

3.4 Transportation/Traffic

This section examines whether implementation of the General Plan will cause a substantial increase in volume to capacity ratios on roads, exceed level of service standards, increase hazards due to a design feature, result in inadequate emergency access or result in inadequate parking. Through the Initial Study, issues regarding change in air traffic patterns were found to have no impact, and potential conflicts with adopted alternative transportation policies were found to have a less-than-significant impact. The information contained in this section is summarized from the *Rancho Santa Margarita Existing Conditions Memorandum* and *Future Conditions Memorandum* prepared by Urban Crossroads (January 8, 2002 and January 18, 2002, respectively). These reports are contained in Appendix C of this EIR.

ENVIRONMENTAL SETTING

Circulation

Rancho Santa Margarita's circulation network includes a freeway, arterial roadways, and local roadways. The north-south Foothill Transportation Corridor (SR-241) bisects the City with interchanges at Antonio Parkway, Santa Margarita Parkway, and Los Alisos Boulevard, which are the primary east-west arterials.

Non-motorized transportation routes in the City include bicycle and pedestrian facilities. The Orange County Transportation Authority adopted the 2001 Commuter Bikeways Strategies Plan which identifies existing and proposed regional bikeways in the County. ~~The Strategic Plan includes Trabuco Creek Bikeway, a regional Class I (paved off-road) bikeways, generally located along the eastern bluff of the Arroyo Trabuco and part of Santa Margarita Parkway. Class I bikeways accommodate both pedestrians and bicyclists. which accommodate pedestrians, are located in Trabuco Canyon and along part of Santa Margarita Parkway.~~ Class II (on-road) bikeways are located along Santa Margarita Parkway, Antonio Parkway south of Santa Margarita Parkway, Avenida Empresa, Los Alisos Boulevard south of Altisima, and Melinda Road south of Santa Margarita Parkway.

Public transportation consists of fixed-route bus service provided by the Orange County Transportation Authority. Two bus routes currently operate in the City: Routes 82 and 87. Route 82 serves much of Rancho Santa Margarita with a connection to the City of Mission Viejo. Route 87 provides access from Rancho Santa Margarita to Laguna Niguel along Alicia Parkway.

Related Regional Plan

The Orange County Transportation Authority (OCTA) is responsible for planning and operating regional transit facilities and services in Orange County. The OCTA prepares

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the Congestion Management Plan (CMP) mandated by State law. The Orange County CMP identifies the CMP transportation network subject to the Plan, establishes service levels for network routes, and identifies strategies to reduce congestion. In Rancho Santa Margarita, the Foothill Transportation Corridor (SR-241) is a part of the CMP network.

Existing Traffic Conditions

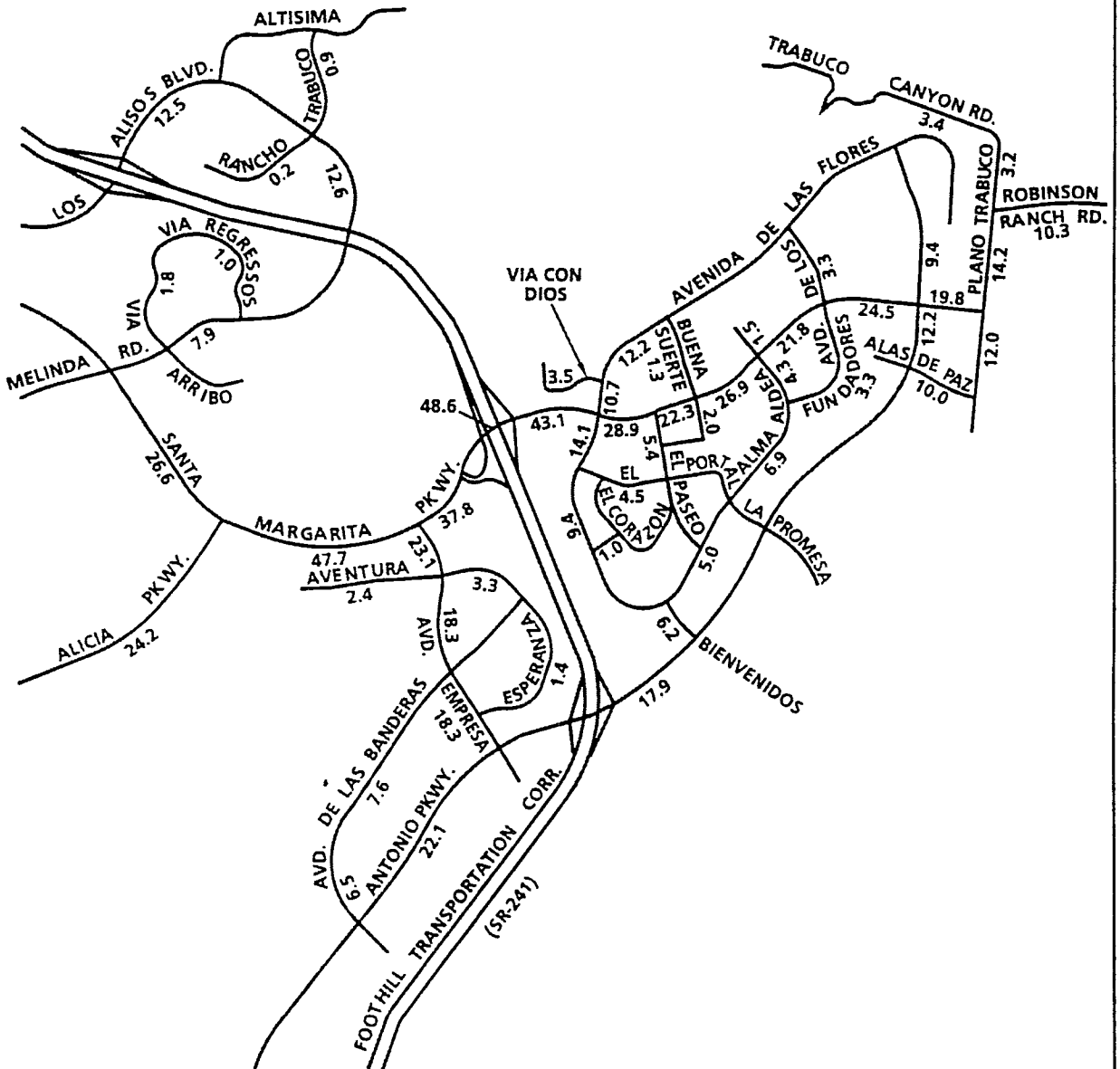
The quality and condition of local traffic conditions can be described using a rating system. The Level of Service, or LOS, descriptor is one such system. Level of service describes the ability of an intersection or roadway segment to meet its intended design capacity. Each LOS rating describes how people perceive the amount of congestion or difficulty in getting to where they want to go. LOS is ranked from A, representing no limitation, to F, representing very high levels of congestion. A detailed description of the LOS concept and analysis methodologies is located in Appendix C.

