TRAFFIC IMPACT FEE STUDY
2002 UPDATE

Prepared by

Transportation Services Division
City of Costa Mesa

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1.0 INTRODUCTION

This traffic impact fee study is a revision of the 1997 Citywide Traffic Impact Fee Study conducted in June 1998, which established the basis for the imposition of a citywide traffic impact fee pursuant to Government Code Section 66000 et seq. and Ordinance No. 93-11 and No. 97-11. The Transportation Section Management section of the Costa Mesa Municipal Code, which discusses the trip fee program, is included in Appendix A. The purpose of the fee is to fund transportation/circulation improvements within the City of Costa Mesa which are related directly to the incremental traffic/vehicle burden imposed on the City's transportation system by the development of a new commercial, industrial and residential uses as permitted in the General Plan, and to maintain compliance with the eligibility requirements of the Orange County Measure M Program (Measure "M").

2.0 REFERENCE DOCUMENTS

This study has been prepared to update the traffic impact fees for Fiscal Year 2001-02. The documents that are incorporated by reference into this study are as follows:

A. General Plan and Environmental Impact Report (EIR) #1049 (on file with Planning Division)

B. Orange County Transportation Analysis Model (OCTAM) 3.1 (on file with Public Services Department)

C. Citywide Traffic Impact Fee Study of June 2, 1997 (on file with Public Services Department)

D. Ordinance #s 93-11, 97-11 (on file with City Clerk Office)

E. Major Thoroughfare and Bridge Fee Program for San Joaquin Hills Transportation Corridor and Foothill/Eastern Transportation Corridors (on file with Public Services Department)

F. Measure M 7-Year Capital Improvement Program Annual Report (on file with Public Services Department)

G. 7-Year Capital Improvement Program prepared annually for City Budget (on file with Public Services Department)

H. Development Phasing and Performance Monitoring Program Annual Report (on file with Public Services Department)

3.0 BACKGROUND

In June 1993, an interim traffic impact fee of $228 per average daily trip end (ADT) for new developments was adopted by City Council based on designated General Plan public

improvements. The City Council also approved the formation of a Traffic Impact Fee Ad Hoc Committee consisting of representatives from various stakeholders in July 1993 to work with staff on all aspects related to the revision of traffic impact fees.

In June 1994, the interim fee of $228 per ADT was reestablished as continued interim traffic impact fee pending revision of fee study. On May 1, 1995, based on the results of revised study and Ad Hoc Committee recommendation, a traffic impact fee of $200 per ADT was adopted as citywide traffic impact fee.

In June 1997, a Citywide Traffic Impact Fee analysis was conducted recommending a maximum fee of $281 per ADT and a minimum fee of $133 per ADT. The City Council recommended a citywide traffic impact fee of $150 per ADT. The City Council continued the traffic impact fee of $150 per ADT in June 1998.

In January 1999, the City Council approved a recommendation by the Traffic Impact Fee Ad Hoc Committee, to establish an incentive for all new residential, commercial, and industrial developments in Costa Mesa. The incentive was based upon the assessment of traffic impact fees on an incremental basis for the first 100 trips generated by new developments. According to the proposed fee structure, the first 25 ADT of each project would be exempt from the fee program. A fee of $50 per ADT would be assessed for developments with traffic generation between 26 and 50 ADT. A fee of $75 per ADT would be assessed on traffic generation between 51 and 75 ADT, and a fee of $100 per ADT would be assessed on traffic generation between 76 and 100 ADT. Trips exceeding 100 ADT would be assessed at $150 per ADT.

In June 1999, the City Council adopted traffic impact fees of $149 per ADT, with the tiered structure as described above, for trips less than 100 ADT.

On June 19, 2000, City Council adopted a two-district traffic impact fee for new developments in the City of Costa Mesa. District 1, areas north of I-405 and SR-73 Freeways, was approved with traffic impact fees of $195 per ADT, whereas District 2, areas south of I-405 and SR-73 Freeways, was approved with traffic impact fees of $149 per ADT. The City Council also approved continuation of the incentive program for the first 100 ADT.

4.0 EXISTING FEES

On June 4, 2001, City Council recommended continuation of the two-district traffic impact fees of $195 per ADT for District 1 and $149 per ADT for District 2, and the incentive program for trips less than 100 ADT. City Council also directed staff to update the traffic impact fee study following adoption of the General Plan Update.

5.0 AD-HOC COMMITTEE

An Ad-Hoc Committee consisting of members representing large and small developers, Chamber of Commerce and Homeowners Association and appointed by City Council assisted staff in the development of the proposed traffic impact fee. The current Ad Hoc Committee members and their representation are:

Gary Monahan	City Council Liaison
Walter Davenport	Planning Commission Representative
Ed Fawcett	Chamber of Commerce
Bruce Garlich	Homeowners Association Representative
George Sakioka	Major Developers Representative
Kerry Smith	Small Developers Representative
Vacant	At-large member representing Costa Mesa residents

Members of the Ad Hoc Committee met as needed to discuss the study methodology, assumptions and results.

6.0 STUDY METHODOLOGY

The traffic impact fee study incorporated the following methodology based on discussions with Ad Hoc Committee.

A. Determine the transportation network improvements needed to accommodate the projected traffic demand in Costa Mesa in year 2020 as determined in the General Plan Update;

B. Estimate total costs of transportation/circulation improvements needed;

C. Adjust transportation/circulation improvements cost that is attributed to - existing deficiencies in the transportation/circulation system due to existing uses; estimated growth in population; excess capacity; and regional traffic.

D. Estimate the number of new average daily vehicle trip ends generated by development of new commercial, industrial and residential uses within Costa Mesa by Year 2020 based on the General Plan Update.

E. The maximum traffic impact fee is the total transportation/circulation improvement costs in subsection B, less the adjustments in subsection C, divided by the new average daily trip ends in subsection D.

F. The baseline traffic impact fee is the minimum traffic impact fee adopted by Growth Management Area No. 8, which is 0.5% of the valuation of construction work authorized by a building permit.

6.1 LIST OF IMPROVEMENTS

The General Plan Circulation Element includes Master Plan of Highways (MPH), a hierarchy of streets and highways that would accommodate the future transportation demand that is expected by year 2020 due to buildout of land uses in the City and surrounding region. Improvements needed to maintain standard levels of service at all City intersections are determined based on the MPH.

The City's General Plan, including the Circulation Element, was updated and approved by the Planning Commission on October 22, 2001 and by the City Council on January 22, 2002. Final Environmental Impact Report (EIR) #1049, which identified impacts and mitigation measures of the General Plan Update, was prepared and approved concurrent with the General Plan.

Table 1 provides a comparison of land use and trip generation estimates between Year 2000 and General Plan in Year 2020. As shown in the table, the trip generation is expected to increase by approximately 20 percent to 1,277,683 average daily trips (ADT). These are trips generated within the City and doesn't account for regional traffic. Appendix B includes the detailed land use and trip generation information by zone as analyzed in the General Plan Update. The updated Circulation Element, which includes the City's MPH and Master Plan of Bikeways, is included in Appendix C.

The improvements required with the General Plan Update, and eligible for inclusion in traffic impact fee analysis, are identified in Table 2. The changes in the improvements compared to the earlier traffic impact fee analysis are also highlighted. Certain improvements were deleted as they are either complete, or not needed by year 2020 based on the General Plan Update. A few additional improvements were identified as needed by year 2020 due to changes in travel patterns with the new regional model. The additional improvements are due to re-distribution of traffic with the updated regional model. These improvements are within the scope of the current city's MPH. Therefore, an upward revision of the designation of any arterial is not required. In fact, the General Plan Update recommended initiation of downgrade process for some arterials in the City.

6.2 ESTIMATED COST OF IMPROVEMENTS

The Transportation Services Division developed detailed cost estimates of the improvements that are part of traffic impact fee study in March 2001. In order to estimate the costs of improvements, preliminary layout plans of improvements were prepared and most recent unit costs were used.

The total cost for arterial improvements is estimated to be approximately $49.5 million. The intersection modifications are estimated to cost approximately $18.4 million.

Several freeway improvements have already been funded using grant sources from Federal, State and Local agencies. In addition, the City in April 2000 contributed its share towards four freeway access improvement projects. These improvements were included in the traffic impact fee program. The four projects are:

- Anton Boulevard onramp;
- Avenue of the Arts offramp;
- Bristol Street offramp braid; and
- Hyland Avenue onramp.

The cost of the above freeway improvement projects is approximately $16.5 million.

TABLE 1
LAND USE AND TRIP GENERATION COMPARISON

Land Use Category	Existing			2020 General Plan		Net Increase	
	Units	Amount	ADT[1]	Amount	ADT	Amount	ADT
Residential	DU	40,330.00	316,499	42,469.00	339,093	2,139.00	22,594
Commercial (Retail & Office)	TSF	17,397.42	539,029	23,579.30	700,146	6,181.88	161,117
Industrial, R&D	TSF	14,416.19	124,432	17,550.51	151,931	3,134.32	27,499
Other[2]	--	--	81,725	--	86,513	--	4,788
Total			**1,061,685**		**1,277,683**		**215,998**

Notes:

1. Average Daily Traffic
2. Uses quantified in units other than dwelling units or square feet

TABLE 2

LIST OF IMPROVEMENTS FOR 2002 TRAFFIC IMPACT FEE STUDY

LOCATION	IMPROVEMENT
FREEWAY ACCESS IMPROVEMENTS	
Anton Avenue Onramp	
Avenue of the Arts Offramp	
Bristol Street North Braid	
Hyland Avenue Onramp	
SIGNIFICANT ARTERIAL IMPROVEMENTS	
~~17th (Superior to c/o Santa Ana Orange to Irvine)~~	~~Improve to 6 Lanes~~
17th (Placentia ~~Whittier~~ to Pomona ~~Superior~~)	Improve to 4 Lanes
17th (City Limits to Placentia)	Improve to 4 Lanes
~~18th (Park to Newport)~~	~~Improve to 4 Lanes~~
19th (Whittier to Monrovia)	Improve to 4 Lanes
~~22nd (SR-55 to Santa Ana)~~	~~Improve to 4 Lanes~~
Anton (Sunflower to Sakioka)	Restripe to 6 lanes
~~Baker (Bear to Red Hill)~~	~~Improve to 6 Lanes~~
~~Bear (@ SR-73)~~	~~Improve to 6 Lanes~~
Bear Street Overcrossing	Improve to 6 Lanes
Bristol (I-405 to Baker)	Improve to 7 Lanes (4 NB)
Bristol (Bear to Randolph)	Reconstruct for 3 Lanes SB
Del Mar (Elden to Santa Ana)	Improve to 4 Lanes
Fairview (Wilson to *Avocado* ~~SR-55~~)	Improve to 6 Lanes
Hyland (South Coast to Sunflower)	*Improve to 4 Lanes*
~~Red Hill (I-405 to Bristol)~~	~~Improve to 6 Lanes~~
Santa Ana (Mesa to Del Mar)	Improve to 4 Lanes
Wilson (College to Fairview)	Improve to 4 Lanes
Wilson (Fairview to Newport)	Improve to 4 Lanes
Wilson (~~Placentia~~ Pomona to Harbor)	Improve to 4 Lanes
INTERSECTION MODIFICATIONS	
~~Newport & 19th~~	~~Add 3rd WBT, 2nd SBL, EBR to 3rd EBT & free WBR~~
~~Newport & 18th~~	~~Add 2nd NBL, 2nd EBL & SBR~~
~~Newport & 17th~~	~~Add 2nd WBL~~
Orange & 17th	Add NBR, *SBR,* EBT, WBT *and WBR*
Santa Ana & 17th	Add NBR, SBR, EBR, WBR, 3rd EBT & WBT
Tustin & 17th	Add NBR. EBR, WBR~~, 3rd EBT & WBT~~
Superior & 16th	Add WBL
~~Bristol & Sunflower~~	~~Add WBR~~
~~Sakioka/Flower & Sunflower~~	~~Add EBR~~
Anton & Sunflower	Add 2nd WBL
Bristol & Town Center	Add 2nd WBL ~~& free EBR~~
Bristol & Paularino	Add 4th NBT, 2nd WBL[1]
SR-55 SB Ramps & Paularino	Add ~~SBL~~*SBR*
~~Bear & SR-73 SB Ramps~~	~~Add 3rd NBT & EBR~~
Bear & Baker	Add~~-EBR, 2nd NBT, &~~ 3rd WBT
Bristol & Baker	Add 3rd EBT, *EBL,* WBT, & 4th NBT

TABLE 2

LIST OF IMPROVEMENTS FOR 2002 TRAFFIC IMPACT FEE STUDY

LOCATION	IMPROVEMENT
SR-55 SB Ramps & Baker	Add ~~3rd EBT, WBT, SBL, SBR, free EBR, & 2nd SBT to SBT/SBR~~ *free SBR*
Harbor & Sunflower	Add EBR, WBR & NBR
Fairview & Sunflower	Add SBR & EBR
Harbor & South Coast	Add ~~NBR, SBR, WBR~~, 2nd WBL, ~~& 4th SBT~~ *WBR, 2nd EBR; Convert SBT to SBR and EBT+R to EBT*
Harbor & Gisler	Add WBR, SBR, & 5th NBT
~~Harbor & Nutmeg~~	~~Add 4th SBT & Convert NBR to 4th NBT~~
~~Harbor & Baker~~	~~Add 4th NBT, SBT & 2nd EBL~~
~~Fairview & Baker~~	~~Add 3rd WBT, 4th SBT & Convert EBR to 3rd EBT~~
Fairview & Adams	Convert SBR to free flow SBR
SR-55 NB Ramps & Paularino	Add WBR ~~& 2nd WBR~~
~~Redhill & Paularino~~	~~Add 3rd WBT, 4th SBT, & EBR to 3rd EBT~~
SR-55 NB Ramps & Baker	Add ~~3rd EBT, WBT, 2nd NBT, NBL, NBR & NBL/NBT to NBL~~ *EBL, NB Lane*
~~Red Hill & Baker~~	~~Add 3rd NBT, SBT/SBR & SBR~~
Bristol & Bear	Add 3rd SBT
~~Bristol (N/S) & Newport NB~~	~~Add EBR & 3rd NBT, SBT~~
~~Bristol (N/S) & Redhill~~	~~Add EBR & 3rd SBT~~
Newport NB & Del Mar	~~Add free WBR~~ *Convert WBT to WBT+R*
Fairvew & Wilson	Add 3rd NBT, 2nd EBT, WBT; *Convert SBR to SBT+R*
Newport NB & Victoria/22nd	Add 2nd EBT, *WBT+R; Convert NBR to NBT+R and NBL to NBT+L*
Harbor & Adams	Add NBR, *EBL; Remove EBR; Convert SBT to SBT+R*
Harbor & Wilson	Add ~~EBR &~~ WBR
~~Monrovia & 19th~~	~~Add NBR~~
~~Irvine & 19th~~	~~Add SBR~~
~~Orange & 19th~~	~~Add SBR~~
~~Santa Ana & 19th~~	~~Add NBR & SBR~~
~~Tustin & 19th~~	~~Add NBR & SBR~~
Newport SB & Victoria	*Add 4th EBT; Convert SBR to free SBR*
Harbor & 19th	*Convert NBR to NBT+R and SBR to SBT+R*
Newport & Industrial	*Add SBR*
Bristol & Sunflower	*Add NBL and WBT; Convert NBT to NBT+R*
Fairview & South Coast	*Add SBT, WBR; Convert EBT to EBT+R*
Harbor & I-405 NB Ramps	*Add NBT*
Fairview & I-405 SB Ramps	*Convert NBT to NBT+R; Convert EBR to EBL+R; Add SBL*
Mesa Verde E & Adams	*Convert SBT to SBT+R*

Note: All new improvements are italicized and deleted improvements are striked out.

The total cost of all improvements (arterial, intersection and freeway access) is approximately $84.4 million. Compared to the earlier traffic impact fee analysis, the cost of future improvements were reduced by approximately 50 percent.

6.3 ADJUSTMENTS TO COSTS

Consistent with the principles of Russ Bldg. Partnership v. City and County of San Francisco (1987) 1999 Cal.App.3d 1469 [246 Cal. Rptr. 21] and Bixel Associates v. City of Los Angeles (1989) 215 Cal.App.3d 1208, the total cost of all transportation improvements, including arterial, intersection and freeway access, of $84.4 million has been subject to a series of adjustments to assure that new development projects pay only their fair share of the cost of improvements required by such development.

In summary, the adjustments include the following:

- The cost of improvements to correct the existing deficiencies in the City transportation/circulation system due to existing land uses and population;
- The cost of improvements to the City transportation/circulation system due to the natural growth of population not attributed to new commercial, industrial and residential developments between now and buildout (Post-2010) of the 1990 General Plan;
- The cost of improvements to maintain the "reserve" capacity of City transportation/circulation system; and
- The cost of improvements to the City transportation/circulation system due to the regional traffic generated by uses and population outside of the City of Costa Mesa.

The adjustments and methodology of these items are discussed below:

Existing Deficiencies

The 1990 General Plan and the Update identifies LOS "D" or better as the established traffic level of service at all signalized intersections under the sole control of the City. LOS is determined using the Intersection Capacity Utilization (ICU) methodology. The City of Costa Mesa does not have an adopted LOS standard for arterials or freeways. Typically, intersections need to be widened before mid-block sections. Arterial improvements, hence, are based on intersection improvements.

The relationship between LOS and ICU is shown in table below:

Level of Service	Intersection Capacity Utilization
A	0.00 – 0.60
B	0.61 – 0.70
C	0.71 – 0.80
D	0.81 – 0.90
E	0.91 – 1.00
F	> 1.00

The City of Costa Mesa Transportation Services Division, in conjunction with Development Services Department, prepares an annual report titled Development Phasing and Performance Monitoring Program (DPPMP). This report provides the means to track land use entitlements and construction activity, monitor arterial highway volumes and intersection levels of service, and identify deficiencies and program future capital improvements. The DPPMP will ensure that improvements to the transportation circulation system will be consistent with the approved level of development.

Existing deficiencies include those transportation facilities that are currently operating at a level of service (LOS) worse than adopted standard acceptable level of service. The most recent DPPMP completed in October 2001, identified two intersections as deficient. These are:

- Newport Boulevard Northbound Frontage Road & Victoria Street/22nd Street; and
- Newport Boulevard Southbound Frontage Road & Victoria Street.

Appendix D includes a table from October 2001 DPPMP providing existing ICU values and LOS at all intersections.

The proposed improvement at Newport Boulevard Northbound Frontage Road & Victora Street/22nd Street intersection would result in improving the ICU to acceptable conditions (LOS D). The proposed improvement consists of only restriping and presents nominal cost.

For the Newport Boulevard Southbound Frontage Road & Victoria Street intersection, the City is proposing a southbound free-flow right-turn lane consistent with the General Plan configuration. The cost of this improvement is estimated to be approximately $330,000. With the proposed improvement, the intersection of Newport Boulevard Southbound Frontage Road & Victoria Street would operate at an ICU value of 0.60 (improvement of 0.33). The existing deficiency is 0.03. Therefore 9 percent of the cost of the improvement (0.03/0.33), $29,700, would be deducted from the total cost of improvements.

Existing Population Growth

Based on the Costa Mesa Traffic Model (CMTM), the growth of existing traffic does not create a demand for traffic improvements. The amount of growth in population is achieved by increasing the number of dwelling units in the City. These increases in dwelling units are also subject to traffic impact fee. Therefore, no deduction will be made to the total cost of improvements attributable to developments subject to traffic impact fee because the model addresses the growth of existing population.

Excess Capacity

City staff has identified two components to determine excess and reserve capacity. Excess capacity is the current level of service at intersections and arterials, which are below LOS D. The excess capacity on the City's transportation/circulation system is a valuable asset to the City for which new development has not been charged a traffic impact fee. Any unidentified excess capacity for a transportation system improvement, which may be paid for by developers through the payment of traffic impact fee, is offset by the reserve capacity provided to new development. Furthermore, the exclusion of administrative costs attributed to new developments also offset any unidentified excess capacity.

The City recognizes that, the Russ decision provides that the City cannot have new development pay to reserve capacity for its system at LOS D (Id, supra, 199 Ca.App.3d at p.1516). As LOS E represents true capacity, LOS D standard reflects a 10 percent capacity reserve. Therefore, the cost of freeway access, arterial and intersection improvements applicable to new developments was further reduced by 10 percent to account for reserve capacity. This reduction amounts to approximately $4.3 million.

Regional Traffic

The amount of regional traffic using the City's transportation system was determined using the Costa Mesa Transportation Model (CMTM). A trip is considered regional if both ends of the trip are outside the city limits. If one end of the trip is within the city, one-half of that trip is considered regional. Approximately 201,148 new regional trips are estimated to create the need for freeway, arterial and intersection improvements required by year 2020 in the City of Costa Mesa.

The share of freeway access, arterial and intersection improvements attributable to regional traffic was estimated at $8.6 million, $24.1 million and $9.0 million, respectively. These costs have been deducted from total cost of improvements attributable to new developments subject to traffic impact fees.

Existing Fund Balance

The traffic impact fee account balance as of April 1, 2002, is $2,093,987. This amount has been subtracted from the total cost of improvements, as these funds would be used on projects listed in the traffic impact fee calculation. The amount was proportionally distributed between Districts 1 and 2 based on number of trips.

Summary of Adjustments

The total cost of improvements subject to the traffic impact fee is calculated by subtracting the adjustments from the total cost of all improvements. Based on the above analysis, total amount of adjustments is $48.1 million. Subtracting this amount from the

total cost of improvements of $84.4 million, results in a total amount of $36.3 million subject to traffic impact fees.

6.4 TRAFFIC GENERATED BY NEW DEVELOPMENTS

The traffic impact fee could be based on the number of trips generated by the new developments during the A.M. peak hour, P.M. peak hour or on a daily basis. Upon careful consideration of all aspects of a variety of alternatives, a trip fee based on Average Daily Trips (ADT) is determined to be the most equitable for all different land uses.

The traffic share analysis methodology in the CMTM identifies the number of new daily trip ends from pre-determined areas that use a specified transportation facility using the "select link" analysis process. The pre-determined areas include districts within the City and regional areas outside the City. The number of regional trips estimated earlier was determined using this methodology. The select link process identifies each trip using a specified street by the origin end and destination end. If both ends of a trip are within the City, this trip is considered a local trip. If both ends are outside the City, i.e., the trip essentially passes through Costa Mesa using the specified street, then it is considered as a regional trip. Trips that have one end in the City and another outside are divided between regional and local trips.

Based on this methodology, the total number of new trips that create the need for improvements is 405,949. Regional trips account for 201,148 trips of the total 405,949 new trips, resulting in a net total of 204,801 trips, generated by new developments in the City of Costa Mesa.

The number of trips estimated above can be further subdivided into separate districts. The current trip fee program consists of two districts. District 1 includes areas north of the I-405 and SR-73 Freeways and District 2 includes areas south of I-405 and SR-73 Freeways. The number of trips in District 1 and District 2 that create the need for improvements is estimated to be 119,007 and 85,794, respectively.

Table 3 on Pages 12 and 13 of this study provides details on each improvement including its estimated cost, the number of local trips by district, regional trips, cost allocations, and adjustment for excess capacity and existing deficiencies.

6.5 CALCULATION OF TRAFFIC IMPACT FEE

The maximum traffic impact fee is the cost of the total transportation/circulation improvements in subsection B, less the adjustments in subsection C, divided by the new average daily trip ends in subsection D.

The total improvement costs were estimated to be approximately $84.4 million. The total adjustments were estimated to be $48.1 million, resulting in a net cost of $36.3 million that is subject to traffic impact fees imposed on new de elopments in the City. The total number of new trips that will be generated by new developments in the City of Costa Mesa is estimated to be 204,801. This results in a "citywide" traffic impact fee of approximately $177 per average daily trip.

TABLE 3

TRAFFIC IMPACT FEE ANALYSIS - 2002

LOCATION	IMPROVEMENT	TOTAL ESTIMATED COST	New Trip Ends				Cost Allocation			
			District 1	District 2	Regional	Total	District 1	District 2	Regional	Total
FREEWAY ACCESS IMPROVEMENTS										
Anton Avenue Onramp		$4,533,291	1,613	111	996	2,720	$1,739,163	$119,682	$2,674,446	$4,533,291
Avenue of the Arts Offramp		$1,012,797	311	0	958	1,269	$506,399	$0	$506,399	$1,012,797
Bristol Street North Braid		$10,517,168	574	0	1,891	2,465	$5,258,584	$0	$5,258,584	$10,517,168
Hyland Onramp		$450,000	1,053	29	842	1,924	$218,970	$6,030	$225,000	$450,000
Subtotal		**$16,513,256**					**$7,723,115**	**$125,713**	**$8,664,429**	**$16,513,256**
SIGNIFICANT ARTERIAL IMPROVEMENTS										
17th (City Limits to Pomona)	Improve to 4 Lanes	$6,000,000	66	1,508	1,474	3,048	$129,921	$2,968,504	$2,901,575	$6,000,000
19th (Whittier to Monrovia)	Improve to 4 Lanes	$3,000,000	56	955	4,981	5,992	$28,037	$478,138	$2,493,825	$3,000,000
Anton (Sunflower to Sakioka)	Restripe to 6 lanes	$40,000	8,318	265	3,281	11,864	$28,045	$893	$11,062	$40,000
Bear Street Overcrossing	Improve to 6 Lanes	$5,141,680	1,724	807	3,728	6,259	$1,416,242	$662,939	$3,062,499	$5,141,680
Bristol (I-405 to Baker)	Improve to 7 Lanes (4 NB)	$2,670,000	4,701	1,147	5,083	10,931	$1,148,264	$280,166	$1,241,571	$2,670,000
Bristol (Bear to Randolph)	Reconstruct for 3 Lanes SB	$480,000	3,032	1,150	3,132	7,314	$198,983	$75,472	$205,546	$480,000
Del Mar (Elden to Santa Ana)	Improve to 4 Lanes	$6,750,000	182	943	870	1,995	$615,789	$3,190,602	$2,943,609	$6,750,000
Fairview (Wilson to Avocado)	Improve to 6 Lanes	$775,000	599	1,039	684	2,322	$199,925	$346,781	$228,295	$775,000
Hyland (South Coast to Sunflower)	Improve to 4 Lanes	$30,000	601	145	496	1,242	$14,517	$3,502	$11,981	$30,000
Santa Ana (Mesa to Del Mar)	Improve to 4 Lanes	$3,000,000	185	846	1,019	2,050	$270,732	$1,238,049	$1,491,220	$3,000,000
Wilson (College to Fairview)	Improve to 4 Lanes	$7,619,187	261	1,644	1,355	3,260	$610,002	$3,842,314	$3,166,871	$7,619,187
Wilson (Fairview to Newport)	Improve to 4 Lanes	$1,516,000	129	637	493	1,259	$155,333	$767,031	$593,636	$1,516,000
Wilson (Pomona to Harbor)	Improve to 4 Lanes	$12,440,000	225	735	824	1,784	$1,568,946	$5,125,224	$5,745,830	$12,440,000
Subtotal		**$49,461,867**					**$6,384,735**	**$18,979,614**	**$24,097,518**	**$49,461,867**
INTERSECTION MODIFICATIONS										
Orange & 17th	Add NBR, SBR, ~~EBT, WBT~~ and WBR	$470,000	561	5,151	3,557	9,269	$28,446	$261,190	$180,364	$470,000
Santa Ana & 17th	Add NBR, SBR, EBR, WBR, ~~3rd EBT & WBT~~	$852,000	409	3,380	2,989	6,778	$51,412	$424,869	$375,720	$852,000
Tustin & 17th	Add NBR, EBR, WBR	$870,000	327	2,841	2,698	5,866	$48,498	$421,355	$400,147	$870,000
Superior & 16th	Add WBL	$7,000	276	2,043	2,462	4,781	$404	$2,991	$3,605	$7,000
Anton & Sunflower	Add 2nd WBL	$250,000	5,867	60	5,855	11,782	$124,491	$1,273	$124,236	$250,000
Bristol & Town Center	Add 2nd WBL	$410,000	2,260	667	6,357	9,284	$99,806	$29,456	$280,738	$410,000
Bristol & Paularino	Add 2nd WBL[1], 4 NBT	$25,000	4,569	1,328	4,789	10,686	$10,689	$3,107	$11,204	$25,000
SR-55 SB Ramps & Paularino	Add SBR	$185,000	1,566	372	4,989	6,927	$41,823	$9,935	$133,242	$185,000
Bear & Baker	Add-3rd WBT	$232,000	4,653	471	3,961	9,085	$118,822	$12,028	$101,150	$232,000
Bristol & Baker	Add 3rd EBT, WBT, NBL, SBL, 4th NBT[2]	$582,500	6,458	1,519	6,915	14,892	$252,604	$59,416	$270,480	$582,500
SR-55 SB Ramps & Baker	Add free SBR	$365,000	3,656	1,075	6,824	11,555	$115,486	$33,957	$215,557	$365,000
Harbor & Sunflower	Add EBR, WBR & NBR[2]	$262,500	3,019	1,271	6,733	11,023	$71,894	$30,267	$160,339	$262,500
Fairview & Sunflower	Add SBR & EBR	$637,000	4,238	1,230	9,536	15,004	$179,926	$52,220	$404,854	$637,000

TABLE 3

TRAFFIC IMPACT FEE ANALYSIS - 2002

LOCATION	IMPROVEMENT	TOTAL ESTIMATED COST	New Trip Ends				Cost Allocation			
			District 1	District 2	Regional	Total	District 1	District 2	Regional	Total
Harbor & South Coast	Add 2nd WBL, WBR, 2nd EBR; Convert SBT to SBR and EBT+R to EBT	$1,722,000	6,989	1,734	7,790	16,513	$728,823	$180,824	$812,353	$1,722,000
Harbor & Gisler	Add WBR, SBR, & 5th NBT	$939,000	6,509	3,088	8,854	18,451	$331,253	$157,153	$450,594	$939,000
Fairview & Adams	Convert SBR to free flow	$260,000	3,165	2,271	3,958	9,394	$87,598	$62,855	$109,547	$260,000
SR-55 NB Ramps & Paularino	Add WBR	$425,000	1,389	489	4,659	6,537	$90,305	$31,792	$302,903	$425,000
SR-55 NB Ramps & Baker	Add EBL, NB Lane	$255,000	2,044	1,026	5,391	8,461	$61,603	$30,922	$162,475	$255,000
Newport NB & Del Mar	Convert WBT to WBT+R	$150,000	946	3,355	3,397	7,698	$18,433	$65,374	$66,193	$150,000
Fairvew & Wilson	Add 3rd NBT, 2nd EBT, WBT; Convert SBR to SBT+R	$1,286,130	1,346	3,184	2,737	7,267	$238,218	$563,511	$484,400	$1,286,130
Newport NB & Victoria/22nd	Add 2nd EBT, WBT+R; Convert NBR to NBT+R and NBL to NBT+L	$612,800	688	3,890	2,713	7,291	$57,826	$326,950	$228,024	$612,800
Harbor & Wilson	Add WBR	$295,000	1,816	5,843	2,737	10,396	$51,531	$165,803	$77,666	$295,000
Harbor & Adams	Add NBR, EBL; Convert SBT to SBT+R	$1,332,000	3,725	5,020	4,321	13,066	$379,741	$511,759	$440,500	$1,332,000
Newport SB & Victoria	Add 4th EBT; Convert SBR to free SBR (9% of total cost)	$610,270	815	6,178	3,483	10,476	$47,477	$359,894	$202,899	$610,270
Harbor & 19th	Convert NBR to NBT+R and SBR to SBT+R	$10,000	1,003	6,465	5,643	13,111	$765	$4,931	$4,304	$10,000
Newport & Industrial	Add SBR	$350,000	875	2,582	8,526	11,983	$25,557	$75,415	$249,028	$350,000
Bristol & Sunflower	Add NBL and WBT; Convert NBT to NBT+R	$1,180,000	4,313	628	8,509	13,450	$378,390	$55,096	$746,514	$1,180,000
Fairview & South Coast	Add SBT, WBR; Convert EBT to EBT+R	$942,000	6,781	1,348	9,283	17,412	$366,856	$72,928	$502,216	$942,000
Harbor & I-405 NB Ramps	Add NBT	$3,275,000	6,822	2,381	8,767	17,970	$1,243,297	$433,933	$1,597,770	$3,275,000
Fairview & I-405 SB Ramps	Convert NBT to NBT+R; Convert EBR to EBL+R; Add SBL[2]	$100,000	6,026	1,735	8,247	16,008	$37,644	$10,838	$51,518	$100,000
Mesa Verde E & Adams	Convert SBT to SBT+R	$2,500	2,266	1,208	2,361	5,835	$971	$518	$1,012	$2,500
Subtotal		**$18,424,700**					**$5,262,144**	**$4,191,370**	**$8,971,186**	**$18,424,700**
TOTAL		**$84,399,823**	**119,007**	**85,794**	**201,148**	**405,949**	**$19,369,995**	**$23,296,696**	**$41,733,132**	**$84,399,823**

Existing Balance	**$950,637**	**$1,143,350**	**$2,093,987**
New Daily Trip Ends	**119,007**	**85,794**	
District Fee per ADT	**$138**	**$231**	
Citywide Fee per ADT	**$177**		

1) The earlier General Plan improvement of 2 right-turn lanes was $25,000. Provision of 2 left-turn lanes is part of Town Center project. This is projected to cost an additional $198,000.

