

## **CHAPTER 3 • CIRCULATION ELEMENT**

### **INTRODUCTION**

The Circulation Element is second only to the Land Use Element in terms of importance to a community. It has a significant impact on existing and future residents of Kerman because it determines the route and mode by which persons are going to travel within the community and to other destinations outside the community.

Section 65302 (b) of the Government Code indicates that the circulation element must disclose the general location and extent of existing and proposed major thoroughfares, transportation routes and transportation-related facilities.

The Court has indicated that in addition to indicating that roadway improvements must be consistent with the General Plan, (*Friends of "B" Street. et. al. v. City of Hayward, et. al.*, 106 Cal. App. 3d 988 (1980)), there must be a correlation between the circulation and land use elements, (*Concerned Citizens of Calaveras County v. Board of Supervisors of Calaveras County* 166 Cal. App. 3d 90 (1985)). Generally, correlation is dependent upon the two elements using the same population and land use projections.

The Kerman Circulation Element contains six primary components:

- 1) existing conditions;
- 2) an evaluation of the existing circulation system;
- 3) traffic projections and evaluation;
- 4) circulation goals;
- 5) the Plan - issues, policies and action programs; and
- 6) circulation map.

### **EXISTING CONDITIONS**

In addition to the information contained in this chapter, information on existing conditions in Kerman is also contained in Part 2 of this document.

### Roadways

Kerman's circulation system is based on a grid pattern that was established in the early 1900s when the original townsite was formed. The original townsite extended from A Street (California Avenue) on the south to Kearney Boulevard on the north and from 1st Street on the east to 9th Street on the west. Each street had a 60-foot right-of-way except for Madera Avenue and C Street. Madera Avenue has a 200-foot right-of-way on the south end, which contains Plaza Park, and a 100-foot right-of-way on the north end. C Street, which was originally proposed as a commercial street has a right-of-way of 80 feet.

Kerman's circulation system contains arterials, major and minor collectors, local roadways and alleys. A definition of each type of roadway is provided below. In addition, Kerman's existing arterials and collectors are named and described.

**Expressway**- Provides for through traffic movement on continuous routes through a city. It generally connects with arterials, highways, freeways. Also it connects a city with other cities. Arterials are generally four lane roadways, divided and undivided.

Kerman has two expressways: - State Highways 145 (Madera Avenue) and 180 (Whitesbridge Road). State Highway 145 connects Kerman with Madera and State Highway 99 to the north and Interstate 5 to the south. Highway 180 connects Kerman with Fresno and Highway 99 to the east and with Mendota to the west.

Madera Avenue, between Whitesbridge Avenue and Church Street, has four travel lanes, two parking lanes and a 15-foot median with left-turn pockets. It narrows to two lanes just north of Whitesbridge and south of Church. Madera Avenue's right-of-way ranges from 60 to 100 feet.

Whitesbridge, between Siskiyou and Goldenrod avenues, has four travel lanes and two parking lanes. It narrows to two lanes east of Del Norte and west of Vineland. Whitesbridge's right-of-way ranges in width from 60 to 100 feet.

**Arterial** - Provides for traffic movement around or through a city. It generally connects with a collector or arterial. Arterials are generally two lanes, divided, or four lanes, undivided. It provides access to Kerman's four quadrants; they are generally spaced every 1/2 mile.

Kerman has three east/west and three north/south arterials. The east/west arterials are Church Avenue, from Del Norte to Vineland; California Avenue, from Siskiyou to Goldenrod; and Kearney Avenue, from Siskiyou to Goldenrod. The north/south arterials are Siskiyou Avenue, from California to Whitesbridge; Del Norte Avenue, from Church to Whitesbridge; Vineland Avenue, from Church to Whitesbridge; and Goldenrod Avenue, from Church to Whitesbridge.

These arterials have geometrics that range from two travel lanes and two parking lanes to two travel lanes, two parking lanes and a 12-16-foot median with left-turn pockets, 6-8-foot parkways and 4-5 foot sidewalks. These arterials have rights-of-way that range in width from 60 feet to 80 feet.

**Collector** - Provides for traffic movement through a city. It generally connects a local roadway with another collector or arterial. Collectors are generally two lanes with two parking lanes. They provide access to major collector roadways from two or more neighborhoods. They generally are spaced every 1/4 mile.

Kerman has three east/west and three north/south collectors. East/west collectors are C Street, from 1st to 9th; E Street, from Siskiyou to 8th; and Stanislaus Street, from 1st to Vineland. North/south collectors are Park Avenue, from Kearney to California; 1st Street, from Whitesbridge to California; and 8th Street, from Kearney to California.

These collectors have geometrics that range from two travel lanes and two parking lanes to two travel lanes, two parking lanes, a 12-15-foot center turning median, 6-foot parkways and 4-5-foot sidewalks. These collectors have rights-of-way that range in width from 60 feet to 80 feet.

**Local** - Provides for internal traffic movement within a neighborhood and serves to provide direct access to abutting property. Local streets generally have only two lanes.

Local roadways provide direct access to Kerman's residential neighborhoods and serve to direct neighborhood traffic to adjacent major or minor collectors. These roadways have two travel lanes, two parking lanes, 6-foot parkways and 4-5-foot sidewalks. Their rights-of-way range in width from 56 feet for cul-de-sacs to 60 feet for through streets.

**Alleys** - Provides rear access to residential dwellings and serves as a route by which solid waste is collected and an area where utilities are installed.

Kerman has an extensive alley system that provides rear access to residential dwellings and commercial buildings fronting onto Madera Avenue. These alleys are paved and have a right-of-way width of 20 feet.

### Railroads

Kerman is served by a branch line of the Southern Pacific Railroad. Spur lines serve various plants in Kerman's industrial park. Amtrak provides passenger service from the depot in Fresno.

### Air Service

Kerman is served by the Fresno-Yosemite International Air Terminal, 20 miles to the east, which provides regularly scheduled freight and passenger service. The Fresno-

Chandler Airport, 10 miles to the east, provides charter passenger service and furnishes private and company aircraft hangers and tie-downs

### Public Transportation

Two public transportation systems are available to residents in Kerman. The Fresno County Rural Transit Agency provides a bus for dial-a-ride trips within the greater Kerman area. This system, which averages about 20 persons per day, serves primarily the senior citizen population in Kerman.

The Fresno County Economic Opportunities Commission (EOC) provides inter-city transportation through the Westside Corridor bus. This bus provides transportation from Firebaugh, San Joaquin, Mendota and Kerman into Fresno.

## **EVALUATION OF EXISTING CIRCULATION SYSTEM**

An evaluation of Kerman's existing circulation system is furnished in this chapter and in Part 2 of this document. This portion of the Circulation Element expands on the evaluation of roadway and intersection capacities, connectivity, and traffic safety.

