

2012

City of Merced

Public Facilities Financing Plan



*Comprehensive Update—
October 2012*

*Originally Adopted--May 1998
Revised--2003, 2004, 2006, 2009, and
2010*

CITY OF MERCED

PUBLIC FACILITIES FINANCING PLAN



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PUBLIC FACILITIES FINANCING PLAN

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PUBLIC FACILITIES FINANCING PLAN



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PUBLIC FACILITIES FINANCING PLAN



1. INTRODUCTION

A. Purpose

Merced takes pride in being an attractive place to live, raise a family, and to do business. Preservation of the quality of life has been a key element guiding local planning efforts. The *Merced Vision 2030 General Plan* (Policy P-1.1) calls for adequate public facilities and services to be provided to meet the needs of future development and to ensure continuation of the quality of life that is desired by the community. The City of Merced, with the assistance of the Public Facilities Impact Fee Task Force, has developed a comprehensive public facilities financing plan for public improvements that will be required through 2030. Implementing Action 1.3.f of the *Merced Vision 2030 General Plan* (adopted in January 2012) recognized that after the General Plan was adopted, a comprehensive update of the Public Facilities Financing Plan (PFFP) and Public Facilities Impact Fee (PFIF) program (originally adopted in 1998 and revised in 2003, 2004, 2006, 2009, and 2010) would need to be prepared.

The objective of the PFFP is to identify resources to ensure that adequate public facilities will be available to meet the projected needs of the City as it grows and to further ensure that the facilities planned are consistent with the adopted General Plan.

Merced Civic Center



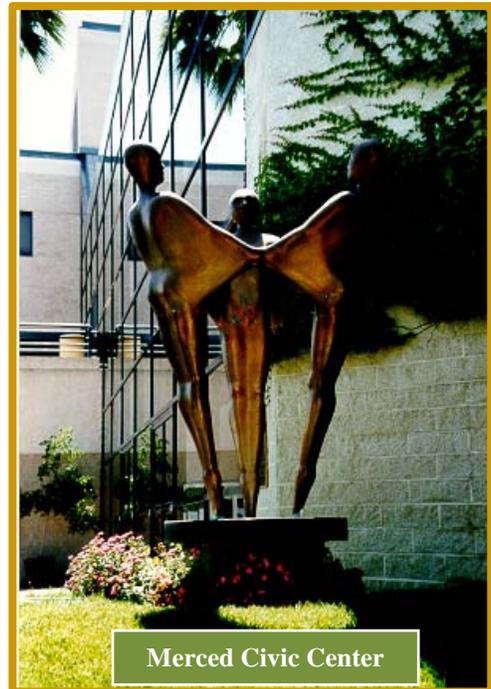
The *Merced Vision 2030 General Plan* serves as the basis for the PFFP.

1. INTRODUCTION (Continued)

B. History and Accomplishments

Original Public Facilities Financing Plan--1998

Starting in early 1996, City staff presented their findings outlining future needs for public facilities projects to a number of community organizations and the City Council. From October 1996 through October 1997, the original Public Facilities Financing Plan Task Force, appointed by the City Council, met thirteen times working with City staff to prepare a Public Facilities Financing Plan for City Council consideration. The Task Force was made up of 17 community stakeholders, representing local real estate and development interests, the Building Industry Association, the school districts, the Merced County Association of Governments, and the Planning Commission.



After extensive public outreach, the *Public Facilities Financing Plan* recommended by the Task Force was adopted in May 1998 by the City Council along with the *Public Facilities Impact Fee Program* (Ordinance #1989 or Merced Municipal Code Section 17.62). In summary, the *Public Facilities Financing Plan* identified various funding sources for completing public facilities and infrastructure for a 20-year period (until the Year 2015) and a projected City population of 145,330. In all, the Plan identified \$554 million in capital projects, including arterial streets, traffic signals, bridges, railroad crossings, fire stations, police facilities, parks, bikeways, and other public facilities. In June 1998, the City Council adopted the Public Facilities Fees Administrative Policy (Resolution #98-40) outlining the definitions of the various land use categories, exemptions, deferred payment options for non-residential projects, and developer credit and reimbursement policies.

Revisions—1998, 1999, 2003, 2004, 2006, 2009, and 2010

After adoption, the Public Facilities Impact Fees have been amended several times:

- October 1998 Revision: The first amendment (Ordinance #2000 and Resolution #98-73) folded the five project fee categories (Roadways/Bridges/Railroad Crossings, Traffic Signals, Police, Fire, and Parks & Bikeways) into a single fee category in order to provide maximum flexibility for offering developer credits/reimbursements and funding specific projects. This amendment also involved dedicating one-half of the fees collected for projects for repayment for developer-installed improvements with the other half earmarked for improvements to be installed by the City. Certain projects were excluded from this 50-50 split, including all non-residential projects without a requirement for installing improvements that were part of the fee program for a three year period ending in October 2001 and a list of 17 residential subdivisions (with no time limit).
- December 1999 Revision: The second amendment (Ordinance #2033) in December 1999 modified the fee for “High Turnover Commercial” to be calculated on a peak hour trip basis rather than square feet of building area to better reflect the impacts of these types of developments (fast food restaurants, gas stations, and convenience markets).
- 2003 Update: In 2003, the City Council adopted a major Revision to the Public Facilities Financing Plan and Impact Fee program. The Public Facilities Financing Task Force was reconvened with 10 of its original 17 members along with 5 new members. The City Council also appointed a 3-member Council Subcommittee.

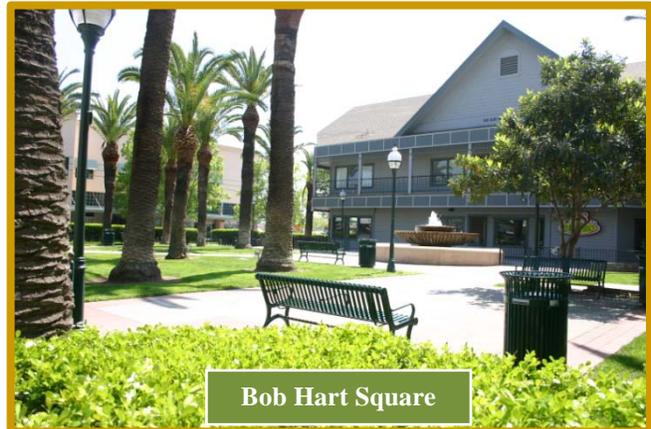


Bob Hart Square

The review was a comprehensive update of the *Public Facilities Financing Plan* and Impact Fee program. The process began with a new 20-year time frame (2000 to 2020), significantly reduced population projections, and a modified list of capital projects with new cost estimates for each project (Ordinance #2130).

- 2004 Revision:The 2004 revision included staff review of three items—1) a re-examination of the fees for High Turnover Retail (such as fast food restaurants or mini-marts), as directed by Council; 2) a review of project costs felt to be in need of revision; and 3) a review of underlying assumptions of the “units of growth” in the impact fee calculations, because of significant changes in growth over the last two years.
- 2006 Revision:The 2006 revision included updated cost estimates, updated project descriptions, and modified the 20-year timeframe to end in 2025 (Ordinance #2232).

