

A P P E N D I X G

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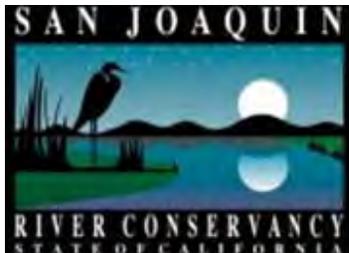


San Joaquin River Parkway Transportation Study
Existing Conditions Report

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INTRODUCTION

This transportation study was prepared to assess the current conditions surrounding the San Joaquin River Parkway in and near Fresno, California. The intent of this document is to provide an overview of the regional and local planning efforts that have taken place to assist in the deployment of multi-modal transportation within and to the Parkway. The report represents the initial planning efforts to develop a comprehensive and sustainable transportation system to serve the current and future needs of the Fresno and Madera counties.

The Parkway study area straddles the San Joaquin River on both the Madera and Fresno County sides and runs from State Highway 99 to Friant Dam. The Parkway is 22 miles in length and includes approximately 4,000 acres and six miles of multi-use trails. The San Joaquin River Conservancy has acquired approximately 1,700 acres within the developing Parkway. These lands provide for the protection and enhancement of wildlife habitat, public access for fishing, boating, and other recreation, and education about natural and cultural resources. Figure 1 shows the Parkway location.

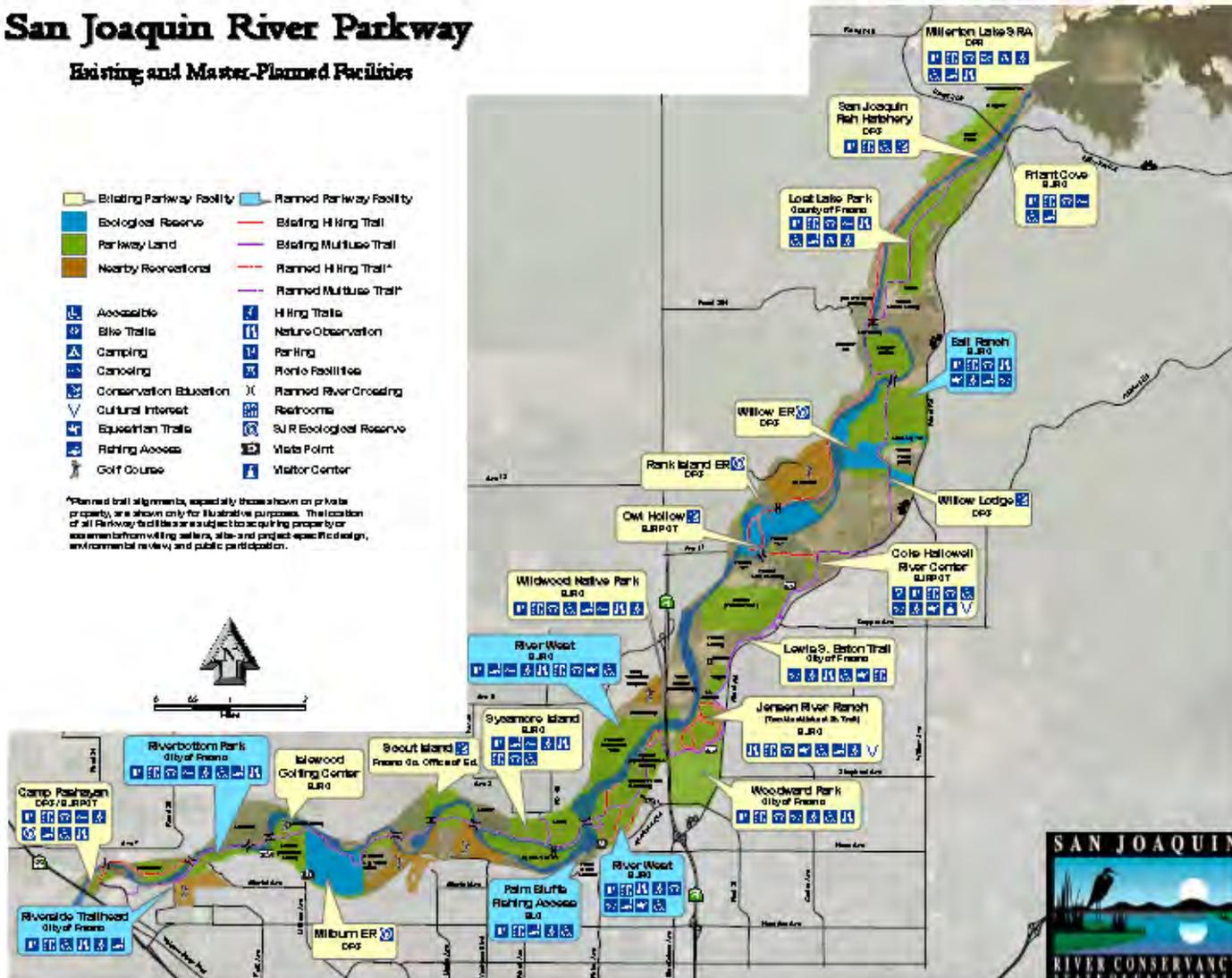


San Joaquin River Parkway

Existing and Master-Planned Facilities

- | | |
|---------------------------|--------------------------|
| Existing Parkway Facility | Planned Parkway Facility |
| Ecological Reserve | Existing Hiking Trail |
| Parkway Land | Existing Multiuse Trail |
| Nearby Recreational | Planned Hiking Trail* |
| | Planned Multiuse Trail* |
| Accessible | Hiking Trails |
| Bike Trails | Nature Observation |
| Camping | Parking |
| Canoeing | Public Facilities |
| Conservation Education | Planned River Crossing |
| Cultural Interest | Restrooms |
| Equestrian Trails | SJR Ecological Reserve |
| Fishing Access | Waste Point |
| Golf Course | Visitor Center |

*Planned trail alignments, especially those shown on private property, are shown only for illustrative purposes. The location of all Parkway facilities are subject to acquiring proper title, assessment from willing sellers, site- and project-specific design, environmental review and public participation.



BACKGROUND

The development of communitywide and regional facilities is a high priority within Fresno County. Transportation planning efforts have for the past 30 years called for a balanced program with increased emphasis on integration of transit, bicycle and pedestrian systems into the core street and highway programs. As such the Council of Fresno County Governments (Fresno COG) has through the Regional Transportation Plan established a multi-modal approach emphasizing sustainable transportation strategies.