2) A portion of these improvements were conditioned to the Home Ranch Project and were not included in trip fee calculation.

If the two district plan is selected, the improvement cost for each district needs to be allocated in proportion to the number of trips in that district. The total cost of approximately $36.3 million that is subject to traffic impact fee would be segregated to District 1 and District 2. The District 1 share is approximately $16.5 million and the District 2 share is approximately $19.8 million. The number of trips generated by new developments within District 1 and District 2 is estimated to be 119,007 and 85,794, respectively. This results in a traffic impact fee of $138 per average daily trip for District 1 and a traffic impact fee of $231 per average daily trip for District 2.

The District 2 traffic impact fee is higher than District 1 due to higher cost of improvements in District 2 and the fewer number of trips that would utilize and pay for these improvements.

6.6 BASELINE TRAFFIC IMPACT FEE

The baseline traffic impact fee is the minimum traffic impact fee charged by a municipality within the Growth Management Area No. 8, which is the City of Irvine fee of 0.5% of the valuation of construction work authorized by a building permit. The 0.5% building valuation compares with approximately $133 per trip end.

7.0 INCENTIVE PROGRAM

Further adjustments to traffic impact fee have been approved by the City Council to reduce the overall financial burden on developers and to provide an incentive for certain types of development in specific areas of the City. Reductions in the traffic impact fee are currently provided for the following cases:

- All projects receive a reduced traffic impact fee rate for the first 100 trips generated through the application of a tiered fee structure. Under this structure, the first 25 trips pay no fee. For trips between 25 and 50, the traffic impact fee is $50 per trip. For trips between 50 and 75, the traffic impact fee is $75 per trip, and for trips between 75 and 100, the traffic impact fee is $100 per trip. Staff estimated that this reduces the traffic impact fee revenue by approximately $150,000 per year.

- All developments within the Newport Boulevard Specific Plan area receive a reduction in the traffic impact fee as an incentive to encourage certain types of development within the Specific Plan area. Staff estimated that there were three qualifying projects over the past five years that resulted in a reduction in traffic impact fee revenue of approximately $200,000. At present there are no pending projects in the Newport Boulevard Specific Plan area that have a net increase in average daily trips where payment of traffic impact fee is required.

- Public benefit facilities, including schools, libraries, parks, utilities, administration and related facilities are exempt from payment of traffic impact fee.

- New developments or changes in use within existing developed properties receive credit for trip generation based on prior use.

8.0 RECOMMENDATION

Staff and the City Council appointed Traffic Impact Fee Ad Hoc Committee recommend that the City Council adopt a "citywide" traffic impact fee of $177 per average daily trip. It is also recommended that the above incentive program be continued with the exception that the credit for first 100 trips should be applied only to new developments and not to expansions. Where an expansion of a project is being considered, the first 100 trips from the entire project, including the existing development should be considered to determine whether it qualifies for the incentive program.

APPENDIX A

ARTICLE 3. TRANSPORTATION SYSTEM MANAGEMENT

Sec. 13-271. PURPOSE

The purpose of this article is to set forth the provisions for assuring an adequate transportation system in conjunction with new development.

Sec. 13-272. DEFINITIONS

For the purpose of this article, the following definitions shall apply:

Development project. This article applies to the following development project approvals: general plan amendments, specific plans, master plans, rezones, development reviews, variances, use permits, administrative adjustments, minor modifications and development agreements, unless otherwise exempted by Section 13-276 EXEMPTIONS.

Intersection. The general area where 2 or more roadways join or cross.

Measurable traffic. A volume of traffic which will result in a 0.01 or greater increase in the peak period volume to capacity ratio at any given signalized intersection.

Potentially deficient intersection. An intersection identified in the General Plan for which the standard level of service may not be feasible upon General Plan buildout. The intersection volume to capacity ratios identified in the General Plan shall not be exceeded for these intersections.

Pro rata. A proportionate share based on a development project's impacts.

Standard Level of Service. The Standard Level of Service shall be Level of Service "D" or better (0.90 or less volume to capacity ratio) for all signalized arterial intersections within the City during peak hours Monday through Friday with the exception of those intersections identified as potentially deficient in the General Plan. Levels of Service shall be defined and computed using the Intersection Capacity Utilization (ICU) methodology.

Transportation Demand Management Program. A series of required and/or voluntary actions which reduce the vehicle trip generation rate of a specific use or uses of land.

Sec. 13-273. COMPREHENSIVE TRANSPORTATION SYSTEM IMPROVEMENT PROGRAM

(a) **Purpose.** The Comprehensive Transportation System Improvement Program shall be adopted by resolution of the City Council which addresses the cumulative impacts of development in a defined impact area. This program shall mandate circulation improvements, including freeway improvements, to ensure that the Master Plan of Highways is constructed and that the Standard Level of Service is achieved and will be maintained at all intersections in the defined impact area in accordance with the General Plan. For those intersections identified as potentially deficient, the program shall identify the maximum improvements feasible in accordance with the General Plan. The program shall address the funding, construction and maintenance of transportation facilities to implement the Master Plan of Highways. The program shall be updated on an annual basis.

(b) **Relationship to development fee program.** The Comprehensive Transportation System Improvement Program shall be utilized to determine the pro rata share of the cost of necessary improvements attributable to development projects as described in Section 13-274 DEVELOPMENT FEE PROGRAM.

(c) **Development Phasing and Performance Monitoring Report.** Each year the City shall prepare a Development Phasing and Performance Monitoring Report which shall be used to update the Comprehensive Transportation System Improvement Program.

(d) **Interim Approval Procedure.** Until such time as this program is adopted, development projects not exempted pursuant to Section 13-276 EXEMPTIONS may be approved if the City adopts findings that the development projects are consistent with the provisions of this article.

Sec. 13-274. DEVELOPMENT FEE PROGRAM

(a) **Establishment of Development Impact Fee Program.** A development impact fee program shall be established by resolution of the City Council based on the Comprehensive Transportation System Improvement Program. The program shall set forth the basis for the fee as required by State Government Code Section 66001. The program shall establish guidelines for payment, accounting, and refund of the fees collected as required by State Government Code Sections 66001, 66006 and 66007.

(b) **Updates of fee.** On an annual basis, the City Council shall review this fee program, as required by State Government Code Section 66002, to determine whether the fee amounts are reasonably related to the impacts of development projects and whether the described public facilities are still needed.

(c) **Limited use of fees.** The revenues raised by payment through this fee program shall be placed in a separate and special account and such revenues, along with any interest earnings on that account, shall be used solely to:

(1) Pay for the City's future construction of facilities or to reimburse the City for those facilities, described or listed in the program, constructed by the City with funds advanced by the City from other sources; or

(2) Reimburse developers who have been required or permitted to install such listed facilities to the extent the actual cost of the facilities installed by the developer exceeds the impact fee obligation of the development project.

(d) **Developer construction of public facilities.** Whenever the conditions of approval of a development project require direct construction of a public transportation facility (see Section 13-275(c) DEVELOPMENT PROJECT REVIEW PROCEDURES) described or listed in the Comprehensive Transportation System Improvement Program, a credit or reimbursement, as applicable, shall be given against the development impact fee, which would have been charged to the development project under the program, for actual construction costs incurred by the developer. The reimbursement and/or credit amount shall not include any improvements the City can require from the development project under the Subdivision Map Act, or the portion of the improvement deemed to be an on-site improvement that is not included in the Comprehensive Transportation System Improvement Program.

(e) **Fee adjustments.** A developer of any development project subject to the fee program provided in this article may apply to the City Council for:

(1) A waiver of the fee, or portion of the fee, based upon adequate documentation of the absence of any reasonable relationship or nexus between the circulation impacts of that development project and either the amount of the fee charged or the type of facilities to be financed; or

(2) A reduction of the fee based upon the implementation of a Transportation Demand Management Program, as described in Section 13-275(d)- DEVELOPMENT PROJECT REVIEW PROCEDURES.

(3) The application for a fee waiver shall be made in writing and filed with the City Clerk not later than:

a. 10 days prior to the public hearing on the development permit application for the project; or

b. If no development permit is required, at the time of the filing of the request for a building permit.

(4) The application shall state in detail the factual basis for the claim of waiver. The City Council shall consider the application at the public hearing on the permit application held within 60 days after the filing of the application. The decision of the City Council shall be final. If a waiver is granted, any change in use or increase in building intensity within the development project shall invalidate the waiver of the fee, and the developer shall be obligated to pay the full amount of the fee attributed to the development project, including the change in use or increase in intensity, as provided by this article.

(f) **Fee refunds.** A refund shall be made when a building permit expires and no extensions have been granted for a development project for which the funds have been collected and the development project has not been constructed.

(g) **Fees for phased development projects.** Where there is a requirement imposed upon a phased development project pursuant to this article for the payment of traffic impact fees into a Comprehensive Transportation System Improvement Program, such fees may be payable on a pro rata basis as each phase of the project is completed, in conjunction with the improvements accomplished.

Sec. 13-275. DEVELOPMENT PROJECT REVIEW PROCEDURES

(a) **Traffic study required.** A traffic impact study shall be required for all development projects estimated by the Public Services Director to generate 100 or more vehicle trip ends during a peak hour. Traffic studies may also be required for smaller projects at the discretion of the Public Services Director. The cost of the study shall be paid for by the developer. The study area and number of intersections to be analyzed shall be determined by the Public Services Director and the study area shall be reasonably related to the estimated impacts attributed to the development project. The traffic study shall also identify mitigation measures that are reasonably related to the development project's traffic impacts.

(b) **Mitigation measures.** Mitigation measures for development projects shall consist of either payment of a development impact fee and/or construction of circulation improvements. The necessary circulation improvements may be designed and constructed by the developer as determined by the City. These mitigation measures shall be incorporated as conditions of the development project's approval. Table 13-275 indicates the criteria for either requiring payment of a development impact fee and/or construction of circulation improvements.

(c) **Approval criteria.** A development project may be approved if as a condition of approval it is required to construct a circulation improvement and/or pay a development impact fee, as shown in Table 13-275, and if a finding is made that the development project's impacts will be mitigated at all affected intersections within 3 years of issuance of the first building permit for the development project, as described in subsection (b), unless additional right-of-way or coordination with other government agencies is required to complete the improvement. If right-of-way acquisition or coordination with other governmental agencies delays the improvement construction, appropriate measures shall be taken to ensure that the improvement construction occurs in a timely manner. Circulation improvements may be required sooner if, because of extraordinary traffic generation characteristics of the development project or extraordinary impacts to the surrounding circulation system, the circulation improvements are necessary to prevent significant adverse impacts. For phased development projects, the construction of circulation improvements may be phased as well based upon the findings of the traffic study.

(d) **Transportation Demand Management Program.** Where a Transportation Demand Management Program is used to reduce vehicle trips related to a development project, the program shall comply with the following:

(1) A conditional use permit for the development project and program must be approved by the Planning Commission consistent with the requirements of subsection (c). An annual report shall be prepared for the City at the expense of the property owner, to show whether the vehicle trip reduction identified in the program has been achieved and maintained.

(2) If the annual report demonstrates that the vehicle trip reductions identified in the program have not occurred, the conditional use permit shall be reevaluated and additional conditions imposed by the Planning Commission in order to meet the requirements of this article.

(3) The traffic impact development fees required under this article shall be based on the trip generation forecast without consideration of estimated reductions associated with a Transportation Demand Management Program. An application for a fee reimbursement may be approved by the City Council pursuant to Section 13-274(e)-DEVELOPMENT FEE PROGRAM based upon documentation of average annual trip reduction over a 3 year period as reported in the annual monitoring report referenced in Section 13-273(c) COMPREHENSIVE TRANSPORTATION SYSTEM IMPROVEMENT PROGRAM.

(e) **Change of use.** Each development project approved under this article shall be reevaluated by the Public Services Director when any change in use occurs which may increase the project's traffic generation. The purpose of this reevaluation is to assure that traffic capacity is available in the transportation system. Any increase in traffic generation by the change of use shall be subject to review by the appropriate reviewing authority who may impose additional conditions on the development project for the mitigation of the increased traffic generation.

Table 13-275
DEVELOPMENT IMPACT CRITERIA

PROJECT DEVELOPMENT SIZE	INTERSECTION CONDITION	ICU INCREASE[1]	MITIGATION MEASURE(S)	INTENT OF MITIGATION MEASURE(S)
Projects generating less than 100 peak hour trip ends	Adequate (Standard Level of Service or better) OR Deficient (exceeds Standard Level of Service)	Less than 1% 1% or greater	Payment of impact fee	Contribute to implementation of the Comprehensive Transportation System Improvement Program
Projects generating 100 or more peak hour tripends	Adequate (Standard Level of Service or better) OR Deficient (exceeds Standard Level of Service)	Less than 1%	Payment of impact fee	Contribute to implementation of the Comprehensive Transportation System Improvement Program
		1% or greater	Payment of impact fee and improvement construction by developer under conditions listed in footnote #2	Contribute to implementation of the Comprehensive Transportation System Improvement Program and mitigate development project's impacts

1. ICU = Intersection Capacity Utilization
2. When the project contributes 50% or more of the incremental impact at the intersection and all of the improvements identified in the General Plan at the subject location are required as mitigation. If all of the improvements identified in the General Plan are not required as mitigation, then only the improvements determined necessary by the Public Services Director shall be constructed by the developer.

Sec. 13-276. EXEMPTIONS

(a) **Exempt development projects.** Projects which fall within any of the categories listed below shall be exempt from the provisions of this article:

(1) Any residential construction that does not increase the number of permanent housing units on the lot where the construction takes place, such as remodeling or rebuilding an existing house or units. Granny units and accessory apartments are also exempt.

(2) Any industrial or commercial construction that neither increases the footprint nor square footage or changes the use on the lot where the construction takes place, such as remodeling or rebuilding an existing structure, and does not increase peak hour trip generation.

(3) Public benefit facilities limited to public libraries, public administration facilities, public parks, public utilities, schools and related facilities.

(4) Facilities serving the health and safety of the public, limited to hospitals, police, fire and safety facilities.

APPENDIX B

ADT AND PEAK HOUR TRIP RATE SUMMARY

Land Use Type	Units	-- AM Peak Hour -- In	Out	Total	-- PM Peak Hour -- In	Out	Total	ADT
1. Low Density Residential	DU	0.18	0.55	0.73	0.64	0.35	0.99	9.41
2. Medium Density Residential	DU	0.12	0.46	0.58	0.47	0.26	0.73	7.50
3. High Density Residential	DU	0.09	0.44	0.53	0.43	0.22	0.65	6.85
4. Neighborhood Commercial	TSF	1.19	0.59	1.78	2.28	2.75	5.03	53.77
5. General Commercial	TSF	1.11	0.63	1.74	1.85	2.12	3.97	40.60
6. Commercial Center	TSF	1.09	0.39	1.48	1.63	2.22	3.85	38.67
8. Urban Center Commercial	TSF	1.04	0.19	1.23	0.47	1.16	1.63	14.26
9. Light Industry	TSF	0.86	0.16	1.02	0.31	1.03	1.34	11.07
10. Industrial Park	TSF	0.79	0.16	0.95	0.20	0.79	0.99	7.40
11. Golf Course	ACRE	0.16	0.05	0.21	0.10	0.20	0.30	5.04
12. School (K-12)	STU	0.23	0.14	0.37	0.03	0.04	0.07	1.32
13. Public Facility	ACRE	0.16	0.02	0.18	0.04	0.19	0.23	2.57
14. Fairground	ACRE	0.00	0.00	0.00	2.00	2.00	4.00	12.30
15. Storage	TSF	0.09	0.06	0.15	0.13	0.13	0.26	2.50
16. Community College	STU	0.13	0.01	0.14	0.12	0.05	0.17	1.54
17. Cultural Arts Center	TSF	1.20	0.25	1.45	0.44	1.12	1.56	13.57
18. Movie Theater	SEAT	0.00	0.01	0.01	0.24	0.02	0.26	1.76
19. Performance Theater	SEAT	0.01	0.00	0.01	0.08	0.02	0.10	1.23
20. South Coast Metro	TSF	1.05	0.17	1.22	0.31	0.98	1.29	10.20
21. Metro Pointe	TSF	1.03	0.45	1.48	1.61	1.86	3.47	38.05

ADT AND PEAK HOUR TRIP GENERATION EQUATION SUMMARY

EQUATION FORM: LN(T)=A*LN(X)+B
WHERE: X=LAND USE AMOUNT & T=DAILY TRIPS

Land Use Type	Units	- Coefficients - A	B	-- AM Peak Hour -- Pk/ADT Ratio	In	Out	-- PM Peak Hour -- Pk/ADT Ratio	In	Out
7. Regional Commercial (EQ)	TSF	0.643	5.866	0.022	61%	39%	0.095	48%	52%

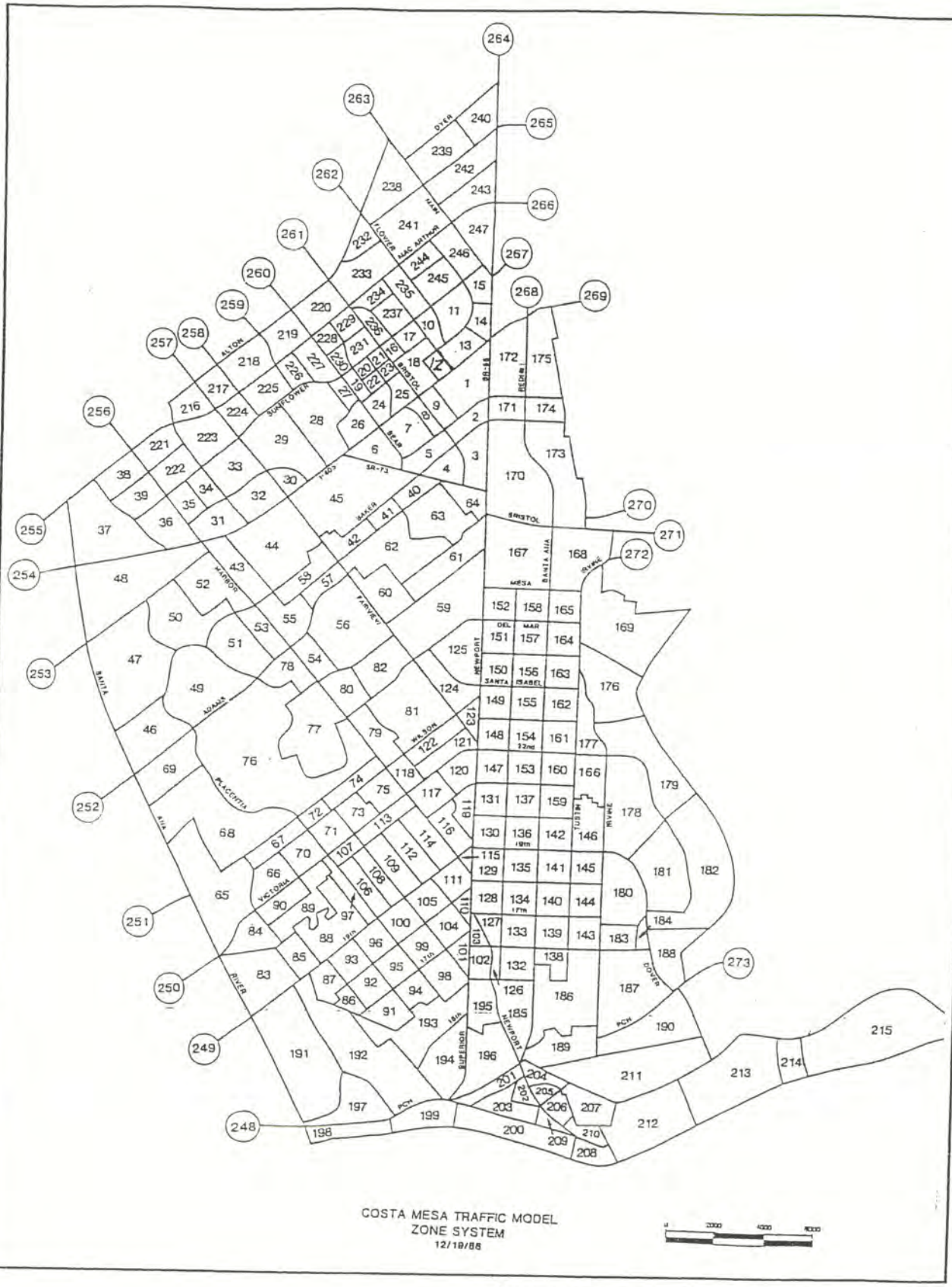


Figure B-1

CMTM TRAFFIC ANALYSIS ZONES

Existing (1998) ZONAL LAND USE AND TRIP GENERATION

Zone	Land Use Type	Units	-- AM Peak Hour -- In	Out	Total	-- PM Peak Hour -- In	Out	Total	ADT
1	1. Low Density Residential	235.00 DU	42	129	171	150	82	232	2211
	3. High Density Residential	487.00 DU	44	214	258	209	107	316	3336
	13. Public Facility	2.48 ACRE	0	0	0	0	0	0	6
	SUB-TOTAL		86	343	429	359	189	548	5553
2	3. High Density Residential	258.00 DU	23	114	137	111	57	168	1767
	4. Neighborhood Commercial	1.82 TSF	2	1	3	4	5	9	98
	5. General Commercial	135.42 TSF	150	85	235	251	287	538	5498
	9. Light Industry	103.88 TSF	89	17	106	32	107	139	1150
	SUB-TOTAL		264	217	481	398	456	854	8513
3	3. High Density Residential	716.00 DU	64	315	379	308	158	466	4905
	5. General Commercial	204.72 TSF	227	129	356	379	434	813	8312
	SUB-TOTAL		291	444	735	687	592	1279	13217
4	5. General Commercial	131.46 TSF	146	83	229	243	279	522	5337
	9. Light Industry	197.58 TSF	170	32	202	61	204	265	2187
	SUB-TOTAL		316	115	431	304	483	787	7524
5	3. High Density Residential	534.00 DU	48	235	283	230	117	347	3658
	5. General Commercial	64.65 TSF	72	41	113	120	137	257	2625
	13. Public Facility	0.81 ACRE	0	0	0	0	0	0	2
	SUB-TOTAL		120	276	396	350	254	604	6285
6	1. Low Density Residential	132.00 DU	24	73	97	84	46	130	1242
	13. Public Facility	6.34 ACRE	1	0	1	0	1	1	16
	SUB-TOTAL		25	73	98	84	47	131	1258
7	1. Low Density Residential	269.00 DU	48	148	196	172	94	266	2531
	4. Neighborhood Commercial	11.00 TSF	13	6	19	25	30	55	591
	5. General Commercial	71.08 TSF	79	45	124	131	151	282	2886
	SUB-TOTAL		140	199	339	328	275	603	6008
8	5. General Commercial	193.26 TSF	215	122	337	358	410	768	7846
	SUB-TOTAL		215	122	337	358	410	768	7846
9	5. General Commercial	949.48 TSF	1054	598	1652	1757	2013	3770	38549
	SUB-TOTAL		1054	598	1652	1757	2013	3770	38549
10	3. High Density Residential	770.00 DU	69	339	408	331	169	500	5275
	5. General Commercial	448.37 TSF	498	282	780	829	951	1780	18204
	SUB-TOTAL		567	621	1188	1160	1120	2280	23479
11	13. Public Facility	0.69 ACRE	0	0	0	0	0	0	2
	SUB-TOTAL		0	0	0	0	0	0	2
12	17. Cultural Arts Center	642.28 TSF	771	161	932	283	719	1002	8716
	SUB-TOTAL		771	161	932	283	719	1002	8716

Existing (1998) ZONAL LAND USE AND TRIP GENERATION (cont.)

Zone	Land Use Type	Units	-- AM Peak Hour -- In	Out	Total	-- PM Peak Hour -- In	Out	Total	ADT
13	20. South Coast Metro	749.23 TSF	787	127	914	232	734	966	7642
	SUB-TOTAL		787	127	914	232	734	966	7642
16	17. Cultural Arts Center	390.26 TSF	468	98	566	172	437	609	5296
	18. Movie Theater	1862.00 SEAT	0	19	19	447	37	484	3277
	SUB-TOTAL		468	117	585	619	474	1093	8573
17	17. Cultural Arts Center	464.50 TSF	557	116	673	204	520	724	6303
	19. Performance Theater	3668.00 SEAT	37	0	37	293	73	366	4512
	SUB-TOTAL		594	116	710	497	593	1090	10815
18	17. Cultural Arts Center	976.99 TSF	1172	244	1416	430	1094	1524	13258
	18. Movie Theater	1700.00 SEAT	0	17	17	408	34	442	2992
	SUB-TOTAL		1172	261	1433	838	1128	1966	16250
19	7. Regional Commercial (EQ) (Equation base = 2926.20 TSF)	609.78 TSF	167	107	274	568	615	1183	12453
	SUB-TOTAL		167	107	274	568	615	1183	12453
20	7. Regional Commercial (EQ) (Equation base = 2926.20 TSF)	203.26 TSF	56	36	92	189	205	394	4151
	SUB-TOTAL		56	36	92	189	205	394	4151
21	7. Regional Commercial (EQ) (Equation base = 2926.20 TSF)	203.26 TSF	56	36	92	189	205	394	4151
	SUB-TOTAL		56	36	92	189	205	394	4151
22	7. Regional Commercial (EQ) (Equation base = 2926.20 TSF)	203.26 TSF	56	36	92	189	205	394	4151
	SUB-TOTAL		56	36	92	189	205	394	4151
23	7. Regional Commercial (EQ) (Equation base = 2926.20 TSF)	203.26 TSF	56	36	92	189	205	394	4151
	SUB-TOTAL		56	36	92	189	205	394	4151
24	7. Regional Commercial (EQ) (Equation base = 2926.20 TSF)	609.78 TSF	167	107	274	568	615	1183	12453
	SUB-TOTAL		167	107	274	568	615	1183	12453
25	7. Regional Commercial (EQ) (Equation base = 2926.20 TSF)	203.26 TSF	56	36	92	189	205	394	4151
	SUB-TOTAL		56	36	92	189	205	394	4151
26	18. Movie Theater	2500.00 SEAT	0	25	25	600	50	650	4400
	21. Metro Pointe	540.26 TSF	556	243	799	870	1005	1875	20557
	SUB-TOTAL		556	268	824	1470	1055	2525	24957
27	7. Regional Commercial (EQ) (Equation base = 2926.20 TSF)	690.35 TSF	189	121	310	643	696	1339	14098
	SUB-TOTAL		189	121	310	643	696	1339	14098

Existing (1998) ZONAL LAND USE AND TRIP GENERATION (cont.)

Zone	Land Use Type	Units	-- AM Peak Hour -- In	Out	Total	-- PM Peak Hour -- In	Out	Total	ADT
28	1. Low Density Residential	414.00 DU	75	228	303	265	145	410	3896
	3. High Density Residential	296.00 DU	27	130	157	127	65	192	2028
	8. Urban Center Commercial	80.00 TSF	83	15	98	38	93	131	1141
	13. Public Facility	10.00 ACRE	2	0	2	0	2	2	26
	SUB-TOTAL		187	373	560	430	305	735	7091
29	1. Low Density Residential	491.00 DU	88	270	358	314	172	486	4620
	2. Medium Density Residential	90.00 DU	11	41	52	42	23	65	675
	4. Neighborhood Commercial	14.82 TSF	18	9	27	34	41	75	797
	13. Public Facility	2.79 ACRE	0	0	0	0	1	1	7
	SUB-TOTAL		117	320	437	390	237	627	6099
30	2. Medium Density Residential	244.00 DU	29	112	141	115	63	178	1830
	SUB-TOTAL		29	112	141	115	63	178	1830
32	10. Industrial Park	28.23 TSF	22	5	27	6	22	28	209
	SUB-TOTAL		22	5	27	6	22	28	209
33	8. Urban Center Commercial	717.00 TSF	746	136	882	337	832	1169	10224
	SUB-TOTAL		746	136	882	337	832	1169	10224
35	10. Industrial Park	472.73 TSF	373	76	449	95	373	468	3498
	12. School (K-12)	350.00 STU	81	49	130	11	14	25	462
	SUB-TOTAL		454	125	579	106	387	493	3960
36	5. General Commercial	128.54 TSF	143	81	224	238	272	510	5219
	10. Industrial Park	944.03 TSF	746	151	897	189	746	935	6986
	12. School (K-12)	525.00 STU	121	74	195	16	21	37	693
	SUB-TOTAL		1010	306	1316	443	1039	1482	12898
37	10. Industrial Park	1528.19 TSF	1207	245	1452	306	1207	1513	11309
	SUB-TOTAL		1207	245	1452	306	1207	1513	11309
38	10. Industrial Park	418.68 TSF	331	67	398	84	331	415	3098
	SUB-TOTAL		331	67	398	84	331	415	3098
39	10. Industrial Park	646.07 TSF	510	103	613	129	510	639	4781
	SUB-TOTAL		510	103	613	129	510	639	4781
40	5. General Commercial	101.29 TSF	112	64	176	187	215	402	4112
	15. Storage	41.11 TSF	4	2	6	5	5	10	103
	SUB-TOTAL		116	66	182	192	220	412	4215
41	1. Low Density Residential	74.00 DU	13	41	54	47	26	73	696
	12. School (K-12)	550.00 STU	127	77	204	17	22	39	726
	13. Public Facility	1.84 ACRE	0	0	0	0	0	0	5
	SUB-TOTAL		140	118	258	64	48	112	1427

Existing (1998) ZONAL LAND USE AND TRIP GENERATION (cont.)

Zone	Land Use Type	Units	-- AM Peak Hour -- In	Out	Total	-- PM Peak Hour -- In	Out	Total	ADT
42	3. High Density Residential	40.00 DU	4	18	22	17	9	26	274
	4. Neighborhood Commercial	40.45 TSF	48	24	72	92	111	203	2175
	5. General Commercial	122.01 TSF	135	77	212	226	259	485	4954
	9. Light Industry	225.63 TSF	194	36	230	70	232	302	2498
	15. Storage	6.14 TSF	1	0	1	1	1	2	15
	SUB-TOTAL		382	155	537	406	612	1018	9916
43	1. Low Density Residential	35.00 DU	6	19	25	22	12	34	329
	2. Medium Density Residential	80.00 DU	10	37	47	38	21	59	600
	5. General Commercial	414.46 TSF	460	261	721	767	879	1646	16827
	SUB-TOTAL		476	317	793	827	912	1739	17756
44	1. Low Density Residential	580.00 DU	104	319	423	371	203	574	5458
	12. School (K-12)	370.00 STU	85	52	137	11	15	26	488
	13. Public Facility	13.15 ACRE	2	0	2	1	2	3	34
	SUB-TOTAL		191	371	562	383	220	603	5980
45	1. Low Density Residential	753.00 DU	136	414	550	482	264	746	7086
	2. Medium Density Residential	282.00 DU	34	130	164	133	73	206	2115
	12. School (K-12)	429.00 STU	99	60	159	13	17	30	566
	13. Public Facility	2.23 ACRE	0	0	0	0	0	0	6
	SUB-TOTAL		269	604	873	628	354	982	9773
46	1. Low Density Residential	293.00 DU	53	161	214	188	103	291	2757
	13. Public Facility	18.00 ACRE	3	0	3	1	3	4	46
	SUB-TOTAL		56	161	217	189	106	295	2803
47	1. Low Density Residential	180.00 DU	32	99	131	115	63	178	1694
	2. Medium Density Residential	57.00 DU	7	26	33	27	15	42	428
	11. Golf Course	140.20 ACRE	22	7	29	14	28	42	707
	SUB-TOTAL		61	132	193	156	106	262	2829
48	1. Low Density Residential	761.00 DU	137	419	556	487	266	753	7161
	3. High Density Residential	140.00 DU	13	62	75	60	31	91	959
	5. General Commercial	53.11 TSF	59	33	92	98	113	211	2156
	12. School (K-12)	1406.00 STU	323	197	520	42	56	98	1856
	13. Public Facility	6.33 ACRE	1	0	1	0	1	1	16
	SUB-TOTAL		533	711	1244	687	467	1154	12148
49	1. Low Density Residential	491.00 DU	88	270	358	314	172	486	4620
	5. General Commercial	56.72 TSF	63	36	99	105	120	225	2303
	12. School (K-12)	528.00 STU	121	74	195	16	21	37	697
	13. Public Facility	5.81 ACRE	1	0	1	0	1	1	15
	SUB-TOTAL		273	380	653	435	314	749	7635
50	1. Low Density Residential	435.00 DU	78	239	317	278	152	430	4093
	SUB-TOTAL		78	239	317	278	152	430	4093

Existing (1998) ZONAL LAND USE AND TRIP GENERATION (cont.)