Capacity refers to an intersection's or roadway's ability to effectively carry traffic - without congestion and periodic stops and starts. Connectivity pertains to how well various sections of the city are connected together with roadways. Is it easy to travel from one section of the city to another? Traffic safety pertains to how safe a roadway is for the traveler. For example, does a collector or arterial roadway contain a number of intersections that potentially create unsafe traffic conditions?

### **Capacity Evaluation**

#### Roadways

The ability of a roadway to carry traffic is a function of many factors, including street width, the number of travel lanes, the number of intersecting streets, the presence of signals, and the existence of medians. A roadway's volume is increased during "peak-hour" times - 7:00 to 8:30 a.m., 12:00 to 1:00 p.m., and 4:30 to 6:00 p.m. To measure the traffic capacity of a roadway, a Level of Service (LOS) rating system is used. An LOS of "A" signifies a roadway that has traffic that is free flowing; a roadway with a LOS of "F" is very congested. Table 7 provides an interpretation of the various LOS ratings and Table 8 provides traffic counts for various types of roadways that are operating at a LOS of "E" - a roadway that is experiencing extreme congestion (grid-lock). Typically, an LOS of "C" is considered acceptable by the driving public, however, in smaller cities, it may be too congested for the typical driver.

**TABLE 7**  
**LEVEL OF SERVICE INTERPRETATION**

LOS	DESCRIPTION	volume ÷ capacity
A	Free flow, low volume, high operating speed, high maneuverability.	0.00-0.59
B	Stable flow, moderate volume, speed somewhat restricted by traffic conditions, high maneuverability.	0.60-0.69
C	Stable flow, high volume, speed and maneuverability determined by traffic conditions.	0.70-0.79
D	Unstable flow, high volumes, tolerable but fluctuating operating speed and maneuverability.	0.80-0.89
E	Unstable flow, high volumes approaching roadway capacity, limited speed, intermittent vehicle queuing.	0.90-0.99
F	Forced flow, volumes lower than capacity due to very low speeds; heavy queuing of vehicles, frequent stoppages.	above 1.0

Source: Highway Research Board, 1965

**TABLE 8**  
**DAILY CAPACITIES FOR KERMAN ROADWAYS**

<u>ROADWAY</u>	<u>LEVEL "E" CAPACITIES</u>
4 Lane Freeway	80,000 vehicles per day
4 Lane Divided Arterial	27,000
2 Lane Divided Arterial	15,000
4 Lane Undivided Arterial	24,000
2 Lane Undivided Arterial	12,000
4 Lane Divided Collector	20,000
2 Lane Divided Collector	10,000
4 Lane Undivided Collector	18,000
2 Lane Undivided Collector	9,000

Source: 1985 Highway Capacity Manual

Table 9 shows average daily traffic volumes for Kerman's major roadways and provides a calculated Level of Service rating for segments of each roadway; Table 23 in Part 2 of this document also shows existing traffic counts in the planning area.

**TABLE 9  
EXISTING TRAFFIC VOLUMES**

Street	Lanes	Type(1)	Daily Volume(2)	Daily Capacity(3)	V/C	LOS	Street	Lanes	Type(1)	Daily Volume(2)	Daily Capacity(3)	V/C	LOS
<b>Modoc Ave</b>							<b>Nielson Ave</b>						
s/o Nielson Ave	2	C	154	9,000	0.02	A	w/o Modoc Ave	2	C	91	9,000	0.01	A
s/o Nielson Ave	2	C	152	9,000	0.02	A	e/o Modoc Ave	2	C	64	9,000	0.01	A
n/o Whitesbridge Road	2	C	152	9,000	0.02	A	w/o Siskiyou Ave	2	C	97	9,000	0.01	A
<b>Siskiyou Ave</b>							e/o Siskiyou Ave	2	C	57	9,000	0.01	A
s/o Nielson Ave	2	C	304	9,000	0.03	A	w/o Del Norte Ave	2	C	57	9,000	0.01	A
n/o Whitesbridge Road	2	C	304	9,000	0.03	A	e/o Del Norte Ave	2	C	91	9,000	0.01	A
n/o Kearney Ave	2	C	3,033	9,000	0.34	A	<b>Whitesbridge Rd. (SR180)</b>						
s/o Kearney Ave	2	C	3,111	9,000	0.35	A	w/o Siskiyou Ave	2	A	6,735	12,000	0.56	A
n/o California Ave	2	C	1,583	9,000	0.18	A	e/o Siskiyou Ave	2	A	8,807	12,000	0.73	C
s/o California Ave	2	C	474	9,000	0.05	A	w/o Madera Ave	4	A	10,979	24,000	0.45	A
n/o Church Ave	2	C	474	9,000	0.05	A	e/o Madera Ave	4	A	9,843	24,000	0.41	A
s/o Church Ave	2	C	494	9,000	0.05	A	w/o Goldenrod Ave	2	A	8,496	12,000	0.71	B
n/o Jensen Ave	2	C	494	9,000	0.05	A	e/o Goldenrod Ave	2	A	8,289	12,000	0.69	B
<b>Del Norte Ave</b>							<b>Keamey Blvd.</b>						
n/o Nielson Ave	2	C	253	9,000	0.03	A	e/o Modoc Ave	2	C	480	9,000	0.05	A
s/o Nielson Ave	2	C	298	9,000	0.03	A	w/o Siskiyou Ave	2	C	1,334	9,000	0.15	A
n/o Whitesbridge Road	2	C	298	9,000	0.03	A	e/o Siskiyou Ave	2	C	1,539	9,000	0.17	A
n/o Kearney Ave	2	C	1,843	9,000	0.20	A	w/o Vineland Ave	2	C	2,903	9,000	0.32	A
n/o California Ave	2	C	839	9,000	0.09	A	e/o Vineland Ave	2	C	2,113	9,000	0.23	A
<b>Madera Ave (SR145)</b>							w/o Goldenrod Ave	2	C	1,528	9,000	0.17	A
n/o Whitesbridge Road	4	E	11,086	24,000	0.46	A	e/o Goldenrod Ave	2	C	1,349	9,000	0.15	A
s/o Whitesbridge Road	4	E	16,681	24,000	0.70	B	<b>California Ave</b>						
n/o Church Ave	2	E	10,050	12,000	0.84	D	w/o Siskiyou Ave	2	C	1,080	9,000	0.12	A
s/o Church Ave	2	E	7,149	12,000	0.60	A	e/o Siskiyou Ave	2	C	893	9,000	0.10	A
<b>Vineland Ave</b>							w/o Del Norte Ave	2	C	1,531	9,000	0.17	A
n/o Whitesbridge Road	2	C	444	9,000	0.05	A	e/o Del Norte Ave	2	C	751	9,000	0.08	A
s/o Whitesbridge Road	2	C	2,789	9,000	0.31	A	e/o Vineland Ave	2	C	113	9,000	0.01	A
n/o Kearney Blvd	2	C	2,724	9,000	0.30	A	w/o Goldenrod Ave	2	C	1,546	9,000	0.17	A
s/o Kearney Blvd	2	C	2,767	9,000	0.31	A	e/o Goldenrod Ave	2	C	1,474	9,000	0.16	A
n/o California Ave	2	C	1,701	9,000	0.19	A	<b>Church Ave</b>						
n/o Church Ave	2	C	199	9,000	0.02	A	e/o Siskiyou Ave	2	C	55	9,000	0.01	A
s/o Church Ave	2	C	129	9,000	0.01	A	w/o Madera Ave	2	C	355	9,000	0.04	A
n/o Jensen Ave	2	C	129	9,000	0.01	A	e/o Vineland Ave	2	C	113	9,000	0.01	A
s/o Jensen Ave	2	C	93	9,000	0.01	A	<b>Jensen Ave</b>						
<b>Goldenrod Ave</b>							w/o Siskiyou Ave	2	A	1,612	9,000	0.18	A
n/o Whitesbridge Road	2	C	395	9,000	0.04	A	e/o Siskiyou Ave	2	A	1,545	9,000	0.17	A
s/o Whitesbridge Road	2	C	959	9,000	0.11	A	w/o Del Norte Ave	2	A	1,545	9,000	0.17	A
n/o Kearney Blvd	2	C	959	9,000	0.11	A	e/o Del Norte Ave	2	A	1,569	9,000	0.17	A
s/o Kearney Blvd	2	C	1,079	9,000	0.12	A	w/o Madera Ave	2	A	1,569	9,000	0.17	A
s/o California Ave	2	C	536	9,000	0.06	A	e/o Madera Ave	2	A	2,143	9,000	0.24	A
							w/o Vineland Ave	2	A	2,143	9,000	0.24	A