The traffic analysis for the General Plan evaluated existing and future conditions on roadway segments within the City. Figure 6 depicts existing average daily traffic on identified segments. Table 3 summarizes baseline year 2001 conditions for identified segments. No deficiencies exist on the analyzed roadway segments.

**Table 3
Existing Segment Conditions**

Roadway Segment			Roadway Capacity	Exiting Traffic	Volume to Capacity Ratio	Level of Service
Name	From	To				
Los Alisos Blvd.	SR-241	Altisima	37,500	12,500	0.33	A
Alicia Pkwy	Santa Margarita Pkwy	Mission Viejo	56,300	24,200	0.43	A
Santa Margarita Pkwy	Melinda Rd.	Alicia Pkwy	56,300	26,600	0.47	A
	Alicia Pkwy	Ave. Empresa	56,300	47,700	0.85	D
	Ave. Empresa	SR-241 SB Ramps	56,300	37,800	0.67	B
	SR-241 NB Ramps	Ave. De Las Flores	56,300	43,100	0.77	C
	Ave. De Las Flores	El Paseo	56,300	28,900	0.51	A
	Ave. Fundadores	Antonio Pkwy	56,300	24,500	0.44	A
	Antonio Pkwy	Plano Trabuco	37,500	19,800	0.35	A
Ave. Empresa	Santa Margarita Pkwy	Aventura	37,500	23,100	0.62	B
	Ave De Las Banderas	Antonio Pkwy	37,500	18,300	0.49	A
Antonio Pkwy	Ave. De Las Banderas	Ave. Empresa	56,300	22,100	0.39	A
	SR-241 NB Ramps	Bienvenidos	56,300	17,900	0.32	A
	Alas De Paz	Santa Margarita Pkwy	56,300	12,200	0.22	A
Alas De Paz	Antonio Pkwy	Plano Trabuco	37,500	10,000	0.27	A
Plano Trabuco	Alas De Paz	Santa Margarita Pkwy	37,500	12,000	0.32	A
	Santa Margarita Pkwy	Robinson Ranch Rd.	37,500	14,200	0.38	A

Source: Urban Crossroads, *Existing Conditions Memorandum*, January 2002.



LEGEND:

1.0 = VEHICLES PER DAY (1000'S)



Source: Urban Crossroads.

Figure 6
Existing Average Daily Traffic (ADT)

Emergency Evacuation

The City of Rancho Santa Margarita maintains an Emergency Preparedness Plan. The plan identifies resources available for emergency situations and disasters, including earthquakes, floods, hazardous materials release, nuclear power plant emergency, wildland fire and aircraft accident. This plan also includes evacuation routes in the event of an emergency or disaster.

THRESHOLDS USED TO DETERMINE LEVEL OF IMPACT

Circulation

The Rancho Santa Margarita General Plan Circulation Element establishes a level of service threshold calculated from average daily traffic volumes for roadway segments. The performance criteria for evaluating roadway segment service is as follows:

- Level of Service D for Major, Primary, and Secondary Arterials
- Level of Service E for CMP Highways, as specified in the CMP

Therefore, a significant impact will occur on a roadway segment if implementation of the General Plan will cause a LOS E on major, primary, and secondary arterials or an LOS F on CMP Highways.

