light Industrial										
Government Offices		44,213.56	1.32%	44.94	0.59	3.13	140.44	1.86		1.86
Hotel/Motel		6,241.89	0.19%	11.82	0.02	0.00	0.00	0.00		0.00
Light Manufacturing		1,763,903.91	52.71%	7.79	4.11	1.54	11.98	6.32		6.32
Low-Rise Office		272,449.70	8.14%	23.26	1.89	2.63	61.21	4.98		4.98
Other Retail		477,924.62	14.28%	23.26	3.32	2.63	61.21	8.74		8.74
R & D/Flex Space		483,172.24	14.44%	14.21	2.05	1.25	17.76	2.56		2.56
Warehouse		295,279.13	8.82%	16.32	1.44	1.61	26.32	2.32		2.32
Heavy Manufa		3,515.20	0.11%	44.94	0.05	3.13	140.44	0.15		0.15
<i>Total</i>		3,346,700.24	100.00%		13.48			26.93		26.93
Low Density Residential										
Government Offices		25,314.12	3.17%	44.94	1.42	3.13	140.44	4.45		4.45
Hotel/Motel		118,524.94	14.83%	11.82	1.75	0.00	0.00	0.00		0.00
Low-Rise Office		73,242.34	9.17%	23.26	2.13	2.63	61.21	5.61		5.61
Other Retail		410,691.75	51.40%	23.26	11.96	2.63	61.21	31.46		31.46
Regional Ret		19,428.12	2.43%	14.21	0.35	1.25	17.76	0.43		0.43
Warehouse		21,653.31	2.71%	16.32	0.44	1.61	26.32	0.71		0.71
Light Manufacturing		130,168.35	16.29%	7.79	1.27	1.54	11.98	1.95		1.95
<i>Total</i>		799,022.92	100.00%		19.32			44.62		44.62
Medium Density Residential										
Government Offices		6,421.95	1.30%	44.94	0.59	3.13	140.44	1.83		1.83
High-Rise Office		2,976.58	0.60%	15.22	0.09	1.00	15.22	0.09		0.09
Hotel/Motel		104,246.34	21.17%	11.82	2.50	0.00	0.00	0.00		0.00
Light Manufacturing		66,040.14	13.41%	7.79	1.04	1.54	11.98	1.61		1.61
Low-Rise Office		90,914.28	18.46%	23.26	4.29	2.63	61.21	11.30		11.30
Other Retail		212,769.24	43.21%	23.26	10.05	2.63	61.21	26.45		26.45
Warehouse		9,055.20	1.84%	16.32	0.30	1.61	26.32	0.48		0.48
<i>Total</i>		492,423.72	100.00%		18.87			41.76		41.76
Mixed Use										
Light Manufacturing		57,387.40	28.74%	7.79	2.24	1.54	11.98	3.44		3.44
Low-Rise Office		9,270.56	4.64%	23.26	1.08	2.63	61.21	2.84		2.84
Other Retail		133,048.32	66.62%	23.26	15.50	2.63	61.21	40.78		40.78
<i>Total</i>		199,706.28	100.00%		18.81			47.07		47.07
Open Space										
Government Offices		4,938.85	9.57%	44.94	4.30	3.13	140.44	13.44		13.44
Light Manufacturing		19,335.38	37.46%	7.79	2.92	1.54	11.98	4.49		4.49
Other Retail		27,060.43	52.43%	23.26	12.19	2.63	61.21	32.09		32.09
R & D/Flex Space		281.60	0.55%	14.21	0.08	1.25	17.76	0.10		0.10