- 2009 Revisions: In August 2009, the City Council approved a temporary 25% fee reduction in impact fees for all commercial categories of development; a 28% reduction of fees within an Infill Zone; and deletion of one project (Old Lake/Nevada Road from Highway 59 to R Street) from the *Public Facilities Financing Plan*



(Ordinance #2340), effective in November 2009. This temporary reduction for a two-year period was intended to help stimulate commercial and residential development in the City, especially the Infill zone. The City Council also suspended the annual cost increases based on the Engineering News Record Construction Cost Index until January 2012.

- 2010 Revision:In September 2010, the City Council adopted a temporary fee reduction of \$8,000 (from \$10,404 to \$2,404) for single-family homes that meet certain eligibility requirements (Ordinance #2360), effective in December 2010. Single-family homes that are owner-occupied for at least 2 years after purchase and that are within one of the City’s Community Facilities Districts are eligible. A maximum of 576 homes would qualify, based on the deletion of three projects from the 20-year horizon (Old Lake/Nevada Road from R to G Streets, Thornton Road right-of-way acquisition, and M Street/Fahrens Creek Bridge).
- 2011 Extension of Temporary Reductions: In September 2011, the City Council granted an additional 2-year extension of the temporary fee reduction granted in 2009 and also suspended the annual increases until January 2014 (Ordinance #2377).

Accomplishments of the Public Facilities Impact Fee Program

Many projects throughout Merced have been built as a result of the Public Facilities Impact Fees collected since 1998. Without the impact fees, there would not have been sufficient revenue to build these completed projects:

Fire:

- Fire Station 55 (Parsons & Silverado)
- Acquisition of land for Fire Station 56 (Merced College)

Police:

- Acquisition of land for new Central Police Station (Mansionette & Yosemite)

Parks:

- Acquisition of land for Community Park #42 (Mission & Tyler)
- Youth Sports Complex Development
- Miles of Class I Bikeways



Railroad Crossings:

- G Street Undercrossing at BNSF

Roadways:

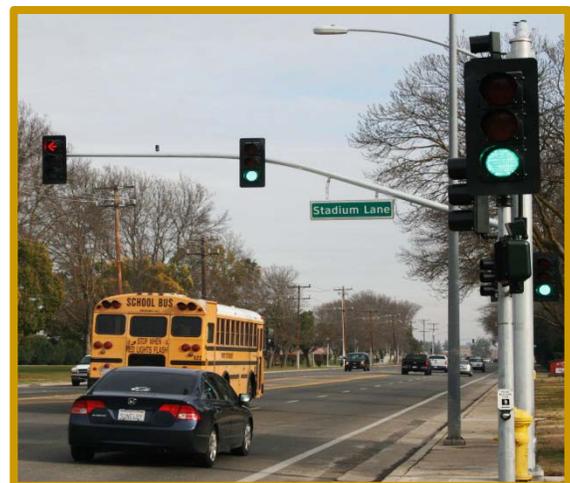
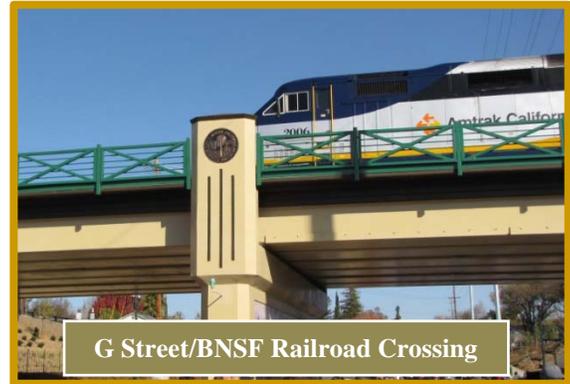
- Campus Parkway, Highway 99 to Childs
- Yosemite Avenue, west of R Street
- Yosemite Avenue completion from G Street to Mansionette
- 13th and 14th Streets, one-way couplet at Highway 99
- Parsons Avenue completion, south of Childs
- Parson Avenue completion, Childs Avenue to Highway 140
- Parsons Avenue completion, Yosemite Avenue to Rahilly Park
- Acquire land for Parsons Avenue at Ada Givens Park
- M Street, Merced College through Bellevue Ranch
- G Street, Merced College north past Bellevue Ranch

Bridges:

- Yosemite Avenue Bridge at Fahrens Creek
- Buena Vista Bridge at Fahrens Creek
- R Street Bridge at Fahrens Creek
- Cardella Avenue Bridge at Fahrens Creek
- M Street Bridge at Fahrens Creek
- M Street Bridge at Cottonwood Creek
- G Street Bridge at Cottonwood Creek
- Gardner Road Bridge at Cottonwood Creek

Traffic Signals:

- Signal at Parsons Avenue-Olive Avenue
- Signal at G Street-Bellevue Road
- Signal at R Street-Yosemite Avenue
- Signal at Childs Avenue-G Street
- Signal at Gerard Avenue-G Street
- Signal at Yosemite Avenue-El Redondo Drive
- Highway 59-Cooper Avenue Signal and Widening (under construction)



1. INTRODUCTION (Continued)

C. Process for the Comprehensive Update (2012)

In June 2012, the Public Facilities Impact Fee Task Force, consisting of nine business owners and community members along with three City Council members (Mayor Thurston, Council Member Murphy, and Council Member Rawling), began meeting with City Staff to discuss a comprehensive review of the City's Public Facilities Impact Fee program and the Public Facilities Financing Plan. In order to simplify the process, it was decided before the Task Force began its work that the focus would be on only those projects that involved the Public Facilities Impact Fees (PFIF) as a funding source. All capital projects that did not involve the PFIF fees would be removed from the revised Financing Plan, a change from the PFFP first adopted in 1998. That meant that sewer, water, flooding/drainage, public works, airport, and other projects would not be included.

From June to September 2012, the Task Force met every 2 weeks and reviewed the existing fee program, a revised list of capital projects to be included in the updated fee program, the revised project costs, possible incentives, the policies on credits and reimbursements for developers, and a survey of development-related fees for competing jurisdictions for five sample projects. Appendix A-1 contains the PFIF Task Force membership list and meeting calendar.



The above survey involved visits by City staff to six competing jurisdictions (Atwater, Chowchilla, Livingston, Madera, Modesto, and Turlock) in order to better understand each city's approach to fees. The survey revealed a wide disparity among jurisdictions in several areas, including what fees are charged, the basis for those fees, and the approach to what developers are required to construct versus reimbursement/credit policies. Based on this information, the Task Force agreed that the City of Merced's approach to the fee revisions were on the right track.

On September 6, 2012, the Task Force reviewed a draft fee proposal prepared by Development Services staff. The Task Force unanimously recommended to the City Council approval of the fee proposal. On September 17, 2012, the draft fee proposal was presented to the City Council for information and direction. The City Council accepted the report for information and directed City staff to proceed with the public hearing and adoption process. The City Council thanked the Task Force for all their hard work and dedication in assisting City staff with this task. City staff then proceeded with preparing this revised Public Facilities Financing Plan along with revisions to the Public Facilities Impact Fee program, summarized in Section 7, which functions as the “Public Facilities Impact Fee Nexus Report” as required under AB 1600.