Roadway Design

For purposes of this EIR, a significant impact will occur if implementation of the General Plan will substantially increase hazards due to a design feature.

Emergency Access

For purposes of this EIR, a significant impact will occur if implementation of the General Plan will result in inadequate emergency access.

Emergency Evacuation

For the purposes of this EIR, a significant impact will occur if implementation of the General Plan will result in inadequate emergency evacuation routes.

Parking

For purposes of this EIR, a significant impact will occur if implementation of the General Plan will result in inadequate parking capacity.

ENVIRONMENTAL IMPACT

Circulation

The Orange County Transportation Analysis Model (OCTAM 3.1) provides a baseline for future traffic volume forecasts for arterial roadway segments in the Planning Area. OCTAM 3.1 utilizes Orange County Projections 2000 demographic data, SCAG projections for areas outside of Orange County, and a trip generation model based on the SCAG 1991 Household Origin-Destination Travel Survey. OCTAM 3.1 forecasts were reviewed for reasonableness and some projections were refined. A detailed explanation of refinements is included in Appendix C.

OCTAM 3.1 projected an increase in daily trips associated with the Northeast Future Planned Community to be 3,100 vehicles per day. Because OCTAM 3.1 is a regional model, most of these 3,100 trips are long-distance trips. Therefore, ITE Trip Generation rates were utilized to augment the OCTAM 3.1 projections. Short trips were added to regional trips to yield a projection of 5,700 daily trips from the Northeast Future Planned Community.

Figure 7 summarizes future average daily traffic on identified segments and Table 4 summarizes year 2025 conditions for identified segments. Santa Margarita Pkwy from SR-241 northbound ramps to Avenida de las Flores will experience a reduction in traffic attributed to diversion effects of a newly available parallel route, the Avenida de las Banderas freeway overcrossing. One deficiency exists on the analyzed roadway segments: Santa Margarita Parkway from Alicia Pkwy to Ave. Empresa. This major arterial segment will operate at LOS E; therefore, a significant impact will result.

As previously discussed in the Environmental Setting section, in Rancho Santa Margarita the Foothill Transportation Corridor (SR-241) is a part of the CMP network. The Foothill Transportation Corridor was sized to accommodate projected growth in the area as specified by adopted plans, including the CMP prepared by OCTA, and *OCP 2000* forecast. The General Plan does not intensify uses relative to the adopted plans, and furthermore, it is consistent with those plans. Therefore, adoption and implementation of the General Plan will not increase traffic generation beyond what the Foothill Transportation Corridor was built to accommodate. Impact is less than significant.

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**Table 4
Year 2025 Segment Conditions**

Roadway Segment			Existing		Future	
Name	From	To	Traffic Volume	Level of Service	Traffic Volume	Level of Service
Los Alisos Blvd.	SR-241	Altisima	12,500	A	12,500	A
Alicia Pkwy	Santa Margarita Pkwy	Mission Viejo	24,200	A	24,600	A
Santa Margarita Pkwy	Melinda Rd.	Alicia Pkwy	26,600	A	35,200	B
	Alicia Pkwy	Ave. Empresa	47,700	D	53,500	E
	Ave. Empresa	SR-241 SB Ramps	37,800	B	43,300	C
	SR-241 NB Ramps	Ave. De Las Flores	43,100	C	41,100	C
	Ave. De Las Flores	El Paseo	28,900	A	32,600	A
	Ave. Fundadores	Antonio Pkwy	24,500	A	33,200	A
	Antonio Pkwy	Plano Trabuco	19,800	A	24,000	B
Ave. Empresa	Santa Margarita Pkwy	Aventura	23,100	B	26,200	B
	Ave De Las Banderas	Antonio Pkwy	18,300	A	18,500	A
Antonio Pkwy	Ave. De Las Banderas	Ave. Empresa	22,100	A	25,800	A
	SR-241 NB Ramps	Bienvenidos	17,900	A	29,900	A
	Alas De Paz	Santa Margarita Pkwy	12,200	A	14,200	A
Alas De Paz	Antonio Pkwy	Plano Trabuco	10,000	A	13,800	A
Plano Trabuco	Alas De Paz	Santa Margarita Pkwy	12,000	A	19,800	A
	Santa Margarita Pkwy	Robinson Ranch Rd.	14,200	A	14,600	A