Zone	Land Use Type	Units	-- AM Peak Hour -- In	Out	Total	-- PM Peak Hour -- In	Out	Total	ADT
51	1. Low Density Residential	346.00 DU	62	190	252	221	121	342	3256
	5. General Commercial	72.72 TSF	81	46	127	135	154	289	2952
	13. Public Facility	4.55 ACRE	1	0	1	0	1	1	12
	SUB-TOTAL		144	236	380	356	276	632	6220
52	1. Low Density Residential	50.00 DU	9	28	37	32	18	50	471
	3. High Density Residential	405.00 DU	36	178	214	174	89	263	2774
	5. General Commercial	175.11 TSF	194	110	304	324	371	695	7110
	13. Public Facility	35.58 ACRE	6	1	7	1	7	8	91
	SUB-TOTAL		245	317	562	531	485	1016	10446
53	1. Low Density Residential	26.00 DU	5	14	19	17	9	26	245
	3. High Density Residential	206.00 DU	19	91	110	89	45	134	1411
	5. General Commercial	195.17 TSF	217	123	340	361	414	775	7924
	SUB-TOTAL		241	228	469	467	468	935	9580
54	3. High Density Residential	450.00 DU	41	198	239	194	99	293	3083
	5. General Commercial	144.57 TSF	160	91	251	267	306	573	5869
	SUB-TOTAL		201	289	490	461	405	866	8952
55	3. High Density Residential	770.00 DU	69	339	408	331	169	500	5275
	5. General Commercial	210.37 TSF	234	133	367	389	446	835	8541
	9. Light Industry	104.54 TSF	90	17	107	32	108	140	1157
	SUB-TOTAL		393	489	882	752	723	1475	14973
56	16. Community College	25000.00 STU	3250	250	3500	3000	1250	4250	38500
	SUB-TOTAL		3250	250	3500	3000	1250	4250	38500
57	3. High Density Residential	686.00 DU	62	302	364	295	151	446	4699
	SUB-TOTAL		62	302	364	295	151	446	4699
58	3. High Density Residential	188.00 DU	17	83	100	81	41	122	1288
	4. Neighborhood Commercial	50.99 TSF	61	30	91	116	140	256	2742
	9. Light Industry	401.74 TSF	345	64	409	125	414	539	4447
	13. Public Facility	2.81 ACRE	0	0	0	0	1	1	7
	SUB-TOTAL		423	177	600	322	596	918	8484
59	14. Fairground	146.39 ACRE	0	0	0	293	293	586	1801
	SUB-TOTAL		0	0	0	293	293	586	1801
60	12. School (K-12)	1785.00 STU	411	250	661	54	71	125	2356
	13. Public Facility	2.67 ACRE	0	0	0	0	1	1	7
	SUB-TOTAL		411	250	661	54	72	126	2363
61	12. School (K-12)	864.00 STU	199	121	320	26	35	61	1140
	13. Public Facility	97.16 ACRE	16	2	18	4	18	22	250
	SUB-TOTAL		215	123	338	30	53	83	1390

Existing (1998) ZONAL LAND USE AND TRIP GENERATION (cont.)

Zone	Land Use Type	Units	-- AM Peak Hour -- In	Out	Total	-- PM Peak Hour -- In	Out	Total	ADT
62	1. Low Density Residential	506.00 DU	91	278	369	324	177	501	4761
	3. High Density Residential	350.00 DU	32	154	186	151	77	228	2398
	4. Neighborhood Commercial	34.16 TSF	41	20	61	78	94	172	1837
	SUB-TOTAL		164	452	616	553	348	901	8996
63	1. Low Density Residential	362.00 DU	65	199	264	232	127	359	3406
	3. High Density Residential	32.00 DU	3	14	17	14	7	21	219
	12. School (K-12)	377.00 STU	87	53	140	11	15	26	498
	SUB-TOTAL		155	266	421	257	149	406	4123
64	3. High Density Residential	39.00 DU	4	17	21	17	9	26	267
	5. General Commercial	77.40 TSF	86	49	135	143	164	307	3142
	SUB-TOTAL		90	66	156	160	173	333	3409
65	2. Medium Density Residential	650.00 DU	78	299	377	306	169	475	4875
	3. High Density Residential	8.00 DU	1	4	5	3	2	5	55
	13. Public Facility	51.35 ACRE	8	1	9	2	10	12	132
	SUB-TOTAL		87	304	391	311	181	492	5062
66	1. Low Density Residential	147.00 DU	26	81	107	94	51	145	1383
	2. Medium Density Residential	194.00 DU	23	89	112	91	50	141	1455
	SUB-TOTAL		49	170	219	185	101	286	2838
67	1. Low Density Residential	170.00 DU	31	94	125	109	60	169	1600
	2. Medium Density Residential	56.00 DU	7	26	33	26	15	41	420
	SUB-TOTAL		38	120	158	135	75	210	2020
68	12. School (K-12)	1319.00 STU	303	185	488	40	53	93	1741
	13. Public Facility	217.23 ACRE	35	4	39	9	41	50	558
	SUB-TOTAL		338	189	527	49	94	143	2299
69	1. Low Density Residential	446.00 DU	80	245	325	285	156	441	4197
	13. Public Facility	2.70 ACRE	0	0	0	0	1	1	7
	SUB-TOTAL		80	245	325	285	157	442	4204
70	1. Low Density Residential	140.00 DU	25	77	102	90	49	139	1317
	12. School (K-12)	572.00 STU	132	80	212	17	23	40	755
	SUB-TOTAL		157	157	314	107	72	179	2072
71	2. Medium Density Residential	310.00 DU	37	143	180	146	81	227	2325
	13. Public Facility	5.11 ACRE	1	0	1	0	1	1	13
	SUB-TOTAL		38	143	181	146	82	228	2338
72	2. Medium Density Residential	166.00 DU	20	76	96	78	43	121	1245
	5. General Commercial	6.60 TSF	7	4	11	12	14	26	268
	13. Public Facility	2.16 ACRE	0	0	0	0	0	0	6
	SUB-TOTAL		27	80	107	90	57	147	1519

Existing (1998) ZONAL LAND USE AND TRIP GENERATION (cont.)

Zone	Land Use Type	Units	-- AM Peak Hour -- In	Out	Total	-- PM Peak Hour -- In	Out	Total	ADT
73	1. Low Density Residential	117.00 DU	21	64	85	75	41	116	1101
	2. Medium Density Residential	121.00 DU	15	56	71	57	31	88	908
	SUB-TOTAL		36	120	156	132	72	204	2009
74	1. Low Density Residential	42.00 DU	8	23	31	27	15	42	395
	2. Medium Density Residential	338.00 DU	41	155	196	159	88	247	2535
	3. High Density Residential	79.00 DU	7	35	42	34	17	51	541
	5. General Commercial	86.68 TSF	96	55	151	160	184	344	3519
	SUB-TOTAL		152	268	420	380	304	684	6990
75	1. Low Density Residential	66.00 DU	12	36	48	42	23	65	621
	2. Medium Density Residential	99.00 DU	12	46	58	47	26	73	743
	3. High Density Residential	139.00 DU	13	61	74	60	31	91	952
	5. General Commercial	44.45 TSF	49	28	77	82	94	176	1805
	SUB-TOTAL		86	171	257	231	174	405	4121
76	1. Low Density Residential	202.00 DU	36	111	147	129	71	200	1901
	3. High Density Residential	1019.00 DU	92	448	540	438	224	662	6980
	11. Golf Course	292.01 ACRE	47	15	62	29	58	87	1472
	13. Public Facility	18.33 ACRE	3	0	3	1	3	4	47
	SUB-TOTAL		178	574	752	597	356	953	10400
77	3. High Density Residential	500.00 DU	45	220	265	215	110	325	3425
	SUB-TOTAL		45	220	265	215	110	325	3425
78	3. High Density Residential	42.00 DU	4	18	22	18	9	27	288
	5. General Commercial	336.06 TSF	373	212	585	622	712	1334	13644
	SUB-TOTAL		377	230	607	640	721	1361	13932
79	3. High Density Residential	508.00 DU	46	224	270	218	112	330	3480
	5. General Commercial	275.93 TSF	306	174	480	510	585	1095	11203
	SUB-TOTAL		352	398	750	728	697	1425	14683
80	1. Low Density Residential	153.00 DU	28	84	112	98	54	152	1440
	3. High Density Residential	123.00 DU	11	54	65	53	27	80	843
	4. Neighborhood Commercial	40.95 TSF	49	24	73	93	113	206	2202
	5. General Commercial	45.59 TSF	51	29	80	84	97	181	1851
	13. Public Facility	1.29 ACRE	0	0	0	0	0	0	3
	SUB-TOTAL		139	191	330	328	291	619	6339
81	1. Low Density Residential	542.00 DU	98	298	396	347	190	537	5100
	3. High Density Residential	99.00 DU	9	44	53	43	22	65	678
	5. General Commercial	137.91 TSF	153	87	240	255	292	547	5599
	12. School (K-12)	444.00 STU	102	62	164	13	18	31	586
	13. Public Facility	3.13 ACRE	1	0	1	0	1	1	8
	SUB-TOTAL		363	491	854	658	523	1181	11971
82	1. Low Density Residential	306.00 DU	55	168	223	196	107	303	2879

Existing (1998) ZONAL LAND USE AND TRIP GENERATION (cont.)

Zone	Land Use Type	Units	-- AM Peak Hour -- In	Out	Total	-- PM Peak Hour -- In	Out	Total	ADT
82	13. Public Facility	2.20 ACRE	0	0	0	0	0	0	6
	SUB-TOTAL		55	168	223	196	107	303	2885
83	13. Public Facility	75.97 ACRE	12	2	14	3	14	17	195
	SUB-TOTAL		12	2	14	3	14	17	195
84	1. Low Density Residential	65.00 DU	12	36	48	42	23	65	612
	2. Medium Density Residential	151.00 DU	18	69	87	71	39	110	1133
	4. Neighborhood Commercial	66.10 TSF	79	39	118	151	182	333	3554
	5. General Commercial	2.08 TSF	2	1	3	4	4	8	85
	9. Light Industry	22.42 TSF	19	4	23	7	23	30	248
	13. Public Facility	0.91 ACRE	0	0	0	0	0	0	2
	SUB-TOTAL		130	149	279	275	271	546	5634
86	9. Light Industry	229.46 TSF	197	37	234	71	236	307	2540
	SUB-TOTAL		197	37	234	71	236	307	2540
87	1. Low Density Residential	67.00 DU	12	37	49	43	23	66	630
	2. Medium Density Residential	92.00 DU	11	42	53	43	24	67	690
	9. Light Industry	135.86 TSF	117	22	139	42	140	182	1504
	13. Public Facility	2.40 ACRE	0	0	0	0	0	0	6
	SUB-TOTAL		140	101	241	128	187	315	2830
88	1. Low Density Residential	344.00 DU	62	189	251	220	120	340	3237
	13. Public Facility	35.27 ACRE	6	1	7	1	7	8	91
	SUB-TOTAL		68	190	258	221	127	348	3328
89	1. Low Density Residential	280.00 DU	50	154	204	179	98	277	2635
	SUB-TOTAL		50	154	204	179	98	277	2635
90	1. Low Density Residential	124.00 DU	22	68	90	79	43	122	1167
	3. High Density Residential	80.00 DU	7	35	42	34	18	52	548
	12. School (K-12)	423.00 STU	97	59	156	13	17	30	558
	SUB-TOTAL		126	162	288	126	78	204	2273
91	9. Light Industry	371.00 TSF	319	59	378	115	382	497	4107
	SUB-TOTAL		319	59	378	115	382	497	4107
92	1. Low Density Residential	92.00 DU	17	51	68	59	32	91	866
	9. Light Industry	180.64 TSF	155	29	184	56	186	242	2000
	SUB-TOTAL		172	80	252	115	218	333	2866
93	2. Medium Density Residential	1.00 DU	0	0	0	0	0	0	8
	3. High Density Residential	460.00 DU	41	202	243	198	101	299	3151
	4. Neighborhood Commercial	2.08 TSF	2	1	3	5	6	11	112
	9. Light Industry	8.10 TSF	7	1	8	3	8	11	90
	12. School (K-12)	575.00 STU	132	81	213	17	23	40	759
	SUB-TOTAL		182	285	467	223	138	361	4120

Existing (1998) ZONAL LAND USE AND TRIP GENERATION (cont.)

Zone	Land Use Type	Units	-- AM Peak Hour -- In	Out	Total	-- PM Peak Hour -- In	Out	Total	ADT
94	9. Light Industry	374.08 TSF	322	60	382	116	385	501	4141
	SUB-TOTAL		322	60	382	116	385	501	4141
95	9. Light Industry	591.43 TSF	509	95	604	183	609	792	6547
	SUB-TOTAL		509	95	604	183	609	792	6547
96	1. Low Density Residential	41.00 DU	7	23	30	26	14	40	386
	3. High Density Residential	387.00 DU	35	170	205	166	85	251	2651
	4. Neighborhood Commercial	9.26 TSF	11	5	16	21	25	46	498
	5. General Commercial	49.61 TSF	55	31	86	92	105	197	2014
	9. Light Industry	65.34 TSF	56	10	66	20	67	87	723
	SUB-TOTAL		164	239	403	325	296	621	6272
97	3. High Density Residential	55.00 DU	5	24	29	24	12	36	377
	4. Neighborhood Commercial	8.13 TSF	10	5	15	19	22	41	437
	5. General Commercial	13.55 TSF	15	9	24	25	29	54	550
	9. Light Industry	370.84 TSF	319	59	378	115	382	497	4105
	SUB-TOTAL		349	97	446	183	445	628	5469
98	9. Light Industry	634.07 TSF	545	101	646	197	653	850	7019
	SUB-TOTAL		545	101	646	197	653	850	7019
99	3. High Density Residential	366.00 DU	33	161	194	157	81	238	2507
	9. Light Industry	173.51 TSF	149	28	177	54	179	233	1921
	13. Public Facility	0.17 ACRE	0	0	0	0	0	0	0
	15. Storage	48.16 TSF	4	3	7	6	6	12	120
	SUB-TOTAL		186	192	378	217	266	483	4548
100	3. High Density Residential	365.00 DU	33	161	194	157	80	237	2500
	4. Neighborhood Commercial	4.87 TSF	6	3	9	11	13	24	262
	5. General Commercial	58.24 TSF	65	37	102	108	123	231	2365
	SUB-TOTAL		104	201	305	276	216	492	5127
101	9. Light Industry	157.75 TSF	136	25	161	49	162	211	1746
	SUB-TOTAL		136	25	161	49	162	211	1746
102	5. General Commercial	84.78 TSF	94	53	147	157	180	337	3442
	9. Light Industry	111.53 TSF	96	18	114	35	115	150	1235
	15. Storage	100.93 TSF	9	6	15	13	13	26	252
	SUB-TOTAL		199	77	276	205	308	513	4929
103	5. General Commercial	114.13 TSF	127	72	199	211	242	453	4634
	9. Light Industry	12.94 TSF	11	2	13	4	13	17	143
	SUB-TOTAL		138	74	212	215	255	470	4777
104	1. Low Density Residential	29.00 DU	5	16	21	19	10	29	273
	3. High Density Residential	177.00 DU	16	78	94	76	39	115	1212
	5. General Commercial	45.41 TSF	50	29	79	84	96	180	1844

Existing (1998) ZONAL LAND USE AND TRIP GENERATION (cont.)

Zone	Land Use Type	Units	-- AM Peak Hour -- In	Out	Total	-- PM Peak Hour -- In	Out	Total	ADT
104	9. Light Industry	117.31 TSF	101	19	120	36	121	157	1299
	13. Public Facility	1.09 ACRE	0	0	0	0	0	0	3
	SUB-TOTAL		172	142	314	215	266	481	4631
105	3. High Density Residential	315.00 DU	28	139	167	135	69	204	2158
	5. General Commercial	46.47 TSF	52	29	81	86	99	185	1887
	13. Public Facility	0.94 ACRE	0	0	0	0	0	0	2
	SUB-TOTAL		80	168	248	221	168	389	4047
106	3. High Density Residential	274.00 DU	25	121	146	118	60	178	1877
	5. General Commercial	13.73 TSF	15	9	24	25	29	54	558
	9. Light Industry	247.48 TSF	213	40	253	77	255	332	2740
	SUB-TOTAL		253	170	423	220	344	564	5175
107	1. Low Density Residential	60.00 DU	11	33	44	38	21	59	565
	3. High Density Residential	40.00 DU	4	18	22	17	9	26	274
	4. Neighborhood Commercial	31.42 TSF	37	19	56	72	86	158	1689
	SUB-TOTAL		52	70	122	127	116	243	2528
108	3. High Density Residential	367.00 DU	33	161	194	158	81	239	2514
	5. General Commercial	16.25 TSF	18	10	28	30	34	64	660
	12. School (K-12)	588.00 STU	135	82	217	18	24	42	776
	SUB-TOTAL		186	253	439	206	139	345	3950
109	1. Low Density Residential	112.00 DU	20	62	82	72	39	111	1054
	3. High Density Residential	323.00 DU	29	142	171	139	71	210	2213
	5. General Commercial	24.54 TSF	27	15	42	45	52	97	996
	12. School (K-12)	654.00 STU	150	92	242	20	26	46	863
	SUB-TOTAL		226	311	537	276	188	464	5126
110	1. Low Density Residential	18.00 DU	3	10	13	12	6	18	169
	2. Medium Density Residential	6.00 DU	1	3	4	3	2	5	45
	3. High Density Residential	2.00 DU	0	1	1	1	0	1	14
	5. General Commercial	66.05 TSF	73	42	115	122	140	262	2682
	SUB-TOTAL		77	56	133	138	148	286	2910
111	3. High Density Residential	235.00 DU	21	103	124	101	52	153	1610
	6. Commercial Center	198.65 TSF	217	77	294	324	441	765	7682
	13. Public Facility	12.60 ACRE	2	0	2	1	2	3	32
	SUB-TOTAL		240	180	420	426	495	921	9324
112	1. Low Density Residential	69.00 DU	12	38	50	44	24	68	649
	3. High Density Residential	433.00 DU	39	191	230	186	95	281	2966
	5. General Commercial	18.05 TSF	20	11	31	33	38	71	733
	6. Commercial Center	9.86 TSF	11	4	15	16	22	38	381
	13. Public Facility	0.52 ACRE	0	0	0	0	0	0	1
	SUB-TOTAL		82	244	326	279	179	458	4730

Existing (1998) ZONAL LAND USE AND TRIP GENERATION (cont.)

Zone	Land Use Type	Units	-- AM Peak Hour -- In	Out	Total	-- PM Peak Hour -- In	Out	Total	ADT
113	2. Medium Density Residential	327.00 DU	39	150	189	154	85	239	2453
	3. High Density Residential	142.00 DU	13	62	75	61	31	92	973
	5. General Commercial	18.24 TSF	20	11	31	34	39	73	740
	12. School (K-12)	0.00 STU	0	0	0	0	0	0	0
	13. Public Facility	2.05 ACRE	0	0	0	0	0	0	5
	SUB-TOTAL		72	223	295	249	155	404	4171
114	3. High Density Residential	378.00 DU	34	166	200	163	83	246	2589
	5. General Commercial	127.70 TSF	142	80	222	236	271	507	5185
	6. Commercial Center	47.56 TSF	52	19	71	78	106	184	1839
	SUB-TOTAL		228	265	493	477	460	937	9613
115	6. Commercial Center	185.00 TSF	202	72	274	302	411	713	7154
	SUB-TOTAL		202	72	274	302	411	713	7154
116	2. Medium Density Residential	24.00 DU	3	11	14	11	6	17	180
	3. High Density Residential	263.00 DU	24	116	140	113	58	171	1802
	5. General Commercial	75.92 TSF	84	48	132	140	161	301	3082
	6. Commercial Center	412.17 TSF	449	161	610	672	915	1587	15939
	13. Public Facility	0.83 ACRE	0	0	0	0	0	0	2
	SUB-TOTAL		560	336	896	936	1140	2076	21005
117	1. Low Density Residential	32.00 DU	6	18	24	20	11	31	301
	2. Medium Density Residential	150.00 DU	18	69	87	71	39	110	1125
	3. High Density Residential	125.00 DU	11	55	66	54	28	82	856
	5. General Commercial	74.51 TSF	83	47	130	138	158	296	3025
	SUB-TOTAL		118	189	307	283	236	519	5307
118	2. Medium Density Residential	68.00 DU	8	31	39	32	18	50	510
	5. General Commercial	246.55 TSF	274	155	429	456	523	979	10010
	SUB-TOTAL		282	186	468	488	541	1029	10520
119	5. General Commercial	104.52 TSF	116	66	182	193	222	415	4243
	15. Storage	4.20 TSF	0	0	0	1	1	2	11
	SUB-TOTAL		116	66	182	194	223	417	4254
120	1. Low Density Residential	14.00 DU	3	8	11	9	5	14	132
	2. Medium Density Residential	27.00 DU	3	12	15	13	7	20	203
	3. High Density Residential	49.00 DU	4	22	26	21	11	32	336
	5. General Commercial	182.21 TSF	202	115	317	337	386	723	7398
	SUB-TOTAL		212	157	369	380	409	789	8069
121	3. High Density Residential	534.00 DU	48	235	283	230	117	347	3658
	5. General Commercial	59.22 TSF	66	37	103	110	126	236	2404
	13. Public Facility	2.59 ACRE	0	0	0	0	0	0	7
	SUB-TOTAL		114	272	386	340	243	583	6069
122	1. Low Density Residential	22.00 DU	4	12	16	14	8	22	207

Existing (1998) ZONAL LAND USE AND TRIP GENERATION (cont.)

Zone	Land Use Type	Units	-- AM Peak Hour -- In	Out	Total	-- PM Peak Hour -- In	Out	Total	ADT
122	3. High Density Residential	633.00 DU	57	279	336	272	139	411	4336
	5. General Commercial	11.08 TSF	12	7	19	21	23	44	450
	13. Public Facility	1.63 ACRE	0	0	0	0	0	0	4
	SUB-TOTAL		73	298	371	307	170	477	4997
123	5. General Commercial	71.14 TSF	79	45	124	132	151	283	2888
	SUB-TOTAL		79	45	124	132	151	283	2888
124	3. High Density Residential	928.00 DU	84	408	492	399	204	603	6357
	5. General Commercial	1.11 TSF	1	1	2	2	2	4	45
	13. Public Facility	2.49 ACRE	0	0	0	0	0	0	6
	SUB-TOTAL		85	409	494	401	206	607	6408
125	3. High Density Residential	184.00 DU	17	81	98	79	40	119	1260
	13. Public Facility	9.45 ACRE	2	0	2	0	2	2	24
	16. Community College	950.00 STU	123	10	133	114	48	162	1463
	SUB-TOTAL		142	91	233	193	90	283	2747
126	2. Medium Density Residential	27.00 DU	3	12	15	13	7	20	203
	5. General Commercial	46.08 TSF	51	29	80	85	98	183	1871
	SUB-TOTAL		54	41	95	98	105	203	2074
127	3. High Density Residential	58.00 DU	5	26	31	25	13	38	397
	5. General Commercial	106.58 TSF	118	67	185	197	226	423	4327
	15. Storage	96.05 TSF	9	6	15	12	12	24	240
	SUB-TOTAL		132	99	231	234	251	485	4964
128	3. High Density Residential	247.00 DU	22	109	131	106	54	160	1692
	4. Neighborhood Commercial	18.29 TSF	22	11	33	42	50	92	983
	5. General Commercial	143.06 TSF	159	90	249	265	303	568	5808
	SUB-TOTAL		203	210	413	413	407	820	8483
129	3. High Density Residential	256.00 DU	23	113	136	110	56	166	1754
	5. General Commercial	115.43 TSF	128	73	201	214	245	459	4687
	SUB-TOTAL		151	186	337	324	301	625	6441
130	1. Low Density Residential	42.00 DU	8	23	31	27	15	42	395
	2. Medium Density Residential	177.00 DU	21	81	102	83	46	129	1328
	4. Neighborhood Commercial	15.87 TSF	19	9	28	36	44	80	853
	5. General Commercial	25.71 TSF	29	16	45	48	55	103	1044
	13. Public Facility	0.23 ACRE	0	0	0	0	0	0	1
	SUB-TOTAL		77	129	206	194	160	354	3621
131	1. Low Density Residential	29.00 DU	5	16	21	19	10	29	273
	2. Medium Density Residential	178.00 DU	21	82	103	84	46	130	1335
	3. High Density Residential	178.00 DU	16	78	94	77	39	116	1219
	4. Neighborhood Commercial	27.37 TSF	33	16	49	62	75	137	1471
	5. General Commercial	2.90 TSF	3	2	5	5	6	11	118

Existing (1998) ZONAL LAND USE AND TRIP GENERATION (cont.)

Zone	Land Use Type	Units	-- AM Peak Hour -- In	Out	Total	-- PM Peak Hour -- In	Out	Total	ADT
131	13. Public Facility	1.13 ACRE	0	0	0	0	0	0	3
	SUB-TOTAL		78	194	272	247	176	423	4419
132	2. Medium Density Residential	270.00 DU	32	124	156	127	70	197	2025
	13. Public Facility	4.27 ACRE	1	0	1	0	1	1	11
	SUB-TOTAL		33	124	157	127	71	198	2036
133	2. Medium Density Residential	3.00 DU	0	1	1	1	1	2	23
	3. High Density Residential	296.00 DU	27	130	157	127	65	192	2028
	5. General Commercial	179.80 TSF	200	113	313	333	381	714	7300
	SUB-TOTAL		227	244	471	461	447	908	9351
134	2. Medium Density Residential	279.00 DU	33	128	161	131	73	204	2093
	4. Neighborhood Commercial	32.85 TSF	39	19	58	75	90	165	1767
	5. General Commercial	158.50 TSF	176	100	276	293	336	629	6435
	13. Public Facility	0.41 ACRE	0	0	0	0	0	0	1
	SUB-TOTAL		248	247	495	499	499	998	10296
135	1. Low Density Residential	239.00 DU	43	131	174	153	84	237	2249
	SUB-TOTAL		43	131	174	153	84	237	2249
136	1. Low Density Residential	221.00 DU	40	122	162	141	77	218	2080
	13. Public Facility	4.13 ACRE	1	0	1	0	1	1	11
	SUB-TOTAL		41	122	163	141	78	219	2091
137	1. Low Density Residential	205.00 DU	37	113	150	131	72	203	1929
	5. General Commercial	3.55 TSF	4	2	6	7	8	15	144
	SUB-TOTAL		41	115	156	138	80	218	2073
138	2. Medium Density Residential	189.00 DU	23	87	110	89	49	138	1418
	SUB-TOTAL		23	87	110	89	49	138	1418
139	2. Medium Density Residential	230.00 DU	28	106	134	108	60	168	1725
	5. General Commercial	114.32 TSF	127	72	199	212	242	454	4642
	13. Public Facility	2.50 ACRE	0	0	0	0	0	0	6
	SUB-TOTAL		155	178	333	320	302	622	6373
140	2. Medium Density Residential	196.00 DU	24	90	114	92	51	143	1470
	3. High Density Residential	115.00 DU	10	51	61	49	25	74	788
	5. General Commercial	72.90 TSF	81	46	127	135	155	290	2960
	SUB-TOTAL		115	187	302	276	231	507	5218
141	1. Low Density Residential	206.00 DU	37	113	150	132	72	204	1938
	5. General Commercial	11.50 TSF	13	7	20	21	24	45	467
	13. Public Facility	0.36 ACRE	0	0	0	0	0	0	1
	SUB-TOTAL		50	120	170	153	96	249	2406
142	1. Low Density Residential	199.00 DU	36	109	145	127	70	197	1873
	SUB-TOTAL		36	109	145	127	70	197	1873

Existing (1998) ZONAL LAND USE AND TRIP GENERATION (cont.)

Zone	Land Use Type	Units	-- AM Peak Hour -- In	Out	Total	-- PM Peak Hour -- In	Out	Total	ADT
143	1. Low Density Residential	143.00 DU	26	79	105	92	50	142	1346
	2. Medium Density Residential	20.00 DU	2	9	11	9	5	14	150
	5. General Commercial	136.29 TSF	151	86	237	252	289	541	5533
	SUB-TOTAL		179	174	353	353	344	697	7029
144	1. Low Density Residential	84.00 DU	15	46	61	54	29	83	790
	5. General Commercial	97.69 TSF	108	62	170	181	207	388	3966
	13. Public Facility	9.11 ACRE	1	0	1	0	2	2	23
	SUB-TOTAL		124	108	232	235	238	473	4779
145	1. Low Density Residential	169.00 DU	30	93	123	108	59	167	1590
	SUB-TOTAL		30	93	123	108	59	167	1590
146	1. Low Density Residential	275.00 DU	50	151	201	176	96	272	2588
	SUB-TOTAL		50	151	201	176	96	272	2588
147	1. Low Density Residential	29.00 DU	5	16	21	19	10	29	273
	2. Medium Density Residential	242.00 DU	29	111	140	114	63	177	1815
	3. High Density Residential	128.00 DU	12	56	68	55	28	83	877
	5. General Commercial	81.17 TSF	90	51	141	150	172	322	3295
	SUB-TOTAL		136	234	370	338	273	611	6260
148	2. Medium Density Residential	268.00 DU	32	123	155	126	70	196	2010
	3. High Density Residential	3.00 DU	0	1	1	1	1	2	21
	5. General Commercial	27.75 TSF	31	17	48	51	59	110	1127
	13. Public Facility	3.70 ACRE	1	0	1	0	1	1	10
	SUB-TOTAL		64	141	205	178	131	309	3168
149	2. Medium Density Residential	344.00 DU	41	158	199	162	89	251	2580
	3. High Density Residential	12.00 DU	1	5	6	5	3	8	82
	5. General Commercial	53.89 TSF	60	34	94	100	114	214	2188
	SUB-TOTAL		102	197	299	267	206	473	4850
150	2. Medium Density Residential	335.00 DU	40	154	194	157	87	244	2513
	3. High Density Residential	96.00 DU	9	42	51	41	21	62	658
	5. General Commercial	69.67 TSF	77	44	121	129	148	277	2828
	SUB-TOTAL		126	240	366	327	256	583	5999
151	2. Medium Density Residential	332.00 DU	40	153	193	156	86	242	2490
	3. High Density Residential	65.00 DU	6	29	35	28	14	42	445
	5. General Commercial	118.92 TSF	132	75	207	220	252	472	4828
	SUB-TOTAL		178	257	435	404	352	756	7763
152	2. Medium Density Residential	326.00 DU	39	150	189	153	85	238	2445
	5. General Commercial	125.41 TSF	139	79	218	232	266	498	5092
	15. Storage	11.48 TSF	1	1	2	1	1	2	29
	SUB-TOTAL		179	230	409	386	352	738	7566

Existing (1998) ZONAL LAND USE AND TRIP GENERATION (cont.)

Zone	Land Use Type	Units	-- AM Peak Hour -- In	Out	Total	-- PM Peak Hour -- In	Out	Total	ADT
153	1. Low Density Residential	190.00 DU	34	105	139	122	67	189	1788
	2. Medium Density Residential	21.00 DU	3	10	13	10	5	15	158
	SUB-TOTAL		37	115	152	132	72	204	1946
154	1. Low Density Residential	208.00 DU	37	114	151	133	73	206	1957
	SUB-TOTAL		37	114	151	133	73	206	1957
155	1. Low Density Residential	106.00 DU	19	58	77	68	37	105	997
	2. Medium Density Residential	49.00 DU	6	23	29	23	13	36	368
	5. General Commercial	36.50 TSF	41	23	64	68	77	145	1482
	13. Public Facility	4.65 ACRE	1	0	1	0	1	1	12
	SUB-TOTAL		67	104	171	159	128	287	2859
156	1. Low Density Residential	185.00 DU	33	102	135	118	65	183	1741
	12. School (K-12)	165.00 STU	38	23	61	5	7	12	218
	13. Public Facility	2.26 ACRE	0	0	0	0	0	0	6
	SUB-TOTAL		71	125	196	123	72	195	1965
157	1. Low Density Residential	86.00 DU	15	47	62	55	30	85	809
	2. Medium Density Residential	183.00 DU	22	84	106	86	48	134	1373
	SUB-TOTAL		37	131	168	141	78	219	2182
158	1. Low Density Residential	115.00 DU	21	63	84	74	40	114	1082
	2. Medium Density Residential	212.00 DU	25	98	123	100	55	155	1590
	12. School (K-12)	100.00 STU	23	14	37	3	4	7	132
	SUB-TOTAL		69	175	244	177	99	276	2804
159	1. Low Density Residential	12.00 DU	2	7	9	8	4	12	113
	2. Medium Density Residential	303.00 DU	36	139	175	142	79	221	2273
	12. School (K-12)	535.00 STU	123	75	198	16	21	37	706
	SUB-TOTAL		161	221	382	166	104	270	3092
160	1. Low Density Residential	52.00 DU	9	29	38	33	18	51	489
	2. Medium Density Residential	103.00 DU	12	47	59	48	27	75	773
	12. School (K-12)	714.00 STU	164	100	264	21	29	50	942
	13. Public Facility	2.48 ACRE	0	0	0	0	0	0	6
	SUB-TOTAL		185	176	361	102	74	176	2210
161	1. Low Density Residential	145.00 DU	26	80	106	93	51	144	1364
	SUB-TOTAL		26	80	106	93	51	144	1364
162	1. Low Density Residential	111.00 DU	20	61	81	71	39	110	1045
	2. Medium Density Residential	105.00 DU	13	48	61	49	27	76	788
	SUB-TOTAL		33	109	142	120	66	186	1833
163	1. Low Density Residential	13.00 DU	2	7	9	8	5	13	122
	2. Medium Density Residential	347.00 DU	42	160	202	163	90	253	2603
	SUB-TOTAL		44	167	211	171	95	266	2725

Existing (1998) ZONAL LAND USE AND TRIP GENERATION (cont.)