D. Related Studies, Plans, and Documents

- City of Merced Public Facilities Financing Plan (1998, with revisions in 2003, 2004, 2006, 2009, and 2010)
- *Merced Vision 2030 General Plan* (2012)
- *Merced Vision 2030 General Plan* Environmental Impact Report (2012)
- City of Merced Parks and Open Space Master Plan (2004)
- City of Merced Police Headquarters Needs Assessment 2008-2035 Report (2010)
- City of Merced Bicycle Plan (2008)
- Preliminary Study by Fire Chief of Fire Station Locations and Response Times (2012)

2. ASSUMPTIONS

A. *Parameters of the Public Facilities Financing Plan (PFFP)*

- *The goals of the Public Facilities Impact Fee Task Force in 2012 were as follows:*
 - *Make Merced more competitive with local and competing jurisdictions*
 - *Meet the Community's future infrastructure and public facilities needs*
 - *Make fees easy to calculate and understand*
 - *Ensure that costs are fairly shared among all new development*
 - *Retain current policies regarding credits/reimbursements and deferrals*
 - *Reflect current economic realities*

The Task Force attempted to balance the above needs to achieve the final fee proposal and financing plan.

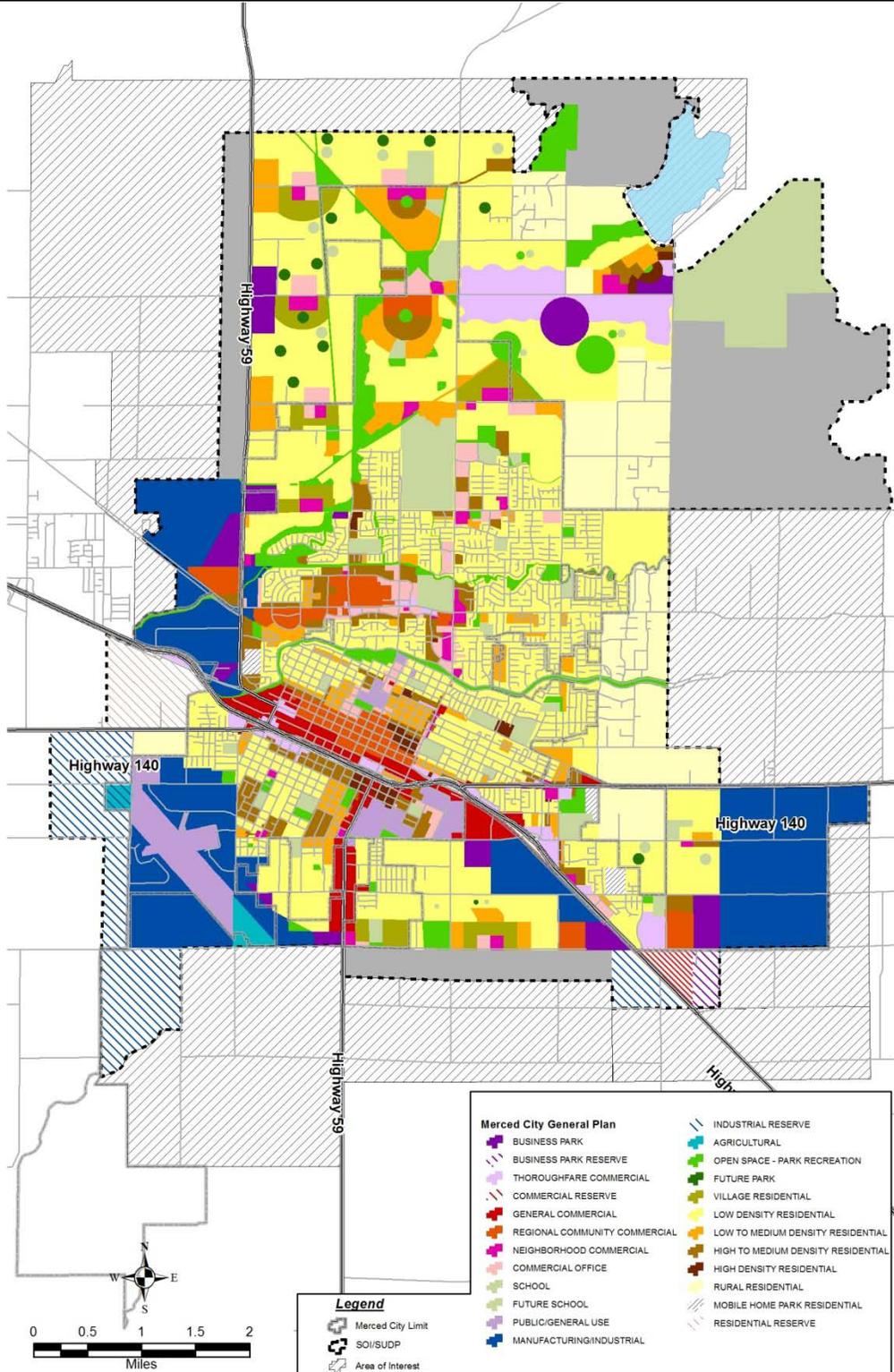
- *Planning for public facilities financing is consistent with the adopted Merced Vision 2030 General Plan.*

The PFFP was developed for the period through 2030 and the area of concern is the General Plan Specific Urban Development Plan (SUDP)/Sphere of Influence (SOI) Area (Figure 2-1). Both the study period and the SUDP/SOI are consistent with the updated General Plan, adopted in January 2012. Facility needs are based on projected development and associated population increase during the 20-year period from 2010 to 2030. It is recognized that the 2030 date may not represent complete build-out of the General Plan SUDP/SOI Area. Public Facility Projects included represent the public improvements which should be in place at the end of the study period, even if the General Plan area is not completely built out.

- *A review of the projects and fees will be conducted annually.*

AB 1600 calls for annual review of development impact fees. This exercise will also permit the City to re-examine assumptions, emerging development trends, population and employment projections, cost estimates, inflation factors, and alternative funding sources for the PFFP as a whole. A comprehensive update should be conducted at least every 5 years, which means such an update should take place around 2017.

Figure 2-1--City of Merced SUDP/SOI Boundary



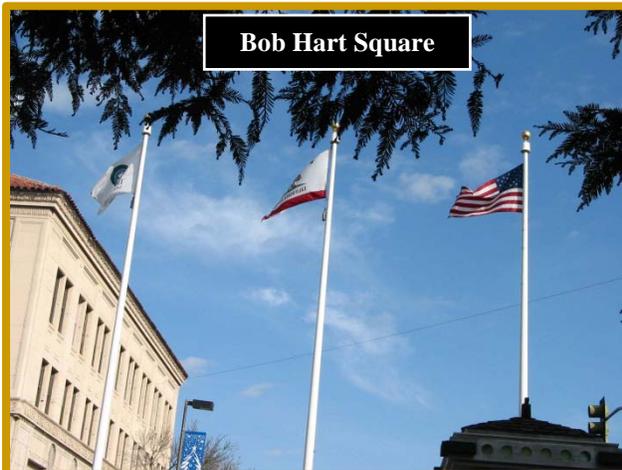
- *All figures are expressed in current year dollars.*

An inflation factor is not built into the fee schedule. Inflation assumptions are often wrong for any given year and, if the fee schedule remains unchanged, the error will multiply. To address this issue, the Public Facilities Impact Fee rates will be adjusted each January 1st to reflect the current cost of construction, based on the Construction Cost Index of the Engineering News Record. Changes in costs or scope of the project, beyond these annual adjustments, will be dealt with as part of the annual review of the PFFP.

- *Current organizational and service delivery systems will remain essentially constant.*

The PFFP does not envision or propose any major consolidation or realignment of City functions.