- 1 A: Arterial; C: Collector
- 2 2007 average volumes obtained from either 2007 field counts or 2005 Caltrans volumes.
- 3 Ultimate capacity.

Intersections

An LOS analysis, including using peak-hour counts, will be need for arterial/collector intersections. The LOS criteria for unsignalized intersections is presented in Table 10.

**TABLE 10**  
**LEVEL-OF -SERVICE CRITERIA OF UNSIGNALIZED INTERSECTIONS**

<u>Reserve Capacity</u>	<u>Level of Service</u>	<u>Delay to Minor Street Traffic</u>
>400 cars per hour	A	Little or no delay
300-399	B	Short delays
200-299	C	Average delays
100-199	D	Long delays
0-99	E	Very long delays
*	F	Severe congestion
* Demand exceeds capacity		

The following intersections are currently unsignalized (controlled by two-way or all-way stops) and require further analysis to determine level of service and Traffic Signal Warrants:

- Madera Avenue & Nielson Avenue
- Madera Avenue & California Avenue
- Madera Avenue & Jensen Avenue
- Whitesbridge Road & Modoc Avenue
- Whitesbridge Road & Siskiyou Avenue
- Whitesbridge Road & Del Norte
- Whitesbridge Road & Vineland Avenue
- Whitesbridge Road & Goldenrod Avenue
- Whitesbridge Road & Sycamore Avenue

**TABLE 11**  
**EXISTING PEAK-HOUR INTERSECTION LEVELS OF SERVICE**

Intersection	Peak Hour LOS 1			
	East Bound	West Bound	North Bound	South Bound
Madera at Nielson (Stop Sign for EB)	B	DNE	A	A
Madera at California (2-way stop)	C	C	C	C
Madera at Church (Stop Sign for EB)	B	DNE	A	A
Madera at Jensen (2-way stop)	A	A	A	A
Whitesbridge at Modoc (2-way stop)	A	A	B	B
Whitesbridge at Siskiyou (2-way stop)	A	A	B	B
Whitesbridge at Del Norte (2-way stop)	B	B	B	B
Whitesbridge at Vineland (2-way stop)	B	B	B	B
Whitesbridge at Goldenrod (2-way stop)	A	A	A	A
Whitesbridge at Sycamore (2-way stop)	A	A	A	A

- 1 Afternoon peak-hour assumed to be 4:30 to 5:30 p.m.
  - 2 For left-turn movement on major street approach.
  - 3 For left-turn, through, and right-turn movements sharing a lane.
- DNE: CURRENTLY DOES NOT EXIST.

### Connectivity

Kerman is fortunate that its original roadway system provided for a "grid" pattern. This street pattern insured that all sections of Kerman were interconnected with roadways. In order to insure that Kerman's future circulation system provides this connectivity, future neighborhoods should have a minimum of two access roadways, they should be connected to a minor or major collector, and the collector should be connected to an arterial.

Presently, the only serious connectivity problem in Kerman occurs at railroad crossings south of California Avenue at Modoc Avenue, Siskiyou Avenue, Del Norte Avenue, Vineland Avenue & Sycamore Avenue.

### Traffic Safety

A roadway system that is safe and efficient - free of congestion - is a primary circulation goal of all cities. This goal also promotes a roadway system that is safe for pedestrians and bicyclists, especially younger children.

The most potentially hazardous roadway in terms of traffic safety is Whitesbridge Road. Driving, riding or walking across Whitesbridge Road is hazardous because of the volume and speed of traffic traveling along this roadway.

## **TRAFFIC PROJECTIONS AND EVALUATION**

### Projections

The Consultant has projected traffic volumes for both roadway segments and certain intersections in the Kerman area. These projections are based on the following assumptions:

1. Traffic volumes on local and State roadway systems will generally increase at a rate similar to population growth rates within the planning area.
2. Persons in Kerman will continue to use cars as their primary mode of transportation.
3. Uses that generate abnormally high volumes of traffic, such as colleges, major manufacturing companies or an office complex, will not locate in the planning area during the planning period.
4. Current traffic flow patterns in the planning area will not change significantly (e.g. two way streets will remain two way; streets will not be closed).
5. Left turn lanes on State Highways 145 and 180 will generally remain unchanged.

Increases in traffic volumes over the planning period for local and State roadways is going to be generated by the development of the land uses in the Kerman area and by increases in population and development in surrounding communities.

Two traffic volume projections - low and high - for the years 2017 and 2027 are provided in this element. The low projection is based on traffic growth rates provided by Caltrans for various segments of State highways passing through the Kerman area. These annual growth rates range from a low of 1.5 percent to a high of 3.75 percent. The Consultant averaged the various annual growth rates and arrived at a figure of 2.9 percent. The high projection is based on Kerman's annual average population growth rate, which is 3.61 percent.

Projected low and high traffic volumes for years 2017 and 2027 are derived by multiplying the current average daily traffic counts (2007) by 2.9 and 3.61 percent per year. These projections are displayed in Tables 11, 12 and 13.