Planning Context

The Parkway represents a unique combination of transportation components and includes automobile, transit, bicycle, pedestrian (hiking) and some limited equestrian. As a multi-modal facility, the Parkway can play a key role in providing recreational opportunities, limited commuter options, as well as, establishing a multi-modal corridor benchmark for the region. The Non-Motorized Transportation Element of the Regional Transportation Plan is focused on regional, metropolitan, and community bikeway and multi-use trails. For many, the use of bicycles as a means of transportation has several appealing aspects. Bicycling has positive air quality, energy, economic and health impacts and can reduce automobile congestion. From an air quality perspective, every bicycle trip that replaces an auto trip results in cleaner air. Bicycles do not consume limited fuel, maintenance is low, and bicycling can be used for commuting as well as for recreational purposes while providing physical exercise.

Furthermore, the relationship between transit, bicycling, and pedestrian trips is important to the Fresno COG and to the communities within Fresno County. The Blueprint Planning Program along with the Public Transportation Infrastructure Study (PTIS) are of primary importance in addressing this relationship. For example, Blueprint Smart Growth Principles



include “create walkable neighborhoods, mix land uses, and provide a variety of transportation choices” among many others.

The Measure C Extension approved by the voters in November 2006 requires that by January 1, 2012, all jurisdictions within Fresno County will have updated and/or adopted a Master Plan for Trail, Bicycle and Pedestrian Facilities that promotes connectivity within all of Fresno County and its urban areas. The Master Plan will be the guiding document for upgrade and/or installation of such facilities. If any jurisdiction fails to meet this goal, the earmarked funds for trail, bicycle and pedestrian facilities shall be withheld by the Fresno County Transportation Authority until such time as a jurisdiction is in compliance.

Regional Goals for the development of bicycle transportation in Fresno County are as follows:

Planning - *The recognition and integration of the bicycle as a valid transportation mode in transportation planning activities.*

Physical Facilities - *Safe, convenient, and continuous routes for bicyclists of all types that interface with and complement a multimodal transportation system.*

Safety and Education - *Improved bicycle safety through education and enforcement.*

Encouragement - *Increased acceptance of bicycling both as a legitimate transportation mode on public roads and highways and as a transportation mode that is a viable alternative to the automobile.*

Implementation - *Increased development of the regional bikeways system and related facilities by maximizing funding opportunities.*

While much of the basic work of planning for regional and metropolitan bikeway systems was done in this area in the 1970s and 1980s, both the City of Fresno and the County of Fresno have recently updated their bike and trail plans. The City of Fresno completed the Bicycle, Pedestrian, and Trails Master Plan (BMP) in 2010 and it is intended to guide and influence bikeway policies, programs, and development standards to make bicycling in the City of Fresno more safe, comfortable, convenient, and enjoyable for all bicyclists. The ultimate goal of this effort is to increase the number of persons in the City of Fresno who bicycle for transportation to work, school, errands or for recreation. The BMP has been developed to complement the Public Facilities Element of the 2025 Fresno General Plan (GP), which includes goals and policies to accommodate all modes of transportation through a balanced system of streets, highways, rail systems, public transportation, and airports. The BMP does support the full development of a Class 1 Bike Path the entire length of the Parkway.

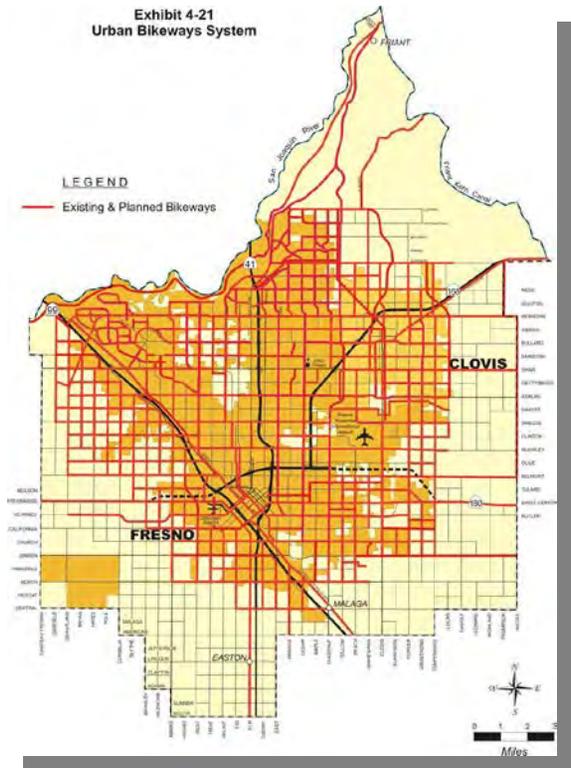
The BMP also calls for two additional crossings of the San Joaquin River; along SR 99 (to be part of the widened freeway

structure) and between the BNSF railroad bridge and SR 41. According to the California Streets and Highways Code, Sections 890 through 894.2, local agencies must complete a BMP to qualify for grant funds issued by the California Department of Transportation through the Bicycle Transportation Account (BTA). California plans must be no more than five years old.

In addition to the BMP, a number of years ago, the City of Fresno modified its street design standards for the construction of collectors and arterials in newly developing areas to add five feet per side for bike lanes. The adoption of this standard has promoted the long-term development of a bikeway system in newer areas. Within the City, several miles of bikeways have been added, particularly in the Woodward Park and Bullard Community Plan areas each of which supports connectivity to the Parkway.

In 2008, the State of California enacted AB 1358, the Complete Streets Act, which requires cities and counties to incorporate provisions for multimodal streets into their General Plan Circulation Elements starting in 2011. This requirement will result in streets, roads and highways that better meet the needs of pedestrians, bicyclists, and others in a manner that is suitable to the rural, suburban or urban context of the General Plan.

The Final Fresno County Measure C Extension Expenditure Plan includes additional requirements applying to all streets, roads and highways utilizing either regional or local allocation funds. For example, every highway, expressway, super-arterial, arterial, or collector within the County constructed or reconstructed in whole or in part with Measure C Extension funds shall include accommodations for bicycle travel either by a shared roadway or by bike lane. Measure C funds may be used for new construction of pedestrian/bicycle trails, bike lane, and for the development of the Master Plan as well as retrofitting pedestrian/bicycle trails within the circulation system that existed as of January 2007 or the date of adoption of the Master Plan. Trails built with earmarked or



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other Measure C Extension funds shall, at a minimum, be designed in accordance with the design criteria for bicycle paths and multi-purpose trails set forth in the California Highway Design Manual, Chapter 1000, Bikeway Planning and Design, with certain caveats as noted in the Final Measure C Extension Expenditure Plan.