- *The responsibility for paying for needed infrastructure will be allocated equitably to existing and new development based on the share of total demand for public improvements that is generated by each segment.*



The discussion of equity issues can encompass a spectrum of positions, and often becomes the most complex when the new public improvements under consideration are considered in a system-wide context, as in the PFFP, rather than on a specific project-by-project basis. Imposing development impact fees under Government Code 66000 et seq. requires a strict legal connection or “nexus” between the source generating the need for expanded capacity of public facilities and the

fees themselves. Proposition 218 has also applied additional restrictions to new or increased fees, assessments, and taxes.

General Plan Policy P-1.3 calls for new development to provide or pay for its fair share of municipal public facility and infrastructure improvements.

The City will endeavor to provide for cost-effective new infrastructure and public service expansion to serve growth. It is the City's policy, however, that new development should not create a financial burden for existing City residents and that all new development should be more self-supporting with respect to infrastructure availability, maintenance, and future municipal service provision.

The associated Implementing Action 1.3.c states, "All new development shall contribute its fair share of the cost of on-site and off-site public infrastructure and municipal services as appropriate." The accompanying discussion lists a variety of ways for this to be accomplished, including participation in a public facilities financing program, such as the PFFP.

In recent years, the trend in public facility financing is to place responsibility for payment on the user of the facility or service--the individual who benefits--as opposed to spreading costs across the general public as a whole. To some degree this is a result of legislative changes that increasingly call for elections and/or precisely documented nexus between public improvements and amounts exacted from payers. This was the approach



taken by the City when it first adopted the Public Facilities Financing Plan and Public Facilities Impact Fee program in 1998. The distribution of the costs of public facilities is made so that the costs of new services and facilities needed to meet the demands generated by new development are paid by new development, and not by the existing community. Conversely, new development cannot pay for correcting existing deficiencies or raising the entire community's standard for level of service; therefore other sources of funding are proposed for those portions of some projects where the need is not attributed to impacts of new growth.

- *Projected needs for new and expanded public facilities are based on level of service standards.*

Level-of-service (LOS) standards describe target conditions for type, quality and/or quantity of service to be provided. LOS standards may be established by federal or state regulation, municipal ordinance, adopted General Plan and other policies, approved budgets, or community preference as supported by City Council actions. Standards for the level of service for each category of public facilities determine the quantity of public improvements that will be needed to accommodate new growth.

2. ASSUMPTIONS (Continued)

B. Levels of Service - Preserving Merced's Quality of Life

One way to describe the characteristics that determine the quality of life in a particular community is in terms of the standards set for the various types of public facilities and services. Different categories of public improvements employ different measures or standards. These standards can be applied to projected population growth to determine what public improvements are needed, and how they should be phased to meet population growth. For instance, the current standard set for roadway projects in Merced is to maintain at least Level of Service "D" as defined by common traffic engineering standards based on vehicle speed, travel time, street volume and capacity, freedom to maneuver, traffic interruptions, and safety. (This Level of Service standard is discussed in detail in Section 4.4.1 of the *Merced Vision 2030 General Plan*.) This standard is used to measure whether existing or proposed roadway capacity is adequate to support this particular component of the overall quality of life. The projects contained in this study reflect improvements that will be needed to sustain Merced's accepted quality of life standards as the community strives to meet the needs generated by projected growth over the next 20 years.

Standards are best expressed in terms that can be related to development. In this way, impacts of new development on facilities can be more readily quantified. If, for instance, the standard level of service for parks facilities is expressed as 5 acres per 1,000 population (as it is in Merced), and if a residential development is projected to generate 2,000 new residents, those new units should pay for the cost of 10 new acres of park land required to meet the demand generated.

Table 2-B-1 summarizes the LOS standards used for different public improvement categories in estimating needs for public improvements. In the Public Facilities Financing Plan process, the impact of projected growth on a service category's target LOS and the associated increased demand for services are used directly to calculate the quantity and phasing for each planned capital project. Therefore, there is a direct relationship between the projected growth, the target for LOS and the size and cost of each capital project that will be constructed. Raising LOS above currently acceptable standards is not proposed for any category of improvement at this time.

Table 2-B-1—Level of Service (LOS)

PROJECT CATEGORY	LEVEL OF SERVICE
TRANSPORTATION	
State Highways & Interchanges	LOS D Minimum, Peak Hour
Major Arterials	LOS D Minimum, Peak Hour
Railroad Crossings	LOS D Minimum, Peak Hour (PUC requires all new crossings to be grade-separated)
Bridges	LOS D Minimum, Peak Hour
Campus Parkway	LOS D Minimum, Peak Hour
Parsons Avenue	LOS D Minimum, Peak Hour
M Street Transitway	LOS D Minimum, Peak Hour
Traffic Signals	1 Signal Per 1,250 Population
FIRE PROTECTION	
Fire Stations (All Locations)	4-6 Minute Response Time, At Least 90 Percent of the Time
POLICE PROTECTION	
Police Protection	1.37 Sworn Officers Per 1,000 Population
PARKS & RECREATION	
Youth Center	1 Center Per 75,000 Population
Fahrens Park Development	5 Acres Per 1,000 Population (3.5 Acres of Community Parks)
Youth Sports Complex	1 Complex Per 75,000 Population
Bikeways	1 Mile Bikepath per 5 Miles of Streets & Class I Bikeways Along All Natural Waterways
Community Parks	5 Acres Per 1,000 Population (3.5 Acres of Community Parks)

3. COMMUNITY TRENDS AND NEEDS

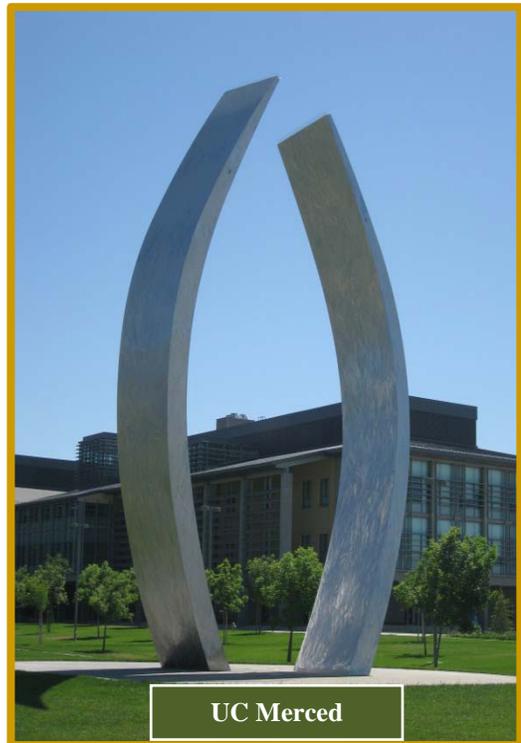
A. Growth

From 1980 to 1990, the City experienced a significant surge in residential construction activity, culminating in the addition of over 4,000 new dwelling units. By 1990, the nationwide recession slowed down Merced's residential construction activity, but a significant amount of commercial construction took place from 1992 to 1994, including the addition of many new large discount stores.

In 1995, Merced's population stood at 61,712, Castle Air Force Base in neighboring Atwater closed, and Lake Yosemite was selected as the site for the next University of California campus. Also in 1995, the City adopted the Bellevue Ranch Master Development Plan for a 1,300-acre mixed use development in North Merced. Nearly 300,000 square feet of new industrial uses were developed in the City in 1997.