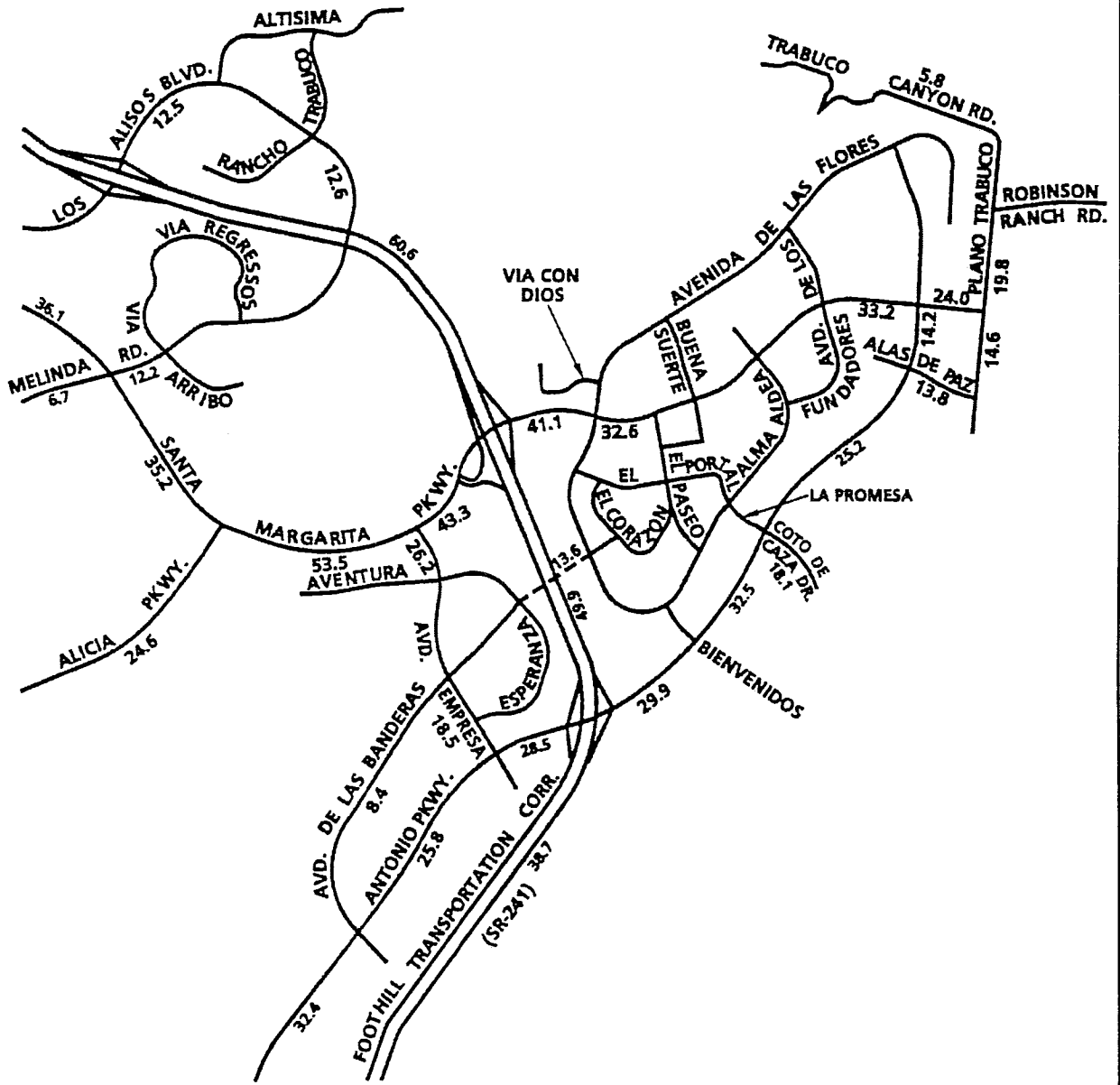
Source: Urban Crossroads, *Existing Conditions Memorandum*, January 2002.

Roadway Design

General Plan implementation will include construction of new roadways in the Northeast Future Planned Community. The recommended roadway system for the Northeast Future Planned Community is shown on Figure 8. Access from the northeast area to the rest of Rancho Santa Margarita is provided at the intersection of Plano Trabuco Road and Trabuco Canyon Road. This circulation plan consists of local and collector roadways and is for conceptual purposes only.

The Circulation Plan in the Circulation Element establishes a hierarchical roadway classification system with dimensions and characteristics (Figure 9). Furthermore, the Circulation Plan establishes performance criteria. With adherence to the roadway classification system and performance standards, future roadways in the Northeast Future Planned Community will avoid hazards due to design features, which would be a significant impact.

Since distribution of the Draft EIR, a Figure has been added to the Circulation Element detailing the schematic cross section of collector roadways. This figure in the General Plan (Figure C-2) has been added to this Final EIR (Figure 9b). This cross section represents desirable standards, but variation in right-of-way width and specific road