The County of Fresno Bicycle Master Plan outlines a number of improvements to the surrounding county road system. The County calls for the completion of the Class 1 Bike Path from Fresno to Friant Dam. Fresno County will implement this critical segment of the bikeway as funding becomes available.



Of special note is the limited level of access, facilities and planning on the Madera County side of the Parkway. While some access is provided via Sycamore Island or Wildwood Park, the Madera side of the Parkway is fairly rural and underdeveloped. No substantial improvements have been made on the Madera side and results in very little access and very limited use. Substantial development is under consideration near Valley Childrens Hospital and to the east of SR 41.

The 2004 Regional Bike Plan calls for a Class III bike route along Road 36, SR41 and along Avenue 12 between SR 41 and the River. A Class III Bike Route is also designated for Cobb Ranch Blvd. between Avenue 10 and San Joaquin River Parkway. The Plan calls for the development of a Class II Bike Lane along Avenue 9 between SR 99

and SR 41, as well as a Class II Bike Lane along Road 204 between the River and Road 145. None of these facilities currently exist and only the Avenue 12 and Cobb Ranch Blvd. Class III Bike Routes would provide any direct connection to the Parkway. All other designated routes or lanes will need to be integrated into the Parkway via road connectors or access through private lands. Funding for these improvements will likely come from a combination of Measure "T", Transportation Development Act and developer contributions.

And finally, there is an ongoing need to focus on implementation of facilities through development project requirements and through active programs undertaken by the County or the City. Working directly with the development community, bike and trail facilities can be implemented as private development projects are constructed.

Funding

Within the new Fresno County Measure C Program, 4% of funding is allocated to pedestrian/trails/bicycle facilities subprograms while fully 24% of funding is allocated to the Regional Public Transit Program, including the Public Transit Agencies Subprogram (19.66%), the Farmworker/Car/Van Pools Subprogram (1.16%), the New Technology Reserve Subprogram (2.10%) and the ADA/Seniors/Paratransit Subprogram (0.79%), among others. In addition, the 2011 RTP includes new policy regarding Complete Streets and policy enhancements suggested by the Fresno County Department of



Public Health that emphasize walking, bicycling, and transit for reasons of health and well-being. Policy and funding are finally coming together to establish an achievable, not just theoretical, relationship between transit and bicycling/pedestrian infrastructure.

The Transportation Development Act requires that 2% of the Local Transportation Fund be set aside each year for bicycle and pedestrian purposes. The Fresno COG apportions these monies annually to each jurisdiction, proportionate to its population. Recent years have shown growing use of these funds for pedestrian projects, particularly as local jurisdictions looked for funding to meet ADA requirements. With growing emphasis on air quality and Transportation Demand Management objectives and with funding available through the Measure C Extension Program that must be spent on ADA improvements, the focus may shift back to bikeway system implementation.

The proposed Fresno COG Master Plan for Trail, Bicycle and Pedestrian Facilities calls for the development of a complete trails system within the Parkway between State Highway 99 and Friant Dam. The 20-year Measure C Extension Program estimated countywide funding for bicycle facilities is \$15 million; for pedestrian/trails in the urban area (Clovis and

Fresno Spheres of Influence) is \$37 million; and for pedestrian/trails in the rural area is \$16.3 million. All toll, it is estimated that approximately \$68 million will be made available over the life of the Measure program.

The Madera County Bike Plan which included substantial funding for bikeways and related facilities. These funds included have numerous sources of federal, state, and local funding programs. Each specific project must be evaluated according to available programs, which fluctuate year to year in amount allocated and in competition with other areas. The major sources for bikeway funding identified in the Plan include the State Bicycle Transportation Account (BTA), which provides approximately \$5 million annually. Also eligible for use in developing the designated bike facilities is the Transportation Development Act funds and the Measure "T" funds. Both of which are competitive and limited in availability.

EXISTING CONDITIONS

The profile of the existing transportation conditions surrounding the Parkway reviews the status of the street system, the transit system, the bike system and the parkway system. Each of the following sections summarizes the key features of the transportation mode and highlights challenges facing that mode and the Parkway.

Streets

The current street system surrounding the Parkway and providing access is a mature urban system on the south side of the River and a rural road system north of the River. The major streets providing regional and communitywide access to the Parkway include State Highways 41 and 99, Herndon Avenue and Friant Road. City Arterials of note include Cornelia, Van Ness, Palm, Copper, Shepherd and Willow.

Level of Service

The existing traffic conditions were evaluated to develop a base line or beginning point for understanding the street and highway network. This analysis was completed for the two state highways, arterials and selected collector streets near the Parkway. The analysis focused on the generalized level of service on each of the selected roadways. This assessment was

intended to provide an overview of the functionality of the street and more detailed assessments can be made at the sub-segment or intersection level.

The evaluation of street capacity was the central focus of the analysis process. A street or highway's capacity is affected by a number of factors. The number of lanes, the location and spacing of intersections, the type of traffic control devices used (stop signs, traffic signs, etc.), the traffic signal timing plan, the use of on-street parking, the percentage of trucks and the number and location of adjacent driveways all have an effect on the carrying capacity of a particular segment of street or highway.

The evaluation of a street's capacity introduces the concept of level of service, which is defined as a qualitative measure describing operational conditions, within a traffic stream, and the perception of these conditions by motorists. A specific level of service definition generally describes these conditions in terms of such factors as speed and travel time, freedom to maneuver, traffic interruptions, comfort and convenience, and safety. Level of service is divided into six categories and are given a letter designation from "A" to "F", with "A" representing the best operating conditions and "F" representing the worst.



For the purposes of assisting in the definition of level of service, volume-to-capacity ratios have been developed. Each level of service falls into a range of volume-to-capacity. Volume as used in this instance is the actual (existing) 24-hour traffic volume on a specific segment of street or highway, which is then converted into a peak hour volume. The peak hour volumes were estimated assuming they represent 10% of the daily volume. The corresponding ratio or percentage relates to the street's ability to carry that volume of traffic efficiently. The closer the volume gets to the capacity, the lower the operating efficiency of the street. For example, from 80% to 90% of capacity the street begins to show deterioration in operating efficiency, but continues to provide a reasonable level of service. After 90% of capacity is reached, the street begins operating less efficiently and the driver is subject to excessive delays. The following is a complete definition of each level of service category.