By 2000, Merced had 63,330 residents and 20,965 housing units and covered 20.94 square miles. In 2003, the Merced Marketplace regional shopping center opened on Olive Avenue with over 200,000 square feet of new retail commercial space.

In Fall 2005, the UC Merced campus opened with great fanfare. By 2005, the City's population had increased to 73,610 and a record number of single-family building permits (1,427) were issued that year. Unfortunately, a few years later, the economic downturn and foreclosure crisis led to only 9 single-family permits being issued in 2009 and even less in 2010 and 2011.



From 1997 to 2010, the City annexed over 3,800 acres of new residential, commercial, and industrial land, and the City now covered 23.1 square miles with a population of 80,865. In 2010, the new Mercy Medical Center Merced opened on G Street in North Merced replacing the old hospital in South Merced.



In 2012, with the adoption of the *Merced Vision 2030 General Plan*, Merced established a 28,500-acre growth boundary (see Figure 2-1), which is expected to serve the City's growth needs for at least the next 20 years.

Table 3-A-1 describes the projected growth over the next 20 years, when the population is expected to reach over 137,000 people, according to the population projections completed by the Merced County Association of Governments (MCAG) in July 2010 and include in the City's General Plan. Table 3-A-1 also reflects the projected increase in dwelling units by type and in employees and square feet of space for non-residential land uses. These projections were based on examining historic trends for population and dwelling unit growth and commercial, industrial, and institutional growth in Merced over the previous 20 years.

Projections for dwelling units are completed by dividing the population projections by Merced's 3.2 persons/unit standard. Adjustments were then made to the projected dwelling units, reducing them by 10 percent, to reflect the almost-zero residential growth of the last few years and to allow for the expected slow recovery of Merced's housing market over the next few years. The commercial and industrial growth is based on adding approximately 450 jobs and 200,000 square feet of building area per year, which corresponds to 2.5 percent growth rate. This is consistent with historic trends over the last 20 years.



**Table 3-A-1—General Plan SUDP/SOI Projected Growth
(2010-2030)**

GROWTH FACTOR	2010	2015	2020	2025	2030	TOTAL INCREASE
RESIDENTIAL (Dwelling Units)						
SINGLE-FAMILY	15,128	16,985	19,973	22,609	25,505	10,376
MULTI-FAMILY	7,793	8,750	10,289	11,647	13,139	5,346
NON-RESIDENTIAL (Employees)						
INSTITUTIONAL	N.A.	N.A.	N.A.	N.A.	N.A.	304
RETAIL COMMERCIAL	7,500	8,250	9,000	9,750	10,500	3,000
LESS THAN 50,000 SF	5,000	5,500	6,000	6,500	7,000	2,000
MORE THAN 50,000 SF	2,500	2,750	3,000	3,250	3,500	1,000
OFFICE	7,500	8,142	8,785	9,427	10,070	2,570
INDUSTRIAL	10,000	10,777	11,554	12,333	13,111	3,111
TOTAL EMPLOYEES	25,000	27,169	29,339	31,510	33,681	8,681
POPULATION	81,500	91,500	107,600	121,800	137,400	55,900



Merced Looking East along Olive Avenue

3. COMMUNITY TRENDS AND NEEDS (Continued)

B. Public Facilities Financing

Since the passage of Proposition 13 in 1978, California cities have been faced with unprecedented challenges in financing capital improvements necessary to community growth. No longer can cities simply adjust property tax rates to raise needed money. Instead, cities have turned to a variety of other means to finance critically needed facilities.



Throughout California, local governments have widely adopted the practice of charging “impact fees” to new development in order to pay for capital improvement projects. Under California law (“AB 1600”), local governments can impose impact fees on new development to recover the costs of capital projects throughout the community which are needed because of new growth.



These are one-time fees, usually paid at the time of building permit issuance. The fees can only be used to pay for capital projects (not operations or maintenance costs), and there must be a reasonable relationship or “nexus” between the impact of the development and the projects funded by the fees. Communities in California have been using these fees since the 1980’s. Merced started using them for water and sewer impacts in the 1980’s.

Before 1998, the City had financed most needed capital facilities from its General Fund, grants from State and federal governments, developer contributions, sewer and water funds accumulated from user fees, and some miscellaneous sources. The City's General Fund, however, was and still is under increasing pressure just to pay for City operations. The competition for State and federal grants had increased. A gap continued to widen between the existing base of revenues and the needs for funding. In response to this challenge, the Merced City Council adopted the *Public Facilities Financing Plan* (PFFP) and the *Public Facilities Impact Fee* program in May 1998 to pay for transportation, fire, police, and park improvements.



A Regional Transportation Impact Fee was adopted in May 2005 to pay for regional transportation improvements, such as the Campus Parkway, freeway interchanges, etc. This fee program is administered by the Merced County Association of Governments and most cities in Merced County and the County adopted the fee.

In 2003, the Merced City Council began to require new developments to annex to the Community Facilities District (CFD)—Services. The Services CFD imposes an annual assessment on new homes and businesses to pay for their impacts on City services, including police and fire protection, parks maintenance, storm drainage, street trees, street lights, etc. The CFD replaces

the old maintenance districts that the City used for many years to address the above services (except police and fire).

3. COMMUNITY TRENDS AND NEEDS (Continued)

C. Projects, Phasing, and Costs

The projects and costs in this report are for those facilities intended for the use and benefit of a broad cross-section of the population. The PFFP mainly deals with needs generated by new growth, but some minor deficiencies in Merced's existing facilities, used by the present population, are included. Where applicable, projects are phased over three periods, i.e., 0-5 years, 6-10 years, and 11-20 years. Also, the costs of improvements within development projects which are customarily borne by developers are excluded. For example, local streets and sewer and water lines in a new residential neighborhood would be financed by developers.

More than \$306 million is needed in the next twenty years for these projects. This is a reduction from the over \$458 million calculated in 2005 in the current Public Facilities Impact Fee program, which represents a 33 percent reduction in overall project costs. This reduction is based on reduced construction costs in recent years, the completion of some projects, and the reduction in the scope of some projects (i.e. reduced number of miles to be built in the 20 year time frame for major arterials, etc.) The 1998 Public Facilities Financing Plan addressed over \$600 million in projects, but those included projects that did not involve Public Facilities Impact Fees (sewer, water, airport, etc.) which have been removed from this 2012 version.

The following sections and Appendix A-2 provide more detailed descriptions of the projects, phasing, and costs. In brief:

- over \$274 million is needed for transportation improvements, including highway improvements, bridges, major arterial roadways, grade-separated railroad crossings, and traffic signals (down from over \$369 million in 2005);
- over \$9 million is needed for fire protection improvements, primarily new stations (down from over \$16 million in 2005);
- over \$11 million is needed for police facilities (up from over \$9 million in 2005); and,
- over \$11 million is needed for parks and recreation, including new parks and bikeways (down from over \$26 million in 2005).

3. COMMUNITY TRENDS AND NEEDS (Continued)

C-1 Transportation

People and goods move around and through Merced on a network of streets and bikeways of various sizes, crossing bridges and railway underpasses, and regulated by traffic signals. This network comprises the City's transportation circulation system.

For the most part, today's circulation system operates satisfactorily, meeting the needs of the existing residents and handling current traffic volume. As the City grows, however, the larger population will require widening existing streets, building new roadways and bridges and installing new signals at intersections in order to keep traffic flowing. Failure to plan for and build transportation facilities will result in ever-increasing delays in travel, higher accident rates, increased air pollution, and ultimately, gridlock.