TABLE 4: RIVERSIDE COUNTY GENERAL PLAN EMPLOYMENT DENSITY

GENERAL PLAN LAND USE	EXISTING LAND USE CATEGORY	AREA (Acres)	ACREAGE DISTRIBUTION	EXISTING EMPLOYMENT DENSITY		EXISTING-WEIGHTED AVERAGE		GPLU EMPLOYMENT DENSITY		GPLU-WEIGHTED AVERAGE
				(Employees / Acre)	(Employees / Acre)	AVERAGE	FAR - ADJUST	(Employees / Acre)	(Employees / Acre)	
	<i>Total</i>	51,616.26	100.00%		19.49		50.11			
Public/Quasi Public	Government Offices	108,775.80	21.06%	44.94	9.46	3.13	140.44	29.57		
	Hotel/Motel	11,469.31	2.22%	11.82	0.26	0.00	0.00	0.00		
	Light Manufacturing	101,533.40	19.65%	7.79	1.53	1.54	11.98	2.36		
	Low-Rise Office	75,012.79	14.52%	23.26	3.38	2.63	61.21	8.89		
	Other Retail	184,174.22	35.65%	23.26	8.29	2.63	61.21	21.82		
	R & D/Flex Space	20,002.77	3.87%	14.21	0.55	1.25	17.76	0.69		
	Warehouse	15,653.25	3.03%	16.32	0.49	1.61	26.32	0.80		
	<i>Total</i>	516,621.55	100.00%		23.97		64.12			
Rural Residential	Light Manufacturing	92,730.46	37.88%	7.79	2.95	1.54	11.98	4.54		
	Low-Rise Office	5,589.82	2.28%	23.26	0.53	2.63	61.21	1.40		
	Other Retail	146,478.38	59.84%	23.26	13.92	2.63	61.21	36.63		
	<i>Total</i>	244,798.66	100.00%		17.40			42.56		
Tourist, Resort, Hotel	Hotel/Motel	137,818.11	78.93%	11.82	9.33	0.00	0.00	0.00		
	Low-Rise Office	9,292.93	5.32%	23.26	1.24	2.63	61.21	3.26		
	Other Retail	27,506.28	15.75%	23.26	3.66	2.63	61.21	9.64		
	<i>Total</i>	174,617.32	100.00%		14.23			12.90		
Heavy Industrial	Light Manufacturing	18,856.93	22.16%	7.79	1.73	1.54	11.98	2.66		
	Other Retail	26,619.38	31.28%	23.26	7.27	2.63	61.21	19.14		
	Warehouse	39,636.23	46.57%	16.32	7.60	1.61	26.32	12.26		
	<i>Total</i>	85,112.54	100.00%		16.60			34.06		
Schools	Government Offices	2,497.42	100.00%	44.94	44.94	3.13	140.44	140.44		
	<i>Total</i>	2,497.42	100.00%		44.94		140.44	140.44		
Very High Density Residential	Hotel/Motel	161,271.59	83.43%	11.82	9.86	0.00	0.00	0.00		
	Low-Rise Office	6,321.10	3.27%	23.26	0.76	2.63	61.21	2.00		
	Other Retail	25,712.04	13.30%	23.26	3.09	2.63	61.21	8.14		
	<i>Total</i>	193,304.73	100.00%		13.72			10.14		

RIVERSIDE CO. FLOOR AREA RATIO EXISTING AVE VS BUILDOUT AVE

LAND USE CATEGORY	ADJUST	E_FAR	BO_FAR
Government Offices	3.13	0.32	1.00
Heavy Manufacturing	1.00	0.00	0.60
High-Rise Office	1.00	0.00	2.00
Hotel/Motel	0.00	1.26	0.00
Light Manufacturing	1.54	0.39	0.60
Low-Rise Office	2.63	0.38	1.00
Other Retail/Services	2.68	0.28	0.75
R & D/Flex Space	1.25	0.40	0.50
Regional Retail	4.76	0.21	1.00
Warehouse	1.61	0.31	0.50

RIVERSIDE CO EXISTING EMP/ACRE

LAND USE CATEGORY	EMP/AC
Government Offices	44.940
Heavy Manufacturing	0.000
High-Rise Office	15.220
Hotel/Motel	11.820
Light Manufacturing	7.790
Low-Rise Office	23.260
Other Retail/Services	12.260
R & D/Flex Space	14.210
Regional Retail	20.680
Warehouse	16.320