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LEVEL OF SERVICE	TYPE OF FLOW	DELAY	MANEUVERABILITY	VOLUME-TO-CAPACITY RATIO (V/C)
A	Stable Flow	Very slight delay. Progression is very favorable, with most vehicles arriving during the green phase not stopping at all.	Turning movements are easily made, and nearly all drivers find freedom of operation.	0.00-0.59
B	Stable Flow	Good progression and/or short cycle lengths. More vehicles stop than for LOS A, causing higher levels of average delay.	Vehicle platoons are formed. Many drivers begin to feel somewhat restricted within groups of vehicles.	0.60-0.69
C	Stable Flow	Higher delays resulting from fair progression and/or longer cycle lengths. Individual cycle failures may begin to appear at this level. The number of vehicles stopping is significant, although many still pass through the intersection without stopping.	Back-ups may develop behind turning vehicles. Most drivers feel somewhat restricted.	0.70-0.79
D	Approaching Unstable Flow	The influence of congestion becomes more noticeable. Longer delays may result from some combination of unfavorable progression, long cycle lengths, or high volume-to-capacity ratios. Many vehicles stop, and the proportion of vehicles not stopping declines. Individual cycle failures are noticeable.	Maneuverability is severely limited during short periods due to temporary back-ups.	0.80-0.89
E	Unstable Flow	Generally considered to be the limit of acceptable delay. Indicative of poor progression, long cycle lengths, and high volume-to-capacity ratios. Individual cycle failures are frequent occurrences.	There are typically long queues of vehicles waiting upstream of the intersection.	0.90-0.99
F	Forced Flow	Generally considered to be unacceptable to most drivers. Often occurs with over saturation. May also occur at high volume-to-capacity ratios. There are many individual cycle failures. Poor progression and long cycle lengths may also be major contributing factors.	Jammed conditions. Back-ups from other locations restrict or prevent movement. Volumes may vary widely, depending principally on the downstream back-up conditions.	1.00 plus

Source: *Highway Capacity Manual*

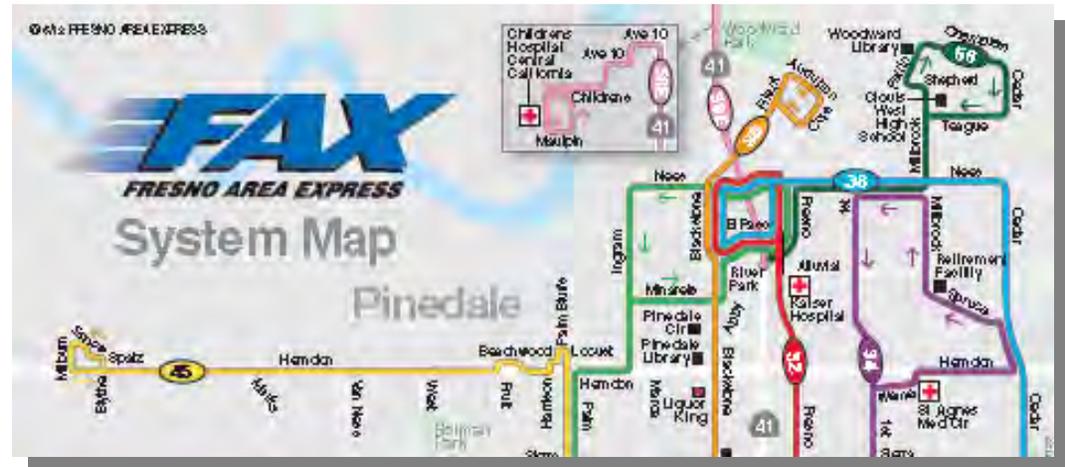
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Road	Segment	Lanes Ea Dir	Median	Roadway Type	2011 Daily Vol	PM Peak %	PM Peak	Dir Bias	Dir PM Peak	Capacity/ lane/hr	Biased PK Split		
											Dir Cap	V/C	LOS
State Route 99	Herndon to Avenue 7	2	Divided	Fwy	64,000	0.1	6400	0.55	3,520	2,200	4,400	0.80	D
State Route 41	Friant Rd. to Valley Childrens	2	Divided	Fwy	62,000	0.1	6200	0.55	3,410	2,200	4,400	0.78	C
Road 206	Road 145 to Friant Rd.	1	Undivided	Arterial	4,000	0.1	400	0.55	220	1,700	1,700	0.13	A
Children's Blvd.	Avenue 9 to SR 41	3	Divided	Major Art.	12,900	0.1	1290	0.55	710	1,900	5,700	0.12	A
Nees Avenue	Palm to Blackstone	2	Divided	Arterial	33,200	0.1	3320	0.55	1,826	1,900	3,800	0.48	A
Audobon Avenue	Palm to Blackstone	2	Undivided	Collector	10,900	0.1	1090	0.55	600	1,600	3,200	0.19	A
Shepherd Avenue	Friant to Cedar	2	Divided	Arterial	31,800	0.1	3180	0.55	1,749	1,900	3,800	0.46	A
Copper Avenue	Friant to Willow	2	Divided	Arterial	6,200	0.1	620	0.55	341	1,900	3,800	0.09	A
Willow Avenue	Copper to Friant	2	Divided	Arterial	24,300	0.1	2430	0.55	1,337	1,900	3,800	0.35	A
Friant Road	SR 41 to Shepherd	3	Divided	Arterial	58,400	0.1	5840	0.55	3,212	1,900	5,700	0.56	A
	Shepherd to Copper	2	Divided	Expressway	30,500	0.1	3050	0.55	1,678	2,000	4,000	0.42	A
	Copper to Willow	2	Divided	Expressway		0.1	0	0.55	-	2,000	4,000	0.00	A
	Willow to Road 204	2	Divided	Expressway		0.1	0	0.55	-	2,000	4,000	0.00	A
Palm Avenue	Herndon to Nees	2	Divided	Arterial	36,200	0.1	3620	0.55	1,991	1,900	3,800	0.52	A
Van Ness Avenue	Herndon to River	2	Divided	Arterial	4,500	0.1	450	0.55	248	1,900	3,800	0.07	A
Marks Avenue	Herndon to River	2	Divided	Arterial		0.1	0	0.55	-	1,900	3,800	0.00	A
Millburn Avenue	Herndon to River	2	Divided	Arterial	16,900	0.1	1690	0.55	930	1,900	3,800	0.24	A

Current levels of service on the selected street segments show that all roadways are operating at a high level for daily volumes. State Highway 99 does show a level of service “D” for the segment at the San Joaquin River. It should be noted that some locations may be experiencing lower levels of service during specific peak hours. These reduced levels of service are associated with peaking and directional bias of traffic. As such this assessment has been limited to daily volumes and a segment level analysis methodology.