**TABLE 12**  
**PROJECTED AVERAGE DAILY TRAFFIC VOLUMES FOR**  
**ROADWAY SEGMENTS**

Street	Location	Direction	2006 Volume(2)	2017 Low/High	2027 Low/High	Street	Location	Direction	Daily Volume(2)	2017 Low/High	2027 Low/High
<b>Modoc Ave</b>	n/o Nielson Ave	BOTH	154	211 / 312	281 / 324	<b>Nielson Ave</b>	w/o Modoc Ave	BOTH	91	125 / 184	166 / 192
	s/o Nielson Ave	BOTH	152	208 / 307	277 / 320		e/o Modoc Ave	BOTH	64	88 / 129	117 / 135
	n/o Whitesbridge Road	BOTH	152	208 / 307	277 / 320		w/o Siskiyou Ave	BOTH	97	133 / 196	177 / 204
<b>Siskiyou Ave</b>	s/o Nielson Ave	BOTH	304	416 / 615	554 / 640	e/o Siskiyou Ave	BOTH	57	78 / 115	104 / 120	
	n/o Whitesbridge Road	BOTH	304	416 / 615	554 / 640	w/o Del Norte Ave	BOTH	57	78 / 115	104 / 120	
	n/o Kearney Ave	BOTH	3,033	4,154 / 6,136	5,528 / 6,387	e/o Del Norte Ave	BOTH	91	125 / 184	166 / 192	
	s/o Kearney Ave	BOTH	3,111	4,261 / 6,293	5,671 / 6,551	<b>Whitesbridge Rd. (SR180)</b>	w/o Siskiyou Ave	BOTH	6,735	9,223 / 13,624	12,275 / 14,182
	n/o California Ave	BOTH	1,583	2,168 / 3,202	2,885 / 3,334		e/o Siskiyou Ave	BOTH	8,807	12,061 / 17,816	16,053 / 18,546
	s/o California Ave	BOTH	474	649 / 959	864 / 998		w/o Madera Ave(5)	BOTH	10,879	14,899 / 22,008	19,830 / 22,910
	n/o Church Ave	BOTH	474	649 / 959	864 / 998		e/o Madera Ave	BOTH	9,843	13,480 / 19,912	17,941 / 20,728
s/o Church Ave	BOTH	494	677 / 999	900 / 1,040	w/o Goldenrod Ave		BOTH	8,496	11,635 / 17,187	15,486 / 17,892	
n/o Jensen Ave	BOTH	494	677 / 999	900 / 1,040	e/o Goldenrod Ave	BOTH	8,289	11,352 / 16,768	15,108 / 17,455		
<b>Del Norte Ave</b>	n/o Nielson Ave	BOTH	253	346 / 512	461 / 533	<b>Kearney Blvd.</b>	e/o Modoc Ave	BOTH	480	657 / 971	875 / 1,011
	s/o Nielson Ave	BOTH	298	408 / 603	543 / 628		w/o Siskiyou Ave	BOTH	1,334	1,827 / 2,699	2,432 / 2,809
	n/o Whitesbridge Road	BOTH	298	408 / 603	543 / 628		e/o Siskiyou Ave	BOTH	1,539	2,108 / 3,113	2,805 / 3,241
	n/o Kearney Ave	BOTH	1,843	2,524 / 3,728	3,359 / 3,881		w/o Vineland Ave	BOTH	2,903	3,976 / 5,873	5,291 / 6,113
	n/o California Ave	BOTH	839	1,149 / 1,697	1,529 / 1,767		e/o Vineland Ave	BOTH	2,113	2,894 / 4,275	3,851 / 4,450
<b>Madera Ave (SR145)</b>	n/o Whitesbridge Road	BOTH	11,086	15,183 / 22,427	20,207 / 23,346	w/o Goldenrod Ave	BOTH	1,528	2,093 / 3,091	2,785 / 3,218	
	s/o Whitesbridge Road (4)	BOTH	16,681	22,845 / 33,745	30,405 / 35,129	e/o Goldenrod Ave	BOTH	1,349	1,847 / 2,729	2,459 / 2,841	
	n/o Church Ave	BOTH	10,050	13,764 / 20,331	18,319 / 21,165	<b>California Ave</b>	w/o Siskiyou Ave	BOTH	1,080	1,479 / 2,185	1,969 / 2,274
	s/o Church Ave	BOTH	7,149	9,791 / 14,462	13,031 / 15,055		e/o Siskiyou Ave	BOTH	893	1,223 / 1,807	1,628 / 1,881
<b>Vineland Ave</b>	n/o Whitesbridge Road	BOTH	444	608 / 898	809 / 935		w/o Del Norte Ave	BOTH	1,531	2,097 / 3,097	2,791 / 3,224
	s/o Whitesbridge Road	BOTH	2,789	3,820 / 5,642	5,084 / 5,873		e/o Del Norte Ave	BOTH	751	1,029 / 1,519	1,369 / 1,582
	n/o Kearney Blvd	BOTH	2,724	3,731 / 5,511	4,965 / 5,736		e/o Vineland Ave	BOTH	113	155 / 229	206 / 238
	s/o Kearney Blvd	BOTH	2,767	3,789 / 5,598	5,044 / 5,827	w/o Goldenrod Ave	BOTH	1,546	2,117 / 3,127	2,818 / 3,256	
	n/o California Ave	BOTH	1,701	2,330 / 3,441	3,100 / 3,582	e/o Goldenrod Ave	BOTH	1,474	2,019 / 2,982	2,687 / 3,104	
	n/o Church Ave	BOTH	199	273 / 403	363 / 419	<b>Church Ave</b>	e/o Siskiyou Ave	BOTH	55	75 / 111	100 / 116
	s/o Church Ave	BOTH	129	177 / 261	235 / 272		w/o Madera Ave	BOTH	355	486 / 718	647 / 748
n/o Jansen Ave	BOTH	129	177 / 261	235 / 272	e/o Vineland Ave		BOTH	113	155 / 229	206 / 238	
s/o Jensen Ave	BOTH	93	127 / 188	170 / 196	<b>Jensen Ave</b>	w/o Siskiyou Ave	BOTH	1,612	2,208 / 3,261	2,938 / 3,395	
<b>Goldenrod Ave</b>	n/o Whitesbridge Road	BOTH	395	541 / 799		720 / 832	e/o Siskiyou Ave	BOTH	1,545	2,116 / 3,125	2,816 / 3,254
	s/o Whitesbridge Road	BOTH	959	1,313 / 1,940		1,748 / 2,020	w/o Del Norte Ave	BOTH	1,545	2,116 / 3,125	2,816 / 3,254
	n/o Kearney Blvd	BOTH	959	1,313 / 1,940		1,748 / 2,020	e/o Del Norte Ave	BOTH	1,569	2,149 / 3,174	2,860 / 3,304
	s/o Kearney Blvd	BOTH	1,079	1,478 / 2,183		1,967 / 2,272	w/o Madera Ave	BOTH	1,569	2,149 / 3,174	2,860 / 3,304
	s/o California Ave	BOTH	536	734 / 1,084		977 / 1,129	e/o Madera Ave	BOTH	2,143	2,935 / 4,335	3,906 / 4,513
	w/o Vineland Ave	BOTH	2,143	2,935 / 4,335	3,906 / 4,513						

(1) Madera Avenue and Whitesbridge Avenue traffic volumes are from 2005 Caltrans data and are adjusted to 2007 volumes based on an annual growth rate of 3.61 percent.