TABLE 5: SAN BERNARDINO COUNTY GENERAL PLAN EMPLOYMENT DENSITY

GENERAL PLAN LAND USE	EXISTING LAND USE CATEGORY	AREA (Acres)	ACREAGE DISTRIBUTION	EXISTING EMPLOYMENT DENSITY		FAR - ADJUST	GPLU EMPLOYMENT DENSITY	
				(Employees / Acre)	WEIGHTED AVERAGE		(Employees / Acre)	WEIGHTED AVERAGE
RESIDENTIAL 1 TO 4.99 UNITS PER ACRE	Government Offices	94,825.81	74.48%	24.11	17.96	5.00	120.55	89.78
	Low-Rise Office	32,496.70	25.52%	16.80	4.29	1.88	31.50	8.04
	<i>Total</i>	127,322.50	100.00%		22.24			97.82
PUBLIC FACILITY	Heavy Manufacturing	96,102.35	100.00%	5.25	5.25	1.00	5.25	5.25
	<i>Total</i>	96,102.35	100.00%		5.25			5.25
INDUSTRIAL	Light Manufacturing	6,325,928.24	62.75%	6.92	4.34	3.13	21.63	13.57
	Other Retail/Services	547,557.26	5.43%	9.98	0.54	10.00	99.80	5.42
	R & D/Flex Space	177,573.81	1.76%	12.22	0.22	1.52	18.52	0.33
	Warehouse	3,030,001.95	30.06%	6.02	1.81	2.17	13.09	3.93
	<i>Total</i>	10,081,061.25	100.00%		6.91			23.25
COMMERCIAL	Hotel/Motel	351,764.17	3.82%	10.50	0.40	1.22	12.80	0.49
	Other Retail/Services	8,530,382.18	92.64%	9.98	9.25	10.00	99.80	92.46
	Regional Retail	325,664.53	3.54%	9.32	0.33	2.78	25.89	0.92
	<i>Total</i>	9,207,810.88	100.00%		9.98			93.86

SAN BERNARDINO CO EXISTING EMP/ACRE

LAND USE CATEGORY	EMP/AC
Government Offices	24.110
Heavy Manufacturing	5.250
High-Rise Office	0.000
Hotel/Motel	10.500
Light Manufacturing	6.920
Low-Rise Office	16.800
Other Retail/Services	9.980
R & D/Flex Space	12.220
Regional Retail	9.320
Warehouse	6.020

SAN BERNARDINO CO. FLOOR AREA RATIO EXISTING AVE VS BUILDOUT AVE

LAND USE CATEGORY	ADJUST	E_FAR	BO_FAR
Government Offices	5.000	0.15	0.75
Heavy Manufacturing	1.000	0.00	0.50
High-Rise Office	1.000	0.00	0.00
Hotel/Motel	1.220	0.82	1.00
Light Manufacturing	3.125	0.16	0.50
Low-Rise Office	1.875	0.40	0.75
Other Retail/Services	10.000	0.04	0.40
R & D/Flex Space	1.515	0.33	0.50
Regional Retail	2.778	0.36	1.00
Warehouse	2.174	0.23	0.50

TABLE 6: VENTURA COUNTY GENERAL PLAN EMPLOYMENT DENSITY

GENERAL PLAN LAND USE	EXISTING LAND USE CATEGORY	AREA (Acres)	ACREAGE DISTRIBUTION	EXISTING EMPLOYMENT DENSITY		GPLU EMPLOYMENT DENSITY		
				(Employees / Acre)	WEIGHTED AVERAGE	(Employees / Acre)	WEIGHTED AVERAGE	
Commercial	Government Offices	15,525.69	2.99%	35.69	1.07	9.09	324.45	9.69
	Hotel/Motel	21,056.95	4.05%	19.92	0.81	1.00	19.92	0.81
	Light Manufacturing	15,243.70	2.93%	14.63	0.43	6.67	97.53	2.86
	Low-Rise Office	81,968.31	15.77%	20.34	3.21	3.70	75.33	11.88
	Other Retail Services	384,551.62	73.97%	20.34	15.05	3.70	75.33	55.72
	R & D/Flex Space	1,531.80	0.29%	13.7	0.04	4.17	57.08	0.17
Total		519,878.06	100.00%		20.59			81.13
Freeway Right of Way	Light Manufacturing	3,649.23	100.00%	14.63	14.63	6.67	97.53	97.53
	Total	3,649.23	100.00%		14.63			97.53
High Density Residential	Low-Rise Office	2,252.98	100.00%	20.34	20.34	3.70	75.33	75.33
	Total	2,252.98	100.00%		20.34			75.33
Industrial	Low-Rise Office	52,074.31	5.40%	20.34	1.10	3.70	75.33	4.07
	Light Manufacturing	912,309.54	94.60%	14.63	13.84	6.67	97.53	92.27
	Total	964,383.84	100.00%		14.94			96.33
Industrial/Commercial	Other Retail Services	1,329.54	100.00%	20.34	20.34	3.70	75.33	75.33
	Total	1,329.54	100.00%		20.34			75.33
Agriculture	Light Manufacturing	7,108.96	100.00%	14.63	14.63	6.67	97.53	97.53
	Total	7,108.96	100.00%		14.63			97.53
Low - Medium Density Residential	Government Offices	232.64	4.58%	35.69	1.64	9.09	324.45	14.87
	Other Retail/Services	4,843.03	95.42%	17.68	16.87	4.41	78.00	74.42
	Total	5,075.66	100.00%		18.51			89.30
Low Density Residential	R & D/Flex Space	915.01	10.08%	13.7	1.38	4.17	57.08	5.75
	Light Manufacturing	4,231.42	46.60%	14.63	6.82	6.67	97.53	45.45
	Other Retail/Services	3,934.52	43.33%	17.68	7.66	4.41	78.00	33.80
	Total	9,080.94	100.00%		15.86			84.99
Manufacturing - Commercial	Light Manufacturing	11,752.93	42.38%	14.63	6.20	6.67	97.53	41.33
	Other Retail/Services	15,979.90	57.62%	17.68	10.19	4.41	78.00	44.94