Transit

Fresno Area Express (FAX) operates an extensive fixed route and demand response system in the Fresno area. FAX carried more than 18 million fixed-route passengers last year and is the only service to the Parkway. FAX generally runs weekdays between 5:30am to 10pm. Routes are operated on 30 minute headways and weekend service is also provided. The general public fare to ride FAX is \$1.25, while seniors and disabled can ride for \$0.60 and children under 6 ride for free.



Several routes provide limited access to the Parkway. None of the FAX service provides direct connection to any of the Parkway gateways. Route 45 operates along Herndon and has a turn-back at Milburn. Route 26 operates along Palm and turns-back on Nees and Ingram. Route 58e operates along State Highway 41 and provides service to Valley Childrens Hospital. The most direct service to the Parkway is provided by Route 30 which serves Woodward Park. This limited level of service to the Parkway is reflective of the development pattern of Fresno, the Parkway's remote location relative to urban development and the lack, other than Woodward Park, of a significant destination or transit trip generator within the Parkway.

Clovis Transit Stageline service operates in the Clovis area, but does not provide any direct service to the Parkway. Likewise, the Madera County Connection provides service between Madera and Valley Childrens Hospital, but currently provides no direct service to the Parkway.

Bicycle

The City of Fresno currently has 137 miles of bikeways: 14 miles of Class I Bike Paths, 116 miles of Class II Bike Lanes, and 7 miles of Class III Bike Routes. Class I Bike Paths are typically paved facilities separate from the city street, county roadway or state highway. Class II Bike Lanes are bike facilities integrated into the city street, county roadway or state highway and are typically located on the shoulder or the road. Class III Bike Routes are limited to signs providing guidance to bicyclists.

Fresno Area Express (FAX) is currently equipped to accommodate bicyclists through their provision of bike racks on every bus, although they have identified that additional bicycle capacity is needed. Short term and long-term bicycle parking is provided at certain locations throughout the City, although bicyclists are not guaranteed bike parking at a majority of destinations. According to Census 2000 Journey to Work data, 0.9 percent of Fresno residents currently use the bicycle as their primary means of commuting to work.

The City's Bicycle, Pedestrian, and Trails Master Plan (BMP) is intended to guide and influence bikeway policies, programs, and development standards to make bicycling in the City of Fresno more safe, comfortable, convenient, and enjoyable for all bicyclists. The ultimate goal of this effort is to increase the number of persons in the City of Fresno who bicycle for transportation to work, school, and errands, or for recreation. The BMP has been developed to complement the Public Facilities Element of the 2025 Fresno General Plan

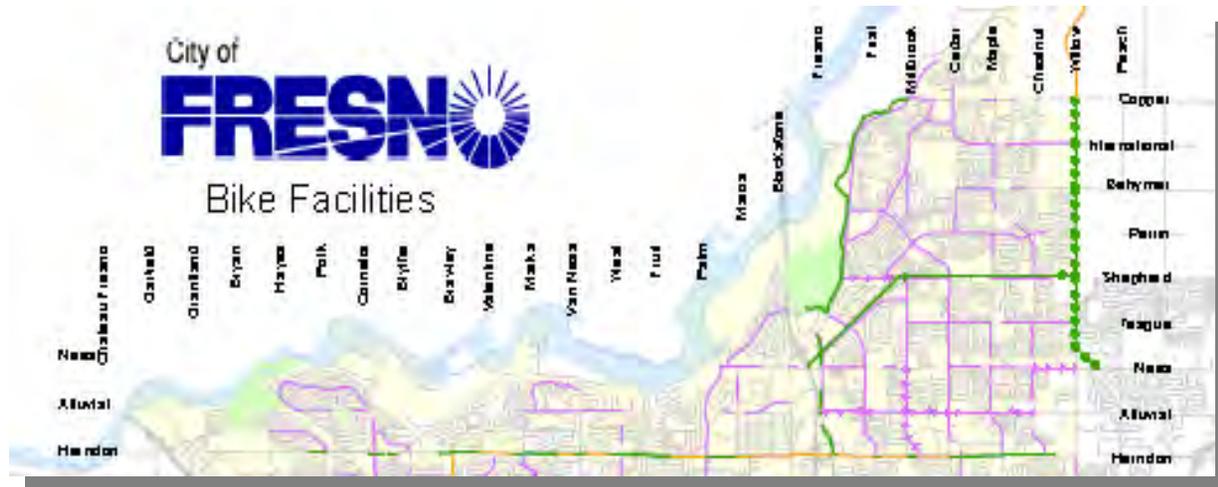




(GP), which includes goals and policies to accommodate all modes of transportation through a balanced system of streets, highways, rail systems, public transportation, and airports.

A number of the existing City bike facilities provide limited access to the Parkway. The most significant, the Eaton Trail, will be discussed in more detail later in this report. The balance of the facilities are Class II bike lanes integrated into the City multi-modal street system. For the western section of the Parkway, several Class II bike lanes have been installed on local streets north of Herndon Avenue. While not intended or designed to provide access to the Parkway, these bike lanes provide limited access between the residential neighborhoods and the Parkway gateways. Herndon Avenue provides nearly continuous bike circulation across the community south of the River through a combination of Class I bike paths and Class II bike lanes. While this facility does not provide direct access to the Parkway, it does provide connection with the community to the south as well as east-west circulation south of the River.

East of State Highway 41, the Parkway has significantly more integrated access. This is provided by a series of trails and bike lanes throughout Northeast Fresno. Primary to this system is the Eaton Trail which begins in Woodward Park and continues to the Coke Hallowell Center for River Studies. In addition, Old Friant Road, Fresno, First, Cedar, Ft. Washington,



Champlain and Copper provide access to the Fresno side of the Parkway via a series of Class II bike lanes.

Bike access and facilities on the Madera side of the River are limited to the use of County Roads. River crossings are limited to Road 204 near the Town of Friant, State Highway 41 and State Highway 99 and significantly impact the connectivity of the Parkway for bicycles and pedestrians.