Source: Caltrans. All other volumes obtained Yamabe & Horn Engineer, Inc.

**TABLE 13 A**  
**SEGMENT LEVELS OF SERVICE EVALUATION – 2017**

Street	Lanes	Type(1)	Daily Volumes Low/High	Daily (3) Capacity	V/C Low/High	LOS Low/High	Street	Lanes	Type(1)	Daily Volumes Low/High	Daily (3) Capacity	V/C Low/High	LOS Low/High
<b>Modoc Ave</b>							<b>Nielson Ave</b>						
n/o Nielson Ave	2	C	211 / 312	10,000	0.02 / 0.03	A / A	w/o Modoc Ave	2	C	125 / 184	10,000	0.01 / 0.02	A / A
s/o Nielson Ave	2	C	208 / 307	10,000	0.02 / 0.03	A / A	e/o Modoc Ave	2	C	88 / 129	10,000	0.01 / 0.01	A / A
n/o Whitesbridge Rd	2	C	208 / 307	10,000	0.02 / 0.03	A / A	w/o Siskiyou Ave	2	C	133 / 196	10,000	0.01 / 0.02	A / A
<b>Siskiyou Ave</b>							<b>Whitesbridge Rd. (SR180)</b>						
s/o Nielson Ave	2	C	416 / 615	10,000	0.04 / 0.06	A / A	w/o Siskiyou Ave	2	A	9,223 / 13,624	27,000	0.34 / 0.50	A / A
n/o Whitesbridge Rd	2	C	416 / 615	10,000	0.04 / 0.06	A / A	e/o Siskiyou Ave	2	A	12,061 / 17,816	27,000	0.45 / 0.66	A / B
n/o Kearney Ave	4	C	4,154 / 6,136	10,000	0.42 / 0.61	A / B	w/o Madera Ave	4	A	14,899 / 22,008	27,000	0.55 / 0.82	A / D
s/o Kearney Ave	4	C	4,261 / 6,293	10,000	0.43 / 0.63	A / B	e/o Madera Ave	4	A	13,480 / 19,912	27,000	0.50 / 0.74	A / C
n/o California Ave	4	C	2,168 / 3,202	10,000	0.22 / 0.32	A / A	w/o Goldenrod Ave	2	A	11,635 / 17,187	27,000	0.43 / 0.64	A / B
s/o California Ave	2	C	649 / 959	10,000	0.06 / 0.10	A / A	e/o Goldenrod Ave	2	A	11,352 / 16,768	27,000	0.42 / 0.62	A / B
n/o Church Ave	2	C	649 / 959	10,000	0.06 / 0.10	A / A	<b>Kearney Blvd.</b>						
s/o Church Ave	2	C	677 / 999	10,000	0.07 / 0.10	A / A	e/o Modoc Ave	2	C	657 / 971	10,000	0.07 / 0.10	A / A
n/o Jensen Ave	2	C	677 / 999	10,000	0.07 / 0.10	A / A	w/o Siskiyou Ave	2	C	1,827 / 2,699	10,000	0.18 / 0.27	A / A
<b>Del Norte Ave</b>							<b>California Ave</b>						
n/o Nielson Ave	2	C	346 / 512	10,000	0.03 / 0.05	A / A	w/o Siskiyou Ave	2	C	1,479 / 2,185	10,000	0.15 / 0.22	A / A
s/o Nielson Ave	2	C	408 / 603	10,000	0.04 / 0.06	A / A	e/o Siskiyou Ave	2	C	1,223 / 1,807	10,000	0.12 / 0.18	A / A
n/o Whitesbridge Road	2	C	408 / 603	10,000	0.04 / 0.06	A / A	w/o Del Norte Ave	2	C	2,097 / 3,097	10,000	0.21 / 0.31	A / A
n/o Kearney Ave	4	C	2,524 / 3,728	10,000	0.25 / 0.37	A / A	e/o Del Norte Ave	2	C	1,029 / 1,519	10,000	0.10 / 0.15	A / A
n/o California Ave	4	C	1,149 / 1,697	10,000	0.11 / 0.17	A / A	e/o Vineland Ave	2	C	155 / 229	10,000	0.02 / 0.02	A / A
<b>Madera Ave (SR145)</b>							<b>Vineland Ave</b>						
n/o Whitesbridge Rd	4	A	15,183 / 22,427	27,000	0.56 / 0.83	A / D	n/o Whitesbridge Rd	2	C	608 / 898	10,000	0.06 / 0.09	A / A
s/o Whitesbridge Rd	4	A	22,845 / 33,745	27,000	0.85 / 1.25	D / F	s/o Whitesbridge Rd	4	C	3,820 / 5,642	10,000	0.38 / 0.56	A / A
n/o Church Ave	4	A	13,764 / 20,331	27,000	0.51 / 0.75	A / C	n/o Kearney Blvd	4	C	3,731 / 5,511	10,000	0.37 / 0.55	A / A
s/o Church Ave	4	A	9,791 / 14,462	27,000	0.36 / 0.54	A / A	s/o Kearney Blvd	4	C	3,789 / 5,598	10,000	0.38 / 0.56	A / A
<b>Goldenrod Ave</b>							<b>Church Ave</b>						
n/o Whitesbridge Rd	2	C	541 / 799	10,000	0.05 / 0.08	A / A	e/o Siskiyou Ave	2	C	75 / 111	10,000	0.01 / 0.01	A / A
s/o Whitesbridge Rd	2	C	1,313 / 1,940	10,000	0.13 / 0.19	A / A	w/o Madera Ave	2	IC	486 / 718	9,000	0.05 / 0.08	A / A
n/o Kearney Blvd	2	C	1,313 / 1,940	10,000	0.13 / 0.19	A / A	e/o Vineland Ave	2	C	155 / 229	10,000	0.02 / 0.02	A / A
s/o Kearney Blvd	2	C	1,478 / 2,183	10,000	0.15 / 0.22	A / A	<b>Jensen Ave</b>						
s/o California Ave	2	C	734 / 1,084	10,000	0.07 / 0.11	A / A	w/o Siskiyou Ave	2	IA	2,208 / 3,261	24,000	0.09 / 0.14	A / A
							e/o Siskiyou Ave						
							w/o Del Norte Ave						
							e/o Del Norte Ave						
							w/o Madera Ave						
							e/o Madera Ave						
							w/o Vineland Ave						

- 1 E: Expressway; A: Arterial; IA: Industrial Arterial; C: Collector; IC: Industrial Collector
- 2 2007 average volumes obtained from either 2007 field counts or adjusted 2005 Caltrans volumes.
- 3 Ultimate capacity.