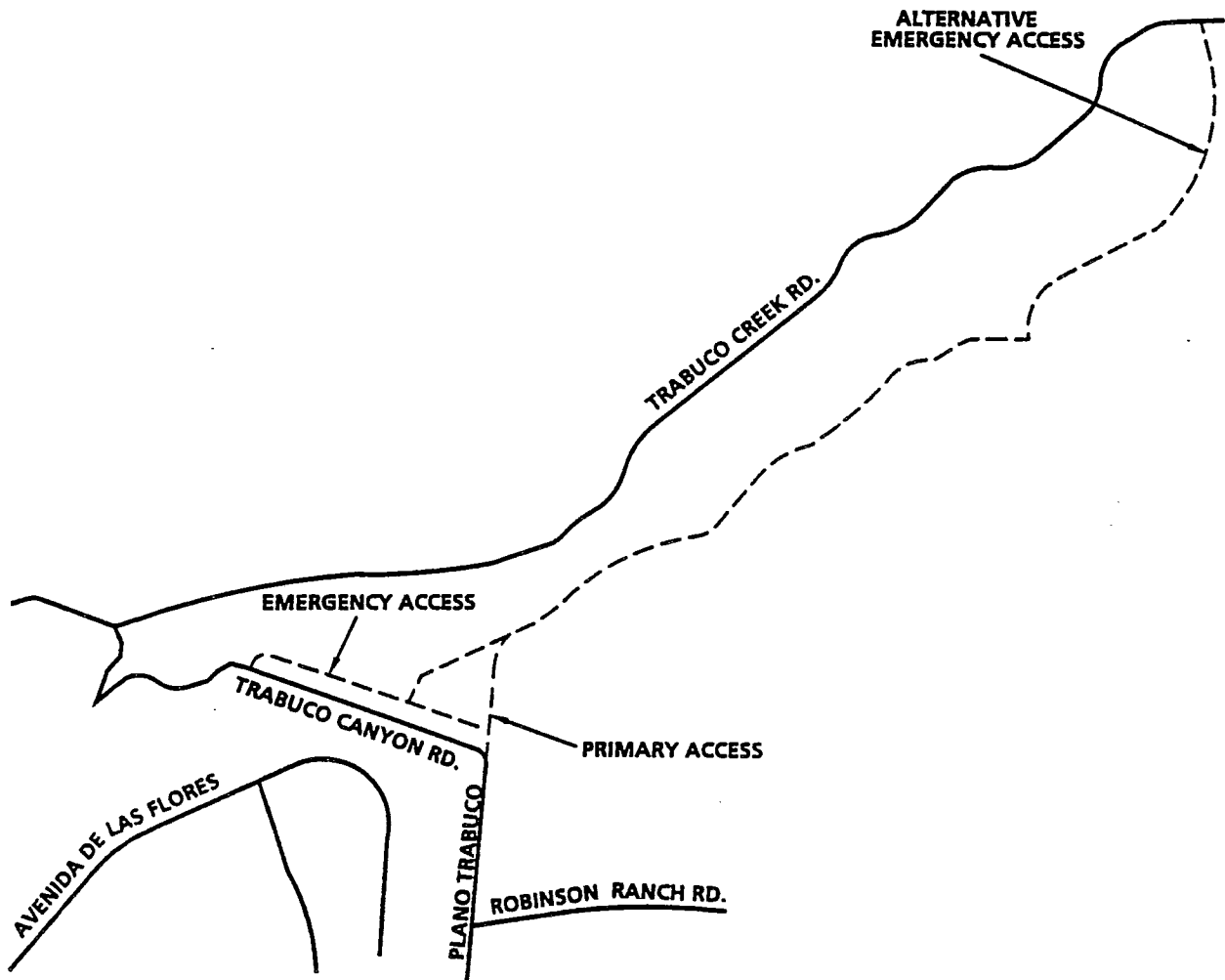
LEGEND:

1.0 = VEHICLES PER DAY (1000'S)



Source: Urban Crossroads.

Figure 7
 Future Average Daily Traffic (ADT)