Zone	Land Use Type	Units	-- AM Peak Hour -- In	Out	Total	-- PM Peak Hour -- In	Out	Total	ADT
164	2. Medium Density Residential	294.00 DU	35	135	170	138	76	214	2205
	SUB-TOTAL		35	135	170	138	76	214	2205
165	2. Medium Density Residential	213.00 DU	26	98	124	100	55	155	1598
	5. General Commercial	5.00 TSF	6	3	9	9	11	20	203
	SUB-TOTAL		32	101	133	109	66	175	1801
166	1. Low Density Residential	9.00 DU	2	5	7	6	3	9	85
	SUB-TOTAL		2	5	7	6	3	9	85
167	1. Low Density Residential	49.00 DU	9	27	36	31	17	48	461
	2. Medium Density Residential	104.00 DU	12	48	60	49	27	76	780
	5. General Commercial	99.55 TSF	111	63	174	184	211	395	4042
	11. Golf Course	127.88 ACRE	20	6	26	13	26	39	645
	15. Storage	97.15 TSF	9	6	15	13	13	26	243
	SUB-TOTAL		161	150	311	290	294	584	6171
168	1. Low Density Residential	118.00 DU	21	65	86	76	41	117	1110
	2. Medium Density Residential	200.00 DU	24	92	116	94	52	146	1500
	3. High Density Residential	288.00 DU	26	127	153	124	63	187	1973
	5. General Commercial	317.14 TSF	352	200	552	587	672	1259	12876
	13. Public Facility	0.10 ACRE	0	0	0	0	0	0	0
	SUB-TOTAL		423	484	907	881	828	1709	17459
170	5. General Commercial	75.99 TSF	84	48	132	141	161	302	3085
	10. Industrial Park	1639.46 TSF	1295	262	1557	328	1295	1623	12132
	15. Storage	150.00 TSF	14	9	23	20	20	40	375
	SUB-TOTAL		1393	319	1712	489	1476	1965	15592
171	10. Industrial Park	189.77 TSF	150	30	180	38	150	188	1404
	12. School (K-12)	300.00 STU	69	42	111	9	12	21	396
	SUB-TOTAL		219	72	291	47	162	209	1800
172	10. Industrial Park	695.63 TSF	550	111	661	139	550	689	5148
	SUB-TOTAL		550	111	661	139	550	689	5148
173	5. General Commercial	13.48 TSF	15	8	23	25	29	54	547
	10. Industrial Park	1802.62 TSF	1424	288	1712	361	1424	1785	13339
	12. School (K-12)	648.00 STU	149	91	240	19	26	45	855
	SUB-TOTAL		1588	387	1975	405	1479	1884	14741
174	10. Industrial Park	189.01 TSF	149	30	179	38	149	187	1399
	SUB-TOTAL		149	30	179	38	149	187	1399
175	10. Industrial Park	1024.64 TSF	809	164	973	205	809	1014	7582
	SUB-TOTAL		809	164	973	205	809	1014	7582
176	2. Medium Density Residential	133.00 DU	16	61	77	63	35	98	998
	SUB-TOTAL		16	61	77	63	35	98	998

Existing (1998) LAND USE AND TRIP GENERATION SUMMARY

Land Use Type	Units	-- AM Peak Hour -- In	Out	Total	-- PM Peak Hour -- In	Out	Total	ADT
1. Low Density Residential	13373.00 DU	2404	7356	9760	8558	4680	13238	125837
2. Medium Density Residential	9216.00 DU	1105	4235	5340	4333	2395	6728	69131
3. High Density Residential	17741.00 DU	1601	7809	9410	7628	3900	11528	121531
4. Neighborhood Commercial	410.43 TSF	490	241	731	936	1127	2063	22068
5. General Commercial	8647.04 TSF	9598	5448	15046	15998	18333	34331	351070
6. Commercial Center	853.23 TSF	931	333	1264	1392	1895	3287	32995
7. Regional Commercial (EQ)	2926.20 TSF	803	515	1318	2724	2951	5675	59759
8. Urban Center Commercial	797.00 TSF	829	151	980	375	925	1300	11365
9. Light Industry	4837.14 TSF	4159	775	4934	1500	4981	6481	53547
10. Industrial Park	9579.05 TSF	7566	1532	9098	1918	7566	9484	70885
11. Golf Course	560.09 ACRE	89	28	117	56	112	168	2824
12. School (K-12)	14221.00 STU	3271	1993	5264	428	570	998	18769
13. Public Facility	700.99 ACRE	108	11	119	24	127	151	1799
14. Fairground	146.39 ACRE	0	0	0	293	293	586	1801
15. Storage	555.22 TSF	51	33	84	72	72	144	1388
16. Community College	25950.00 STU	3373	260	3633	3114	1298	4412	39963
17. Cultural Arts Center	2474.03 TSF	2968	619	3587	1089	2770	3859	33573
18. Movie Theater	6062.00 SEAT	0	61	61	1455	121	1576	10669
19. Performance Theater	3668.00 SEAT	37	0	37	293	73	366	4512
20. South Coast Metro	749.23 TSF	787	127	914	232	734	966	7642
21. Metro Pointe	540.26 TSF	556	243	799	870	1005	1875	20557
TOTAL		40726	31770	72496	53288	55928	109216	1061685

Buildout (2020) ZONAL LAND USE AND TRIP GENERATION

Zone	Land Use Type	Units	-- AM Peak Hour -- In	Out	Total	-- PM Peak Hour -- In	Out	Total	ADT
1	1. Low Density Residential	244.00 DU	44	134	178	156	85	241	2296
	3. High Density Residential	487.00 DU	44	214	258	209	107	316	3336
	13. Public Facility	2.48 ACRE	0	0	0	0	0	0	6
	SUB-TOTAL		88	348	436	365	192	557	5638
2	3. High Density Residential	258.00 DU	23	114	137	111	57	168	1767
	4. Neighborhood Commercial	6.21 TSF	7	4	11	14	17	31	334
	5. General Commercial	159.18 TSF	177	100	277	294	337	631	6463
	9. Light Industry	104.59 TSF	90	17	107	32	108	140	1158
	SUB-TOTAL		297	235	532	451	519	970	9722
3	3. High Density Residential	716.00 DU	64	315	379	308	158	466	4905
	5. General Commercial	242.69 TSF	269	153	422	449	515	964	9853
	SUB-TOTAL		333	468	801	757	673	1430	14758
4	5. General Commercial	196.98 TSF	219	124	343	364	418	782	7997
	9. Light Industry	200.81 TSF	173	32	205	62	207	269	2223
	SUB-TOTAL		392	156	548	426	625	1051	10220
5	3. High Density Residential	554.00 DU	50	244	294	238	122	360	3795
	5. General Commercial	82.71 TSF	92	52	144	153	175	328	3358
	13. Public Facility	0.81 ACRE	0	0	0	0	0	0	2
	SUB-TOTAL		142	296	438	391	297	688	7155
6	1. Low Density Residential	132.00 DU	24	73	97	84	46	130	1242
	13. Public Facility	6.34 ACRE	1	0	1	0	1	1	16
	SUB-TOTAL		25	73	98	84	47	131	1258
7	1. Low Density Residential	271.00 DU	49	149	198	173	95	268	2550
	4. Neighborhood Commercial	11.00 TSF	13	6	19	25	30	55	591
	5. General Commercial	78.41 TSF	87	49	136	145	166	311	3183
	SUB-TOTAL		149	204	353	343	291	634	6324
8	5. General Commercial	203.57 TSF	226	128	354	377	432	809	8265
	SUB-TOTAL		226	128	354	377	432	809	8265
9	5. General Commercial	949.48 TSF	1054	598	1652	1757	2013	3770	38549
	SUB-TOTAL		1054	598	1652	1757	2013	3770	38549
10	3. High Density Residential	770.00 DU	69	339	408	331	169	500	5275
	5. General Commercial	448.37 TSF	498	282	780	829	951	1780	18204
	SUB-TOTAL		567	621	1188	1160	1120	2280	23479
11	3. High Density Residential	1410.00 DU	127	620	747	606	310	916	9659
	13. Public Facility	0.69 ACRE	0	0	0	0	0	0	2
	SUB-TOTAL		127	620	747	606	310	916	9661
12	17. Cultural Arts Center	942.28 TSF	1131	236	1367	415	1055	1470	12787
	SUB-TOTAL		1131	236	1367	415	1055	1470	12787

Buildout (2020) ZONAL LAND USE AND TRIP GENERATION (cont.)

Zone		Land Use Type	Units	-- AM Peak Hour -- In	Out	Total	-- PM Peak Hour -- In	Out	Total	ADT
13	20.	South Coast Metro	1021.18 TSF	1072	174	1246	317	1001	1318	10416
		SUB-TOTAL		1072	174	1246	317	1001	1318	10416
14	20.	South Coast Metro	525.00 TSF	551	89	640	163	515	678	5355
		SUB-TOTAL		551	89	640	163	515	678	5355
15	8.	Urban Center Commercial	863.00 TSF	898	164	1062	406	1001	1407	12306
		SUB-TOTAL		898	164	1062	406	1001	1407	12306
16	17.	Cultural Arts Center	645.26 TSF	774	161	935	284	723	1007	8756
	18.	Movie Theater	1862.00 SEAT	0	19	19	447	37	484	3277
		SUB-TOTAL		774	180	954	731	760	1491	12033
17	17.	Cultural Arts Center	604.50 TSF	725	151	876	266	677	943	8203
	19.	Performance Theater	7308.00 SEAT	73	0	73	585	146	731	8989
		SUB-TOTAL		798	151	949	851	823	1674	17192
18	17.	Cultural Arts Center	1162.99 TSF	1396	291	1687	512	1303	1815	15782
		SUB-TOTAL		1396	291	1687	512	1303	1815	15782
19	7.	Regional Commercial (EQ) (Equation base = 3440.35 TSF)	750.00 TSF	194	124	318	659	714	1373	14457
		SUB-TOTAL		194	124	318	659	714	1373	14457
20	7.	Regional Commercial (EQ) (Equation base = 3440.35 TSF)	250.00 TSF	65	41	106	220	238	458	4819
		SUB-TOTAL		65	41	106	220	238	458	4819
21	7.	Regional Commercial (EQ) (Equation base = 3440.35 TSF)	250.00 TSF	65	41	106	220	238	458	4819
		SUB-TOTAL		65	41	106	220	238	458	4819
22	7.	Regional Commercial (EQ) (Equation base = 3440.35 TSF)	250.00 TSF	65	41	106	220	238	458	4819
		SUB-TOTAL		65	41	106	220	238	458	4819
23	7.	Regional Commercial (EQ) (Equation base = 3440.35 TSF)	250.00 TSF	65	41	106	220	238	458	4819
		SUB-TOTAL		65	41	106	220	238	458	4819
24	7.	Regional Commercial (EQ) (Equation base = 3440.35 TSF)	750.00 TSF	194	124	318	659	714	1373	14457
		SUB-TOTAL		194	124	318	659	714	1373	14457
25	7.	Regional Commercial (EQ) (Equation base = 3440.35 TSF)	250.00 TSF	65	41	106	220	238	458	4819
		SUB-TOTAL		65	41	106	220	238	458	4819

Buildout (2020) ZONAL LAND USE AND TRIP GENERATION (cont.)

Zone	Land Use Type	Units	-- AM Peak Hour -- In	Out	Total	-- PM Peak Hour -- In	Out	Total	ADT
26	8. Urban Center Commercial	6.26 TSF	7	1	8	3	7	10	89
	18. Movie Theater	2500.00 SEAT	0	25	25	600	50	650	4400
	21. Metro Pointe	552.26 TSF	569	249	818	889	1027	1916	21013
	SUB-TOTAL		576	275	851	1492	1084	2576	25502
27	7. Regional Commercial (EQ) (Equation base = 3440.35 TSF)	690.35 TSF	179	114	293	607	657	1264	13307
	SUB-TOTAL		179	114	293	607	657	1264	13307
28	1. Low Density Residential	415.00 DU	75	228	303	266	145	411	3905
	3. High Density Residential	296.00 DU	27	130	157	127	65	192	2028
	8. Urban Center Commercial	80.00 TSF	83	15	98	38	93	131	1141
	13. Public Facility	10.00 ACRE	2	0	2	0	2	2	26
	SUB-TOTAL		187	373	560	431	305	736	7100
29	1. Low Density Residential	493.00 DU	89	271	360	316	173	489	4639
	2. Medium Density Residential	90.00 DU	11	41	52	42	23	65	675
	4. Neighborhood Commercial	20.37 TSF	24	12	36	46	56	102	1095
	13. Public Facility	2.79 ACRE	0	0	0	0	1	1	7
	SUB-TOTAL		124	324	448	404	253	657	6416
30	2. Medium Density Residential	244.00 DU	29	112	141	115	63	178	1830
	SUB-TOTAL		29	112	141	115	63	178	1830
31	10. Industrial Park	278.64 TSF	220	45	265	56	220	276	2062
	SUB-TOTAL		220	45	265	56	220	276	2062
32	10. Industrial Park	682.42 TSF	539	109	648	136	539	675	5050
	SUB-TOTAL		539	109	648	136	539	675	5050
33	8. Urban Center Commercial	967.00 TSF	1006	184	1190	454	1122	1576	13789
	SUB-TOTAL		1006	184	1190	454	1122	1576	13789
34	2. Medium Density Residential	369.00 DU	44	170	214	173	96	269	2768
	SUB-TOTAL		44	170	214	173	96	269	2768
35	10. Industrial Park	547.21 TSF	432	88	520	109	432	541	4049
	12. School (K-12)	350.00 STU	81	49	130	11	14	25	462
	SUB-TOTAL		513	137	650	120	446	566	4511
36	5. General Commercial	135.75 TSF	151	86	237	251	288	539	5511
	10. Industrial Park	1034.74 TSF	817	166	983	207	817	1024	7657
	12. School (K-12)	525.00 STU	121	74	195	16	21	37	693
	SUB-TOTAL		1089	326	1415	474	1126	1600	13861
37	10. Industrial Park	1727.38 TSF	1365	276	1641	345	1365	1710	12783
	SUB-TOTAL		1365	276	1641	345	1365	1710	12783

Buildout (2020) ZONAL LAND USE AND TRIP GENERATION (cont.)

Zone	Land Use Type	Units	-- AM Peak Hour -- In	Out	Total	-- PM Peak Hour -- In	Out	Total	ADT
38	10. Industrial Park	551.15 TSF	435	88	523	110	435	545	4079
	SUB-TOTAL		435	88	523	110	435	545	4079
39	10. Industrial Park	719.76 TSF	569	115	684	144	569	713	5326
	SUB-TOTAL		569	115	684	144	569	713	5326
40	2. Medium Density Residential	56.00 DU	7	26	33	26	15	41	420
	5. General Commercial	109.67 TSF	122	69	191	203	233	436	4453
	15. Storage	68.28 TSF	6	4	10	9	9	18	171
	SUB-TOTAL		135	99	234	238	257	495	5044
41	1. Low Density Residential	74.00 DU	13	41	54	47	26	73	696
	12. School (K-12)	550.00 STU	127	77	204	17	22	39	726
	13. Public Facility	1.84 ACRE	0	0	0	0	0	0	5
	SUB-TOTAL		140	118	258	64	48	112	1427
42	3. High Density Residential	40.00 DU	4	18	22	17	9	26	274
	4. Neighborhood Commercial	59.15 TSF	70	35	105	135	163	298	3180
	5. General Commercial	146.97 TSF	163	93	256	272	312	584	5967
	9. Light Industry	283.87 TSF	244	45	289	88	292	380	3142
	15. Storage	11.44 TSF	1	1	2	1	1	2	29
	SUB-TOTAL		482	192	674	513	777	1290	12592
43	1. Low Density Residential	38.00 DU	7	21	28	24	13	37	358
	2. Medium Density Residential	80.00 DU	10	37	47	38	21	59	600
	5. General Commercial	495.29 TSF	550	312	862	916	1050	1966	20109
	SUB-TOTAL		567	370	937	978	1084	2062	21067
44	1. Low Density Residential	584.00 DU	105	321	426	374	204	578	5495
	12. School (K-12)	370.00 STU	85	52	137	11	15	26	488
	13. Public Facility	13.15 ACRE	2	0	2	1	2	3	34
	SUB-TOTAL		192	373	565	386	221	607	6017
45	1. Low Density Residential	753.00 DU	136	414	550	482	264	746	7086
	2. Medium Density Residential	282.00 DU	34	130	164	133	73	206	2115
	4. Neighborhood Commercial	16.50 TSF	20	10	30	38	45	83	887
	12. School (K-12)	429.00 STU	99	60	159	13	17	30	566
	13. Public Facility	2.23 ACRE	0	0	0	0	0	0	6
	SUB-TOTAL		289	614	903	666	399	1065	10660
46	1. Low Density Residential	294.00 DU	53	162	215	188	103	291	2767
	13. Public Facility	19.26 ACRE	3	0	3	1	4	5	49
	SUB-TOTAL		56	162	218	189	107	296	2816
47	1. Low Density Residential	237.00 DU	43	130	173	152	83	235	2230
	2. Medium Density Residential	57.00 DU	7	26	33	27	15	42	428
	11. Golf Course	140.20 ACRE	22	7	29	14	28	42	707
	SUB-TOTAL		72	163	235	193	126	319	3365

Buildout (2020) ZONAL LAND USE AND TRIP GENERATION (cont.)

Zone	Land Use Type	Units	-- AM Peak Hour -- In	Out	Total	-- PM Peak Hour -- In	Out	Total	ADT
48	1. Low Density Residential	761.00 DU	137	419	556	487	266	753	7161
	3. High Density Residential	140.00 DU	13	62	75	60	31	91	959
	5. General Commercial	67.52 TSF	75	43	118	125	143	268	2741
	12. School (K-12)	1406.00 STU	323	197	520	42	56	98	1856
	13. Public Facility	6.33 ACRE	1	0	1	0	1	1	16
	SUB-TOTAL		549	721	1270	714	497	1211	12733
49	1. Low Density Residential	497.00 DU	89	273	362	318	174	492	4677
	5. General Commercial	62.35 TSF	69	39	108	115	132	247	2531
	12. School (K-12)	528.00 STU	121	74	195	16	21	37	697
	13. Public Facility	8.48 ACRE	1	0	1	0	2	2	22
	SUB-TOTAL		280	386	666	449	329	778	7927
50	1. Low Density Residential	436.00 DU	78	240	318	279	153	432	4103
	SUB-TOTAL		78	240	318	279	153	432	4103
51	1. Low Density Residential	360.00 DU	65	198	263	230	126	356	3388
	5. General Commercial	187.81 TSF	208	118	326	347	398	745	7625
	13. Public Facility	4.55 ACRE	1	0	1	0	1	1	12
	SUB-TOTAL		274	316	590	577	525	1102	11025
52	1. Low Density Residential	50.00 DU	9	28	37	32	18	50	471
	3. High Density Residential	405.00 DU	36	178	214	174	89	263	2774
	5. General Commercial	235.64 TSF	262	148	410	436	500	936	9567
	13. Public Facility	35.58 ACRE	6	1	7	1	7	8	91
	SUB-TOTAL		313	355	668	643	614	1257	12903
53	1. Low Density Residential	26.00 DU	5	14	19	17	9	26	245
	3. High Density Residential	206.00 DU	19	91	110	89	45	134	1411
	5. General Commercial	287.30 TSF	319	181	500	531	609	1140	11664
	SUB-TOTAL		343	286	629	637	663	1300	13320
54	3. High Density Residential	450.00 DU	41	198	239	194	99	293	3083
	5. General Commercial	161.91 TSF	180	102	282	300	343	643	6574
	SUB-TOTAL		221	300	521	494	442	936	9657
55	3. High Density Residential	770.00 DU	69	339	408	331	169	500	5275
	5. General Commercial	334.37 TSF	371	211	582	619	709	1328	13576
	9. Light Industry	106.23 TSF	91	17	108	33	109	142	1176
	13. Public Facility	14.67 ACRE	2	0	2	1	3	4	38
	SUB-TOTAL		533	567	1100	984	990	1974	20065
56	16. Community College	27000.00 STU	3510	270	3780	3240	1350	4590	41580
	SUB-TOTAL		3510	270	3780	3240	1350	4590	41580
57	3. High Density Residential	686.00 DU	62	302	364	295	151	446	4699
	SUB-TOTAL		62	302	364	295	151	446	4699

Buildout (2020) ZONAL LAND USE AND TRIP GENERATION (cont.)

Zone	Land Use Type	Units	-- AM Peak Hour -- In	Out	Total	-- PM Peak Hour -- In	Out	Total	ADT
58	3. High Density Residential	188.00 DU	17	83	100	81	41	122	1288
	4. Neighborhood Commercial	90.50 TSF	108	53	161	206	249	455	4866
	5. General Commercial	7.40 TSF	8	5	13	14	16	30	300
	9. Light Industry	602.08 TSF	518	96	614	187	620	807	6665
	13. Public Facility	2.81 ACRE	0	0	0	0	1	1	7
	SUB-TOTAL		651	237	888	488	927	1415	13126
59	14. Fairground	146.39 ACRE	0	0	0	293	293	586	1801
	SUB-TOTAL		0	0	0	293	293	586	1801
60	12. School (K-12)	1785.00 STU	411	250	661	54	71	125	2356
	13. Public Facility	2.67 ACRE	0	0	0	0	1	1	7
	SUB-TOTAL		411	250	661	54	72	126	2363
61	12. School (K-12)	864.00 STU	199	121	320	26	35	61	1140
	13. Public Facility	97.16 ACRE	16	2	18	4	18	22	250
	SUB-TOTAL		215	123	338	30	53	83	1390
62	1. Low Density Residential	510.00 DU	92	281	373	326	179	505	4799
	3. High Density Residential	350.00 DU	32	154	186	151	77	228	2398
	4. Neighborhood Commercial	34.98 TSF	42	21	63	80	96	176	1881
	SUB-TOTAL		166	456	622	557	352	909	9078
63	1. Low Density Residential	362.00 DU	65	199	264	232	127	359	3406
	3. High Density Residential	32.00 DU	3	14	17	14	7	21	219
	12. School (K-12)	377.00 STU	87	53	140	11	15	26	498
	SUB-TOTAL		155	266	421	257	149	406	4123
64	3. High Density Residential	39.00 DU	4	17	21	17	9	26	267
	5. General Commercial	174.94 TSF	194	110	304	324	371	695	7103
	SUB-TOTAL		198	127	325	341	380	721	7370
65	2. Medium Density Residential	658.00 DU	79	303	382	309	171	480	4935
	3. High Density Residential	8.00 DU	1	4	5	3	2	5	55
	13. Public Facility	51.35 ACRE	8	1	9	2	10	12	132
	SUB-TOTAL		88	308	396	314	183	497	5122
66	1. Low Density Residential	147.00 DU	26	81	107	94	51	145	1383
	2. Medium Density Residential	194.00 DU	23	89	112	91	50	141	1455
	SUB-TOTAL		49	170	219	185	101	286	2838
67	1. Low Density Residential	170.00 DU	31	94	125	109	60	169	1600
	2. Medium Density Residential	56.00 DU	7	26	33	26	15	41	420
	SUB-TOTAL		38	120	158	135	75	210	2020
68	12. School (K-12)	1319.00 STU	303	185	488	40	53	93	1741
	13. Public Facility	217.23 ACRE	35	4	39	9	41	50	558
	SUB-TOTAL		338	189	527	49	94	143	2299

Buildout (2020) ZONAL LAND USE AND TRIP GENERATION (cont.)

Zone	Land Use Type	Units	-- AM Peak Hour -- In	Out	Total	-- PM Peak Hour -- In	Out	Total	ADT
69	1. Low Density Residential	458.00 DU	82	252	334	293	160	453	4310
	13. Public Facility	2.70 ACRE	0	0	0	0	1	1	7
	SUB-TOTAL		82	252	334	293	161	454	4317
70	1. Low Density Residential	140.00 DU	25	77	102	90	49	139	1317
	12. School (K-12)	572.00 STU	132	80	212	17	23	40	755
	SUB-TOTAL		157	157	314	107	72	179	2072
71	2. Medium Density Residential	310.00 DU	37	143	180	146	81	227	2325
	13. Public Facility	5.11 ACRE	1	0	1	0	1	1	13
	SUB-TOTAL		38	143	181	146	82	228	2338
72	2. Medium Density Residential	171.00 DU	21	79	100	80	44	124	1283
	5. General Commercial	7.38 TSF	8	5	13	14	16	30	299
	13. Public Facility	2.16 ACRE	0	0	0	0	0	0	6
	SUB-TOTAL		29	84	113	94	60	154	1588
73	1. Low Density Residential	117.00 DU	21	64	85	75	41	116	1101
	2. Medium Density Residential	121.00 DU	15	56	71	57	31	88	908
	SUB-TOTAL		36	120	156	132	72	204	2009
74	1. Low Density Residential	42.00 DU	8	23	31	27	15	42	395
	2. Medium Density Residential	341.00 DU	41	157	198	160	89	249	2558
	3. High Density Residential	79.00 DU	7	35	42	34	17	51	541
	5. General Commercial	97.50 TSF	108	61	169	180	207	387	3958
	SUB-TOTAL		164	276	440	401	328	729	7452
75	1. Low Density Residential	66.00 DU	12	36	48	42	23	65	621
	2. Medium Density Residential	106.00 DU	13	49	62	50	28	78	795
	3. High Density Residential	145.00 DU	13	64	77	62	32	94	993
	5. General Commercial	118.99 TSF	132	75	207	220	252	472	4831
	SUB-TOTAL		170	224	394	374	335	709	7240
76	1. Low Density Residential	203.00 DU	37	112	149	130	71	201	1910
	3. High Density Residential	1019.00 DU	92	448	540	438	224	662	6980
	11. Golf Course	292.01 ACRE	47	15	62	29	58	87	1472
	13. Public Facility	18.33 ACRE	3	0	3	1	3	4	47
	SUB-TOTAL		179	575	754	598	356	954	10409
77	3. High Density Residential	500.00 DU	45	220	265	215	110	325	3425
	5. General Commercial	124.18 TSF	138	78	216	230	263	493	5042
	SUB-TOTAL		183	298	481	445	373	818	8467
78	2. Medium Density Residential	145.00 DU	17	67	84	68	38	106	1088
	3. High Density Residential	42.00 DU	4	18	22	18	9	27	288
	5. General Commercial	433.21 TSF	481	273	754	801	918	1719	17589
	SUB-TOTAL		502	358	860	887	965	1852	18965

Buildout (2020) ZONAL LAND USE AND TRIP GENERATION (cont.)

Zone	Land Use Type	Units	-- AM Peak Hour -- In	Out	Total	-- PM Peak Hour -- In	Out	Total	ADT
79	3. High Density Residential	508.00 DU	46	224	270	218	112	330	3480
	5. General Commercial	439.36 TSF	488	277	765	813	931	1744	17838
	SUB-TOTAL		534	501	1035	1031	1043	2074	21318
80	1. Low Density Residential	154.00 DU	28	85	113	99	54	153	1449
	3. High Density Residential	123.00 DU	11	54	65	53	27	80	843
	4. Neighborhood Commercial	59.02 TSF	70	35	105	135	162	297	3174
	5. General Commercial	89.28 TSF	99	56	155	165	189	354	3625
	13. Public Facility	1.29 ACRE	0	0	0	0	0	0	3
	SUB-TOTAL		208	230	438	452	432	884	9094
81	1. Low Density Residential	542.00 DU	98	298	396	347	190	537	5100
	3. High Density Residential	106.00 DU	10	47	57	46	23	69	726
	5. General Commercial	138.50 TSF	154	87	241	256	294	550	5623
	12. School (K-12)	444.00 STU	102	62	164	13	18	31	586
	13. Public Facility	3.13 ACRE	1	0	1	0	1	1	8
	SUB-TOTAL		365	494	859	662	526	1188	12043
82	1. Low Density Residential	306.00 DU	55	168	223	196	107	303	2879
	13 Public Facility	2.20 ACRE	0	0	0	0	0	0	6
	SUB-TOTAL		55	168	223	196	107	303	2885
83	13. Public Facility	75.97 ACRE	12	2	14	3	14	17	195
	SUB-TOTAL		12	2	14	3	14	17	195
84	1. Low Density Residential	70.00 DU	13	39	52	45	25	70	659
	2. Medium Density Residential	151.00 DU	18	69	87	71	39	110	1133
	4. Neighborhood Commercial	66.10 TSF	79	39	118	151	182	333	3554
	5. General Commercial	6.14 TSF	7	4	11	11	13	24	249
	9. Light Industry	28.16 TSF	24	5	29	9	29	38	312
	13. Public Facility	0.91 ACRE	0	0	0	0	0	0	2
	SUB-TOTAL		141	156	297	287	288	575	5909
86	9. Light Industry	340.14 TSF	293	54	347	105	350	455	3765
	SUB-TOTAL		293	54	347	105	350	455	3765
87	1. Low Density Residential	67.00 DU	12	37	49	43	23	66	630
	2. Medium Density Residential	92.00 DU	11	42	53	43	24	67	690
	9. Light Industry	161.26 TSF	139	26	165	50	166	216	1785
	13. Public Facility	2.40 ACRE	0	0	0	0	0	0	6
	SUB-TOTAL		162	105	267	136	213	349	3111
88	1. Low Density Residential	349.00 DU	63	192	255	223	122	345	3284
	5. General Commercial	3.97 TSF	4	3	7	7	8	15	161
	13. Public Facility	35.27 ACRE	6	1	7	1	7	8	91
	SUB-TOTAL		73	196	269	231	137	368	3536
89	1. Low Density Residential	298.00 DU	54	164	218	191	104	295	2804
	SUB-TOTAL		54	164	218	191	104	295	2804

Buildout (2020) ZONAL LAND USE AND TRIP GENERATION (cont.)

Zone	Land Use Type	Units	-- AM Peak Hour -- In	Out	Total	-- PM Peak Hour -- In	Out	Total	ADT
90	1. Low Density Residential	124.00 DU	22	68	90	79	43	122	1167
	2. Medium Density Residential	25.00 DU	3	12	15	12	7	19	188
	3. High Density Residential	80.00 DU	7	35	42	34	18	52	548
	12. School (K-12)	423.00 STU	97	59	156	13	17	30	558
	SUB-TOTAL		129	174	303	138	85	223	2461
91	9. Light Industry	549.21 TSF	472	88	560	170	566	736	6080
	SUB-TOTAL		472	88	560	170	566	736	6080
92	1. Low Density Residential	92.00 DU	17	51	68	59	32	91	866
	5. General Commercial	2.85 TSF	3	2	5	5	6	11	116
	9. Light Industry	338.35 TSF	291	54	345	105	348	453	3746
	SUB-TOTAL		311	107	418	169	386	555	4728
93	2. Medium Density Residential	22.00 DU	3	10	13	10	6	16	165
	3. High Density Residential	460.00 DU	41	202	243	198	101	299	3151
	4. Neighborhood Commercial	3.85 TSF	5	2	7	9	11	20	207
	9. Light Industry	8.10 TSF	7	1	8	3	8	11	90
	12. School (K-12)	575.00 STU	132	81	213	17	23	40	759
	SUB-TOTAL		188	296	484	237	149	386	4372
94	9. Light Industry	450.00 TSF	387	72	459	139	463	602	4981
	SUB-TOTAL		387	72	459	139	463	602	4981
95	9. Light Industry	606.77 TSF	522	97	619	188	625	813	6717
	SUB-TOTAL		522	97	619	188	625	813	6717
96	1. Low Density Residential	41.00 DU	7	23	30	26	14	40	386
	3. High Density Residential	387.00 DU	35	170	205	166	85	251	2651
	4. Neighborhood Commercial	12.36 TSF	15	7	22	28	34	62	665
	5. General Commercial	54.64 TSF	61	34	95	101	116	217	2218
	9. Light Industry	104.89 TSF	90	17	107	33	108	141	1161
	SUB-TOTAL		208	251	459	354	357	711	7081
97	3. High Density Residential	64.00 DU	6	28	34	28	14	42	438
	4. Neighborhood Commercial	12.59 TSF	15	7	22	29	35	64	677
	5. General Commercial	17.50 TSF	19	11	30	32	37	69	710
	9. Light Industry	428.15 TSF	368	69	437	133	441	574	4740
	SUB-TOTAL		408	115	523	222	527	749	6565
98	9. Light Industry	672.95 TSF	579	108	687	209	693	902	7450
	SUB-TOTAL		579	108	687	209	693	902	7450
99	3. High Density Residential	366.00 DU	33	161	194	157	81	238	2507
	9. Light Industry	206.76 TSF	178	33	211	64	213	277	2289
	13. Public Facility	0.17 ACRE	0	0	0	0	0	0	0
	15. Storage	77.96 TSF	7	5	12	10	10	20	195
	SUB-TOTAL		218	199	417	231	304	535	4991

Buildout (2020) ZONAL LAND USE AND TRIP GENERATION (cont.)