TABLE 6: VENTURA COUNTY GENERAL PLAN EMPLOYMENT DENSITY

GENERAL PLAN LAND USE	EXISTING LAND USE CATEGORY	AREA (Acres)	ACREAGE DISTRIBUTION	EXISTING EMPLOYMENT DENSITY		GPLU EMPLOYMENT DENSITY	
				(Employees / Acre)	WEIGHTED AVERAGE	(Employees / Acre)	WEIGHTED AVERAGE
	<i>Total</i>	27,732.84	100.00%		16.39		86.28
Medium Density Residential	Other Retail/Services	8,145.07	100.00%	17.68	17.68	4.41	78.00
	<i>Total</i>	8,145.07	100.00%		17.68		78.00
Office	Low-Rise Office	39,017.38	74.22%	20.34	15.10	3.70	75.33
	Other Retail/Services	13,551.18	25.78%	17.68	4.56	4.41	78.00
	<i>Total</i>	52,568.56	100.00%		19.65		76.02
Park	Government Offices	160.31	100.00%	35.69	35.69	9.09	324.45
	<i>Total</i>	160.31	100.00%		35.69		324.45
Public	Other Retail/Services	1,490.05	100.00%	17.68	17.68	4.41	78.00
	<i>Total</i>	1,490.05	100.00%		17.68		78.00
Rural Density Residential	Other Retail/Services	8,622.54	51.15%	17.68	9.04	4.41	78.00
	Light Manufacturing	8,233.92	48.85%	14.63	7.15	6.67	97.53
	<i>Total</i>	16,856.46	100.00%		16.19		87.54
Schools	Government Offices	6,153.58	100.00%	35.69	35.69	9.09	324.45
	<i>Total</i>	6,153.58	100.00%		35.69		324.45
Transit Center	Low-Rise Office	751.81	100.00%	20.34	20.34	3.70	75.33
	<i>Total</i>	751.81	100.00%		20.34		75.33

VENTURA CO. FLOOR AREA RATIO EXISTING AVE VS BUILDOUT AVE

LAND USE CATEGORY	ADJUST	E_FAR	BO_FAR
Government Offices	9.091	0.11	1.00
Heavy Manufacturing	1.000	0.00	0.60
High-Rise Office	1.000	0.00	2.00
Hotel/Motel	1.000	0.00	0.00
Light Manufacturing	6.667	0.09	0.60
Low-Rise Office	3.704	0.27	1.00
Other Retail/Services	4.412	0.17	0.75
R & D/Flex Space	4.167	0.12	0.50
Regional Retail	1.887	0.53	1.00
Warehouse	8.333	0.06	0.50

EXISTING TO BUILDOUT FAR - VENTURA CO

LAND USE CATEGORY	EMP/AC
Government Offices	35.690
Heavy Manufacturing	4.430
High-Rise Office	n/a
Hotel/Motel	19.920
Light Manufacturing	14.630
Low-Rise Office	20.340
Other Retail/Services	17.680
R & D/Flex Space	13.700
Regional Retail	11.930
Warehouse	13.740