Parkway Facilities

A number of parkway facilities have been developed to provide access (parking or trails) and a number are planned. The following summarizes the current access components. These form the basis for the Parkway use and generally dictate the types and frequency of use within the Parkway.



Camp Pashayan

Camp Pashayan is a 31-acre property located at the western end of the Parkway. It is managed jointly by the San Joaquin River Parkway & Conservation Trust (River Parkway Trust) and the California Department of Fish and Game as part of the San Joaquin River Ecological Reserve. Camp Pashayan has several picnic areas as well as a picnic shelters, and a boat launch appropriate for hand-carried boats such as canoes and kayaks. It is handicap accessible and has approximately 85 parking stalls.

Sycamore Island Ranch

Sycamore Island Ranch is a 350-acre natural area located along the San Joaquin River in Madera County. Sycamore Island Ranch is one of the best fishing spots along the River and home to a variety of species of fish (bass, catfish, blue gill and crappie). The Ranch includes nature trails for wildlife observation and relaxing walks, picnicking facilities, restrooms, and a bait shop with refreshments. Access to the site is off of Madera County Road 40. Parking is

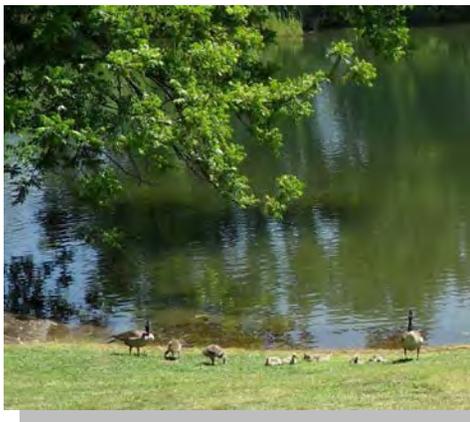
available through a series of unpaved parking areas.

Woodward Park

The late Ralph Woodward, a long-time Fresno resident, bequeathed the major portion of his estate in 1968 to provide a regional park and bird sanctuary in Northeast Fresno on the south bank of the San Joaquin River between Highway 41 and Friant Road. This 300 acre park represents the key southern anchor of the eastern Parkway facilities. As such, it offers a wide variety of amenities, including restrooms, picnic sites with barbecues, several ponds and streams, the Shin Zen Friendship Garden, 3 playgrounds, and access to the Lewis S. Eaton Trail and the Parkway via Jensen River Ranch. Woodward Park is the highest activity center on the Parkway, enjoys the best multi-modal access and forms the southern terminus for the Eaton Trail.

Jensen River Ranch

Adjacent to Woodward Park, lies Jensen River Ranch, a 167-acre property owned by the San Joaquin River Conservancy. Jensen River Ranch can only be accessed by foot or by bicycle. The River Parkway Trust is currently working on a restoration project on the site that includes habitat restoration, a trail network, and picnic sites near the river. For now, the property is accessible to pedestrians, cyclists and equestrians from the Lewis S. Eaton Trail and through Woodward Park. River access is currently available via an interim loop trail, which runs between the two pastures, along the riverbank, and then back toward the bluffs.



Wildwood Native Park

Wildwood Native Park; it is located off of State Highway 41 at Cobb Ranch Road in Madera County. The park is owned by the San Joaquin River Conservancy and managed by the City of Fresno. Amenities include canoeing access, hiking trails, picnic facilities, equestrian trails, fishing access, nature observation, restrooms, parking, which is handicap accessible.

Coke Hallowell Center for River Studies

The River Center provides connection with the culture and natural history of the San Joaquin River through art and educational exhibits, programs and activities, gardens and links to pedestrian and bike trails. The River Center's year round programs include storytelling, river-inspired art workshops, readings by local authors, gardening classes and kids' crafts. The River Center facility is centered around a restored 1890's ranch house, rose garden, orchard, vineyard and picnic area. The Center has 29 parking stalls.



Lost Lake Park

Lost Lake Park is located on Friant Road 8 miles east of State Highway 41. This 305-acre county park features hiking trails, canoeing, camping, riverfront picnic & barbecue facilities, restrooms, open wildlife habitat, boat launch, and a self-guided nature trail. Lost Lake Park has approximately 40 formal parking stalls and significant amounts of informal parking.

Friant Cove

Friant Cove is owned by the Conservancy and managed by California State Parks, Millerton Lake State Recreation Area. Friant Cove provides a Park and Ride for commuters to Fresno and Madera, hand-carried canoe launch, fishing, picnic tables, and restrooms. It has 62 parking stalls.



Lewis S. Eaton Trail System

The Lewis S. Eaton Trail is the main multi-use trail of the Parkway, and will eventually run the entire length of the Parkway from State Highway 99 to Friant Dam. The name is used primarily by the City of Fresno to designate facilities on the Fresno side of the river and the Counties of Madera and Fresno use other terms when referencing sections of the trail in their jurisdictions. Drinking fountains are located at the River Overlook inside Woodward Park and two miles north on

the trail. Restrooms are located at Woodward Park, and on the trail between Rice Road and Old Friant Road and at the Coke Hallowell Center for River Studies. Currently, six miles of the trail are completed. Trailhead parking (including horse trailers) is provided within Woodward Park for a day use fee. Parking is also available free of charge at the Coke Hallowell Center for River Studies . Bike access points along Friant Road are at the intersections of Audubon, Fort Washington, Champlain and Copper. Fresno Area Express Route #30 (equipped with bike racks) stops at the trailhead at Friant Road and Audubon.

Riverside Segment, Lewis S. Eaton Trail

This short segment of the Lewis S. Eaton Trail is accessible from the Riverside Golf Course Parking lot and is the most significant portion of the trail west of State Highway 41. The trail dives into the river bottom down a steep, paved pathway; at the end of the paved trail visitors can wander down to a sandy beach at the river's edge. The next segment of this trail will link it with the neighborhood just east of the railroad crossing. This trail is not currently accessible to horses.

Thomas MacMichael Sr. Loop Trail

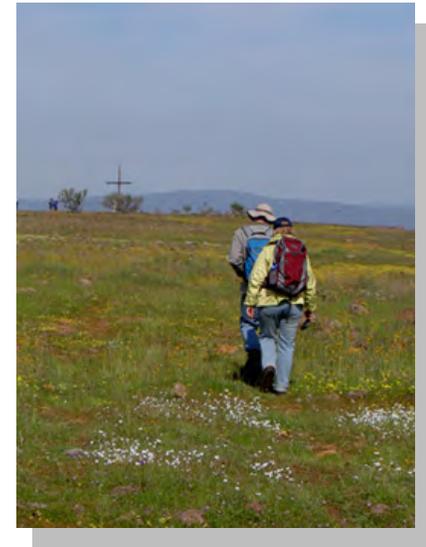
This trail ventures off the Lewis S. Eaton Trail onto Jensen River Ranch below Woodward Park. The trail meanders down to the banks of the river and is accessible via the Lewis S. Eaton Trail on the north side of Woodward Park.