Zone	Land Use Type	Units	-- AM Peak Hour -- In	Out	Total	-- PM Peak Hour -- In	Out	Total	ADT
100	3. High Density Residential	426.00 DU	38	187	225	183	94	277	2918
	4. Neighborhood Commercial	7.45 TSF	9	4	13	17	20	37	400
	5. General Commercial	86.87 TSF	96	55	151	161	184	345	3527
	SUB-TOTAL		143	246	389	361	298	659	6845
101	9. Light Industry	197.53 TSF	170	32	202	61	203	264	2187
	SUB-TOTAL		170	32	202	61	203	264	2187
102	5. General Commercial	126.00 TSF	140	79	219	233	267	500	5115
	9. Light Industry	160.76 TSF	138	26	164	50	166	216	1780
	15. Storage	100.93 TSF	9	6	15	13	13	26	252
	SUB-TOTAL		287	111	398	296	446	742	7147
103	5. General Commercial	127.20 TSF	141	80	221	235	270	505	5164
	9. Light Industry	17.28 TSF	15	3	18	5	18	23	191
	SUB-TOTAL		156	83	239	240	288	528	5355
104	1. Low Density Residential	29.00 DU	5	16	21	19	10	29	273
	3. High Density Residential	179.00 DU	16	79	95	77	39	116	1226
	5. General Commercial	64.05 TSF	71	40	111	118	136	254	2600
	9. Light Industry	169.05 TSF	145	27	172	52	174	226	1871
	13. Public Facility	1.09 ACRE	0	0	0	0	0	0	3
	SUB-TOTAL		237	162	399	266	359	625	5973
105	3. High Density Residential	351.00 DU	32	154	186	151	77	228	2404
	5. General Commercial	79.48 TSF	88	50	138	147	168	315	3227
	13. Public Facility	0.94 ACRE	0	0	0	0	0	0	2
	SUB-TOTAL		120	204	324	298	245	543	5633
106	3. High Density Residential	274.00 DU	25	121	146	118	60	178	1877
	5. General Commercial	9.11 TSF	10	6	16	17	19	36	370
	9. Light Industry	272.49 TSF	234	44	278	84	281	365	3016
	SUB-TOTAL		269	171	440	219	360	579	5263
107	1. Low Density Residential	60.00 DU	11	33	44	38	21	59	565
	3. High Density Residential	40.00 DU	4	18	22	17	9	26	274
	4. Neighborhood Commercial	32.28 TSF	38	19	57	74	89	163	1736
	SUB-TOTAL		53	70	123	129	119	248	2575
108	3. High Density Residential	394.00 DU	35	173	208	169	87	256	2699
	5. General Commercial	32.47 TSF	36	20	56	60	69	129	1318
	12. School (K-12)	588.00 STU	135	82	217	18	24	42	776
	SUB-TOTAL		206	275	481	247	180	427	4793
109	1. Low Density Residential	112.00 DU	20	62	82	72	39	111	1054
	3. High Density Residential	360.00 DU	32	158	190	155	79	234	2466
	5. General Commercial	39.03 TSF	43	25	68	72	83	155	1585
	12 School (K-12)	654.00 STU	150	92	242	20	26	46	863
	SUB-TOTAL		245	337	582	319	227	546	5968

Buildout (2020) ZONAL LAND USE AND TRIP GENERATION (cont.)

Zone	Land Use Type	Units	-- AM Peak Hour -- In	Out	Total	-- PM Peak Hour -- In	Out	Total	ADT
110	1. Low Density Residential	18.00 DU	3	10	13	12	6	18	169
	2. Medium Density Residential	6.00 DU	1	3	4	3	2	5	45
	3. High Density Residential	39.00 DU	4	17	21	17	9	26	267
	5. General Commercial	68.62 TSF	76	43	119	127	145	272	2786
	SUB-TOTAL		84	73	157	159	162	321	3267
111	3. High Density Residential	235.00 DU	21	103	124	101	52	153	1610
	6. Commercial Center	203.75 TSF	222	79	301	332	452	784	7879
	13. Public Facility	12.60 ACRE	2	0	2	1	2	3	32
	SUB-TOTAL		245	182	427	434	506	940	9521
112	1. Low Density Residential	69.00 DU	12	38	50	44	24	68	649
	3. High Density Residential	463.00 DU	42	204	246	199	102	301	3172
	5. General Commercial	21.76 TSF	24	14	38	40	46	86	883
	6. Commercial Center	17.43 TSF	19	7	26	28	39	67	674
	13. Public Facility	0.52 ACRE	0	0	0	0	0	0	1
	SUB-TOTAL		97	263	360	311	211	522	5379
113	2. Medium Density Residential	333.00 DU	40	153	193	157	87	244	2498
	3. High Density Residential	142.00 DU	13	62	75	61	31	92	973
	5. General Commercial	25.34 TSF	28	16	44	47	54	101	1029
	12. School (K-12)	0.00 STU	0	0	0	0	0	0	0
	13. Public Facility	2.05 ACRE	0	0	0	0	0	0	5
	SUB-TOTAL		81	231	312	265	172	437	4505
114	3. High Density Residential	420.00 DU	38	185	223	181	92	273	2877
	5. General Commercial	231.85 TSF	257	146	403	429	492	921	9413
	6. Commercial Center	69.02 TSF	75	27	102	113	153	266	2669
	13. Public Facility	0.45 ACRE	0	0	0	0	0	0	1
	SUB-TOTAL		370	358	728	723	737	1460	14960
115	6. Commercial Center	185.00 TSF	202	72	274	302	411	713	7154
	SUB-TOTAL		202	72	274	302	411	713	7154
116	2. Medium Density Residential	24.00 DU	3	11	14	11	6	17	180
	3. High Density Residential	263.00 DU	24	116	140	113	58	171	1802
	5. General Commercial	153.84 TSF	171	97	268	285	326	611	6246
	6. Commercial Center	420.19 TSF	458	164	622	685	933	1618	16249
	13. Public Facility	0.83 ACRE	0	0	0	0	0	0	2
	SUB-TOTAL		656	388	1044	1094	1323	2417	24479
117	1. Low Density Residential	32.00 DU	6	18	24	20	11	31	301
	2. Medium Density Residential	166.00 DU	20	76	96	78	43	121	1245
	3. High Density Residential	125.00 DU	11	55	66	54	28	82	856
	5. General Commercial	151.80 TSF	169	96	265	281	322	603	6163
	SUB-TOTAL		206	245	451	433	404	837	8565
118	2. Medium Density Residential	68.00 DU	8	31	39	32	18	50	510

Buildout (2020) ZONAL LAND USE AND TRIP GENERATION (cont.)

Zone	Land Use Type	Units	-- AM Peak Hour -- In	Out	Total	-- PM Peak Hour -- In	Out	Total	ADT
118	5. General Commercial	257.49 TSF	286	162	448	476	546	1022	10454
	SUB-TOTAL		294	193	487	508	564	1072	10964
119	5. General Commercial	217.19 TSF	241	137	378	402	460	862	8818
	15. Storage	24.86 TSF	2	1	3	3	3	6	62
	SUB-TOTAL		243	138	381	405	463	868	8880
120	1. Low Density Residential	15.00 DU	3	8	11	10	5	15	141
	2. Medium Density Residential	27.00 DU	3	12	15	13	7	20	203
	3. High Density Residential	55.00 DU	5	24	29	24	12	36	377
	5. General Commercial	379.20 TSF	421	239	660	702	804	1506	15396
	SUB-TOTAL		432	283	715	749	828	1577	16117
121	3. High Density Residential	548.00 DU	49	241	290	236	121	357	3754
	5. General Commercial	100.62 TSF	112	63	175	186	213	399	4085
	13. Public Facility	2.59 ACRE	0	0	0	0	0	0	7
	SUB-TOTAL		161	304	465	422	334	756	7846
122	1. Low Density Residential	22.00 DU	4	12	16	14	8	22	207
	3. High Density Residential	633.00 DU	57	279	336	272	139	411	4336
	5. General Commercial	14.17 TSF	16	9	25	26	30	56	575
	13. Public Facility	1.63 ACRE	0	0	0	0	0	0	4
	SUB-TOTAL		77	300	377	312	177	489	5122
123	5. General Commercial	89.25 TSF	99	56	155	165	189	354	3624
	SUB-TOTAL		99	56	155	165	189	354	3624
124	3. High Density Residential	928.00 DU	84	408	492	399	204	603	6357
	4. Neighborhood Commercial	5.89 TSF	7	3	10	13	16	29	317
	5. General Commercial	9.94 TSF	11	6	17	18	21	39	404
	13. Public Facility	2.49 ACRE	0	0	0	0	0	0	6
	SUB-TOTAL		102	417	519	430	241	671	7084
125	3. High Density Residential	184.00 DU	17	81	98	79	40	119	1260
	13. Public Facility	44.96 ACRE	7	1	8	2	9	11	116
	16. Community College	1000.00 STU	130	10	140	120	50	170	1540
	SUB-TOTAL		154	92	246	201	99	300	2916
126	2. Medium Density Residential	40.00 DU	5	18	23	19	10	29	300
	5. General Commercial	58.94 TSF	65	37	102	109	125	234	2393
	SUB-TOTAL		70	55	125	128	135	263	2693
127	3. High Density Residential	58.00 DU	5	26	31	25	13	38	397
	5. General Commercial	207.43 TSF	230	131	361	384	440	824	8422
	15. Storage	96.05 TSF	9	6	15	12	12	24	240
	SUB-TOTAL		244	163	407	421	465	886	9059
128	3. High Density Residential	276.00 DU	25	121	146	119	61	180	1891

Buildout (2020) ZONAL LAND USE AND TRIP GENERATION (cont.)

Zone	Land Use Type	Units	-- AM Peak Hour -- In	Out	Total	-- PM Peak Hour -- In	Out	Total	ADT
128	4. Neighborhood Commercial	36.29 TSF	43	21	64	83	100	183	1951
	5. General Commercial	181.41 TSF	201	114	315	336	385	721	7365
	SUB-TOTAL		269	256	525	538	546	1084	11207
129	3. High Density Residential	330.00 DU	30	145	175	142	73	215	2261
	5. General Commercial	131.06 TSF	145	83	228	242	278	520	5321
	SUB-TOTAL		175	228	403	384	351	735	7582
130	1. Low Density Residential	42.00 DU	8	23	31	27	15	42	395
	2. Medium Density Residential	209.00 DU	25	96	121	98	54	152	1568
	4. Neighborhood Commercial	22.47 TSF	27	13	40	51	62	113	1208
	5. General Commercial	45.54 TSF	51	29	80	84	97	181	1849
	13. Public Facility	0.23 ACRE	0	0	0	0	0	0	1
	SUB-TOTAL		111	161	272	260	228	488	5021
131	1. Low Density Residential	29.00 DU	5	16	21	19	10	29	273
	2. Medium Density Residential	185.00 DU	22	85	107	87	48	135	1388
	3. High Density Residential	211.00 DU	19	93	112	91	46	137	1445
	4. Neighborhood Commercial	35.85 TSF	43	21	64	82	99	181	1928
	5. General Commercial	4.97 TSF	6	3	9	9	11	20	202
	13. Public Facility	1.13 ACRE	0	0	0	0	0	0	3
	SUB-TOTAL		95	218	313	288	214	502	5239
132	2. Medium Density Residential	303.00 DU	36	139	175	142	79	221	2273
	13. Public Facility	4.27 ACRE	1	0	1	0	1	1	11
	SUB-TOTAL		37	139	176	142	80	222	2284
133	2. Medium Density Residential	4.00 DU	0	2	2	2	1	3	30
	3. High Density Residential	305.00 DU	27	134	161	131	67	198	2089
	5. General Commercial	189.10 TSF	210	119	329	350	401	751	7677
	SUB-TOTAL		237	255	492	483	469	952	9796
134	2. Medium Density Residential	295.00 DU	35	136	171	139	77	216	2213
	4. Neighborhood Commercial	36.10 TSF	43	21	64	82	99	181	1941
	5. General Commercial	170.19 TSF	189	107	296	315	361	676	6910
	13. Public Facility	0.41 ACRE	0	0	0	0	0	0	1
	SUB-TOTAL		267	264	531	536	537	1073	11065
135	1. Low Density Residential	239.00 DU	43	131	174	153	84	237	2249
	SUB-TOTAL		43	131	174	153	84	237	2249
136	1. Low Density Residential	226.00 DU	41	124	165	145	79	224	2127
	13. Public Facility	4.13 ACRE	1	0	1	0	1	1	11
	SUB-TOTAL		42	124	166	145	80	225	2138
137	1. Low Density Residential	206.00 DU	37	113	150	132	72	204	1938
	5. General Commercial	6.49 TSF	7	4	11	12	14	26	263
	SUB-TOTAL		44	117	161	144	86	230	2201

Buildout (2020) ZONAL LAND USE AND TRIP GENERATION (cont.)

Zone	Land Use Type	Units	-- AM Peak Hour -- In	Out	Total	-- PM Peak Hour -- In	Out	Total	ADT
138	2. Medium Density Residential	198.00 DU	24	91	115	93	51	144	1485
	SUB-TOTAL		24	91	115	93	51	144	1485
139	2. Medium Density Residential	232.00 DU	28	107	135	109	60	169	1740
	5. General Commercial	125.90 TSF	140	79	219	233	267	500	5111
	13. Public Facility	2.50 ACRE	0	0	0	0	0	0	6
	SUB-TOTAL		168	186	354	342	327	669	6857
140	2. Medium Density Residential	202.00 DU	24	93	117	95	53	148	1515
	3. High Density Residential	138.00 DU	12	61	73	59	30	89	945
	5. General Commercial	99.54 TSF	110	63	173	184	211	395	4041
	SUB-TOTAL		146	217	363	338	294	632	6501
141	1. Low Density Residential	206.00 DU	37	113	150	132	72	204	1938
	5. General Commercial	11.50 TSF	13	7	20	21	24	45	467
	13. Public Facility	1.66 ACRE	0	0	0	0	0	0	4
	SUB-TOTAL		50	120	170	153	96	249	2409
142	1 Low Density Residential	201.00 DU	36	111	147	129	70	199	1891
	SUB-TOTAL		36	111	147	129	70	199	1891
143	1. Low Density Residential	144.00 DU	26	79	105	92	50	142	1355
	2. Medium Density Residential	20.00 DU	2	9	11	9	5	14	150
	5. General Commercial	170.74 TSF	190	108	298	316	362	678	6932
	SUB-TOTAL		218	196	414	417	417	834	8437
144	1. Low Density Residential	85.00 DU	15	47	62	54	30	84	800
	5. General Commercial	117.41 TSF	130	74	204	217	249	466	4767
	13. Public Facility	9.11 ACRE	1	0	1	0	2	2	23
	SUB-TOTAL		146	121	267	271	281	552	5590
145	1. Low Density Residential	169.00 DU	30	93	123	108	59	167	1590
	SUB-TOTAL		30	93	123	108	59	167	1590
146	1. Low Density Residential	286.00 DU	51	157	208	183	100	283	2691
	SUB-TOTAL		51	157	208	183	100	283	2691
147	1. Low Density Residential	29.00 DU	5	16	21	19	10	29	273
	2. Medium Density Residential	254.00 DU	30	117	147	119	66	185	1905
	3. High Density Residential	128.00 DU	12	56	68	55	28	83	877
	5. General Commercial	81.17 TSF	90	51	141	150	172	322	3295
	SUB-TOTAL		137	240	377	343	276	619	6350
148	2. Medium Density Residential	275.00 DU	3	127	160	129	72	201	2063
	3. High Density Residential	55.00 DU	5	24	29	24	12	36	377
	5. General Commercial	27.90 TSF	31	18	49	52	59	111	1133
	13. Public Facility	3.70 ACRE	1	0	1	0	1	1	10
	SUB-TOTAL		70	169	239	205	144	349	3583

Buildout (2020) ZONAL LAND USE AND TRIP GENERATION (cont.)

Zone	Land Use Type	Units	-- AM Peak Hour -- In	Out	Total	-- PM Peak Hour -- In	Out	Total	ADT
149	2. Medium Density Residential	353.00 DU	42	162	204	166	92	258	2648
	3. High Density Residential	12.00 DU	1	5	6	5	3	8	82
	5. General Commercial	55.81 TSF	62	35	97	103	118	221	2266
	SUB-TOTAL		105	202	307	274	213	487	4996
150	2. Medium Density Residential	341.00 DU	41	157	198	160	89	249	2558
	3. High Density Residential	96.00 DU	9	42	51	41	21	62	658
	5. General Commercial	95.94 TSF	106	60	166	177	203	380	3895
	SUB-TOTAL		156	259	415	378	313	691	7111
151	2. Medium Density Residential	340.00 DU	41	156	197	160	88	248	2550
	3. High Density Residential	67.00 DU	6	29	35	29	15	44	459
	5. General Commercial	130.80 TSF	145	82	227	242	277	519	5311
	SUB-TOTAL		192	267	459	431	380	811	8320
152	2. Medium Density Residential	331.00 DU	40	152	192	156	86	242	2483
	5. General Commercial	130.72 TSF	145	82	227	242	277	519	5307
	15. Storage	11.48 TSF	1	1	2	1	1	2	29
	SUB-TOTAL		186	235	421	399	364	763	7819
153	1. Low Density Residential	199.00 DU	36	109	145	127	70	197	1873
	2. Medium Density Residential	25.00 DU	3	12	15	12	7	19	188
	SUB-TOTAL		39	121	160	139	77	216	2061
154	1. Low Density Residential	213.00 DU	38	117	155	136	75	211	2004
	SUB-TOTAL		38	117	155	136	75	211	2004
155	1. Low Density Residential	112.00 DU	20	62	82	72	39	111	1054
	2. Medium Density Residential	58.00 DU	7	27	34	27	15	42	435
	5. General Commercial	49.55 TSF	55	31	86	92	105	197	2012
	13. Public Facility	4.65 ACRE	1	0	1	0	1	1	12
	SUB-TOTAL		83	120	203	191	160	351	3513
156	1. Low Density Residential	191.00 DU	34	105	139	122	67	189	1797
	12. School (K-12)	165.00 STU	38	23	61	5	7	12	218
	13. Public Facility	2.26 ACRE	0	0	0	0	0	0	6
	SUB-TOTAL		72	128	200	127	74	201	2021
157	1. Low Density Residential	86.00 DU	15	47	62	55	30	85	809
	2. Medium Density Residential	195.00 DU	23	90	113	92	51	143	1463
	SUB-TOTAL		38	137	175	147	81	228	2272
158	1. Low Density Residential	121.00 DU	22	67	89	77	42	119	1139
	2. Medium Density Residential	226.00 DU	27	104	131	106	59	165	1695
	12. School (K-12)	100.00 STU	23	14	37	3	4	7	132
	SUB-TOTAL		72	185	257	186	105	291	2966
159	1. Low Density Residential	13.00 DU	2	7	9	8	5	13	122

Buildout (2020) ZONAL LAND USE AND TRIP GENERATION (cont.)

Zone	Land Use Type	Units	-- AM Peak Hour -- In	Out	Total	-- PM Peak Hour -- In	Out	Total	ADT
159	2. Medium Density Residential	303.00 DU	36	139	175	142	79	221	2273
	12. School (K-12)	535.00 STU	123	75	198	16	21	37	706
	SUB-TOTAL		161	221	382	166	105	271	3101
160	1. Low Density Residential	52.00 DU	9	29	38	33	18	51	489
	2. Medium Density Residential	103.00 DU	12	47	59	48	27	75	773
	12. School (K-12)	714.00 STU	164	100	264	21	29	50	942
	13. Public Facility	2.48 ACRE	0	0	0	0	0	0	6
	SUB-TOTAL		185	176	361	102	74	176	2210
161	1. Low Density Residential	145.00 DU	26	80	106	93	51	144	1364
	SUB-TOTAL		26	80	106	93	51	144	1364
162	1. Low Density Residential	112.00 DU	20	62	82	72	39	111	1054
	2. Medium Density Residential	105.00 DU	13	48	61	49	27	76	788
	SUB-TOTAL		33	110	143	121	66	187	1842
163	1. Low Density Residential	13.00 DU	2	7	9	8	5	13	122
	2. Medium Density Residential	350.00 DU	42	161	203	165	91	256	2625
	SUB-TOTAL		44	168	212	173	96	269	2747
164	2. Medium Density Residential	294.00 DU	35	135	170	138	76	214	2205
	96.00 0 0 0 0 0 0 0								
	SUB-TOTAL		35	135	170	138	76	214	2205
165	2. Medium Density Residential	258.00 DU	31	119	150	121	67	188	1935
	5. General Commercial	5.00 TSF	6	3	9	9	11	20	203
	SUB-TOTAL		37	122	159	130	78	208	2138
166	1. Low Density Residential	9.00 DU	2	5	7	6	3	9	85
	SUB-TOTAL		2	5	7	6	3	9	85
167	1. Low Density Residential	49.00 DU	9	27	36	31	17	48	461
	2. Medium Density Residential	104.00 DU	12	48	60	49	27	76	780
	5. General Commercial	157.07 TSF	174	99	273	291	333	624	6377
	11. Golf Course	127.88 ACRE	20	6	26	13	26	39	645
	15. Storage	97.15 TSF	9	6	15	13	13	26	243
	SUB-TOTAL		224	186	410	397	416	813	8506
168	1. Low Density Residential	120.00 DU	22	66	88	77	42	119	1129
	2. Medium Density Residential	247.00 DU	30	114	144	116	64	180	1853
	3. High Density Residential	288.00 DU	26	127	153	124	63	187	1973
	5. General Commercial	328.38 TSF	364	207	571	607	696	1303	13332
	13. Public Facility	0.10 ACRE	0	0	0	0	0	0	0
	SUB-TOTAL		442	514	956	924	865	1789	18287
170	5. General Commercial	117.96 TSF	131	74	205	218	250	468	4789
	10. Industrial Park	1705.07 TSF	1347	273	1620	341	1347	1688	12618

Buildout (2020) ZONAL LAND USE AND TRIP GENERATION (cont.)

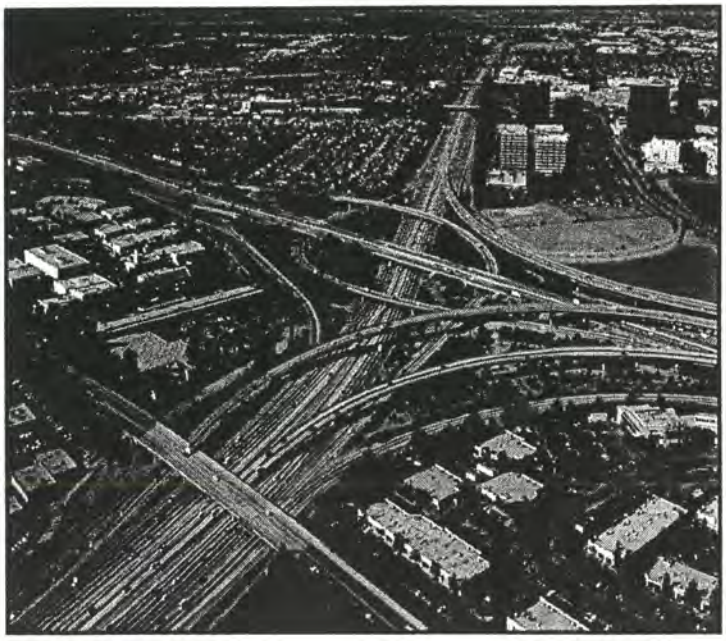
Zone	Land Use Type	Units	-- AM Peak Hour -- In	Out	Total	-- PM Peak Hour -- In	Out	Total	ADT
170	15. Storage	67.52 TSF	6	4	10	9	9	18	169
	SUB-TOTAL		1484	351	1835	568	1606	2174	17576
171	10. Industrial Park	326.44 TSF	258	52	310	65	258	323	2416
	12. School (K-12)	300.00 STU	69	42	111	9	12	21	396
	SUB-TOTAL		327	94	421	74	270	344	2812
172	10. Industrial Park	759.53 TSF	600	122	722	152	600	752	5621
	SUB-TOTAL		600	122	722	152	600	752	5621
173	5. General Commercial	17.28 TSF	19	11	30	32	37	69	702
	10. Industrial Park	1907.57 TSF	1507	305	1812	382	1507	1889	14116
	12. School (K-12)	648.00 STU	149	91	240	19	26	45	855
	SUB-TOTAL		1675	407	2082	433	1570	2003	15673
174	10. Industrial Park	227.13 TSF	179	36	215	45	179	224	1681
	SUB-TOTAL		179	36	215	45	179	224	1681
175	10. Industrial Park	1074.02 TSF	848	172	1020	215	848	1063	7948
	SUB-TOTAL		848	172	1020	215	848	1063	7948
176	2. Medium Density Residential	133.00 DU	16	61	77	63	35	98	998
	SUB-TOTAL		16	61	77	63	35	98	998

Buildout (2020) LAND USE AND TRIP GENERATION SUMMARY

Land Use Type	Units	-- AM Peak Hour -- In	Out	Total	-- PM Peak Hour -- In	Out	Total	ADT
1. Low Density Residential	13577.00 DU	2444	7470	9914	8690	4751	13441	127756
2. Medium Density Residential	10177.00 DU	1220	4682	5902	4782	2648	7430	76340
3. High Density Residential	19707.00 DU	1779	8670	10449	8474	4335	12809	134997
4. Neighborhood Commercial	568.95 TSF	678	333	1011	1298	1565	2863	30592
5. General Commercial	11304.89 TSF	12547	7119	19666	20910	23968	44878	458976
6. Commercial Center	895.39 TSF	976	349	1325	1460	1988	3448	34625
7. Regional Commercial (EQ)	3440.35 TSF	892	567	1459	3025	3275	6300	66316
8. Urban Center Commercial	1916.26 TSF	1994	364	2358	901	2223	3124	27325
9. Light Industry	6009.44 TSF	5168	963	6131	1862	6188	8050	66525
10. Industrial Park	11541.07 TSF	9116	1847	10963	2307	9116	11423	85406
11. Golf Course	560.09 ACRE	89	28	117	56	112	168	2824
12. School (K-12)	14221.00 STU	3271	1993	5264	428	570	998	18769
13. Public Facility	756.85 ACRE	115	12	127	27	139	166	1943
14. Fairground	146.39 ACRE	0	0	0	293	293	586	1801
15. Storage	555.67 TSF	50	34	84	71	71	142	1390
16. Community College	28000.00 STU	3640	280	3920	3360	1400	4760	43120
17. Cultural Arts Center	3355.03 TSF	4026	839	4865	1477	3758	5235	45528
18. Movie Theater	4362.00 SEAT	0	44	44	1047	87	1134	7677
19. Performance Theater	7308.00 SEAT	73	0	73	585	146	731	8989
20. South Coast Metro	1546.18 TSF	1623	263	1886	480	1516	1996	15771
21. Metro Pointe	552.26 TSF	569	249	818	889	1027	1916	21013
TOTAL		50270	36106	86376	62422	69176	131598	1277683

APPENDIX C

CHAPTER 3
CIRCULATION ELEMENT



CHAPTER 3
CIRCULATION ELEMENT

3.1 PURPOSE

The 2000 General Plan Circulation Element contains the City's overall transportation system plan. The relationship of the Circulation Element to the Land Use Element is critical since the circulation system must adequately handle future traffic.

The Circulation Element identifies and establishes the City's policies governing the system of roadways, intersections, bike paths, pedestrian ways, and other components of the circulation system, which collectively provide for the movement of persons and goods throughout the City. The Element establishes official City policy which:

- Identifies facilities required to serve present and future vehicular and non-vehicular travel demand in the City;
- Identifies linkage between alternative modes of transportation and feasible alternative transit strategies; and
- Identifies strategies to implement the City's circulation system.

3.2 RELATIONSHIP TO OTHER GENERAL PLAN ELEMENTS

The Circulation Element specifies the system of roadways and other transportation infrastructure required to satisfy future travel demand. The

Circulation Element is closely related to the Land Use Element, which defines the buildout land use scenario for the year 2020. The land use scenario, through the specification of the type, density, intensity and pattern of development, establishes the magnitude and pattern of future trip making. The Circulation Element is also related to the Air Quality subsection of the Conservation Element because automobiles are a principal source of many airborne pollutants, including carbon monoxide and the pollutants which combine to form smog. The policies of the Circulation Element promote air quality objectives by providing an efficient circulation system, one which accommodates travel demand while minimizing the number and length of automobile trips.

3.3 SUMMARY OF EXISTING CONDITIONS

The City of Costa Mesa circulation system is largely built-out with most of the roadways shown on the Master Plan of Highways (MPH) already constructed. In this section, the existing roadway system is discussed and recent traffic volume counts are summarized.

EXISTING ROADWAYS

The existing roadway system within the City, together with the number of lanes (midblock) on individual segments of the circulation system are illustrated in Exhibit CIR-1. Regional circulation facilities serving the City include the San Diego Freeway (I-405), which traverses east-west across the northern portion of the City, the Corona del Mar Freeway (SR-73), which begins at the San Diego Freeway between Fairview Road and Bear Street and extends southeast where it becomes the San Joaquin Hills Transportation Corridor, and the Costa Mesa Freeway (SR-55), which enters at the northeast corner of the City and extends southwest transitioning into Newport Boulevard south of 19th Street.

The City's circulation system is greatly affected by the three freeways mentioned above. The San Diego Freeway carries the largest volume of traffic which in 1998 varied from approximately 260,000 vehicles per day just west of Bristol Avenue to over 300,000 vehicles per day between Harbor Boulevard and Fairview Road. The Costa Mesa Freeway carries approximately 135,000 vehicles per day on the segment between the San Diego Freeway and the Corona del Mar Freeway and about 80,000 vehicles per day at its terminus just north of 19th Street. The Corona del Mar Freeway differs from the other two freeways in the City because it becomes a toll facility just east of the City limits. Because of this, it carries lower volumes of regional traffic than toll-free highways. Traffic volumes on the Corona del Mar Freeway in 1998 were approximately 80,000 vehicles per day.

North/south arterial facilities serving the central part of the City include Harbor Boulevard, Fairview Road, and Bristol Street. Each is a six-lane facility for the most part, currently carrying volumes ranging from 30,000 to 72,000 vehicles per day. Other four-lane north/south facilities include Placentia Avenue in the west, Bear Street in the north, and Irvine Avenue to the east, each currently carrying volumes ranging from 12,000 to 33,000 vehicles per day.

EXISTING ROADWAY SYSTEM

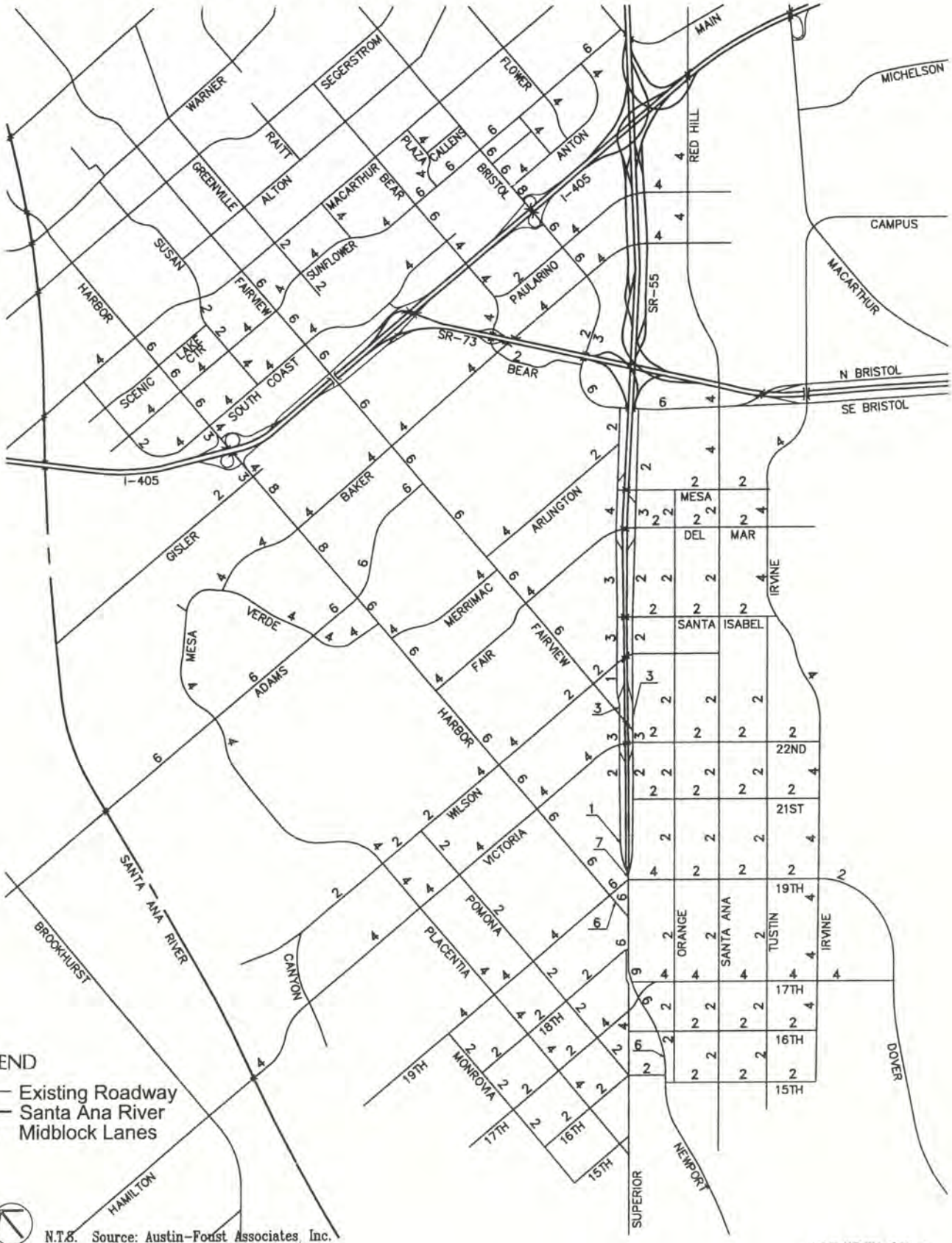


EXHIBIT CIR-1

Six-lane facilities serving east/west travel through the City include Sunflower Avenue east of Bear Street and Adams Avenue west of Fairview Road, currently carrying volumes ranging from 27,000 to 43,000 vehicles per day, respectively. Several four-lane arterials also serve east/west traffic, including Baker Street, Fair Drive, Wilson Street, Victoria Street, west 19th Street, South Coast Drive, Sunflower Avenue (west of Bear Street) and 17th Street, each currently carrying a maximum daily volume in the range of 15,000 to 39,000 vehicles per day.