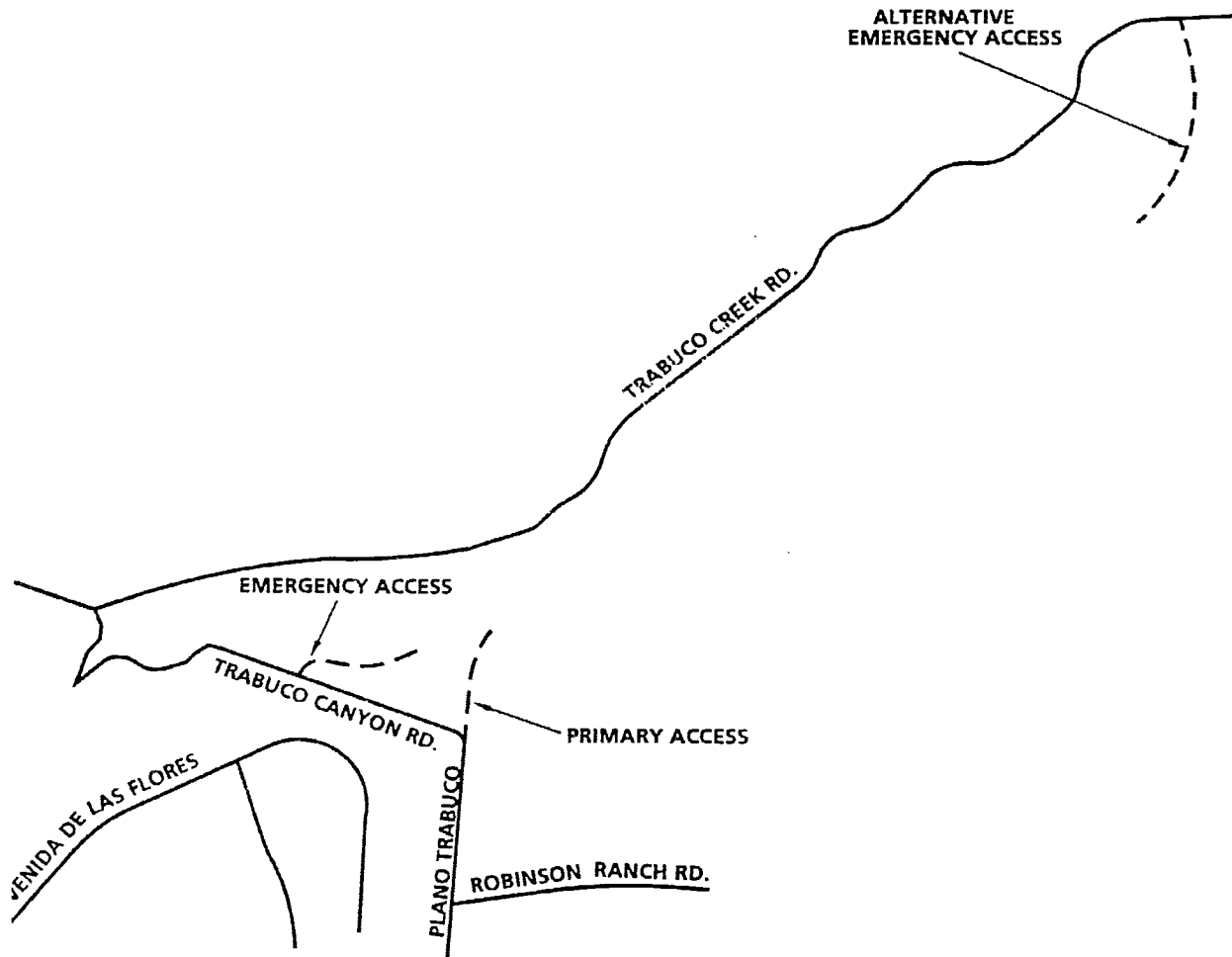
LEGEND:

--- = POTENTIAL ROADWAY

Not to Scale

Source: Urban Crossroads, 2001.

~~Figure 8~~
~~Northeast Future Planned Community~~
~~Conceptual Roadway System~~



LEGEND:

--- = POTENTIAL ACCESS

Figure 8
**Northeast Area
Future Planned Community
Conceptual Roadway Access**

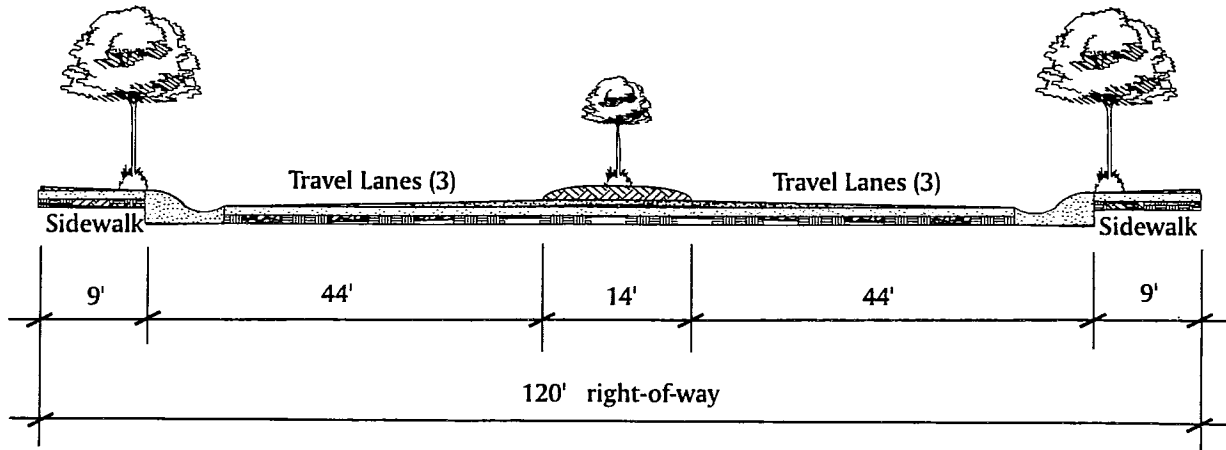
Not to Scale

Source: Urban Crossroads, 2001.