Lost Lake Park Audubon Trail

Wandering along the banks of the river, this trail takes you on a walk through the more natural areas of the park. Keep an eye out for impressive mortar stones near the river, used long ago by native americans for grinding acorn. This is an informal park trail with no connection to the rest of the Parkway.

Hidden Homes Nature Trail

This 1/2 mile footpath is located immediately adjacent to the River Center. The Trail features interactive species exhibits and native plantings.



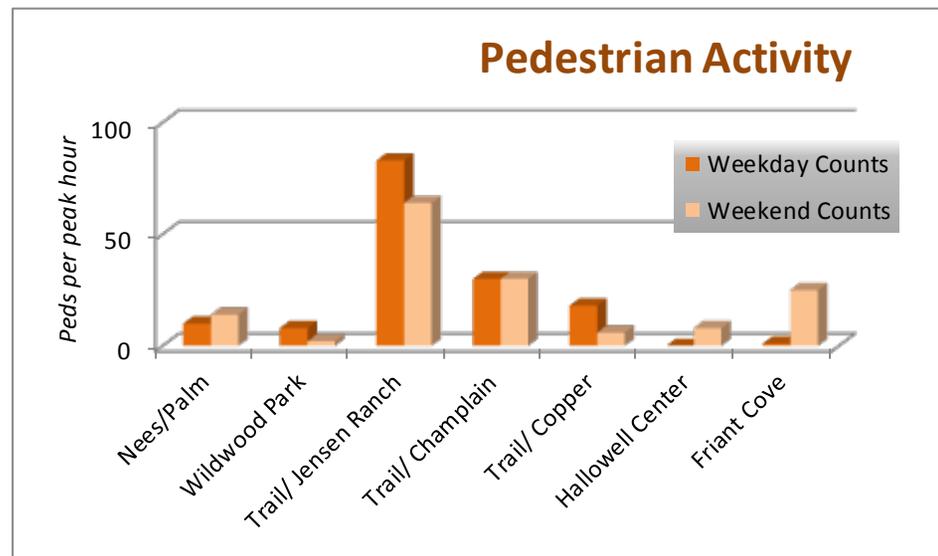
Parkway Use

In an effort to understand the overall utilization of the trail, two count programs were conducted. Each surveyed selected locations along the trail to determine the level of pedestrian and bicycle activity. The first count was conducted on Thursday, September 13th between 5pm and 7pm, while the second survey was completed on Saturday, September 22 between 12 noon and 2pm. Seven locations were selected for counts;

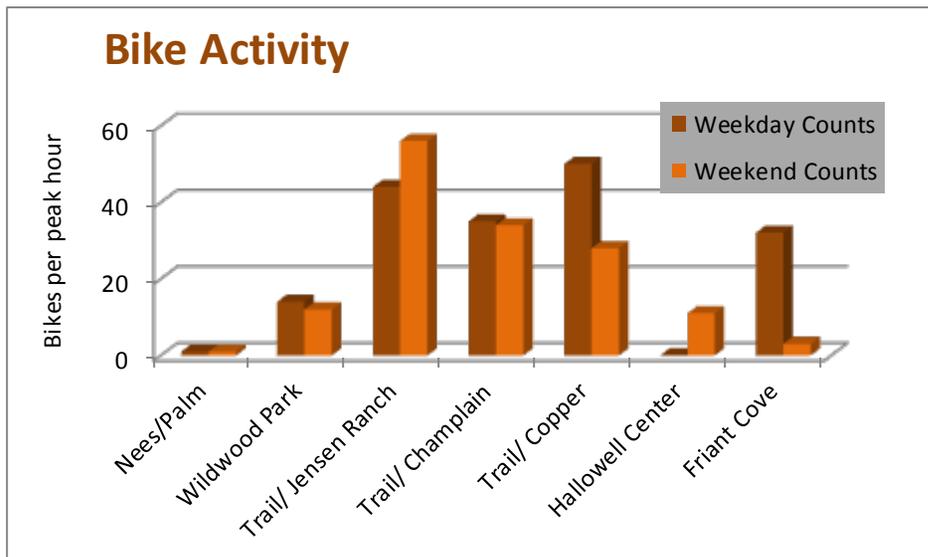
- *Nees at Palm*
- *Wildwood Park*
- *The Trail at Jensen Ranch*
- *The Trail at Copper Avenue*
- *The Trail at Champlain*
- *The Hollowell Center*
- *Friant Cove Park*

These locations provide for a profile of activity along the Easton Trail east of SR 41 and represent significant gateways to the trail and connections into the surrounding neighborhoods. The following tables show the activity levels for each of the locations. It should be noted that the Trail access at the Hollowell Center closes at 5pm on weekdays, so the data at that location reflects this limited access.

The highest pedestrian activity is experienced between Jensen Ranch and



Copper. This represents the most developed portions of the trail and the areas with the most direct connections into the surrounding neighborhoods. There is a slight increase in pedestrian activity during the weekends at locations such as Friant Cove or the Hollowell Center and this data reflects the expanded hours of operation and the recreational nature of these two gateways. The highest activity was found at Jensen Ranch during the weekday count with 83 pedestrians using the Eaton Trail at this location. Weekday and weekend activity was approximately the same.



The bike activity was generally concentrated between Jensen Ranch and Copper. Although given the nature of this activity, more of the Trail is utilized. Limited bike activity was observed at the Palm/Nees gateway and this reflects the lack of a surfaced bike trail in this location. The Jensen Ranch gateway was the busiest location, followed by the Trail at Copper and the Trail at Champlain. The highest bike activity was found on Saturday at Jensen Ranch with 56 bicyclists followed closely by the weekday activity at Copper with 50. Of special note is the weekday bike activity at Friant Cove which reflects the number of bicyclists that use this location as a staging area for longer bike trips along the Class 2 Bike Lane on Friant Road. Interestingly,

the peak hour weekday activity was 21% higher than weekend peak hour bike use.