The City is bordered on the east and west by topographical features that limit the number of access points from areas outside the City. Running along the western City boundary is the Santa Ana River. Within the City of Costa Mesa, the Santa Ana River currently has crossings only at Adams Avenue and Victoria Street. Besides the San Diego Freeway, these two roadways represent the only locations where Costa Mesa vehicles can access the Cities of Huntington Beach and Fountain Valley to the west using City streets. Just east of the City is the Upper Newport Bay Ecological Preserve that limits travel to the east. Vehicles traveling from Costa Mesa and the eastern portion of the City of Newport Beach must use either Pacific Coast Highway to the south or Bristol Street to the north to bypass the bay.

The layout of the City's circulation system is most notable for its two differing grid patterns. Streets east of and including Newport Boulevard were constructed at approximately 45 degree angles from the traditional north/south streets in north Orange County. This results in odd-angled intersections along Newport Boulevard, as well as high traffic volumes where north/south streets like Harbor Boulevard intersect with Newport Boulevard.

Several major east/west arterials are interrupted by obstacles which prevent a continuous roadway from one end of the City to the other. Many streets east of Newport Boulevard do not align with their westerly extensions. For example, West 18th Street becomes Rochester Street upon crossing Newport Boulevard. Continuous east/west circulation is disrupted where Rochester Street cul-de-sacs just east of Orange Avenue. East 18th Street, which extends uninterrupted to Irvine Avenue, is located one block north of West 18th Street/Rochester Street.

Adams Avenue and Baker Street provide another example of the discontinuity in east/west travel. Adams Avenue transitions into a residential neighborhood east of Fairview Road and Baker Street similarly terminates into the Mesa Verde residential area west of Harbor Boulevard. This results in high turning movement volumes between Baker Street and Adams Avenue on Harbor Boulevard and Fairview Road. Similarly, Fair Drive terminates at Harbor Boulevard resulting in westbound traffic being forced to turn to access Adams Avenue, Wilson Street or Victoria Street in order to continue traveling westbound.

For northbound/southbound traffic in the northern portion of the City, the San Diego Freeway is an obstruction with only four crossings between the Santa Ana River and the Costa Mesa Freeway. These crossings are at Harbor Boulevard, Fairview Road, Bear Street, and Bristol Street. The north/south arterials within the City are also used by regional traffic traveling between Newport Beach to the south and northern cities such as Santa Ana.

CURRENT TRAFFIC VOLUMES

Existing (2000) average daily traffic (ADT) volumes on the circulation system are illustrated in Exhibit CIR-2, *Existing (2000) ADT Volumes*. The traffic volume counts for the arterial system were collected during 2000 by the City and the freeway counts were collected by Caltrans in 1998.

3.4 KEY ISSUES

Key traffic issues in the City are as follows:

SANTA ANA RIVER CROSSINGS

As noted in the existing conditions section, only three City arterial roadways cross the Santa Ana River. Two additional crossings are shown on the Circulation Element (Gisler Avenue and W. 19th Street), but City Council policy direction is to delete these two crossings from the Master Plan of Highways (MPH). Because of consistency requirements with the County Master Plan of Arterial Highways (MPAH), a special study has to be undertaken and approved by the Orange County Transportation Authority (OCTA) before such action can be taken. Accordingly, the Santa Ana River Crossings Study (SARX) is currently underway jointly with the Cities of Costa Mesa, Newport Beach, Fountain Valley, Huntington Beach and OCTA. When SARX is completed, the Circulation Element will be amended accordingly.

An implication of having these two additional river crossings in the Master Plan of Highways is that all City planning efforts for future conditions must include these crossings. This results in long-range planning decisions that may become invalid if the two crossings are eventually removed from the plan. The SARX study is important in this regard since it is in the City's best interest to resolve the issue regarding these crossings as soon as possible.

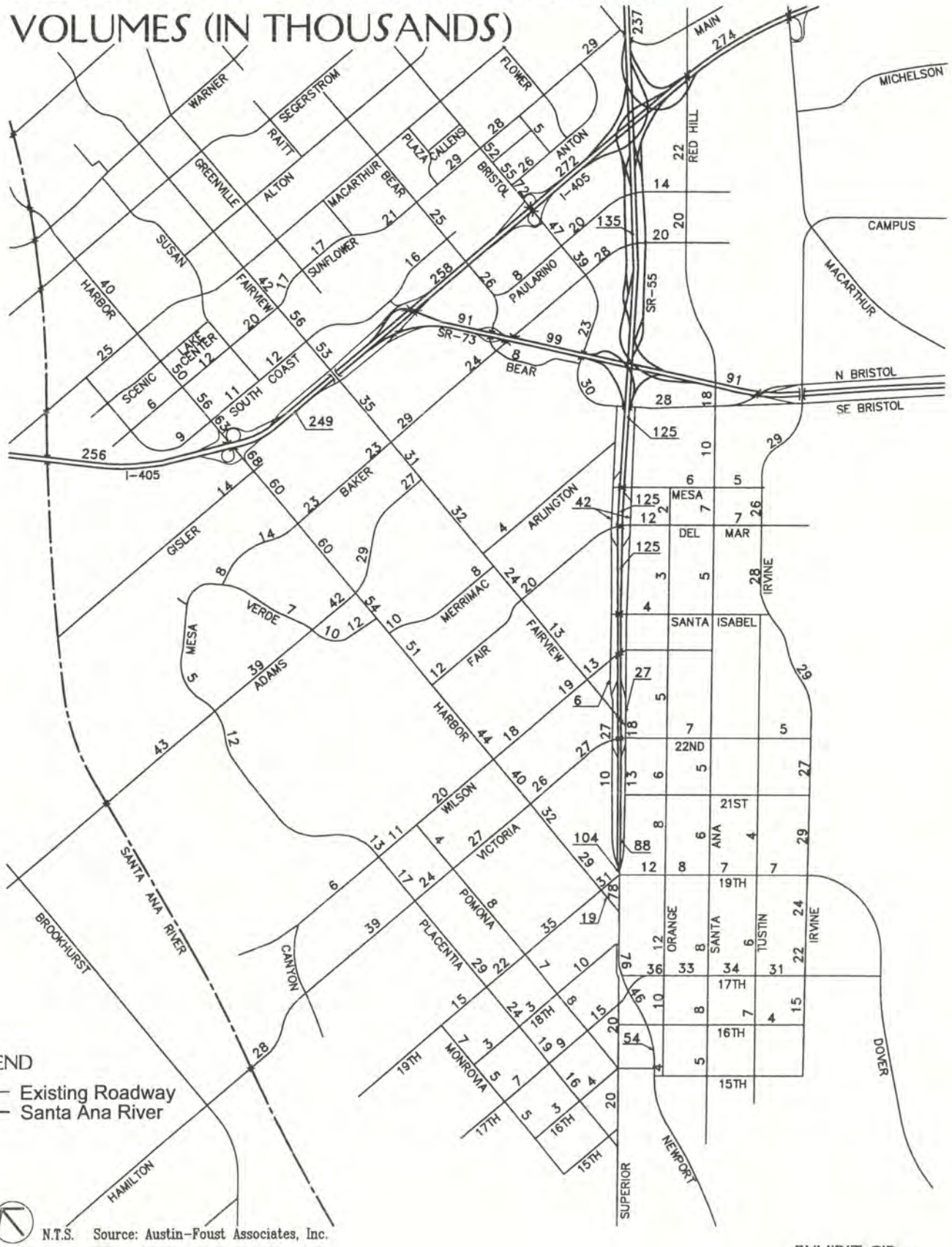
COSTA MESA FREEWAY EXTENSION

Long-range plans show the Costa Mesa Freeway (SR-55) extending beyond its current termination point. However, no timetable or funding source for its extension have been identified nor have many of the issues such as right-of-way needs been resolved.

SAN DIEGO FREEWAY ACCESS POINTS

As part of a plan to improve the I-405/SR-73 confluence area, changes in ramp configurations, deletion, and the addition of ramps will be made in this area. These changes will affect access into and out of the City via the I-405 and SR-73 Freeway and are expected to be completed by 2003. Another major project underway is the I-405/SR-55 Transitway project, which will add direct High Occupancy Vehicle (HOV) lane connectors between I-405 and SR-55 and improve freeway access to and from City streets. This project is also expected to be completed by 2003.

EXISTING (2000) AVERAGE DAILY TRAFFIC VOLUMES (IN THOUSANDS)



LEGEND

—— Existing Roadway

– – – Santa Ana River

N.T.S. Source: Austin-Foust Associates, Inc.

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EXHIBIT CIR-2

The plans to improve area traffic as part of a confluence and transitway project include a reconfiguration of the Harbor Boulevard interchange (including a new northbound onramp from Hyland Avenue), the addition of a northbound offramp onto Avenue of the Arts, and the addition of a northbound onramp from Anton Boulevard, just east of Sakioka Drive. These improvements will result in a redistribution of traffic volumes and a net reduction in the amount of vehicles at existing interchanges.

3.5 FUTURE TRAFFIC DEMANDS

New development within the City of Costa Mesa along with regional traffic growth will result in an increase in traffic volumes within the City. In order to estimate the effect of future traffic on the City's arterial roadway system, the City's traffic model was updated with the 2000 General Plan land uses and the most recent data for long-range regional transportation patterns. The effect of this future traffic demand is discussed below.

TRIP GENERATION FORECASTS

The City's 2000 General Plan land use has been allocated to the 176 traffic analysis zones (TAZs) that make up the City of Costa Mesa. A trip generation rate for each of the City's 2000 General Plan land use categories has been developed based on the universally accepted trip rates published by the Institute of Transportation Engineers. For comparison purposes, the different land uses within the City were aggregated into the following four land use categories:

- Residential
- Commercial (Retail) & Office
- Industrial/R&D
- Other

These combined categories enable the land use trip generation to be easily summarized on an aggregate basis. A comparison of the land use and trip generation estimates as of 2000 development and General Plan in the year 2020 is summarized in Table CIR-1.

TABLE CIR-1
LAND USE AND TRIP GENERATION COMPARISON

			Existing		2020 General Plan		Net Increase	
	Land Use Category	Units	Amount	ADT	Amount	ADT	Amount	ADT
TOTAL	1. Residential	DU	40,330.00	316,499	42,469.00	339,093	2,139.00	22,594
	2. Comm (Retail) & Office	TSF	17,397.42	539,029	23,579.30	700,146	6,181.88	161,117
	3. Industrial & R&D	TSF	14,416.19	124,432	17,550.51	151,931	3,134.32	27,499
	4. Other[1]	--	--	81,725	--	86,513	--	4,788
	TOTAL			**1,061,685**		**1,277,683**		**215,998**

Notes:
[1] Uses quantified in units other than dwelling units or square feet.

As of 2000, development within the City is comprised of 40,330 residential dwelling units, 17,397,000 square-feet of commercial and office use, and 14,416,000 square-feet of industrial use. The "other" category includes uses such as colleges, schools, parks, agriculture, and uses quantified in units other than dwelling units and square footage. The total average daily vehicle trips generated by existing uses within the City is estimated at 1,061,000 ADT, 30 percent of which is attributed to residential uses, and the remaining 70 percent to non-residential uses, primarily office and commercial.

The 2000 General Plan projects increases in dwelling units to 42,469 and industrial/ office/commercial/public/institutional uses to just over 41 million square-feet by 2020. These increases result in a total trip generation within the City of an estimated 1,278,000 ADT, an increase of 20 percent over the existing ADT estimate. At the regional level, 20 year traffic volume forecasts for the portion of Orange County within the vicinity of Costa Mesa area are also anticipated to increase by approximately 20 percent over existing traffic conditions.

TRAFFIC VOLUME FORECASTS

Traffic volumes on the City circulation system were estimated for conditions representing buildout of the City's 2000 General Plan. The long-range time frame established for analyzing the 2000 General Plan is the year 2020. The 2020 circulation system assumed for the forecasts is based on the City's Master Plan of Highways (discussed in the following section) and the Orange County Transportation Authority's (OCTA) Master Plan of Arterial Highways (MPAH). Exhibit CIR-3, *2020 ADT Volumes*, illustrates the projected 2020 traffic volumes.

3.6 MASTER PLAN OF HIGHWAYS

With adoption of the 2000 General Plan, modifications to the roadway classifications were made to the City's Master Plan of Highways (MPH) to make consistent with OCTA's Master Plan of Arterial Highways (MPAH). The change in classifications did not result in any changes to the physical characteristics of the roadway. The following table summarizes the change.

TABLE CIR-2
CITY AND COUNTY ARTERIAL DESIGNATIONS

Classification	1990 General Plan Designations	2000 General Plan/ County MPAH Designations
Major Arterial	6 lanes – 2 left turn lanes – median	6 lane divided roadway
Primary Arterial	6 lanes – 1 left turn lane – median	4 lane divided roadway
Secondary Arterial	4 lanes – median optional	4 lane undivided roadway
Collector Arterial	2 lanes – no median – no parking	2 lane undivided roadway

Source: *Costa Mesa General Plan Traffic Analysis*, Austin-Foust Associates, Inc., March 2000.

For the 1990 MPH to correspond with the County MPAH designations, the following changes to the 2000 General Plan were made:

- Combine the current Major and Primary Arterials into the Major Arterial Category; and
- Divide the current Secondary Arterial into the Primary and Secondary Arterial Categories.

No changes were made to the Coilector Arterial category.

The 2000 MPH, shown in Exhibit CIR-4, documents the ultimate arterial roadway system for the City, taking into consideration the above modifications.

To recognize that some arterials require additional improvements, such as additional turn lanes at intersections, beyond what is associated with the above classification, an additional designation is necessary. This is achieved by designating certain arterial segments as "Augmented". Augmented segments may include any combination of capacity enhancements, such as additional lanes at intersections, special traffic signal coordination or other types of intelligent transportation system (ITS) enhancements.

Exhibit CIR-5 provides typical cross-sections of augmented roadways, as well as augmented roadways with an additional right-turn lane. While the additional right-turn lane is a type of augmentation, it generally requires additional right of way, and hence its need is specifically designated on the MPH.

With adoption of the 2000 General Plan, the MPH was amended to downgrade a segment of 17th Street, from just west of Tustin Avenue to Irvine Avenue, to a primary arterial to be consistent with OCTA's MPAH.

ROADWAY CAPACITIES

The roadway capacity for each arterial on the Master Plan of Highways has been compared to the projected 2020 traffic volumes presented previously in this section. A summary of the arterial capacities is provided in Table CIR-3 and the resulting volume to capacity ratios are summarized in Table CIR-4. The table shows that one roadway segment (Gisler, west of Harbor) is forecast to exceed the theoretical maximum capacity.

Gisler Avenue, west of Harbor Boulevard is forecast to exceed capacity, with a volume of 30,000 ADT on a segment with a capacity of 25,000 ADT. This forecast includes the Gisler Bridge over the Santa Ana River, which adds approximately 8,000 ADT to Gisler Avenue and is a major contributing factor to this roadway exceeding capacity. This bridge is currently being analyzed by the Santa Ana River Crossings Study (SARX). As noted in Section 3.4, SARX is a multi-jurisdictional work effort to examine the impact of deleting the Gisler and 19th Street crossings. When this study is completed, appropriate updates will be made to the City MPAH in accordance with the Orange County Transportation Authority (OCTA) MPAH. If the Gisler bridge is deleted from the Master Plan of Highways, the deficiency shown above will not likely occur.

2020 AVERAGE DAILY TRAFFIC VOLUMES (IN THOUSANDS)

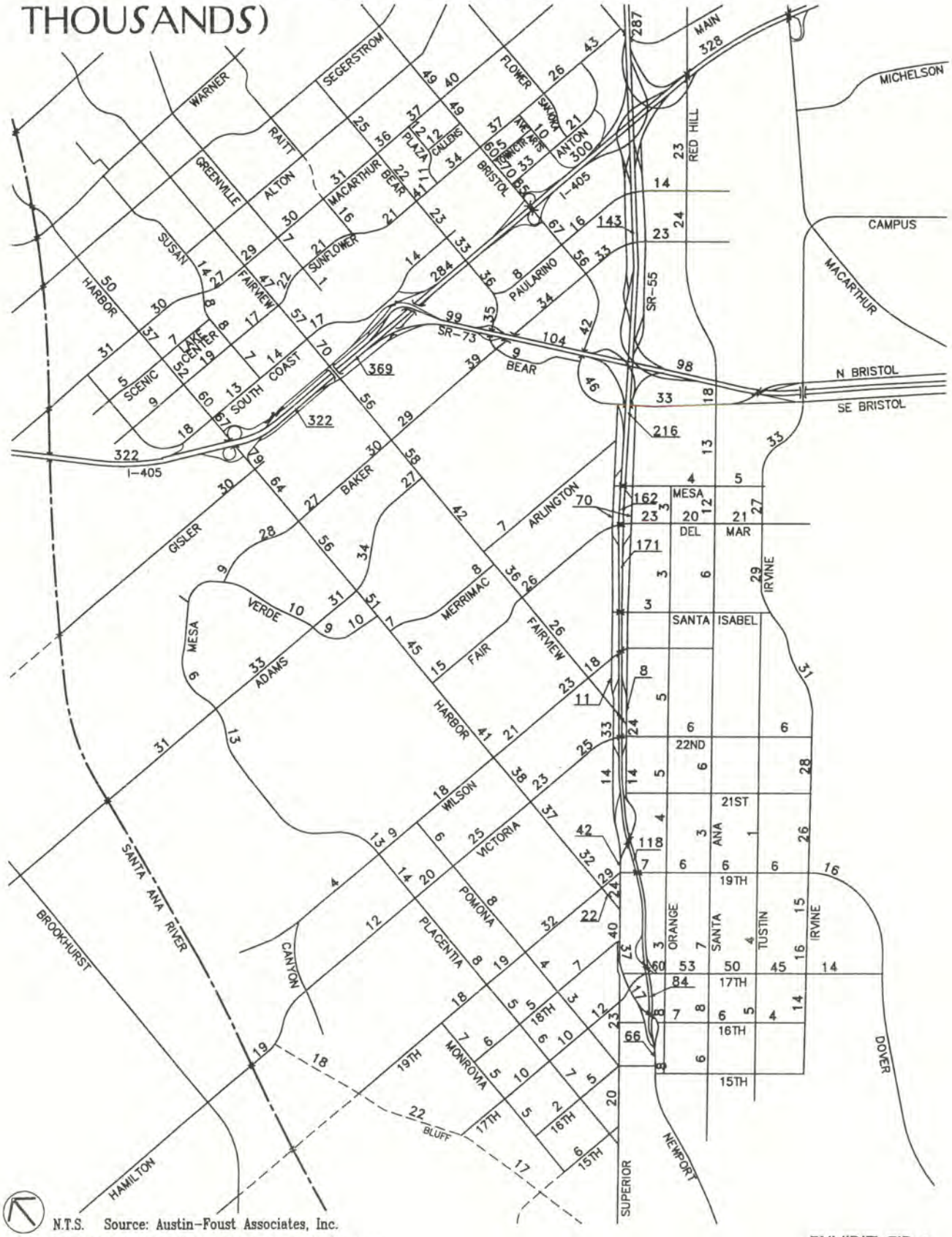

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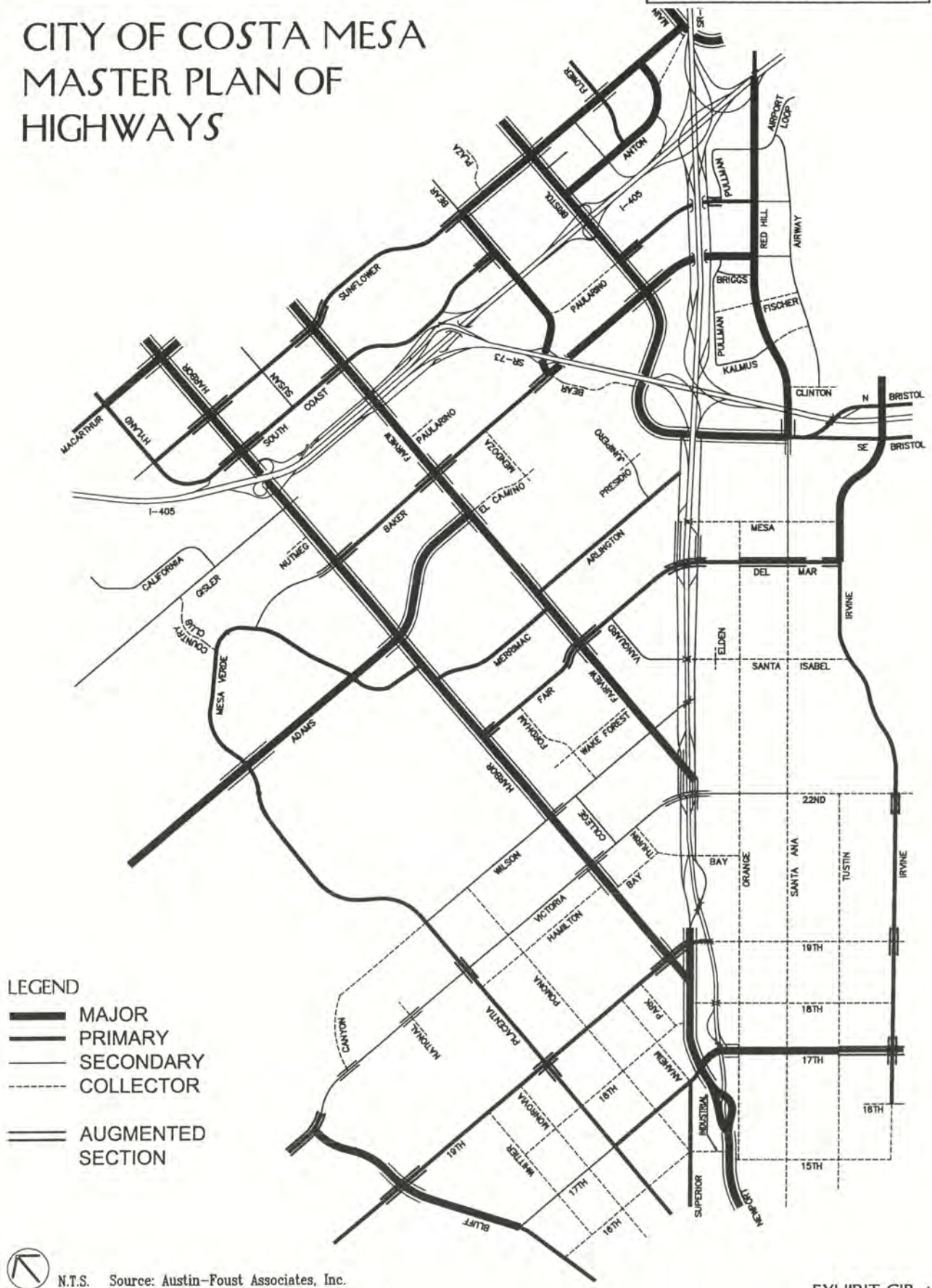
EXHIBIT CIR-3

CITY OF COSTA MESA MASTER PLAN OF HIGHWAYS



LEGEND

- MAJOR
- PRIMARY
- SECONDARY
- COLLECTOR
- AUGMENTED SECTION

N.T.S. Source: Austin-Foust Associates, Inc.

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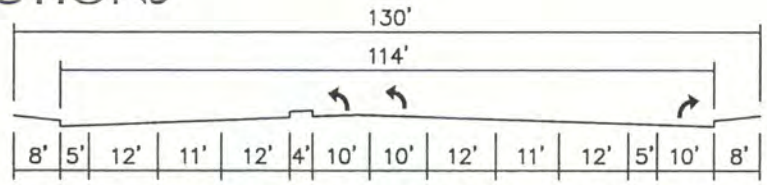
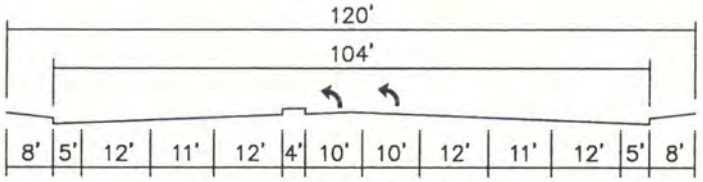
EXHIBIT CIR-4

AUGMENTED ROADWAY CROSS-SECTIONS



AUGMENTED MAJOR WITH RIGHT-TURN LANE



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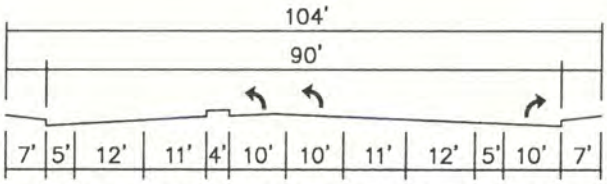

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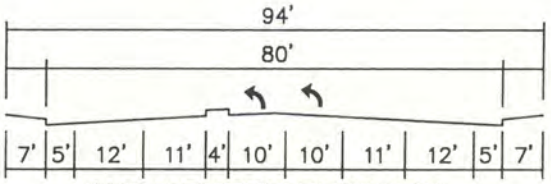

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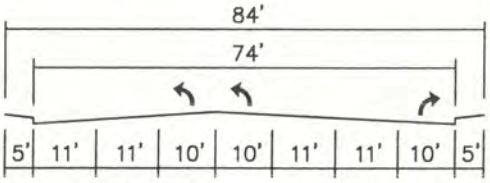

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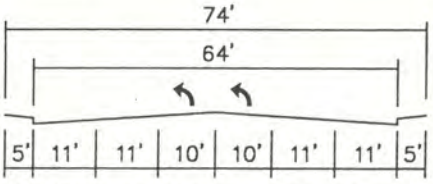

AUGMENTED SECONDARY

N.T.S. Source: Austin-Foust Associates, Inc.

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EXHIBIT CIR-5

TABLE CIR-3
ROADWAY CAPACITY DESIGNATION

Classification	Augmented	Standard
Major (8 lane divided)	90,000	75,000
Major (6 lane divided)	68,000	56,000
Primary (4 lane divided)	45,000	38,000
Secondary (4 lane undivided)	30,000	25,000
Collector (2 lane undivided)		12,500
One-Way Newport Boulevard (4 lanes)	45,000	38,000
One-Way Newport Boulevard (3 lanes)	34,000	28,000
One-Way Newport Boulevard (2 lanes)	23,000	19,000

NOTES:

Augmented Major (MA):	Typically 6 lane Divided Roadway with 120' Right-of-Way at Intersections, Right-Turn Lanes at Intersections (if required).
Standard Major (MS):	Typically 6 Lane Divided Roadway with 106' Right-of-Way at Intersections, Right-Turn Lanes at Intersections (if required).
Augmented Primary (PA):	Typically 4 Lane Divided Roadway with 84' Right-of-Way plus Additional Turn Lanes at Intersections.
Standard Primary (PS):	Typically 4 Lane Divided Roadway with 84' Right-of-Way, Right-Turn Lanes at Intersections (if required).
Augmented Secondary (SA):	Typically 4 Lane Undivided Roadway with 64' Right-of-Way plus Additional Turn Lanes at Intersections.
Standard Secondary (SS):	Typically 4 Lane Undivided Roadway with 64' Right-of-Way, Right-Turn Lanes at Intersections (if required).
Standard Collector (CS):	Typically 2 Lane Undivided Roadway with 60' Right-of-Way for Entire Segment.

RECOMMENDATIONS TO MPH

Three arterials were identified for potential downgrade in the MPH. These are:

- Arlington Drive between Fairview Road and Newport Boulevard – downgrade from Primary Highway to Collector;
- Baker Street from Bear Street to Redhill Avenue – downgrade from Major Highway to Primary Highway; and
- Redhill Avenue from north City Limits to Bristol Street – downgrade from Major Highway to Primary Highway.

These roadways were determined to operate at acceptable levels of service with the downgraded classification. However, in order to formally downgrade these roadways, a recommendation must be made to OCTA to change their classification in the MPAH. After OCTA accepts and changes the roadways to the revised classification, the City Council can authorize a similar change in the MPH.

A policy to authorize City staff to pursue the downgrade process for the above three arterials with OCTA is included in this 2000 General Plan.