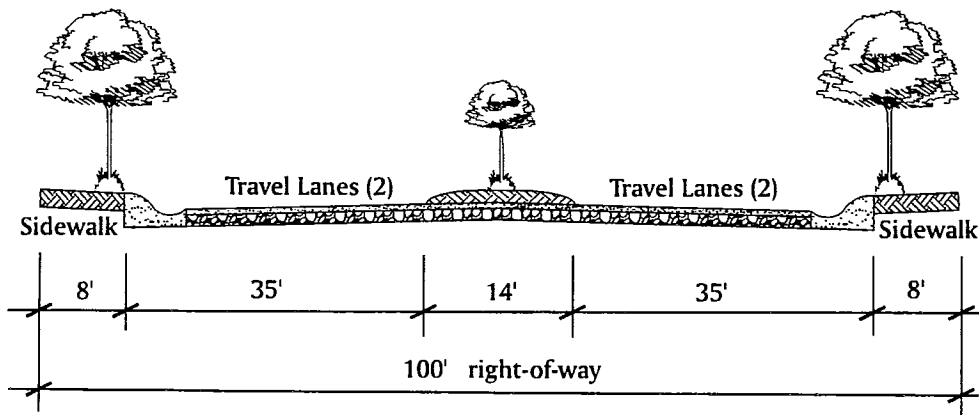
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Major Arterial Cross-Section



Primary Arterial Cross-Section



Secondary Arterial Cross-Section

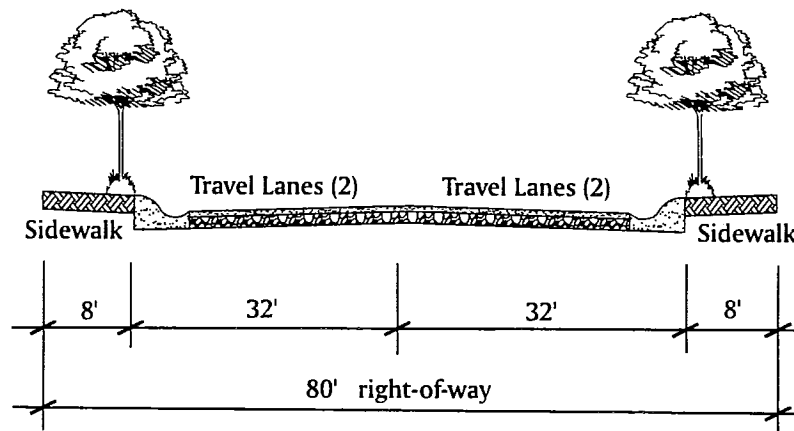


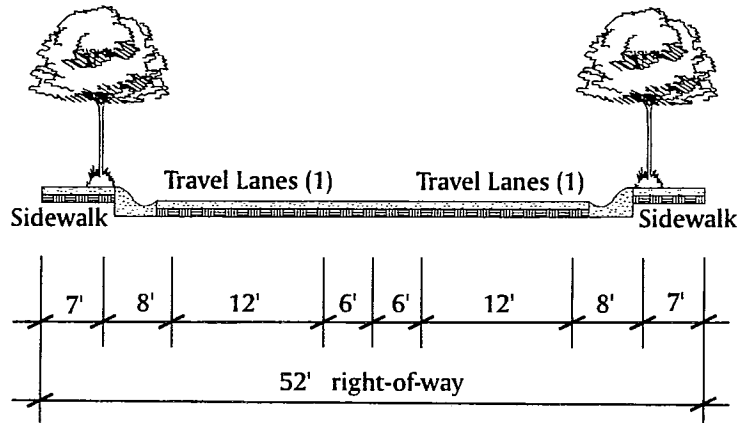
Figure 9.9a

Typical Arterial Roadway Cross-Sections

Source: Urban Crossroads.

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**Collector Roadway Cross-Section
(with Median Turn Lane)**



Collector Roadway Cross-Section

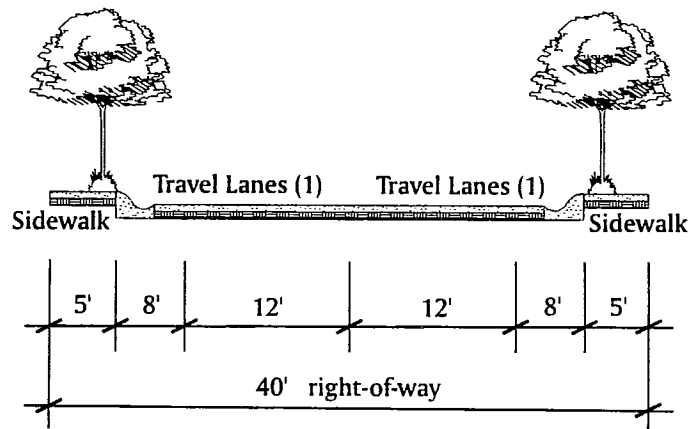


Figure 9b
Collector Roadway Cross-Sections

Source: Urban Crossroads.

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improvements will occur in certain cases due to physical constraints and/or right-of-way limitations.