**TABLE 13 B**  
**SEGMENT LEVELS OF SERVICE EVALUATION -2027**

Street	Lanes	Type(1)	Daily Volume Low/High	Daily (3) Capacity	V/C Low/High	LOS Low/High	Street	Lanes	Type(1)	Daily Volume Low/High	Daily (3) Capacity	V/C Low/High	LOS Low/High
<b>Modoc Ave (C)</b>							<b>Nielson Ave (C)</b>						
n/o Nielson Ave	2	C	281 / 324	10,000	0.03 / 0.03	A / A	w/o Modoc Ave	2	C	166 / 192	10,000	0.02 / 0.02	A / A
s/o Nielson Ave	2	C	277 / 320	10,000	0.03 / 0.03	A / A	e/o Modoc Ave	2	C	117 / 135	10,000	0.01 / 0.01	A / A
n/o Whitesbridge Rd	2	C	277 / 320	10,000	0.03 / 0.03	A / A	w/o Siskiyou Ave	2	C	177 / 204	10,000	0.02 / 0.02	A / A
<b>Siskiyou Ave (C)</b>							<b>Whitesbridge Rd. (SR180) (A)</b>						
s/o Nielson Ave	2	C	554 / 640	10,000	0.06 / 0.06	A / A	w/o Siskiyou Ave	4	E	12,275 / 14,182	27,000	0.45 / 0.53	A / A
n/o Whitesbridge Rd	2	C	554 / 640	10,000	0.06 / 0.06	A / A	e/o Siskiyou Ave	4	E	16,053 / 18,546	27,000	0.59 / 0.69	B / B
n/o Kearney Ave	2	C	5,528 / 6,387	10,000	0.55 / 0.64	A / B	w/o Madera Ave	4	E	19,830 / 22,910	27,000	0.73 / 0.85	C / D
s/o Kearney Ave	2	C	5,671 / 6,551	10,000	0.57 / 0.66	A / B	e/o Madera Ave	4	E	17,941 / 20,728	27,000	0.66 / 0.77	B / C
n/o California Ave	2	C	2,885 / 3,334	10,000	0.29 / 0.33	A / A	w/o Goldenrod Ave	4	E	15,486 / 17,892	27,000	0.57 / 0.66	A / B
s/o California Ave	2	C	864 / 998	10,000	0.09 / 0.10	A / A	e/o Goldenrod Ave	4	E	15,108 / 17,455	27,000	0.56 / 0.65	A / B
n/o Church Ave	2	C	864 / 998	10,000	0.09 / 0.10	A / A	<b>Kearney Blvd.(C)</b>						
s/o Church Ave	2	C	900 / 1,040	10,000	0.09 / 0.10	A / A	e/o Modoc Ave	2	C	875 / 1,011	10,000	0.09 / 0.10	A / A
n/o Jensen Ave	2	C	900 / 1,040	10,000	0.09 / 0.10	A / A	w/o Modoc Ave	2	C	2,432 / 2,809	10,000	0.24 / 0.28	A / A
<b>Del Norte Ave (C)</b>							<b>California Ave (C)</b>						
n/o Nielson Ave	2	C	461 / 533	10,000	0.05 / 0.05	A / A	w/o Siskiyou Ave	2	C	1,969 / 2,274	10,000	0.20 / 0.23	A / A
s/o Nielson Ave	2	C	543 / 628	10,000	0.05 / 0.06	A / A	e/o Siskiyou Ave	2	C	1,628 / 1,881	10,000	0.16 / 0.19	A / A
n/o Whitesbridge Rd	2	C	543 / 628	10,000	0.05 / 0.06	A / A	w/o Del Norte Ave	2	C	2,791 / 3,224	10,000	0.28 / 0.32	A / A
n/o Kearney Ave	2	C	3,359 / 3,881	10,000	0.34 / 0.39	A / A	e/o Del Norte Ave	2	C	1,369 / 1,582	10,000	0.14 / 0.16	A / A
n/o California Ave	2	C	1,529 / 1,767	10,000	0.15 / 0.18	A / A	w/o Vineland Ave	2	C	206 / 238	10,000	0.02 / 0.02	A / A
<b>Madera Ave (SR145) (A)</b>							<b>Goldenrod Ave (C)</b>						
n/o Whitesbridge Rd	4	E	20,207 / 23,346	27,000	0.75 / 0.86	C / D	n/o Siskiyou Ave	2	C	2,818 / 3,256	10,000	0.28 / 0.33	A / A
s/o Whitesbridge Rd	4	E	30,405 / 35,129	27,000	1.13 / 1.30	F / F	e/o Goldenrod Ave	2	C	2,687 / 3,104	10,000	0.27 / 0.31	A / A
n/o Church Ave	4	E	18,319 / 21,165	27,000	0.68 / 0.78	B / C	<b>Church Ave (C)</b>						
s/o Church Ave	4	E	13,031 / 15,055	27,000	0.48 / 0.56	A / A	e/o Siskiyou Ave	2	C	100 / 116	10,000	0.01 / 0.01	A / A
<b>Vineland Ave (C)</b>							<b>Jensen Ave (IA)</b>						
n/o Whitesbridge Rd	2	C	809 / 935	10,000	0.08 / 0.09	A / A	w/o Siskiyou Ave	4	IA	2,938 / 3,395	24,000	0.12 / 0.14	A / A
s/o Whitesbridge Rd	2	C	5,084 / 5,873	10,000	0.51 / 0.59	A / A	e/o Siskiyou Ave	4	IA	2,816 / 3,254	24,000	0.12 / 0.14	A / A
n/o Kearney Blvd	2	C	4,965 / 5,736	10,000	0.50 / 0.57	A / A	w/o Del Norte Ave	4	IA	2,816 / 3,254	24,000	0.12 / 0.14	A / A
s/o Kearney Blvd	2	C	5,044 / 5,827	10,000	0.50 / 0.58	A / A	e/o Del Norte Ave	4	IA	2,860 / 3,304	24,000	0.12 / 0.14	A / A
n/o California Ave	2	C	3,100 / 3,582	10,000	0.31 / 0.36	A / A	w/o Madera Ave	4	IA	2,860 / 3,304	24,000	0.12 / 0.14	A / A
n/o Church Ave	2	C	363 / 419	10,000	0.04 / 0.04	A / A	e/o Madera Ave	4	IA	3,906 / 4,513	24,000	0.16 / 0.19	A / A
s/o Church Ave	2	C	235 / 272	10,000	0.02 / 0.03	A / A	w/o Vineland Ave	4	IA	3,906 / 4,513	24,000	0.16 / 0.19	A / A
n/o Jensen Ave	2	C	235 / 272	10,000	0.02 / 0.03	A / A	<b>Goldenrod Ave (C)</b>						
s/o Jensen Ave	2	C	170 / 196	10,000	0.02 / 0.02	A / A	n/o Whitesbridge Rd	2	C	720 / 832	10,000	0.07 / 0.08	A / A
<b>Goldenrod Ave (C)</b>							<b>Jensen Ave (IA)</b>						
n/o Whitesbridge Rd	2	C	1,748 / 2,020	10,000	0.17 / 0.20	A / A	w/o Siskiyou Ave	4	IA	2,816 / 3,254	24,000	0.12 / 0.14	A / A
s/o Whitesbridge Rd	2	C	1,748 / 2,020	10,000	0.17 / 0.20	A / A	e/o Siskiyou Ave	4	IA	2,816 / 3,254	24,000	0.12 / 0.14	A / A
n/o Kearney Blvd	2	C	1,748 / 2,020	10,000	0.17 / 0.20	A / A	w/o Del Norte Ave	4	IA	2,860 / 3,304	24,000	0.12 / 0.14	A / A
s/o Kearney Blvd	2	C	1,967 / 2,272	10,000	0.20 / 0.23	A / A	w/o Madera Ave	4	IA	2,860 / 3,304	24,000	0.12 / 0.14	A / A
s/o California Ave	2	C	977 / 1,129	10,000	0.10 / 0.11	A / A	e/o Madera Ave	4	IA	3,906 / 4,513	24,000	0.16 / 0.19	A / A
							<b>w/o Vineland Ave</b>						
							4 IA 3,906 / 4,513 24,000 0.16 / 0.19 A / A						