KEY ISSUES AND CHALLENGES

Access to the Parkway proves to be difficult west of State Highway 41. Access points were often closed or locked with signage warning of trespassing violations. In addition, the location of parking facilities is almost unknown throughout the Parkway. Visitors are provided very little information on access locations and parking. There is a clear difference in Parkway access, parking and information in the area east of SR 41. Efforts should be undertaken to equalize the information and amenities on the Parkway to the west of SR 41.

Access to the Parkway is also limited from the surrounding neighborhoods. The neighborhoods to the east of SR 41 have good access, but missing information/signage, which limits accessibility. The neighborhoods to the west of SR 41 have almost no north-south access and virtually no information. Likewise, the Madera County side of the Parkway suffers from very restricted access, which limits the use of the northern side of the Parkway. Expansion of direct (parking) and indirect (pedestrian and bicycle) access is critical for expanding the use of the Parkway.

Transit service to and from the study area is limited and as such prohibits use of this mode for access to the Parkway. This mode is critical to the long term use of the Parkway facilities due to its relief of congestion and demand on limited parking facilities. Use of Fresno Area Express would bring the Parkway into alignment with the goals of sustainable transportation.



Wayfinding signage for the Parkway is almost non-existent. This lack of a unified and coherent signage program inhibits the use and overall enjoyment of the Parkway. Many potential users simply cannot find the access locations, parking facilities or trailheads. The lack of a signage program also prohibits the unification of the Parkway in the public's mind. The need for a signage program may well be the single biggest impediment to the use of the Parkway. The basic purposes or goals of the wayfinding signage program should be:

- *To efficiently and safely guide and direct the public to and from the Parkway*
- *To develop a common "look" and "feel" and apply consistent connectivity signage conventions for motorists, transit passengers, bicyclists, pedestrians and visitors.*
- *To improve movement within the Parkway and provide information regarding parking and amenities.*



The wayfinding signage program should support three information platforms. The first is "connectivity" to the Parkway's gateways. Travelers wishing to use the Parkway must be provided with clear directions to locations to connect with the Parkway. This signage program should begin well in advance of the gateway and should bring the traveler to their destination via their transportation mode of choice. This ease of access is currently missing and greatly influences the level of use of the Parkway. Further, the ease of connecting with the Parkway will greatly influence the overall experience of the visitor. Improving the connectivity will make for stronger supporters of the Parkway.

"Access" to the Parkway is the second critical component of the wayfinding signage system. Access is provided by parking, transit stops, bicycle lanes and sidewalks. Access to the Parkway varies greatly and access is generally poor with ill-defined locations for entrance, parking and interface with alternative modes.

The amount, ease of use and content of the information program for the Parkway and the associated facilities is somewhat prohibitive. The need for more extensive guidance on services and amenities is apparent. This lack of information

severely limits use and enjoyment of the Parkway. This wayfinding signage within the Parkway should be provided wherever trailheads, services, passive areas, points or areas of interest and for overall wayfinding through the Parkway.

These three information platforms can be developed following simple design guidelines which are intended to provide tools for identifying, defining, marketing and navigating around the Parkway. Identifying the Parkway will foster recognition of its significance, of its boundaries and sub-areas and assist with wayfinding. Marketing the 'brand' of the Parkway will also assist in promoting its assets, feature and attractions. The wayfinding signage program should be:

- *to be useable to first-time visitors and residents alike*
- *to be aesthetically appropriate for the architectural context*
- *to make legible, readable and understandable directions and information utilizing plain language and respecting existing nomenclature*
- *to allow sufficient 'redundancy' of sign locations and messaging to enable users to find their way 'out' as well as 'in'*
- *to lead a systematic approach to wayfinding planning*
- *to take into consideration future needs such that the system could be expanded if the need requires it*

Of special note are the differences in the level and type of amenities found in the western portions of the Parkway (State Highway 99 to State Highway 41) vs. the eastern section of the Parkway (State Highway 41 to Friant Dam). This difference is reflected in the type and intensity of use found in the western Parkway, which tend to be passive, river oriented activities which want or need little support services and amenities. The eastern Parkway is typified by more active uses, hiking, biking and education, which require supports service and amenities. This may be by design or it may be a function of the historical development of the Parkway and the supporting grant and private funding made available. The resulting difference in the transportation needs, requirements and development are directly reflective of this stark difference in use and features of the Parkway.



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State Highway Traffic Count Program, Caltrans, 2011
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City of Fresno, Traffic Count Information
2000 US Census for Fresno County
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**Madera County Regional Transportation Plan Roadway
Capacity / Level of Service ⁽¹⁾**

1/29/2001

		Maximum Two-Way Average Daily Traffic (ADT) ⁽²⁾				
Roadway Classification	Number of Lanes	LOS A	LOS B	LOS C	LOS D	LOS E
Collector	2	7,800	9,100	10,400	11,700	13,000
Secondary	4	15,500	18,100	20,700	23,300	25,900
Major	4	20,500	23,900	27,300	30,700	34,100
Arterial (3)	2	10,800	12,600	14,400	16,200	18,000
Arterial	4	21,500	25,100	28,700	32,300	35,900
Mountain Arterial (3)	2	9,700	11,300	12,900	14,500	16,100
Mountain Arterial	3	12,500	14,600	16,700	18,800	20,900
Mountain Arterial	4	22,300	26,000	29,800	33,500	37,200
Urban Arterial	4	21,500	25,100	28,700	32,300	35,900
Urban Arterial	6	32,300	37,700	43,100	48,500	53,900
Urban Arterial	8	43,100	50,300	57,400	64,600	71,800
Expressway (4)	4	24,500	28,600	32,700	36,800	40,900
Expressway (4)	6	36,800	42,900	49,000	55,200	61,300
Expressway (4)	8	49,000	57,200	65,400	73,500	81,700
Freeway	4	45,900	53,600	61,200	68,900	76,500
Freeway	6	70,500	82,200	94,000	105,800	117,500
Freeway	8	96,300	112,400	128,400	144,500	160,500
Freeway	10	120,400	140,400	160,500	180,500	200,600

Notes:

(1) All Capacity figures are based on optimum conditions and are intended as guidelines for planning purposes only.

(2) Maximum two-way ADT values are based on the 1999 Modified Highway Capacity Manual Level of Service Tables.

(3) Level two-lane arterials are analyzed as arterials.

(4) There are currently no roadways in Madera County that match this category, but capacity values are included for future conditions analysis.