TABLE CIR-4
2020 ADT VOLUMES AND CAPACITY ANALYSIS

Location	Classification[1]	Capacity	Volume	V/C
1. MacArthur w/o Harbor	6MA	68,000	31,000	.46
2. Sunflower w/o Harbor	4PA	45,000	9,000	.20
3. Sunflower e/o Harbor	4PA	45,000	19,000	.42
4. Sunflower w/o Fairview	4PA	45,000	17,000	.38
5. Sunflower e/o Fairview	4PA	45,000	22,000	.49
6. Sunflower w/o Bear	4PA	45,000	21,000	.47
7. Sunflower w/o Bristol	6MA	68,000	34,000	.50
8. Sunflower e/o Bristol	6MA	68,000	37,000	.54
10. Sunflower e/o Flower	6MS	56,000	26,000	.46
11. Sunflower w/o Main	6MS	56,000	43,000	.77
12. South Coast w/o Harbor	4PA	45,000	18,000	.40
13. South Coast e/o Harbor	4PA	45,000	13,000	.29
14. South Coast w/o Fairview	4PA	45,000	14,000	.31
15. South Coast e/o Fairview	4PS	38,000	17,000	.45
16. South Coast w/o Bear	4PA	45,000	14,000	.31
17. Anton e/o Bristol	6MS	56,000	33,000	.59
19. Anton s/o Sunflower	6MS	56,000	21,000	.38
21. Gisler w/o Harbor	4SS	25,000	30,000	1.20
22. Paularino e/o Bear	2CS	12,500	8,000	.64
23. Paularino e/o Bristol	4PA	45,000	16,000	.36
24. Paularino w/o Red Hill	4PS	38,000	14,000	.37
25. Baker e/o Mesa Verde	4SS	25,000	9,000	.36
26. Baker w/o Harbor	4SA	30,000	28,000	.93
27. Baker e/o Harbor	4PA	45,000	27,000	.60
28. Baker w/o Fairview	4PA	45,000	30,000	.67
29. Baker e/o Fairview	4PA	45,000	29,000	.64
30. Baker w/o Bear	4PA	45,000	39,000	.87
33. Baker w/o Bristol	6MA	68,000	34,000	.50
34. Baker e/o Bristol	6MA	68,000	33,000	.49
35. Baker w/o Red Hill	6MS	56,000	23,000	.41
36. W. Mesa Verde n/o Adams	4PS	38,000	6,000	.16
37. E. Mesa Verde n/o Adams	4PS	38,000	10,000	.26
38. Adams w/o Mesa Verde	6MA	68,000	31,000	.46
39. Adams btn Mesa Verdes	6MA	68,000	33,000	.49
40. Adams w/o Harbor	6MA	68,000	31,000	.46
41. Mesa Verde s/o Adams	4PS	38,000	9,000	.24
42. Mesa Verde w/o Harbor	4PS	38,000	10,000	.26
43. Adams e/o Harbor	6MA	68,000	34,000	.50
44. Adams w/o Fairview	6MA	68,000	27,000	.40
45. Merrimac e/o Harbor	4PS	38,000	7,000	.18
46. Merrimac w/o Fairview	4PS	38,000	8,000	.21
47. Arlington e/o Fairview	4PS	38,000	7,000	.18
49. Fair e/o Harbor	4PA	45,000	15,000	.33

TABLE CIR-4
2020 ADT VOLUMES AND CAPACITY ANALYSIS – CONTINUED

Location	Classification[1]	Capacity	Volume	V/C
51. Fair e/o Fairview	4PA	45,000	26,000	.58
53. Del Mar e/o Newport	4PA	30,000	23,000	.51
54. Del Mar w/o Santa Ana	4PA	30,000	20,000	.44
55. Del Mar w/o Irvine	4PA	30,000	21,000	.47
56. Wilson w/o Placentia	2CS	12,500	4,000	.32
57. Wilson e/o Placentia	4SS	25,000	9,000	.36
58. Wilson w/o Harbor	4SS	25,000	18,000	.72
59. Wilson e/o Harbor	4SA	30,000	21,000	.70
60. Wilson w/o Fairview	4SS	25,000	23,000	.92
61. Wilson e/o Fairview	4SS	25,000	18,000	.72
62. Santa Isabel e/o Newport	2CS	12,500	3,000	.24
65. Victoria e/o S.A. River	4PA	45,000	19,000	.42
66. Victoria w/o Placentia	4PS	38,000	12,000	.32
67. Victoria e/o Placentia	4PS	38,000	20,000	.53
68. Victoria w/o Harbor	4PS	38,000	25,000	.66
69. Victoria e/o Harbor	4PS	38,000	23,000	.61
70. Victoria w/o Newport	4PS	38,000	25,000	.66
72. 22nd w/o Santa Ana	4SS	12,500	6,000	.24
74. 22nd w/o Irvine	4CS	12,500	6,000	.48
80. 19th w/o Placentia	4PA	45,000	18,000	.40
81. 19th e/o Placentia	4PA	45,000	19,000	.42
82. 19th w/o Harbor	4PA	45,000	32,000	.71
83. 19th e/o Harbor	4PA	45,000	29,000	.64
84. 19th e/o Newport	4SS	25,000	7,000	.28
85. 19th w/o Santa Ana	2CS	12,500	6,000	.48
86. 19th w/o Tustin	2CS	12,500	6,000	.48
87. 19th w/o Irvine	2CS	12,500	6,000	.48
89. 18th w/o Placentia	2CS	12,500	6,000	.48
90. 18th e/o Placentia	2CS	12,500	5,000	.40
91. 18th w/o Newport	2CS	12,500	7,000	.56
92. 17th w/o Placentia	4SS	25,000	10,000	.40
93. 17th e/o Placentia	4PS	38,000	10,000	.26
94. 17th w/o Superior	4PS	38,000	12,000	.32
95. 17th w/o Orange	6MA	68,000	60,000	.88
96. 17th w/o Santa Ana	6MS	56,000	53,000	.95
97. 17th w/o Tustin	6MS	56,000	50,000	.89
98. 17th w/o Irvine	4PA	45,000	45,000	1.00
100. 16th w/o Placentia	2CS	12,500	2,000	.16
101. 16th e/o Placentia	2CS	12,500	5,000	.40
103. 16th w/o Santa Ana	2CS	12,500	7,000	.56
104. 16th w/o Tustin	2CS	12,500	6,000	.48
105. 16th w/o Irvine	2CS	12,500	4,000	.32
109. Monrovia s/o 19th	2CS	12,500	7,000	.56

TABLE CIR-4
2020 ADT VOLUMES AND CAPACITY ANALYSIS – CONTINUED

Location	Classification[1]	Capacity	Volume	V/C
110. Monrovia s/o 18th	2CS	12,500	5,000	.40
111. Monrovia s/o 17th	2CS	12,500	5,000	.40
112. Placentia s/o Adams	4PS	38,000	13,000	.34
113. Placentia n/o Wilson	4PS	38,000	13,000	.34
114. Placentia n/o Victoria	4PA	45,000	14,000	.31
116. Placentia n/o 19th	4PS	38,000	8,000	.21
117. Placentia s/o 19th	4PA	45,000	5,000	.11
118. Placentia s/o 18th	4PS	38,000	6,000	.16
119. Placentia s/o 17th	4PS	38,000	7,000	.18
120. Pomona s/o Wilson	2CS	12,500	6,000	.48
121. Pomona s/o Victoria	2CS	12,500	8,000	.64
122. Pomona s/o 19th	2CS	12,500	4,000	.32
123. Pomona s/o 18th	2CS	12,500	3,000	.24
125. Harbor n/o Sunflower	6MA	68,000	52,000	.76
126. Harbor s/o Sunflower	6MA	68,000	60,000	.88
127. Harbor n/o I-405	8MA	90,000	67,000	.74
128. Harbor s/o I-405	8MA	90,000	79,000	.88
129. Harbor n/o Baker	8MA	90,000	64,000	.71
130. Harbor n/o Adams	8MA	90,000	56,000	.62
131. Harbor s/o Adams	6MA	68,000	51,000	.75
132. Harbor n/o Fair	6MA	68,000	45,000	.66
133. Harbor n/o Wilson	6MA	68,000	41,000	.60
134. Harbor n/o Victoria	6MS	56,000	38,000	.68
135. Harbor s/o Victoria	6MA	68,000	37,000	.54
136. Harbor n/o 19th	6MA	68,000	32,000	.47
137. Harbor s/o 19th	6MS	56,000	22,000	.39
138. Fairview n/o I-405	7MA	79,000	70,000	.89
139. Fairview s/o I-405	6MA	68,000	56,000	.82
140. Fairview n/o Adams	6MA	68,000	58,000	.85
141. Fairview s/o Adams	6MA	68,000	42,000	.62
142. Fairview n/o Fair	6MA	68,000	36,000	.53
143. Fairview n/o Wilson	6MS	56,000	26,000	.46
144. Bear s/o Sunflower	6MA	68,000	23,000	.34
145. Bear n/o Paularino	6MS	56,000	36,000	.64
146. Bristol n/o Anton	7MA	79,000	70,000	.89
147. Bristol s/o Sunflower	7MA	79,000	60,000	.76
148. Bristol n/o I-405	8MA	90,000	85,000	.94
149. Bristol s/o I-405	8MA	90,000	67,000	.74
150. Bristol n/o Baker	6MA	68,000	56,000	.82
151. Bristol s/o Baker	6MA	68,000	42,000	.62
152. Bristol w/o SR-55	6MA	68,000	46,000	.68
153. Bristol e/o SR-55	6MA	68,000	33,000	.49
154. Newport n/o Fair & Del Mar	VAR[2]	79,000	70,000	.89

TABLE CIR-4
2020 ADT VOLUMES AND CAPACITY ANALYSIS – CONTINUED

Location	Classification[1]	Capacity	Volume	V/C
156. Newport SB s/o Fairview	3SA[3]	34,000	33,000	.97
157. Newport n/o 19th	6MA	68,000	42,000	.62
158. Newport n/o 17th	6MA	68,000	37,000	.54
159. Newport s/o 17th	6MA	68,000	17,000	.25
160. Superior s/o 17th	4PS	38,000	23,000	.61
161. Orange n/o Del Mar	2CS	12,500	3,000	.24
162. Orange n/o Santa Isabel	2CS	12,500	3,000	.24
163. Orange n/o 22nd	2CS	12,500	5,000	.40
164. Orange n/o 21ST	2CS	12,500	5,000	.40
165. Orange n/o 19th	2CS	12,500	4,000	.32
166. Orange n/o 17th	2CS	12,500	3,000	.24
167. Orange n/o 16th	2CS	12,500	8,000	.64
168. Orange n/o 15th	2CS	12,500	8,000	.64
169. Red Hill n/o Paularino	6MS	56,000	23,000	.41
170. Red Hill n/o Baker	6MS	56,000	24,000	.43
172. Red Hill n/o Bristol	6MA	68,000	18,000	.26
173. Santa Ana s/o Bristol	4SA	30,000	13,000	.43
174. Santa Ana n/o Del Mar	4SS	25,000	12,000	.48
175. Santa Ana n/o Santa Isabel	2CS	12,500	6,000	.48
177. Santa Ana n/o 21st	2CS	12,500	6,000	.48
178. Santa Ana n/o 19th	2CS	12,500	3,000	.24
179. Santa Ana n/o 17th	2CS	12,500	7,000	.56
180. Santa Ana n/o 16th	2CS	12,500	8,000	.64
181. Santa Ana n/o 15th	2CS	12,500	6,000	.48
182. Irvine s/o Bristol	6MS	56,000	33,000	.59
183. Irvine n/o Del Mar	6MS	56,000	27,000	.48
184. Irvine s/o Del Mar	4PS	38,000	29,000	.76
187. Tustin n/o 19th	2CS	12,500	1,000	.08
188. Tustin n/o 17th	2CS	12,500	4,000	.32
189. Tustin n/o 16th	2CS	12,500	5,000	.40
191. Irvine n/o 22nd	4PS	38,000	31,000	.82
192. Irvine n/o 21st	4PA	45,000	28,000	.62
193. Irvine n/o 19th	4PA	45,000	26,000	.58
194. Irvine s/o 19th	4PA	45,000	15,000	.33
195. Irvine n/o 17th	4PA	45,000	16,000	.36
196. Irvine n/o 16th	4PS	38,000	14,000	.37
198. Mesa e/o Orange	2CS	12,500	4,000	.32
199. Mesa e/o Santa Ana	2CS	12,500	5,000	.40
200. Town Center w/o Avenue of the Arts	4SS	25,000	5,000	.20
202. Ave Of The Arts n/o Anton	4SS	25,000	10,000	.40
203. Newport SB s/o Wilson	3SS[3]	28,000	11,000	.39
204. Newport SB s/o 22nd	2SS[3]	19,000	14,000	.74
226. Newport s/o 19th	6MA	68,000	24,000	.35
227. 18th e/o Newport	2CS	12,500	1,000	.08

TABLE CIR-4
2020 ADT VOLUMES AND CAPACITY ANALYSIS – CONTINUED

Location	Classification[1]	Capacity	Volume	V/C
228. 18th w/o Irvine	2CS	12,500	1,000	.08
277. MacArthur e/o Harbor	6MA	68,000	30,000	.44
288. Sunflower w/o Raitt	4PA	45,000	21,000	.47
289. Harbor n/o MacArthur	6MA	68,000	50,000	.74
290. Harbor s/o MacArthur	6MA	68,000	37,000	.54
294. Susan n/o Sunflower	4SS	25,000	8,000	.32
295. Susan s/o Sunflower	4SS	25,000	7,000	.28
298. Fairview n/o Sunflower	6MA	68,000	47,000	.69
307. Bear n/o Sunflower	4SS	25,000	22,000	.88
313. Bear s/o South Coast	6MA	68,000	33,000	.49
314. Bear s/o Paularino	6MS	56,000	35,000	.63
315. Bear s/o Baker	2CS	12,500	9,000	.72
316. Sunflower e/o Bear	6MA	68,000	41,000	.60
317. Fairview s/o Sunflower	6MA	68,000	57,000	.84
329. Canyon Bluff n/o 19th	6MA	68,000	18,000	.26
333. Canyon Bluff n/o 17th	6MS	56,000	22,000	.39
335. Canyon Bluff s/o 17th	4PS	38,000	17,000	.45
339. Superior s/o 16th	4PS	38,000	20,000	.53
350. Newport NB n/o Fairview	3SS[3]	28,000	8,000	.29
351. Newport NB s/o Fairview	3SA[3]	34,000	24,000	.71
352. Newport NB s/o 22nd	2SS[3]	19,000	14,000	.74
353. Newport s/o Harbor	6MA	68,000	40,000	.59
354. Newport s/o 16th	6MA	68,000	66,000	.97

NOTES:

[1] Roadway classification in the form XYZ where X = number of midblock lanes, Y = roadway classification (major, primary, etc), and Z = roadway designation (augmented, standard or constrained). See Table CIR-3 for definitions

[2] NB is a 3 lane augmented one-way segment, SB is a 4 lane augmented one-way segment

[3] One-way segments

3.7 BICYCLE TRAILS

The City of Costa Mesa first adopted an official Master Plan of Bikeways (MPB) in 1974. With the adoption of the City's General Plan in 1992, a revised Master Plan of Bikeways was adopted and has been periodically updated. The following section discusses the current plan.

MASTER PLAN OF BIKEWAYS

Exhibit CIR-6 shows the City's Master Plan of Bikeways. Bicycle facilities within the City are given one of the following classifications:

- Bike Trail (Class 1)
- Bike Lane (Class 2)
- Bike Route (Class 3)
- Regional Trail

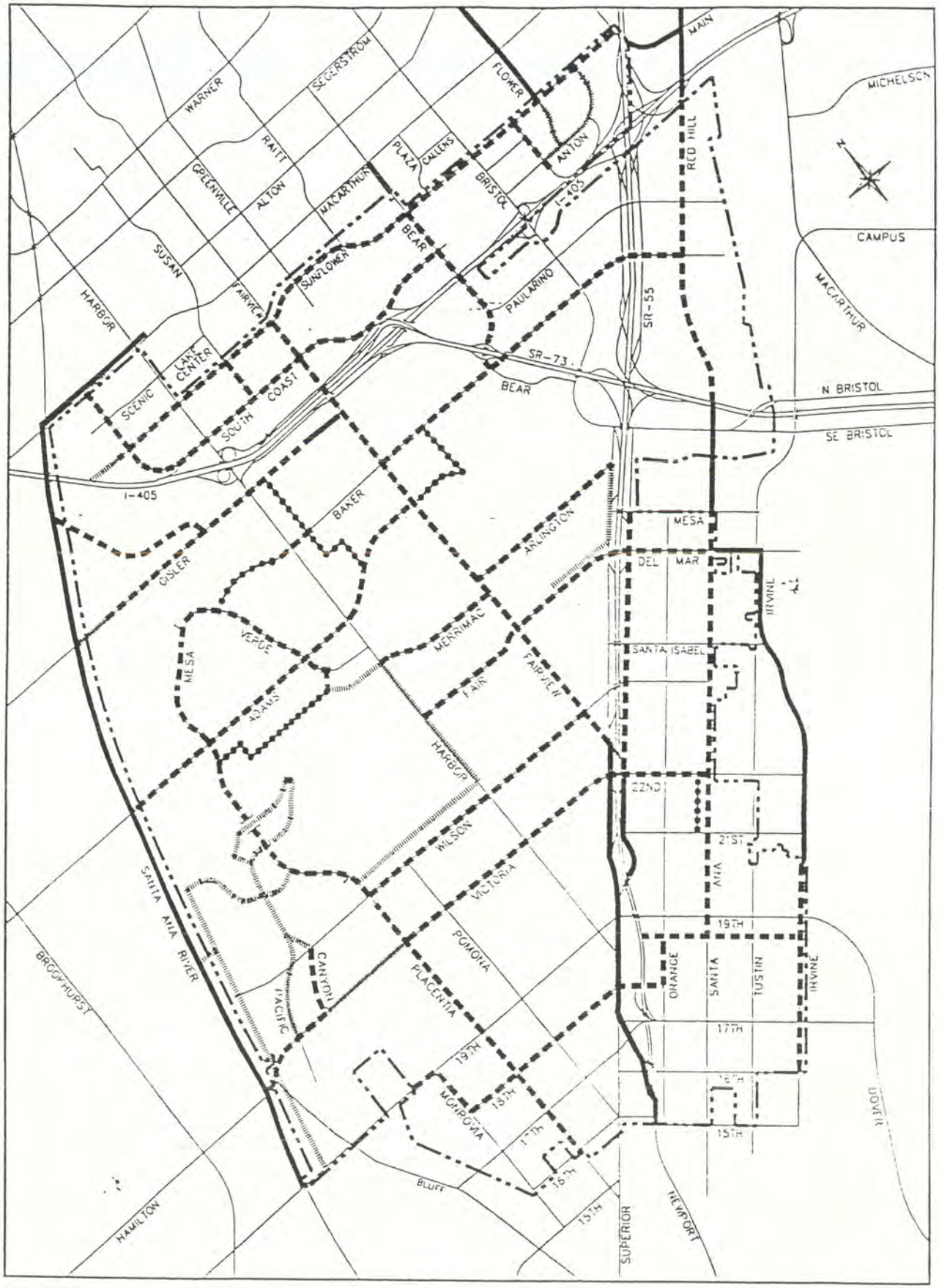
Bike trails are facilities at least eight feet in width that are physically separated from vehicular roadways and are reserved exclusively for bicycle use. Bike trails are most effective in long, uninterrupted stretches, such as along the Santa Ana River and along the Upper Newport Bay Ecological Reserve on the east side of Irvine Avenue.

Bike lanes consist of a painted stripe reserving at least five feet nearest the curb for bicycle use. Bike lanes are the most common classification within the City as they are generally implemented within existing right-of-ways.

Bike routes are designated only with signs and are mainly useful only to bridge short distances between other, more established bike lanes or trails and are typically only used on low volume, residential streets.

With the adoption of the 2000 General Plan, the following changes were made to the MPB:

- Modifications to the Fairview Regional Park bicycle trails pursuant to City Council as listed below:
  - Delete the bike trail along Banning Place between Pacific Avenue and Placentia Avenue;
  - Delete the bike trail between Canary Drive and the north entrance to Fairview Park south of the Fairview Channel;
  - Terminate the north-south bike trail through Fairview Park originating at Pacific Avenue at the north parking lot (delete the connection to Placentia Avenue);
  - Add a loop trail in Fairview Park east of Placentia Avenue connecting to the bicycle trails on the west; and
  - Deletion of the bicycle lanes along Tanager Drive and Harla Avenue since they were not continuous.



Legend

- Bike Trail (Class 1)
- Bike Lane (Class 2)
- Bike Route (Class 3)
- Regional Trial
- City Boundary

Figure CIR-6

MASTER PLAN OF BIKEWAYS

3.8 PUBLIC TRANSIT

The primary provider of public transportation in Orange County is the Orange County Transportation Authority (OCTA). The public transportation facilities within the City of Costa Mesa are described below.

PUBLIC BUS TRANSPORTATION

The OCTA is currently the only provider of public bus transportation within the City with over ten separate bus routes serving Costa Mesa. In 2000, the OCTA served approximately 57 million passenger boardings countywide.

OCTA bus ridership increased by approximately 31 percent during the period between 1990 and 2000 and the bus fleet grew from 668 vehicles to 757 vehicles during that same time period. The OCTA expects to expand bus service by another 49 percent by 2010.

A recently approved plan will change the way bus routes have traditionally been configured within the City. This plan, which took effect in September 2000, realigns most routes to travel either east/west or north/south instead of traveling in all four directions as many routes now do. New routes are proposed to serve most of the areas affected by the restructuring. Exhibit CIR-7 illustrates streets within the City that have transit service.

URBAN RAIL TRANSPORTATION

No urban rail facilities currently exist within the City. However, OCTA is in the planning stages of a light rail system that is proposed to pass through the northeast portion of the City, including a line connecting the South Coast Plaza Town Center area to the system. This project, currently referred to as The CenterLine rail system is envisioned to ultimately consist of 28 miles of rail line connecting Fullerton Transportation Center to Irvine Transportation Center, via Anaheim, Santa Ana, Orange, and Costa Mesa.

Due to the preliminary nature of the urban rail line proposals, potential long-range impacts to the City's public transportation system can not be identified with this information. Further review of final route alignments and station locations will be required as the planning for the urban rail line progresses.

3.9 GOALS, OBJECTIVES AND POLICIES

The goals, objectives, and policies that address circulation are as follows:

GOAL CIR-1:
TRANSPORTATION

It is the goal of the City of Costa Mesa to provide for a balanced, uncongested, safe, and energy-efficient transportation system, incorporating all feasible modes of transportation.

STREETS WITH BUS TRANSIT SERVICE

LEGEND

BUS ROUTES

SCALE: 1"=4500'

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EXHIBIT CIR-7

Objective CIR-1A. To provide specific programs and policies that address multi-modal transportation, multi-agency coordination, mitigation of traffic impacts and the balancing of land uses with transportation systems.

CIR-1A.1 Incorporate bicycle facilities (circulation and storage) into the design and development of all new commercial and industrial projects and public facilities.

CIR-1A.2 Require dedication of right-of-way in an equitable manner for completion of adopted bikeway system as condition of development of adjacent properties.

CIR-1A.3 Coordinate the design and improvement of pedestrian and bicycle ways in major residential, shopping, and employment centers, parks, schools, other public facilities, public transportation facilities, and bicycle networks with adjacent cities.

CIR-1A.4 Include bicycle lanes on all new bridges along Master Plan of Bikeway designated arterials within or adjacent to the City. In cases where bridges are not located within the City, the City should exert its influence on responsible agencies to include such bicycle lanes. If provision of bicycle lanes is not feasible, measures should be taken to prohibit bicycle riding on bridge walkways.

CIR-1A.5 Investigate all available operational measures, including the use of one-way streets, to improve traffic circulation and minimize delay and congestion on arterials.

CIR-1A.6 Require dedication of right-of-way, in an equitable manner, for development that increases the intensity of land use.

CIR-1A.7 Implement citywide and/or areawide transportation system improvement programs on new development and fee programs for new development.

CIR-1A.8 Encourage the integration of compatible land uses and housing into major development projects to reduce vehicle use.

CIR-1A.9 Encourage permitted General Plan land uses which generate high traffic volumes to be located near major transportation corridors and public transit facilities to minimize vehicle use, congestion, and delay.

CIR-1A.10 Allow the application of transportation management rideshare programs, integration of complementary land uses, and other methods to reduce project related average daily and peak hour vehicle trips in order to achieve consistency with allocated trip budgets.

CIR-1A.11 Attempt to maintain or improve mobility within the City to achieve a standard level of service not worse than Level of Service "D" at all intersections under the sole control of the City. Intersection level of service analyses for General Plan conditions shall be updated periodically and presented to City Council.

CIR-1A.12 Cooperate with adjacent jurisdictions to maintain or improve mobility within the City to achieve a standard level of service no worse than "D" at all intersections under State or joint control. Intersection level of service analyses for General Plan conditions for locations under State or joint control shall be updated periodically and presented to City Council.

CIR-1A.13 While the Gisler Road segment, west of Harbor, will exceed its theoretical maximum capacity, the City shall work to ensure that the future volume to capacity ratios do not exceed those identified in Table CIR-3 of the General Plan.

CIR-1A.14 Reduce or eliminate intrusion of commuter through traffic on local streets in residential neighborhoods.

CIR-1A.15 Prioritize intersection improvements which improve through traffic flow on major, primary, and secondary arterials, and reduce impacts on local neighborhood streets with emphasis on pedestrian safety.

CIR-1A.16 Maintain balance between land use and circulation systems by phasing new development to levels that can be accommodated by roadways existing or planned to exist at the time of completion of each phase of the project.

CIR-1A.17 Work closely with the State of California and other government agencies to control traffic-related impacts of uses on State- or other agency-owned land (i.e., Orange County Fairgrounds, Orange Coast College, etc.).

CIR-1A.18 Council shall review the results and findings of the (SARX) study to delete the Gisler Avenue and 19th Street bridges over the Santa Ana River as needed. Upon completion of the study and approval of the changes to the Orange County Transportation Authority's (OCTA) Master Plan of Arterial Highways by the OCTA Board, the City shall process a General Plan Amendment to delete the bridges from the City's Master Plan of Highways. All future development applications submitted to the City shall be reviewed in such a way that the 19th Street and Gisler Avenue bridges will not be included as mitigation measures.

CIR-1A.19 Minimize circulation improvements that will necessitate the taking of private property on existing developed properties.

CIR-1A.20 Encourage Orange County Transportation Authority to downgrade Mesa Verde Drive, Baker Street west of Harbor Boulevard, and Gisler Avenue to a designation less than a Collector Street in the Master Plan of Arterial Highways.

CIR-1A.21 Encourage Orange County Transportation Authority to downgrade Arlington Avenue between Fairview Road and Newport Boulevard to a Collector Street.

CIR-1A.22 Encourage Orange County Transportation Authority to downgrade Baker Street between Redhill Avenue and Bristol

Street, and Redhill Avenue between I-405 and Bristol Street to Primary Arterial from current Major Arterial designation.

GOAL CIR-2:
TRANSPORTATION SYSTEM MANAGEMENT

It is the goal of the City of Costa Mesa to provide for standard service levels at signalized intersections by constructing capacity improvements for all various modes of circulation, adopting land use intensities commensurate with planned circulation improvements and implementing traffic demand reduction programs, thereby creating a more energy efficient transportation system.

Objective CIR-2A. To coordinate efforts with other regional agencies and pursue operational improvements towards enhancing the capacity of the system of freeways and arterial highways in the City.

CIR-2A.1 Coordinate with Caltrans for future consideration of the extension of Route 55 (the Costa Mesa Freeway) from 19th Street to the southern City boundary.

CIR-2A.2 Coordinate with the Orange County Transportation Authority and with adjacent jurisdictions to improve signal timing and coordination along major arterials.

CIR-2A.3 Continue to work with Caltrans to synchronize and coordinate traffic signals on arterials at intersections controlled by Caltrans.

CIR-2A.4 Continue to evaluate and pursue design and operational improvements (medians, driveway closures, signal synchronization or phasing, parking or turn restrictions, etc.) to improve the efficiency of intersections.

Objective CIR-2B. To promote the use of high occupancy vehicular modes of transportation in and through the City.

CIR-2B.1 Coordinate with OCTA to construct bus turnouts at appropriate locations with attractive shelters designed for safe and comfortable use.

Objective CIR-2C. To invest capital via a rationally phased allocation process for implementing transportation projects and programs.

CIR-2C.1 Support efforts to design and construct an urban rail project as it extends through Costa Mesa.

CIR-2C.2 Complete and annually maintain a needs assessment for traffic service levels and traffic safety. Develop and annually update a priority list of improvement projects, with priorities based on 1) correcting identified hazards; 2) improving/maintaining peak hour traffic volumes; 3) improving efficiency of existing infrastructure utilization; and 4) intergovernmental coordination.

Objective CIR-2D. To ensure that the transportation related impacts of development projects are mitigated to the fullest extent possible, in conformance with transportation related policies.

CIR-2D.1 Circulation improvements required to provide or attain the minimum traffic level of service standard at an intersection to which a development project contributes measurable traffic shall be completed within three years of issuance of the first building permit for said project, unless additional right-of-way or coordination with other government agencies is required to complete the improvement. Improvements may be required sooner if, because of extraordinary traffic generation characteristics of the project or extraordinary impacts to the surrounding circulation system, such improvements are necessary to prevent significant adverse impacts.

CIR-2D.2 Construction of circulation improvements for phased development projects may be constructed commensurate with the project construction based upon the findings of a traffic study approved by the City of Costa Mesa.

CIR-2D.3 A traffic impact fee shall be maintained for circulation system improvements to the Master Plan of Highways within the community and updated annually.

CIR-2D.4 Require discussion of transit service needs and site design amenities for transit ridership in EIRs for major projects.

CIR-2D.5 Require discussion of transportation system management (TSM) and transportation demand management (TDM) measures in all EIRs prepared for major projects.

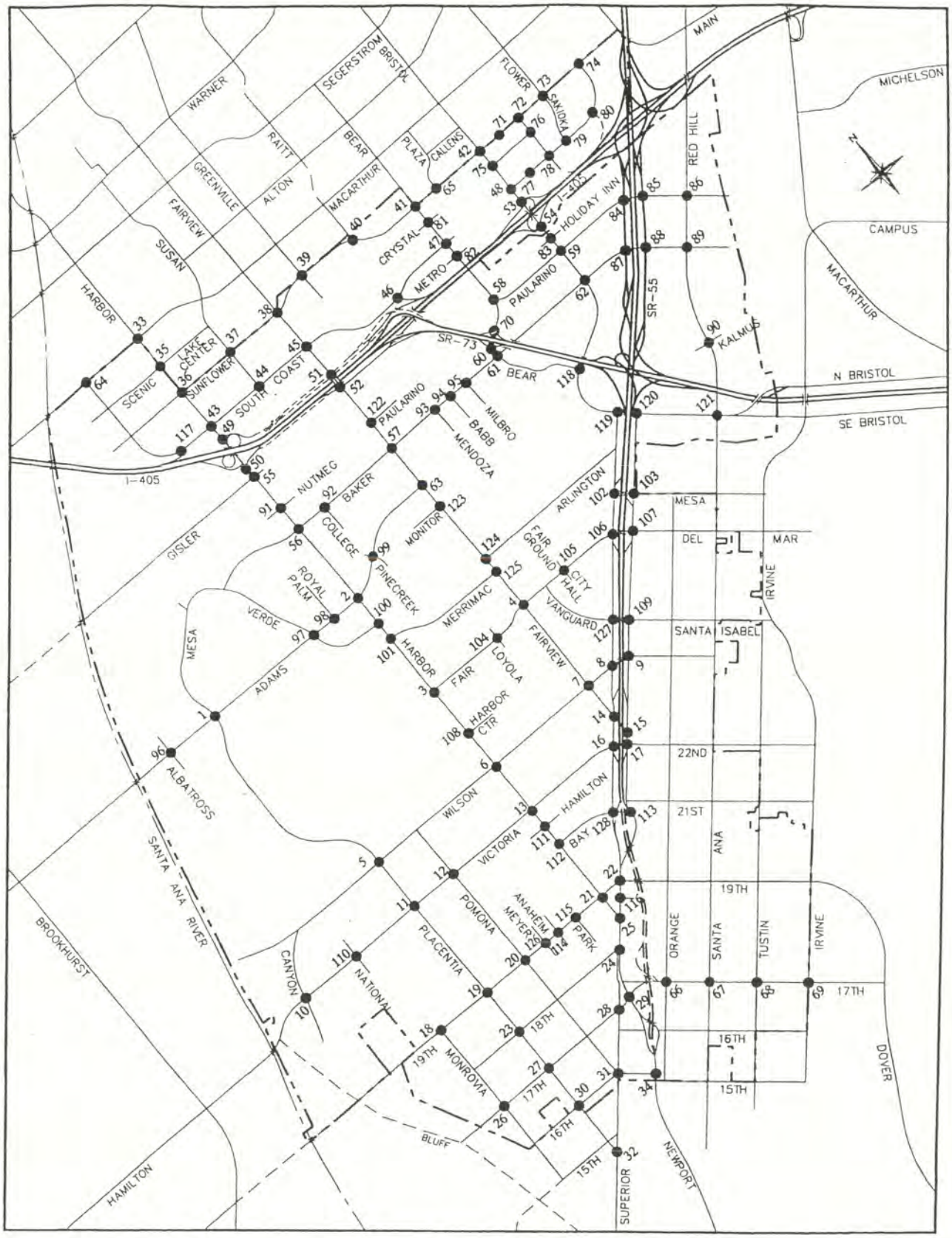
Growth Management: Refer to Goal GM-1, Objective GM-1A and Policies GM-1A.1 through GM-1A.6 found in the Growth Management Element.

Policy CIR-1A.1 will be revised to read:

bikeways into

CIR-1A.1	Develop the Master Plan of Bikeways by pursuing all funding mechanisms and incorporating roadway and bridge widening projects, as appropriate. Incorporate bicycle facilities (circulation and storage) into the design and development of all new commercial and industrial projects and public facilities.

Exhibit CIR-6, Master Plan of Bikeways, is amended in this element, as follows.



Legend

- Existing Roadway
- Future Roadway
- Santa Ana River
- City Boundary

Figure 1

INTERSECTION LOCATIONS

The 1990 General Plan identified two intersections to exceed the established LOS "D" threshold under future year conditions, and adopted both locations within the Transportation Element Goals, Objectives and Policies to remain unmitigated. These locations are:

1. Bristol Street – Sunflower Avenue - LOS E - AM peak (.95)
2. Harbor Boulevard – Gisler Avenue - LOS E – AM/PM peak (.96/.96)

The following sections discuss the impacts at the above locations and identify improvement mitigation options to achieve the acceptable LOS "D". The proposed improvements recommended for these locations are in addition to those adopted by the 1990 General Plan.

Bristol Street – Sunflower Avenue

This intersection is projected to operate at unacceptable levels during the PM peak hour under the new General Plan Update conditions. This intersection is currently at the 1990 General Plan configuration.

Additional future mitigation required at this intersection includes providing a fourth westbound through lane on Sunflower Avenue, a third northbound Bristol Street left-turn lane, and restriping a northbound through lane to an optional through or right-turn lane. Implementing this mitigation will reduce the ICU at this intersection from .99 (LOS E) to 0.87 (LOS D) during the PM peak hour.

Bristol Street – Baker Street

This intersection is projected to operate at an unacceptable level during the PM peak hour under the new General Plan Update conditions. In order to improve to the 1990 General Plan configuration, through lanes are added to the eastbound and westbound approaches on Baker Street and the northbound approach on Bristol Street. However, even with these additional lanes, the PM peak hour level of service would be "E."

Installation of a third eastbound left-turn lane on Baker Street will mitigate this intersection to an acceptable condition. However, this improvement will create significant impacts to adjacent business structures, including a gas station located in the southwest quadrant of the intersection.

Fairview Road – I-405 Southbound Ramps

This intersection is projected to operate at LOS "F" during both the AM and PM peak hours under the new General Plan Update conditions. This intersection is currently at the 1990 General Plan configuration. With existing traffic volumes, this intersection is operating over capacity during AM peak hour.