Emergency Access

General Plan implementation will include construction of new roadways in the Northeast Future Planned Community. The recommended roadway system for the Northeast Future Planned Community is shown on Figure 8. Access from the northeast area to the rest of Rancho Santa Margarita is provided at the intersection of Plano Trabuco Road and Trabuco Canyon Road. Emergency access may be provided at the west end of the Future Planned Community to Trabuco Canyon Road, or alternately at the northeast end of the area to Trabuco Creek Road. The circulation plan for the Northeast Future Planned Community is conceptual. Inclusion of an emergency access point will reduce or avoid an otherwise potentially significant impact.

Emergency Evacuation

Implementation of the General Plan will result in construction of the Northeast Future Planned Community. Evacuation routes to accommodate new and existing development have been established. The General Plan includes a Safety Element that addresses emergency evacuation. This Element includes the following goal and policies:

Goal 4: *Improve the ability of the City to respond effectively to natural and human-caused emergencies.*

Policy 4.1: Support the development of local preparedness plans and multi-jurisdictional cooperation and communication for emergency situations consistent with the Standardized Emergency Management System (SEMS).

Policy 4.2: Educate City staff, residents and businesses regarding appropriate actions to safeguard life and property during and immediately after emergencies.

With implementation of this goal and policies, an otherwise potentially significant impact can be reduced or avoided.

Parking

Implementation of General Plan Land Use Policy will result in approximately 687 new dwelling units and 698,000 square feet of non-residential uses. Of the 687 new units, 75 will be located in existing planned communities, as will 350,000 square feet of non-residential uses. Approved development plans, which address parking standards, exist for each of the planned communities in the City. Future development in these areas will need to be reviewed for consistency with approved development plans. Without review and the requirement of consistency, impact will be significant.

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The Northeast Future Planned Community will accommodate a maximum of 612 new dwelling units and 348,000 square feet of non-residential uses pursuant to General Plan land use policy. A Specific Plan will be prepared for the area prior to annexation to the City. By addressing parking standards in the Specific Plan, future development in the Northeast Future Planned Community will reduce or avoid an otherwise potentially significant impact.

~~Since distribution of the Draft EIR, the representation of recommended roadway access for the Northeast Future Planned Community has changed. Emergency access will still be gained from either Trabuco Canyon Road or Trabuco Creek Road. However, these two access points will not necessarily be linked, as was represented on Figure 8 in the Draft EIR. This will not result in a significant impact in that only one emergency access point is required in addition to primary access to avoid a significant impact.~~

MITIGATION MEASURES

Circulation

The City will implement Implementation Program C-1 which requires the City to monitor the operation of major streets, which includes Rancho Santa Margarita Pkwy intersections at Alicia Pkwy and Avenida Empresa. This program provides for improved capacity by restricting on-street parking, improving signal timing, widening intersections, and adding through and turn lanes.

Roadway Design

The City will implement Implementation Program C-3 which requires future roadways in the Northeast Future Planned Community to meet roadway classification specifications and performance criteria.

Emergency Access

The City will implement Implementation Program C-3 which requires emergency access in addition to primary access to the Northeast Future Planned Community.

Emergency Evacuation

The City will implement Implementation Programs S-16, S-17 and S-18 to ensure adequate emergency evacuation routes and procedures. Implementation Program S-16 requires the maintenance of the Emergency Preparedness Plan under the provision of the State Emergency Management System format to maximize the efforts of emergency service providers and minimize human suffering and property damage during disasters. Implementation Program S-17 requires support of high-level multi-jurisdictional cooperation and communication for emergency planning and management.

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Implementation Program S-18 requires education of all citizens to take appropriate action to safeguard life and property during and immediately after emergencies.

Parking

The City will implement Implementation Program C-4 which requires the City to review development proposals within existing planned communities for parking standard consistency with approved development plans and agreements.

The City will implement Implementation Programs LU-10 and C-3 which require the Specific Plan for the Northeast Future Planned Community to address parking standards and for new development to be consistent with those standards.

LEVEL OF IMPACT AFTER MITIGATION

Circulation

By monitoring the intersections of Santa Margarita Pkwy at Alicia Parkway and Avenida Empresa, as called for in Implementation Program C-1, capacity improvement to handle peak hour traffic flows can be made when necessary. Improving capacity will reduce the impact of traffic on the segment to a less-than-significant level.

Roadway Design

By meeting roadway classification specifications and performance criteria, as called for in Implementation Program C-3, the potential impact of design hazards will be reduced to a less-than-significant level.

Emergency Access

By providing emergency access in addition to primary access, as called for in Implementation Program C-3, emergency access to the Northeast Future Planned Community will be adequate.

Emergency Evacuation

By providing emergency evacuation routes and procedures, as called for in Implementation Programs S-16, S-17 and S-18, emergency evacuation will be adequate.

Parking

By reviewing development proposals for consistency with approved development plans' parking standards, as called for in Implementation Program C-4, the potential for inadequate parking will be reduced to a less-than-significant level.

By requiring parking standards in the Specific Plan for the Northeast Future Planned Community, as called for in Implementation Program LU-10, and requiring new development to be consistent with those standards, as called for in Implementation Program C-3, the potential for inadequate parking in that area will be reduced to a less-than-significant level.

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