The Transportation component of the PFFP includes 21 projects, including 4 state highway projects, 8 major arterials, 1 railroad crossing, 4 bridges, and 4 special transportation projects. Background information regarding levels of service, phasing, the basis for project costs estimates, and the proportion of project costs covered by the Public Facilities Impact Fees (PFIF) can be



found in the *Public Facilities Impact Fees* Report in Section 7. Table 3-C-1 lists the 21 projects with cost estimates (in 2012 dollars) totaling over \$274 million, but only \$58 million is being funded by the Public Facilities Impact Fees with other costs being covered by grants, developer construction, and other sources (see the Funding Matrix in Section 4-B for details). Refer to Section 7-B for details about the Transportation portion of the Public Facilities Impact Fees.

The total \$274 million in transportation project costs is down from over \$369 million in 2005. This reduction reflects the completion of a number of projects (portions of the Campus Parkway, Parsons Avenue, and Gardner Road), a reduction in costs per mile for arterial streets, a reduction in the number of miles of arterial streets to be built within the 20-year time frame, a reduction in the number of bridges from 8 to 4, and the reduction in the number of traffic signals from 56 to 45.

Table 3-C-1—Transportation Projects

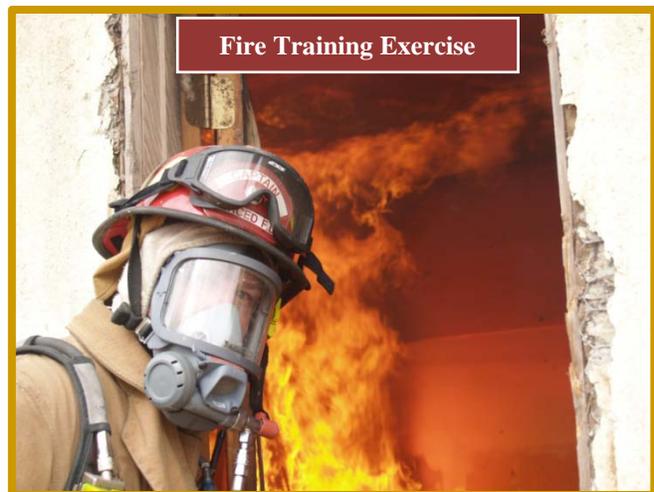
PROJECTS	2012 Cost Estimates
TRANSPORTATION	
<i>State Highways & Interchanges</i>	
13th & 14th Sts., 1-way couplet R to G	2,529,775
Existing Highway 59 Improvements:	
North 59 - 16th Street to Olive	40,000,000
North 59 - Olive to Yosemite Ave.	4,863,240
South 59 - Childs to Mission	10,000,000
STATE HIGHWAY SUB-TOTAL	\$57,393,015
<i>Major Arterials</i>	
Yosemite Avenue (59 to R & Gardner to Pkwy)	8,444,460
R Street (Yosemite to Cardella)	4,863,240
G Street (Yosemite to Bellevue)	4,863,240
Childs Avenue (Hwy 59 to Kibby)	18,038,520
Bellevue Road (M to Lake)	12,158,100
Cardella Road (R to Lake)	13,362,120
Gardner Road (Yosemite to Bellevue)	8,017,120
Mission Avenue (South Hwy 59 to Hwy 99)	12,158,100
ARTERIAL SUB-TOTAL	\$81,904,900
<i>Railroad Crossings</i>	
Santa Fe RR & R Street or Parsons Avenue	\$14,000,000
<i>Bridges</i>	
R Street/Fahrens Creek	1,264,000
Cardella/Fahrens Creek	1,608,000
G Street/Cottonwood Creek	1,376,000
Gardner/Cottonwood Creek	1,151,000
BRIDGE SUB-TOTAL	\$5,399,000
<i>Other Transportation Projects</i>	
Campus Parkway (Childs-Yosemite Ave)	87,600,000
Parsons Ave Corridor (Childs-Yosemite)	14,508,560
M Street Transitway	2,266,200
Traffic Signals	11,250,000
OTHER TRANSPORTATION PROJECTS SUB-TOTAL	\$115,624,760
TRANSPORTATION SUB-TOTAL	\$274,321,675

3. COMMUNITY TRENDS AND NEEDS (Continued)

C-2 Fire Facilities

The City of Merced Fire Department provides fire protection, rescue, and emergency medical services from five fire stations strategically located throughout the City. The Fire Department call volume continues to increase on an annual basis. Some of the increase is a result of a larger population base, others significant factors that affect the call volume are socioeconomic factors and access to services. In 2010, the Department responded to 6325 incidents: 6% of which were to fires and 57% were emergency medical or rescue incidents. The remaining 37% of incidents were comprised of good intent calls, false alarms, service calls, and other special types of incidents.

Fire stations are strategically located, fixed facilities that are developed to house personnel and equipment to provide the identified level of service to a specific geographic area or district. The Fire Department Facilities Master Plan is developed using the approach previously outlined and is used in the planning of stations to provide protection within a primary service area. The Department has a goal of maintaining a response time of four



to six minutes, 90 percent of the time (within the financial constraints of the City) for the first crew to arrive at a fire or medical emergency within an assigned district. This goal was chosen on the basis of proven factors affecting property damage and, more importantly, life.

As the City continues to grow in population and area, the fire protection system will need to evolve to meet this response time standard. This would require the potential relocation of existing facilities and the development of new stations with personnel and equipment to be added to the system.

The Fire component of the PFFP is composed of four projects with a cost of over \$9 million. The *Public Facilities Impact Fees* report in Section 7-C outlines existing facilities, projected needs, levels of service, and cost estimates for fire protection. Table 3-C-2 lists the 4 projects with cost estimates (in 2012 dollars) totaling over \$9 million, but only \$7.6 million is being funded by the Public Facilities Impact Fees with other costs being covered by grants, land sales, and other sources (see the Funding Matrix in Section 4-B for details).



The total \$9 million in fire protection project costs is down from over \$16 million in 2005. This reduction reflects the completion of one new fire station (Station 55 at Parsons and Silverado), the decision to remodel the Loughborough Station instead of relocating it, the reduction in the number of new stations from 6 to 4 in the 20-year time frame, and moving one station further north. This is based on an assessment done by the Fire Department in 2012 regarding response times by using new and more accurate GIS tools that can measure actual response time based on actual roadway routes, not just a general mile radius used for previous station planning.

Table 3-C-2—Fire Protection Projects

PROJECTS	2012 Cost Estimates
FIRE PROTECTION	
Station #53 (near Loughborough & M)	1,000,000
Station #54 (near Gerard & Coffee)	2,700,000
Station #56 (Merced College/Bellevue & M)	2,700,000
Station #57 (near Bellevue & Lake)	2,700,000
FIRE PROTECTION SUB-TOTAL	\$9,100,000

3. COMMUNITY TRENDS AND NEEDS (Continued)

C-3 Police Facilities

Police protection for the entire City is provided by the City of Merced Police Department. The Police Department employs a mixture of sworn officers, non-sworn officer positions (clerical, etc.), and unpaid volunteers (VIP's).