- 1 E: Expressway; A: Arterial; IA; Industrial Arterial; C: Collector; IC: Industrial Collector
- 2 2007 average volumes obtained from either 2007 field counts or adjusted 2005 Caltrans volumes.
- 3 Ultimate capacity.

**TABLE 14**  
**LEVELS OF SERVICE AT MAJOR INTERSECTIONS**

Intersection	Peak Hour LOS 1			
	East Bound	West Bound	North Bound	South Bound
<b>Madera at Kearney (Signalized)</b>				
2017				
LOW	C	C	C	C
HIGH	C	C	C	C
2027				
LOW	D	D	C	C
HIGH	D	D	C	C
<b>Madera at Whitesbridge (Signalized)</b>				
2017				
LOW	C	C	C	C
HIGH	C	C	C	C
2027				
LOW	D	D	D	D
HIGH	D	D	D	D

1 Afternoon peak-hour assumed to be 4:30 to 5:30 p.m.

Evaluations

Information contained in Tables 12 and 13 indicate that Kerman's two arterial roadways - Madera Avenue and Whitesbridge Road - will operate in the D or F LOS by 2027 under low or high traffic projections. All other roadways will have a projected LOS of B or better.

**CIRCULATION GOALS**

Circulation goals express general community values as they relate to travel, traffic safety, mobility, and funding for maintenance and construction of roadways. Circulation goals for Kerman are as follows:

1. INSURE THAT STREETS AND INTERSECTIONS IN KERMAN ARE NOT CONGESTED.
2. PROVIDE EFFICIENT CIRCULATION ACCESS TO ALL PARTS OF KERMAN.
3. ENSURE AMPLE OFF-STREET PARKING FOR NEW AND CHANGING USES LOCATING OR EXPANDING IN KERMAN.
4. DEVELOP STREETS THAT ARE WELL DESIGNED AND VISUALLY ATTRACTIVE.
5. PROMOTE ALTERNATIVE MODES OF TRANSPORTATION THAT WILL IMPROVE THE ENVIRONMENTAL QUALITY IN KERMAN AND CONSERVE RESOURCES SUCH AS BICYCLES, BUS USE, THE USE OF ALTERNATIVE FUELS AND WALKING.
6. ESTABLISH TRUCK ROUTES AND FACILITATE TRUCK FACILITIES THAT ARE NOT DISRUPTIVE TO RESIDENTS OR BUSINESS IN KERMAN.
7. PROVIDE FOR LONG TERM FINANCING FOR STREET CONSTRUCTION AND MAINTENANCE.

#### **A. TRAFFIC**

One thing that people who live in cities tend to agree on is that there is too much traffic on their street. Even if the roadway is operating at a LOS of A, people will still complain that there is too much traffic passing in front of their home. While it is difficult to improve on a roadway that has a LOS of A, cities can embrace policies and action programs that will insure that traffic impacts in the community will be kept to a minimum.

1. **POLICY:** A level of service C will be the desirable minimum service level in Kerman at which highway, arterial and collector segments will operate. A level of service of B will be the desirable minimum service level in Kerman at which intersections and rail crossings will operate.

***ACTION:*** *a. The City will program into its 5-year capital budget, street improvements that will insure the specified LOS is not exceeded in the city limits. Funds for these street improvement projects will come from gas tax, transportation funds and development impact fees.*

*b. The City, working with Caltrans, will periodically check traffic warrants at the Whitesbridge/Madera and Kearney/Madera intersections in order to plan for proper signalization and turn lanes at these intersections.*

2. POLICY: Roadway segments that are projected to operate at a less-than-satisfactory level of service (as indicated by Tables 12 and 13) shall restrict direct access and prioritize the placement of right turn lanes, left turn lanes and signal controls at these locations..

*ACTION: a. The Planning Department shall recommend denial of discretionary land use projects to the Planning Commission and City Council that are inconsistent with this policy.*

3. POLICY: In order to insure circulation connectivity in Kerman, where required railroad crossings will be widened and improved. If there is to be a new rail crossing, a grade separation will be constructed. Existing grade crossings may be relocated if called for by the General Plan.

*ACTION: a. Adoption of the Circulation Map will implement this policy.*  
*b. The City will calculate and implement development impact fees for railroad crossings consistent with the Circulation Element map.*

## **B. EXPRESSWAYS, ARTERIALS & COLLECTORS**

Arterial roadways carry the greatest amount of traffic in Kerman. Not only are traffic volumes higher but also the speed of travel. Potentially, these roadways have the greatest traffic safety problems because of these factors.

Most persons in Kerman will travel on an arterial roadway at least once a day. Travel efficiency on these roadways is important for two reasons: (1) Stop and start conditions cause the traveler to be late for their destination. (2) These types of conditions cause greater amounts of air pollution - already a significant environmental problem in the Valley. Traffic that moves smoothly minimizes these two problems.

Aside from freeways and arterials, collectors carry the greatest amount of traffic in a city. Unlike freeways and arterials, collector roadways traverse residential neighborhoods. These are the streets that drain traffic from the neighborhoods and convey it towards other collector or arterial roadways.

Because collectors pass through neighborhoods, their effectiveness to channel traffic in a safe and effective manner can be diminished by land uses in a neighborhood. For example, a new residential subdivision that allows residential dwellings to front onto a collector creates a situation where numerous driveways from these dwellings intersect with the collector. This creates a traffic safety problem for persons backing out onto the collector as well as for the person traveling along the collector.

Collectors by their nature can have the greatest impact on the residential neighborhoods of a city. They can generate noise that impacts residents and their appearance can either enhance or detract from a neighborhood's visual appeal.

1. **POLICY:** Driveways that intersect with arterials and collectors should be kept to a minimum and, if possible, should be reduced when redevelopment occurs along an arterial roadway.
 