A short-term mitigation is proposed at this location to mitigate the AM peak hour traffic conditions. This will require striping a northbound through lane on Fairview Road to an optional through or right-turn lane providing right-turn movements from two lanes. Implementation of this mitigation will bring the AM peak hour ICU to 0.84 (LOS D) under the new General Plan Update conditions. However, there is no change in PM peak hour LOS. In order to mitigate PM peak hour traffic conditions, a third southbound left-turn lane on Fairview Road is required. This could be accomplished by restriping existing lanes on the bridge. However, the resulting lane widths would be substandard and may not be acceptable to Caltrans. If Caltrans does not accept substandard lane widths, bridge widening will be required. In addition, the southbound I-405 on-ramp will require widening to accommodate three lanes.

Harbor Boulevard – Adams Avenue

This intersection is projected to operate at LOS "E" during the PM peak hour under the new General Plan Update conditions. In order to improve to the 1990 General Plan configuration, an exclusive northbound right-turn lane on Harbor Boulevard is added.

Striping a southbound through lane on Harbor Boulevard at this intersection to an optional through or right-turn lane will reduce the PM peak hour ICU under the new General Plan Update conditions from 1.00 (LOS E) to 0.96 (LOS E). In order to further mitigate this intersection, an

additional left-turn lane should be provided for the eastbound direction on Adams Avenue. This will require additional right-of-way along the north side of Adams Avenue east and west of Harbor Boulevard.

A complete listing of the intersection improvements that are needed by 2020 with the proposed General Plan Update is provided in Table 1. Table 2 summarizes ICU values for each of the intersections for existing (2000) traffic conditions and 2020 forecasts. ICUs for year 2020 are provided using both current (1990) General Plan intersection lane configurations as well as proposed General Plan Update lane configurations, as mentioned above. ICU calculation worksheets are provided in the Appendix.

Table 1

2020 INTERSECTION IMPROVEMENTS

INTERSECTION	IMPROVEMENT
2. Harbor & Adams[1]	Add NB RT, 3rd EB LT; Remove EB RT; Convert SB TH to SB TH+RT
6. Harbor & Wilson	Add WB RT
7. Fairview & Wilson	Add 3rd NB TH, 2nd EB TH, 2nd WB TH; Convert SB RT to 3rd SB TH+RT
11. Placentia & Victoria	Add 2nd EB RT
13. Harbor & Victoria	Add EB RT, WB RT
16. Newport SB & Victoria	Add 4th EB TH; Convert SB RT to SB Freeflow RT
17. Newport NB & Victoria/22nd	Add 2nd EB TH, WB TH+RT; Convert NB RT to NB TH+RT; Convert NB LT to NB LT+TH
19. Placentia & 19th	Add SB RT, EB RT
21. Harbor & 19th	Convert NB RT to NB TH+RT; Convert SB RT to SB TH+RT
27. Placentia & 17th	Add 2nd EB TH, 2nd WB TH
29. Newport & 17th	Add SB RT
31. Superior & 16th	Add WB LT
34. Newport & Industrial	Add SB RT
36. Harbor & Sunflower	Add NB RT, EB RT, WB RT
38. Fairview & Sunflower	Add SB RT, EB RT
42. Bristol & Sunflower[1]	Add 3rd NB LT, 4th WB TH; Convert NB TH to NB TH+RT
43. Harbor & South Coast	Convert SB TH to SB RT; Convert EB TH+RT to EB TH; Add 2nd EB RT, 2nd WB LT, WB RT
45. Fairview & South Coast	Add 4th SB TH, WB RT; Convert EB TH to EB TH+RT
49. Harbor & I-405 NB Ramps	Add 4th NB TH, WB RT
50. Harbor & I-405 SB Ramps	Add EB RT; Add NB Freeflow TH to NB I-405 Ramp (behind bridge piers)
52. Fairview & I-405 SB Ramps[1]	Add 3rd SB LT; Convert NB TH to NB TH+RT; Convert EB RT to EB LT+RT
55. Harbor & Gisler	Add 5th NB TH, SB RT, WB RT
57. Fairview & Baker	*Improvements underway* (4th SB TH, 3rd WB TH)
59. Bristol & Paularino	Add 2nd NBL, 4th NB TH, 2nd WB LT, EB RT
61. Bear & Baker	Add 3rd WB TH
62. Bristol & Baker[1]	Add 4th NB TH, 3rd EB LT, 3rd EB TH, 3rd WB TH

Table 1 (Cont.)

2020 INTERSECTION IMPROVEMENTS

INTERSECTION	IMPROVEMENT
63. Fairview & Adams	Convert SB RT to SB Freeflow RT
66. Orange & 17th	Add NB RT, SB RT, 3rd EB TH, 3rd WB TH, WB RT
67. Santa Ana & 17th	Add NB RT, SB RT, 3rd EB TH, EB RT, 3rd WB TH, WB RT
68. Tustin & 17th	Add NB RT, EB RT, WB RT
71. Park Center & Sunflower	Convert NB TH to NB LT + TH, Convert SB LT to SB LT + TH, Convert SB TH to SB RT
74. Anton & Sunflower	Add 2nd WB LT
75. Bristol & Town Center	Add 2nd WB LT
80. I-405 SB Ramp & Anton (Future Intersection)	Provide 2 NB LT, 1 NB RT, 2 EB TH, 2 EB RT, 2 WB LT, 2 WB TH
83. Bristol & Lion/Holiday Inn	Convert NB RT to NB TH+RT
84. SR-55 SB Ramps & Paularino	Add SB RT
85. SR-55 NB Ramps & Paularino	Add WB RT
87. SR-55 SB Ramps & Baker	Add SB Freeflow RT , Convert EB TH to EB TH + RT
88. SR-55 NB Ramps & Baker	Add NB LT, 2nd EB LT
97. Mesa Verde E & Adams	Convert SB TH to SB TH+RT
107. Newport NB & Del Mar	Add NB RT, Convert WB TH to WB TH+RT
111. Harbor & Hamilton	Add SB RT
117. Hyland & I-405 NB On-Ramp/South Coast (Future)	Provide 1 SB LT, 1 SB RT, 1 EB TH, 1 EB TH+RT
118. Bristol & Bear	Add 3rd SB TH

Notes:

1 - The proposed improvements exceed the buildout configuration recommended in the 1990 General Plan and is subject to City Council Approval.

NB = Northbound	TH = Through Lane
SB = Southbound	LT = Left-Turn Lane
EB = Eastbound	RT = Right-Turn Lane
WB = Westbound	Freeflow = Freeflow Turn Lane (traffic does not stop)

Table 2

ICU SUMMARY

INTERSECTION	EXISTING (2000) COUNTS AM	EXISTING (2000) COUNTS PM	2020 WITH PREVIOUS (1990) GP LANES AM	2020 WITH PREVIOUS (1990) GP LANES PM	2020 WITH PROPOSED UPDATED GP LANES AM	2020 WITH PROPOSED UPDATED GP LANES PM
1. Placentia & Adams	.80	.82	.90	.80	.90	.80
2. Harbor & Adams	.76	.89	.77	1.00	.81	.90
3. Harbor & Fair	.40	.63	.53	.71	.53	.71
4. Fairview & Fair	.47	.62	.57	.85	.57	.85
5. Placentia & Wilson	.55	.52	.45	.41	.54	.43
6. Harbor & Wilson	.47	.68	.55	.74	.55	.74
7. Fairview & Wilson	.59	.76	.58	.81	.60	.87
8. Newport SB & Wilson	.30	.47	.48	.74	.51	.80
9. Newport NB & Wilson	.39	.35	.59	.55	.49	.59
10. Canyon & Victoria	.67	.75	.62	.59	.69	.64
11. Placentia & Victoria	.80	.78	.70	.77	.70	.77
12. Pomona & Victoria	.64	.63	.80	.70	.80	.70
13. Harbor & Victoria	.70	.90	.74	.83	.74	.83
14. Newport SB & Fairview	.34	.67	.53	.89	.53	.89
15. Newport NB & Fairview	.91	.59	.88	.53	.88	.53
16. Newport SB & Victoria	.57	.88	.69	.81	.61	.84
17. Newport NB & Victoria/22nd	1.01	.68	.99	.67	.90	.67
18. Monrovia & 19th	.42	.42	.89	.80	.89	.80
19. Placentia & 19th	.51	.59	.41	.62	.41	.62
20. Pomona & 19th	.51	.57	.58	.67	.58	.67
21. Harbor & 19th	.42	.60	.39	.62	.39	.62
22. Newport & 19th	1.00	.94	.48	.65	.39	.64
23. Placentia & 18th	.40	.45	.23	.26	.23	.26
24. Newport & 18th	.75	.88	.25	.46	.25	.46
25. Newport & Harbor	.62	.80	.27	.41	.27	.41
26. Monrovia & 17th	.22	.32	.59	.70	.59	.70
27. Placentia & 17th	.37	.54	.23	.38	.23	.38
28. Superior & 17th	.52	.62	.44	.42	.34	.42
29. Newport & 17th	.74	.78	.48	.71	.48	.71
30. Placentia & 16th	.35	.35	.32	.19	.32	.19
31. Superior & 16th	.53	.41	.74	.72	.74	.72
32. Placentia & Superior	.64	.56	.56	.43	.56	.43
33. Harbor & Macarthur	.50	.67	.65	.84	.65	.84
34. Newport & Industrial	.53	.55	.86	.82	.86	.82
35. Harbor & Lake Center/Scenic	.65	.61	.74	.77	.74	.77
36. Harbor & Sunflower	.64	.79	.75	.90	.75	.90
37. Susan & Sunflower	.43	.66	.62	.88	.62	.88
38. Fairview & Sunflower	.74	.71	.81	.83	.81	.83
39. Greenville & Sunflower	.44	.66	.60	.80	.60	.80
40. Raitt & Sunflower	.52	.56	.66	.70	.66	.70

(Continued)

Table 2 (cont)
ICU SUMMARY

INTERSECTION	EXISTING (2000) COUNTS AM	PM	2020 WITH PREVIOUS (1990) GP LANES AM	PM	2020 WITH PROPOSED UPDATED GP LANES AM	PM
41. Bear & Sunflower	.42	.68	.68	.78	.68	.78
42. Bristol & Sunflower	.61	.80	.97	.99	.86	.87
43. Harbor & South Coast	.68	.85	.82	.85	.82	.85
44. Susan & South Coast	.27	.38	.57	.71	.57	.71
45. Fairview & South Coast	.74	.82	.79	.92	.79	.74
46. I-405 NB Ramps & South Coas	t .30	.40	.70	.53	.70	.53
47. Bear & South Coast	.31	.51	.40	.62	.40	.62
48. Bristol & Anton	.39	.64	.57	.74	.57	.74
49. Harbor & I-405 NB Ramps	.72	.65	.72	.70	.72	.70
50. Harbor & I-405 SB Ramps	.47	.60	.49	.67	.49	.67
51. Fairview & I-405 NB Ramps	.70	.69	.90	.86	.90	.86
52. Fairview & I-405 SB Ramps	1.01	.76	1.15	1.09	.65	.80
53. Bristol & I-405 NB Ramps	.67	.72	.80	.81	.80	.81
54. Bristol & I-405 SB Ramps	.52	.69	.68	.87	.68	.87
55. Harbor & Gisler	.74	.71	.84	.84	.84	.84
56. Harbor & Baker	.53	.63	.63	.84	.63	.84
57. Fairview & Baker	.76	.77	.81	.79	.87	.79
58. Bear & Paularino	.47	.60	.52	.59	.52	.59
59. Bristol & Paularino	.63	.79	.62	.93	.60	.89
60. Bear & SR-73 SB Ramps	.45	.58	.41	.58	.56	.75
61. Bear & Baker	.63	.85	.74	.79	.82	.79
62. Bristol & Baker	.61	.76	.74	.93	.70	.90
63. Fairview & Adams	.77	.95	.85	.76	.85	.79
64. Hyland & MacArthur	.74	.89	.78	.68	.78	.68
65. Plaza & Sunflower	.33	.66	.60	.57	.61	.79
66. Orange & 17th	.65	.74	.68	.83	.67	.78
67. Santa Ana & 17th	.67	.76	.64	.69	.64	.69
68. Tustin & 17th	.62	.72	.57	.60	.75	.78
69. Irvine & 17th	.57	.79	.75	.80	.75	.80
70. Bear & SR-73 NB Ramp	.45	.62	.56	.71	.56	.71
72. Ave of the Arts & Sunflower	.41	.41	.82	.61	.82	.61
73. Sakioka/Flower & Sunflower	.43	.51	.81	.83	.81	.83
74. Anton & Sunflower	.41	.36	.80	.59	.80	.59
75. Bristol & Town Center Dr	.41	.67	.53	.75	.53	.75
76. Ave of Arts & Town Center	--	--	.46	.53	.46	.53
77. Park Center & Anton	.30	.43	.46	.48	.46	.48
78. Ave of the Arts & Anton	.35	.40	.76	.43	.76	.44
79. Sakioka Dr & Anton	.33	.35	.49	.58	.49	.58
80. I-405 SB On-Ramp & Anton	--	--	.29	.69	.29	.56

(Continued)

Table 2 (cont)
ICU SUMMARY

INTERSECTION	EXISTING (2000) COUNTS AM	EXISTING (2000) COUNTS PM	2020 WITH PREVIOUS (1990) GP LANES AM	2020 WITH PREVIOUS (1990) GP LANES PM	2020 WITH PROPOSED UPDATED GP LANES AM	2020 WITH PROPOSED UPDATED GP LANES PM
81. Bear & Crystal Crt/SCP	.19	.38	.28	.49	.28	.49
82. Bear & Metro Pt/May Co	.22	.50	.28	.59	.27	.50
83. Bristol & Lion/Holiday Inn	.49	.52	.57	.66	.57	.66
84. SR-55 SB Ramps & Paularino	.82	.67	.68	.85	.76	.79
85. SR-55 NB Ramps & Paularino	.63	.87	.73	.84	.73	.86
86. Red Hill & Paularino	.66	.76	.58	.58	.75	.86
87. SR-55 SB Ramps & Baker	.72	.87	.57	1.06	.77	.78
88. SR-55 NB Frontage & Baker	.85	.89	1.06	.83	.76	.86
89. Red Hill & Baker	.49	.62	.58	.62	.67	.86
90. Red Hill & Kalmus	.36	.44	.40	.45	.40	.45
91. Harbor & Nutmeg	.43	.51	.49	.58	.49	.58
92. College & Baker	.39	.55	.51	.58	.57	.68
93. Mendoza & Baker	.73	.70	.73	.73	.84	.82
94. Babb & Baker	.65	.76	.75	.87	.75	.87
95. Milbro & Baker	.62	.73	.74	.86	.74	.86
96. Shantar/Albatross & Adams	.75	.68	.77	.67	.77	.67
97. Mesa Verde East & Adams	.69	.82	.69	.96	.72	.83
98. Royal Palms & Adams	.68	.71	.68	.75	.68	.75
99. Pinecreek & Adams	.49	.65	.51	.71	.51	.71
100. Harbor & Mesa Verde	.47	.70	.51	.80	.51	.80
101. Harbor & Merrimac	.48	.68	.61	.73	.61	.73
102. Newport SB & Mesa	.23	.71	.34	.68	.34	.75
103. Newport NB & Mesa	.35	.48	.23	.32	.36	.48
104. Loyola & Fair	.23	.34	.28	.44	.28	.44
105. City Hall/Fairground & Fair	.39	.61	.50	.69	.51	.72
106. Newport SB & Fair/Del Mar	.37	.55	.68	.85	.68	.85
107. Newport NB & Del Mar	.82	.50	.89	.69	.75	.71
108. Harbor & Harbor Center	.34	.59	.42	.56	.45	.62
109. Newport NB & Santa Isabel	.46	.33	.35	.35	.48	.48
110. National & Victoria	.66	.67	.62	.59	.62	.59
111. Harbor & Hamilton	.47	.59	.38	.53	.38	.53
112. Harbor & Bay	.27	.47	.30	.51	.30	.51
113. Newport NB & Bay	.42	.42	.30	.38	.38	.47
114. Anaheim & 19th	.55	.63	.50	.61	.50	.61
115. Park & 19th	.44	.57	.43	.51	.43	.51
116. Newport & Broadway	.79	.69	.32	.24	.36	.31
117. I-405 NB On-Ramp & Hyland	--	--	.38	.64	.38	.64
118. Bristol & Bear	.42	.61	.51	.70	.51	.70
119. Bristol (N/S) & Newport SB	.28	.65	.39	.77	.34	.77
120. Bristol (N/S) & Newport NB	.33	.56	.50	.81	.50	.81

(Continued)

Table 2 (cont)
ICU SUMMARY

INTERSECTION	EXISTING (2000) COUNTS AM	EXISTING (2000) COUNTS PM	2020 WITH PREVIOUS (1990) GP LANES AM	2020 WITH PREVIOUS (1990) GP LANES PM	2020 WITH PROPOSED UPDATED GP LANES AM	2020 WITH PROPOSED UPDATED GP LANES PM
121. Bristol (N/S) & Red Hill	.75	.65	.80	.73	.80	.70
122. Fairview & Paularino	.52	.49	.57	.59	.57	.59
123. Fairview & Monitor	.38	.36	.42	.45	.42	.45
124. Fairview & Arlington	.32	.42	.37	.59	.37	.59
125. Fairview & Merrimac	.25	.31	.32	.40	.32	.40
126. Meyer & 19th	.41	.49	.49	.57	.49	.57
127. Newport SB & Santa Isabel	.17	.34	.34	.58	.34	.58
128. Newport SB & Bay	.27	.38	.22	.47	.30	.60

Level of service ranges: .00 - .60 A
.61 - .70 B
.71 - .80 C
.81 - .90 D
.91 - 1.00 E
Above 1.00 F

APPENDIX D

TABLE 1
YEAR 2001 TRAFFIC CONDITIONS

ID	Location	1993 Conditions				2000 Conditions				2001 Conditions			
		AM Peak		PM Peak		AM Peak		PM Peak		AM Peak		PM Peak	
		ICU	LOS	ICU	LOS	ICU	LOS	ICU	LOS	ICU	LOS	ICU	LOS
INTERSECTIONS CONTROLLED BY CITY													
1	Placentia & Adams	0.59	A	0.70	B	0.80	C	0.82	D	0.84	D	0.76	C
2	Harbor & Adams	0.77	C	0.97	E	0.76	C	0.89	D	0.76	C	0.84	D
3	Harbor & Fair	0.47	A	0.75	C	0.40	A	0.63	B	0.44	A	0.66	B
4	Fairview & Fair	0.35	A	0.52	A	0.47	A	0.62	B	0.45	A	0.53	A
5	Placentia & Wilson	0.44	A	0.57	A	0.55	A	0.52	A	0.55	A	0.53	A
6	Harbor & Wilson	0.42	A	0.66	B	0.47	A	0.68	B	0.46	A	0.68	B
7	Fairview & Wilson	0.54	A	0.70	B	0.59	A	0.76	C	0.67	B	0.77	C
8	Newport SB & Wilson					0.30	A	0.47	A	0.34	A	0.47	A
9	Newport NB & Wilson					0.39	A	0.35	A	0.42	A	0.37	A
10	Canyon & Victoria	0.48	A	0.53	A	0.67	B	0.75	C	0.70	B	0.73	C
11	Placentia & Victoria	0.56	A	0.65	B	0.80	C	0.78	C	0.78	C	0.80	C
12	Pomona & Victoria	0.52	A	0.61	B	0.64	B	0.63	B	0.69	B	0.73	C
13	Harbor & Victoria	0.57	A	0.83	D	0.70	B	0.90	D	0.77	C	0.89	D
14	Newport SB & Fairview					0.34	A	0.67	B	0.35	A	0.69	B
16	Newport SB & Victoria					0.57	A	0.88	D	0.63	B	0.93	E
17	Newport NB & Victoria/22nd					1.01	F	0.68	B	1.04	F	0.69	B
19	Placentia & 19th	0.48	A	0.59	A	0.51	A	0.59	A	0.56	A	0.61	B
20	Pomona & 19th	0.39	A	0.54	A	0.51	A	0.57	A	0.50	A	0.59	A
21	Harbor & 19th	0.47	A	0.75	C	0.42	A	0.60	A	0.44	A	0.63	B
23	Placentia & 18th	0.43	A	0.55	A	0.40	A	0.45	A	0.51	A	0.55	A
27	Placentia & 17th	0.40	A	0.62	B	0.37	A	0.54	A	0.46	A	0.61	B
28	Superior & 17th	0.53	A	0.82	D	0.52	A	0.62	B	0.60	A	0.65	B
30	Placentia & 16th	0.30	A	0.37	A	0.35	A	0.35	A	0.37	A	0.40	A
31	Superior & 16th	0.48	A	0.47	A	0.53	A	0.41	A	0.58	A	0.46	A
35	Harbor & Lake Center (Scenic)	0.54	A	0.62	B	0.65	B	0.61	B	0.58	A	0.57	A
36	Harbor & Sunflower	0.78	C	0.86	D	0.64	B	0.79	C	0.60	A	0.77	C
37	Susan & Sunflower					0.43	A	0.66	B	0.52	A	0.71	C
38	Fairview & Sunflower	0.69	B	0.68	B	0.74	C	0.71	C	0.71	C	0.76	C
39	Greenville & Sunflower	0.40	A	0.52	A	0.44	A	0.66	B	0.48	A	0.61	B
40	Raitt & Sunflower	0.30	A	0.47	A	0.52	A	0.56	A	0.57	A	0.63	B
41	Bear & Sunflower	0.31	A	0.52	A	0.42	A	0.68	B	0.44	A	0.62	B
42	Bristol & Sunflower	0.38	A	0.72	C	0.61	B	0.80	C	0.60	A	0.72	C
43	Harbor & South Coast	0.72	C	1.02	F	0.68	B	0.85	D	0.63	B	0.86	D
44	Susan & South Coast					0.27	A	0.38	A	0.33	A	0.44	A
45	Fairview & South Coast	0.64	B	0.64	B	0.74	C	0.82	D	0.71	C	0.74	C
47	Bear & South Coast	0.28	A	0.60	A	0.31	A	0.51	A	0.38	A	0.48	A
48	Bristol & Anton	0.33	A	0.62	B	0.39	A	0.65	B	0.41	A	0.69	B
55	Harbor & Gisler	0.73	C	0.75	C	0.74	C	0.71	C	0.69	B	0.70	B
56	Harbor & Baker	0.67	B	0.85	D	0.53	A	0.63	B	0.54	A	0.66	B
57	Fairview & Baker	0.58	A	0.73	C	0.76	C	0.77	C	0.75	C	0.69	B
58	Bear & Paularino	0.31	A	0.59	A	0.47	A	0.60	A	0.43	A	0.64	B
59	Bristol & Paularino	0.56	A	0.73	C	0.63	B	0.78	C	0.61	B	0.71	C
61	Bear & Baker	0.46	A	0.81	D	0.63	B	0.85	D	0.60	A	0.79	C
62	Bristol & Baker	0.46	A	0.71	C	0.61	B	0.76	C	0.56	A	0.73	C

TABLE 1
YEAR 2001 TRAFFIC CONDITIONS

ID	Location	1993 Conditions				2000 Conditions				2001 Conditions			
		AM Peak		PM Peak		AM Peak		PM Peak		AM Peak		PM Peak	
		ICU	LOS	ICU	LOS	ICU	LOS	ICU	LOS	ICU	LOS	ICU	LOS
63	Fairview & Adams	0.59	A	0.87	D	0.77	C	0.95	E	0.66	B	0.89	D
65	Plaza & Sunflower	0.30	A	0.61	B	0.33	A	0.66	B	0.40	A	0.58	A
66	Orange & 17th	0.75	C	0.87	D	0.63	B	0.74	C	0.65	B	0.79	C
67	Santa Ana & 17th	0.43	A	0.73	C	0.65	B	0.75	C	0.65	B	0.79	C
68	Tustin & 17th	0.44	A	0.61	B	0.58	A	0.72	C	0.64	B	0.68	B
71	Park Center & Sunflower	0.32	A	0.57	A	0.39	A	0.72	C	0.45	A	0.65	B
72	Ave of the Arts & Sunflower	0.26	A	0.30	A	0.40	A	0.41	A	0.39	A	0.39	A
73	Sakioka/Flower & Sunflower	0.28	A	0.40	A	0.43	A	0.51	A	0.49	A	0.55	A
74	Anton & Sunflower	0.32	A	0.33	A	0.41	A	0.36	A	0.48	A	0.40	A
75	Bristol & Town Center	0.38	A	0.66	B	0.41	A	0.66	B	0.56	A	0.72	C
77	Park Center & Anton	0.37	A	0.39	A	0.30	A	0.42	A	0.50	A	0.58	A
78	Ave of the Arts & Anton	0.39	A	0.46	A	0.34	A	0.40	A	0.39	A	0.46	A
79	Sakioka & Anton	0.27	A	0.26	A	0.33	A	0.34	A	0.32	A	0.35	A
81	Bear & Crystal Court/SCP	0.28	A	0.39	A	0.19	A	0.38	A	0.32	A	0.43	A
82	Bear & Metro Point/May Co	0.19	A	0.35	A	0.22	A	0.50	A	0.35	A	0.47	A
83	Bristol & Lion/Holiday Inn	0.42	A	0.52	A	0.49	A	0.52	A	0.49	A	0.56	A
86	Red Hill & Paularino	0.50	A	0.68	B	0.66	B	0.76	C	0.60	A	0.62	B
89	Red Hill & Baker	0.42	A	0.53	A	0.49	A	0.62	B	0.50	A	0.61	B
90	Red Hill & Kalmus	0.33	A	0.46	A	0.36	A	0.44	A	0.41	A	0.44	A
91	Harbor & Nutmeg	0.53	A	0.64	B	0.43	A	0.51	A	0.52	A	0.53	A
92	College & Baker	0.42	A	0.54	A	0.39	A	0.55	A	0.40	A	0.58	A
93	Mendoza & Baker	0.47	A	0.62	B	0.73	C	0.70	B	0.71	C	0.63	B
94	Babb & Baker	0.45	A	0.72	C	0.65	B	0.76	C	0.72	C	0.71	C
95	Milbro & Baker	0.54	A	0.79	C	0.62	B	0.73	C	0.67	B	0.79	C
96	Shantar/Albatross & Adams	0.61	B	0.67	B	0.75	C	0.68	B	0.72	C	0.77	C
97	Mesa Verde East & Adams	0.53	A	0.68	B	0.69	B	0.82	D	0.74	C	0.74	C
98	Royal Palm & Adams	0.57	A	0.61	B	0.68	B	0.71	C	0.71	C	0.72	C
99	Pinecreek & Adams	0.37	A	0.63	B	0.49	A	0.65	B	0.56	A	0.65	B
100	Harbor & Mesa Verde	0.45	A	0.61	B	0.47	A	0.70	B	0.47	A	0.67	B
101	Harbor & Merrimac	0.44	A	0.62	B	0.48	A	0.68	B	0.50	A	0.69	B
102	Newport SB & Mesa					0.23	A	0.71	C	0.28	A	0.73	C
103	Newport NB & Mesa					0.35	A	0.48	A	0.39	A	0.46	A
104	Loyola & Fair	0.27	A	0.31	A	0.23	A	0.34	A	0.36	A	0.48	A
105	City Hall/Fairgrounds & Fair	0.36	A	0.46	A	0.39	A	0.61	B	0.51	A	0.74	C
106	Newport SB & Fair/Del Mar					0.37	A	0.55	A	0.35	A	0.51	A
107	Newport NB & Del Mar					0.82	D	0.50	A	0.82	D	0.52	A
108	Harbor & Harbor Center	0.34	A	0.52	A	0.34	A	0.59	A	0.36	A	0.57	A
109	Newport NB & Santa Isabel					0.46	A	0.33	A	0.49	A	0.40	A
110	National & Victoria	0.51	A	0.60	A	0.66	B	0.67	B	0.73	C	0.72	C
111	Harbor & Hamilton	0.44	A	0.55	A	0.47	A	0.59	A	0.50	A	0.63	B
112	Harbor & Bay	0.30	A	0.55	A	0.27	A	0.47	A	0.33	A	0.50	A
113	Newport NB & Bay					0.42	A	0.42	A	0.44	A	0.46	A
114	Anaheim & 19th	0.52	A	0.83	D	0.55	A	0.63	B	0.55	A	0.65	B
115	Park & 19th	0.44	A	0.56	A	0.44	A	0.57	A	0.45	A	0.54	A
117	Bristol & Bear	0.31	A	0.51	A	0.42	A	0.61	B	0.43	A	0.53	A

TABLE 1
YEAR 2001 TRAFFIC CONDITIONS

ID	Location	1993 Conditions				2000 Conditions				2001 Conditions			
		AM Peak		PM Peak		AM Peak		PM Peak		AM Peak		PM Peak	
		ICU	LOS	ICU	LOS	ICU	LOS	ICU	LOS	ICU	LOS	ICU	LOS
118	Bristol & Randolph	0.25	A	0.35	A	0.31	A	0.40	A	0.33	A	0.45	A
122	Vanguard & Fair	0.36	A	0.49	A	0.42	A	0.61	B	0.47	A	0.63	B
123	Fairview & Paularino	0.44	A	0.54	A	0.52	A	0.49	A	0.56	A	0.53	A
124	Fairview & Monitor	0.42	A	0.41	A	0.37	A	0.36	A	0.42	A	0.41	A
125	Fairview & Orange Coast College	0.31	A	0.44	A	0.46	A	0.39	A	0.34	A	0.42	A
126	Fairview & Arlington	0.30	A	0.39	A	0.32	A	0.42	A	0.32	A	0.41	A
127	Fairview & Merrimac	0.23	A	0.35	A	0.25	A	0.31	A	0.34	A	0.33	A
128	Harbor & Celesco Entrance	0.58	A	0.70	B	0.53	A	0.63	B	0.58	A	0.68	B
129	Meyer & 19th					0.41	A	0.49	A	0.44	A	0.56	A
130	Newport SB & Vanguard					0.17	A	0.34	A	0.18	A	0.36	A
131	Newport SB & Bay					0.27	A	0.38	A	0.33	A	0.44	A
132	Jian & Paularino	0.36	A	0.47	A	0.25	A	0.52	A	0.36	A	0.55	A
133	Placentia & Estancia N	0.27	A	0.30	A	0.26	A	0.30	A	0.30	A	0.26	A
134	Placentia & Estancia S	0.40	A	0.40	A	0.28	A	0.24	A	0.37	A	0.30	A
135	South Coast & Metro Point West	0.23	A	0.24	A	0.19	A	0.29	A	0.21	A	0.31	A
136	South Coast & Metro Point East					0.13	A	0.26	A	0.21	A	0.26	A
137	American & Victoria					0.70	B	0.63	B	0.68	B	0.71	C
138	Victoria & Valley	0.53	A	0.61	B	0.67	B	0.70	B	0.70	B	0.77	C
139	Baker & Coolidge									0.51	A	0.75	C
INTERSECTIONS CONTROLLED BY CALTRANS													
22	Newport & 19th					1.00	E	0.94	E	0.97	E	0.97	E
24	Newport & 18th					0.75	C	0.88	D	0.79	C	0.92	E
25	Newport & Harbor					0.62	B	0.80	C	0.65	B	0.87	D
29	Newport & 17th					0.74	C	0.78	C	0.78	C	0.73	C
34	Newport & Industrial					0.53	A	0.55	A	0.61	B	0.61	B
46	I-405 NB Offramp & South Coast					0.30	A	0.40	A	0.35	A	0.47	A
49	Harbor & I-405 NB Ramps					0.72	C	0.65	B	0.79	C	0.70	B
50	Harbor & I-405 SB Ramps					0.47	A	0.60	A	0.48	A	0.61	B
51	Fairview & I-405 NB Ramps					0.70	B	0.69	B	0.67	B	0.65	B
52	Fairview & I-405 SB Ramps					1.01	F	0.76	C	1.06	F	0.72	C
53	Bristol & I-405 NB Ramps					0.67	B	0.71	C	0.36	A	0.56	A
54	Bristol & I-405 SB Ramps					0.52	A	0.68	B	0.44	A	0.60	A
60	Bear & SR-73 NB Ramps					0.45	A	0.58	A	0.43	A	0.54	A
70	Bear & SR-73 SB Ramps					0.45	A	0.62	B	0.41	A	0.56	A
84	SR-55 SB Ramps & Paularino					0.82	D	0.67	B	0.78	C	0.60	A
85	SR-55 NB Ramps & Paularino					0.63	B	0.87	D	0.57	A	0.84	D
87	SR-55 SB Ramps & Baker					0.72	C	0.87	D	0.70	B	0.69	B
88	SR-55 NB Frontage & Baker					0.85	D	0.89	D	0.76	C	0.77	C
116	Newport & Broadway					0.79	C	0.69	B	0.80	C	0.76	C
119	Bristol & Newport SB					0.36	A	0.65	B	0.26	A	0.63	B
120	Bristol & Newport NB					0.42	A	0.80	C	0.30	A	0.60	A
121	Bristol & Red Hill	0.72	C	0.68	B	0.79	C	0.68	B	0.60	A	0.79	C
INTERSECTION CONTROLLED BY NEWPORT BEACH													
69	Irvine & 17th					0.56	A	0.79	C	0.57	A	0.77	C