Criminal activity and calls for police service will increase due to population growth alone. By 2030, officer responses to incidents could increase from nearly 65,000 in 2009 to over 130,000 annually if current population trends hold true. Without adequate support people, equipment and facilities, the police force will not keep pace with growth. Should this situation occur, residents could be faced with slower response times to



incidents, crimes in progress, or medical emergencies; infrequent patrol of neighborhoods; elimination of officer responses to non-injury accidents and other non-essential services; increases in crime; and a myriad of other potentially dangerous consequences.

The Police component of the PFFP is composed of one project with a cost of over \$11 million, which could pay for one facility or multiple facilities depending on the need. The *Public Facilities Impact Fees* report in Section 7-D outlines existing facilities, projected needs, levels of service, and cost estimates for police facilities. Table 3-C-3 lists the 1 project with the cost estimate (in 2012 dollars) totaling over \$11 million, but only \$10.2 million is being funded by the Public Facilities Impact Fees with other costs being covered by grants and other sources (see the Funding Matrix in Section 4-B for details).

The total \$11 million in police protection project costs is an increase from over \$9 million in 2005. This increase reflects a more refined police project based on the Police Headquarters Needs Assessment (2008-2035) Report completed in 2010.

Table 3-C-3—Police Protection Projects

PROJECTS	2012 Cost Estimates
POLICE PROTECTION	
Police Facilities/Communications	\$11,400,000
POLICE PROTECTION SUB-TOTAL	\$11,400,000



3. COMMUNITY TRENDS AND NEEDS (Continued)

C-4 Parks, Recreation Facilities and Bikeways

Community and neighborhood parks, community recreation facilities, picnic areas, multi-use play courts, outdoor sports playing fields and off-street paved bikeways are key elements in Merced's unique livability. Without adequate funding for these facilities, the quality of life currently enjoyed by the community will be jeopardized as existing facilities become overcrowded and physical conditions deteriorate from overuse.



Frisbee Golf in Fahrens Park

The Parks and Recreation component of the PFFP includes five projects for a total of over \$11 million. Background information regarding levels of service, existing facilities, projected needs, and the basis for project costs estimates can be found in the *Public Facilities Impact Fees* report in Section 7-E for parks and bikeway facilities. Table 3-C-4 lists the five projects, which includes another youth center, another youth sports complex, bikeways, and community parks, with cost estimates (in 2012 dollars) totaling over \$11 million, but only \$7.4 million is being funded

by the Public Facilities Impact Fees with other costs being covered by grants, private donations, and Quimby Act park fees (see the Funding Matrix in Section 4-B for details).

The \$11 million in parks projects is down from over \$26 million in 2005. This reduction reflects the City’s significantly lower land costs and the City’s lower growth rate, thus slowing down the need for additional park land and reducing the number of bikeway miles, undercrossings, and bridges along with reductions in the number of projected youth centers and youth sports complexes from 2 to 1 each based on population growth.

Table 3-C-4—Parks and Recreation Projects

PROJECTS	2012 Cost Estimates
PARKS AND RECREATION	
Youth Center	\$2,900,000
Fahrens Park Development	\$1,025,000
Youth Sports Complex	\$1,000,000
Bikeways	\$2,035,000
Community Parks	\$4,600,000
PARKS AND RECREATION SUB-TOTAL	\$11,560,000



Joe Herb Park

4. FINANCING PLAN

A. *Revenue Sources--Options and Alternatives*

“Pay As You Go” vs. “Pay As You Use” Financing

Funding sources and financing techniques available to public entities generally fall into two categories--pay-as-you-go and long term debt. The first, pay-as-you-go, requires the City to pay for capital improvements directly from current revenues such as taxes, fees, assessments, user charges, interest earned, and public or private grants. This is the approach used to meet most ongoing costs. When used for capital improvements, current revenues may be accumulated in a special fund until a sufficient amount is available to proceed with the project.

In reality, project costs frequently far exceed the incoming flow of revenues, and the City must incur debt in order to complete construction or acquisition. Because long-term debt financing spreads the cost over time, it can be described as a pay-as-you-use approach. Payment is made from the City's ongoing (pay-as-you-go) revenue sources, but debt financing offers considerable flexibility and alternatives for structuring the debt and repayment schedule.

In planning for public facilities financing, the City must examine each capital project to determine the best means to pay for that particular improvement.

Prudent financial management combines funding sources and financing techniques to tailor a mix that meets the needs and circumstances of the City. A funding source that is appropriate for one project may be legally ineligible for another. Any combination of pay-as-you-go and debt financing should provide enough flexibility to allow the City to respond to changing economic and development conditions.



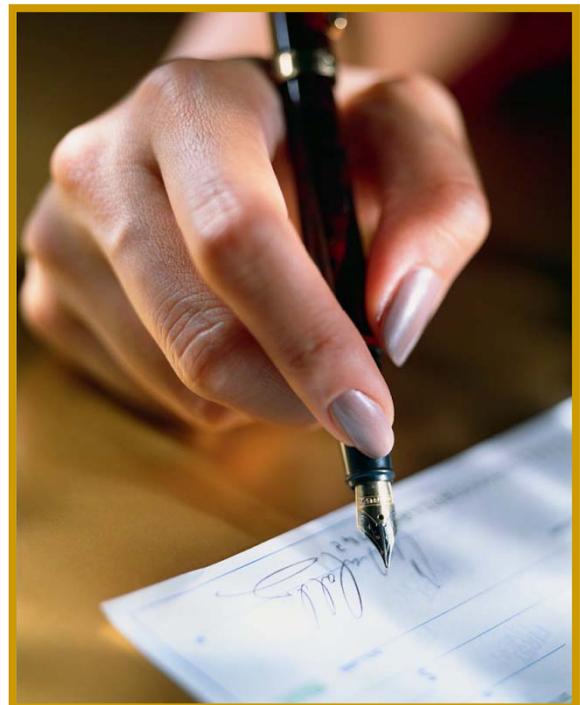
The benefits of pay-as-you-go approach are:

- Reduced interest--City funds not committed to interest payments are available for other uses.
- Increased flexibility--The City is better able to respond to unforeseen economic downturns and can avoid jeopardizing operating reserves.
- Greater debt capacity and improved borrowing terms--The ability to borrow in the future for larger scale projects is not tied up and the City may achieve higher ratings and lower interest rates.
- Increased fiscal responsibility--The impacts of major public improvement costs on the operating budget must be considered.

The drawbacks of the pay-as-you-go approach are:

- Insufficient funds--The City may not be able to afford to pay for needed project from current revenues.
- Inequity over time--Future beneficiaries of the improvement will not contribute to the cost.
- Uneven funding requirements--Actual capital construction costs do not follow the consistent pattern of debt service payments.

Examples of “pay as you go” funding sources include taxes, special assessments, special districts, user fees, grants, development impact fees, and reserves.



The advantages of debt (pay-as-you-use) financing are:

- Immediate benefit--The City can construct or acquire the capital improvement as soon as the financing is secured.
- Equity over time--Future beneficiaries of the improvement contribute to the cost.
- Repayment in cheaper dollars--Assuming an expanding economy, cost to taxpayers will be lower than with full payment at time of completion.
- Stable funding pattern--Swings in cash flow requirements are avoided.

The disadvantages of debt financing are:

- Interest cost--The total project cost is increased by the amount of interest paid.
- Encumbered future revenues--Potential revenues are not available for other purposes.
- Potential for excessive debt issuance--Heavy reliance on borrowing can have a negative effect on credit standing of bonds.