*ACTION:* a. Through the site plan review process, the Planning and Engineering Departments shall determine spacing between adjacent driveways along SR 145 and SR 180 based on speed, needed sight distance and size of land use. Spacing shall also be consistent with good engineering practices and include the review of Caltrans requirements.
2. **POLICY:** Left turn lanes shall be evenly and consistently to facilitate signal timing and built consistent with Caltrans spacing recommendations; they shall also be constructed on arterials where they intersect with other arterials or collectors and, otherwise, breaks in the median shall be limited to ¼ mile.
 

*ACTION:* a. The Public Works Department will coordinate with Caltrans to insure that left turn lanes are constructed along State Highways 145 and 180.
3. **POLICY:** New driveways constructed onto arterial roadways shall meet Caltrans construction specifications.
 

*ACTION:* a. Through Kerman's site plan review process, Caltrans will review all new construction projects along State Highways 145 and 180.
4. **POLICY:** Corner radii should be designed to accommodate the anticipated design vehicle; curbing at the intersections of arterial and collector streets should be painted red or posted "No Stopping at any time" signs at least 50 feet in all directions from the corner curb radius and ramps shall be installed at corners that access sidewalks.

- ACTION:* a. *The Public Works Department will coordinate with Caltrans to identify which curbs at the aforementioned intersections should be red-curbed.*
5. **POLICY:** Arterial roadways should have sufficient right-of-way to contain four travel lanes, two parking lanes, and 16-foot median/turn lane, 7-foot parkways and 5-foot sidewalks; major collector roadways should have sufficient right-of-way to contain two travel lanes, two bike lanes, two parking lanes, a 14-foot median/turn lane, 6-foot parkways and 5-foot sidewalks.
- ACTION:* a. *The Public Works Department will coordinate with Caltrans to insure that sufficient right-of-way will be dedicated when development occurs along State Highways 145 and 180.*
- b. *Major and minor collector roadways will be constructed consistent with street cross-section illustrations contained in Appendix A of the Circulation Element.*
6. **POLICY:** All street improvement projects, including widening, closing, or constructing new roadways, will be reviewed by the Planning and Engineering Departments to confirm that the project is consistent with the Circulation Element.
- ACTION:* a. *The Planning and Public Works Departments will review street projects to determine consistency with the Circulation Element.*

### C. PARKING

The success of commercial businesses is sometimes dependent upon adequate parking. The parking must be in close proximity to the commercial business, it must be safe, and if possible, it should exemplify a pleasant parking environment - landscaped, well lit, and large parking stalls.

For other uses, such as public facilities, churches, apartments, and industries, adequate on-site parking is important so that surrounding land uses are not negatively impacted by persons parking on or in front of these properties.

1. **POLICY:** On-street parking caused by new uses located along arterial or collector streets should be discouraged.

*ACTION:* a. *Through the site plan review process, the Planning and Engineering Departments will insure that the design of the project discourages on-street parking on these types of roadways.*

2. **POLICY:** Parking lots for new uses shall contain landscaping, proper lighting and shall be properly designed to insure maneuverability of vehicles.

*ACTION:* a. Through the site plan review process, the Planning and Engineering Departments will insure that the design of new parking lots contain these features.

b. The Zoning Ordinance shall be amended to include parking lot design standards, including a requirement for 50 percent shading within a ten-year time frame.

3. **POLICY:** New parking lots along Madera Avenue between California Avenue and Kearney Boulevard should be designed so that the parking lot does not occupy the entire frontage of the site.

*ACTION:* a. Through the site plan review process, the Planning Department will insure that the design of new parking lots will be consistent with this policy.

#### **D. SIGNALIZATION**

1. **POLICY:** The City will adopt a development impact fee that finances the signalization of intersections, including the intersections along SR 145 and SR 180.

*ACTIONS:* a. The City will periodically review the levels of service ratings at major intersections in Kerman to determine if signals should be installed.

b. The City will calculate and implement development impact fees for signalization that are consistent with the Circulation Element map and Assembly Bill 1600 (legislation that requires a nexus, or connection, between the fee being required and the improvement to be installed).

#### **E. STREET DESIGN**

The primary purpose of a street is to convey traffic from one destination to another. Streets do not have to be a sterile public improvement that detracts from the appearance of a neighborhood. They can be improvements that enrich the appearance of a neighborhood and creates a unifying theme of trees, lighting and signage.

1. **POLICY:** The City shall have prepared a streetscape design plan, which will establish a 15-year improvement program for the construction of landscaped medians for specific roadways in the community. This Plan should include details for lighting, landscaping and signing.

*ACTION:* a. *The Engineering and Planning Departments will prepare the streetscape design plan. Funds will come from tax increment, gas tax, transportation funds and the state grant programs.*

2. **POLICY:** Proposed landscaping along SR 145 and SR 180 should be approved by the Caltrans District 6 Office of Landscape Architecture and include a maintenance agreement between the State and the City; advertising signs along SR 145 and SR 1880 shall also be consistent with State policies.

## **F. ALTERNATIVE TRANSPORTATION MODES**

Alternative modes of transportation are important to different people for different reasons. For a low-income person or a person on a fixed income, transit service may be the only means of traveling to the store, doctor, or to visit a friend in another city. For the person who is concerned about air pollution, riding the bus may be their way of improving the air environment. For the family who enjoys riding bikes, this form of transportation becomes a recreational activity.

1. **POLICY:** The City shall promote all modes of transportation, including mass transit (buses, etc.) bicycle and walking.

*ACTION:* a. *Through the 5-year capital budget, the City Council should insure that gasoline tax and transportation funds are spent on all modes of transportation.*

2. **POLICY:** The City shall prepare a bikepath design plan which lays out a community-wide bicycle lane network. New subdivisions shall provide for the network.

*ACTION:* a. *The Engineering and Planning Departments will prepare the bikepath design plan. Funds will come from tax increment, gas tax and transportation funds. Bikepaths will be required to be installed in new subdivisions where required by the bikepath design plan.*

**G. TRUCK TRAFFIC**

Truck traffic can adversely affect residential neighborhoods because of the noise they generate. Further, truck traffic can damage local roadways because the road beds are not designed to carry heavy loads. To repair damaged roadways can be very expensive for cities.

1. **POLICY:** To avoid the adverse impacts associated with truck traffic, truck routes shall be designated on the following streets: Whitesbridge Road, Madera Avenue, and Church Avenue as well as all existing and proposed streets located within the Kerman Industrial Park.  
  
*ACTION:* a. *The Public Works Department shall post the above roadways as truck routes.*
  
2. **POLICY:** The City of Kerman will insure that transportation and gasoline tax funds and other funds that can be used for roadway projects are properly programmed through the 5-year capital budget to implement the policies of the Circulation Element.  
  
*ACTION:* a. *The Public Works Director and City Manager will coordinate through the annual budget process to insure that Circulation Element policies are being properly implemented.*

Table 29  
Street Sections