Examples of “pay as you use” revenue sources are general obligation bonds, revenue bonds, lease purchase, tax increment/tax allocation bonds, revolving loans, and public-private ventures.



Funding Sources Used in Public Facilities Financing Plan

The recommended funding mix described in Section 4-B contains elements from both funding techniques, and is organized in two basic categories of revenue sources--non-local government and local government.

Non-Local Government Financing Sources: This section describes sources of funds from any source which is **not** local government. These include federal and state grants, state projects, and other contributions.

In general, the approach taken in financing public facilities will be to maximize the use of these other resources before turning to local funding sources. To the extent possible, the City will seek out grants from other parties.

Federal & State Grants: Grants are essentially gifts of money from another public or private entity, usually for a specific purpose and accompanied by restrictions regarding use of funds. In some cases, grant programs require matching contributions from the grant recipient. Both the Federal and State governments offer various grants for infrastructure. Examples include the American Recovery and Reinvestment Act grants that the City used to complete transportation projects, such as 18th Street, Yosemite Avenue, and G Street. State grants primarily come in the areas of streets and roads, bicycle paths, and parks. Park grants are generally dependent upon state bond issues for parks.

The transportation-related grants are primarily through the Congestion Management Air Quality (CMAQ) program, which funds portions of projects which may improve air quality. Another source is the State-Local Transportation Partnership Program (SLTPP), which may fund a small share of qualifying capital projects. Both of these have been used in the past for various City projects.



Regional Improvement Plan Projects: Some of the transportation projects listed in the PFFP are on Caltrans-controlled highways, particularly Highway 59. These projects may actually be carried out by the State, with its own funding supplemented in some cases by local funding, generally through the Regional Transportation Improvement Plan (RTIP) program administered by the Merced County Association of Governments.

Regional Transportation Impact Fee (RTIF): A Regional Transportation Impact Fee was adopted in May 2005 to pay for regional transportation improvements, such as the Campus Parkway, freeway interchanges, etc. This fee program is administered by the Merced County Association of Governments and most cities in Merced County and the County adopted the fee.



Private Sources: There may be other private sources of contributions for projects, but these are difficult to predict. Some private foundations extend grants for certain kinds of projects, mostly for youth or sports-related projects. Occasionally, there may be some other contribution - such as the McCombs Fund that was used to partially fund the McCombs Youth Center. Under State law, the railroads must

contribute funds for separated-grade railroad crossings. These are considered private funds and were used for the G Street Railroad Crossing and will be used for any future crossings (i.e. R Street or Parsons Avenue).

Local Government Financing Sources: This section describes sources of funds controlled by local government.

Developer Construction/Dedication: The collector street standard (74-foot right-of-way) was used in the PFFP to determine developer responsibility for roadway projects, with impact fees supporting the costs to increase roadway width to meet arterial standards (with rights-of-way ranging from 94 to 128 feet). Developers are responsible for funding the “collector equivalent” portion of arterials, with the Impact Fees or other sources picking up the rest of the cost. Development agreements can also be negotiated on a project-by-project basis, with the developer constructing the public improvement and/or contributing in-lieu dedications or cash, depending on the negotiations. This can be a major source of funding for capital projects with significant benefit to particular new developments.

Park Fees: Under the Quimby Act, the City may charge fees to acquire land for park facilities in-lieu of developers dedicating park land within their developments. These fees are in place and generate funding which is allocated on the basis of several zones within the City. Fees are charged on a per unit basis and are only charged to residential development. Neighborhood parks are not included in the Public Facilities Impact Fees because the development of those parks is covered under the Park Fees. Community Parks and bikeways can also utilize Park Fees for a portion of their costs, but not enough revenue is available to pay for all of those facilities so PFIF funds are also used.

Sale of Assets: The City may choose to dispose of land or other assets to generate funds for capital projects. This has mainly been used for Fire Stations in the past, but can be used for any City-owned properties.

Public Facilities Impact Fees: Assembly Bill 1600 (AB 1600) permits local governments to adopt development impact fees for public facilities. Impact fees are one-time charges on new development to mitigate impacts of the development on public infrastructure and facilities. The local government instituting an impact fee must document the connection (nexus) between the new development and the need for the project, and demonstrate that new development is paying only its fair share for the impact it generates. The City of Merced adopted the Public Facilities Impact Fee program in 1998 and it has been utilized ever since to pay for various infrastructure projects. This comprehensive update of the PFFP will propose that the Impact Fee program be continued, but be modified as discussed in Section 7.

4. FINANCING PLAN (Continued)

B. Matrix and Recommended Funding Sources

The Funding Sources Matrix (Table 4-1) presented in this section is the recommended mix of funding for the projects included in the Public Facilities Financing Plan (PFFP). (Those projects are also illustrated in Figure 4-1.) The previous sections of the PFFP discussed the characteristics of the public improvements and of the funding alternatives. Where the need for a project is attributable in whole or in part to new development, all other available funding was considered before assigning project costs to Public Facilities Impact Fees. The following sections outline the rationale for funding recommendations for the major project categories.



Transportation - State Highways and Interchanges

In order to ensure consistency, the recommendation for these projects was determined in relation to other major plans including the Regional Transportation Plan (RTP) and the Regional Transportation Improvement Plan (RTIP).



Transportation - Major Arterials and Bridges

There are no existing deficiencies associated with either the Major Arterials or Bridges projects. However, City staff recommends that state or federal grants be pursued to cover at least 10 percent of the costs, based on the City's recent history of obtaining such grants for such projects as G Street, Yosemite Avenue, and Parsons Avenue. The remaining costs were divided

between Developer Construction/Dedication (using the collector standard for arterials) and the Public Facilities Impact Fees.

Transportation - Railroad Crossings

The cost of the separated-grade railroad crossing on R Street at the BNSF tracks is split between grants (almost 70 % of the total cost, based on the City's recent experience with the G Street crossing), impact fees, and private sources (the railroad is required by State law to fund a portion of such projects).



Based on need, the crossing on Parsons Avenue at the BNSF tracks may be substituted for the R Street project.



Transportation – Other Projects

Funding for the Campus Parkway is expected to come from Regional Transportation Impact Fees for the most part (over \$82 million), but \$5 million in Public Facilities Impact Fees are proposed. Funding for the Parsons Avenue project is expected to come from

grants, developer construction, and Public Facilities Impact Fees. Funding for the M Street Transitway is expected to come from grants (given its promotion of transit) and Public Facilities Impact Fees.

Transportation - Traffic Signals

35 percent of the project costs are anticipated to come from federal and/or state grants, based on past experience. Developer construction and impact fees are the other sources for other signal costs.



Fire Protection

Most of the project costs are growth related, and assigned to impact fees, offset by proceeds from sales of existing stations and grants (10% of project costs). Asset sales and grants will also cover costs associated with existing deficiencies.



Police Protection

All project costs are growth related and assigned to impact fees, except for 10 percent from grant funding.

Parks and Recreation

The funding mix for these projects reflects the intention to aggressively pursue public-private ventures, particularly for youth-related facilities. Similarly, federal and state funding will be sought for bikeways and community parks development. The PFFP states that park fees will pay for neighborhood parks through the existing Park Fees, so they are not included in the current or modified Public Facilities Impact Fees.



Applegate Park Train

Table 4-1—Public Facilities Financing Plan Funding Matrix (Projects, Costs, and Funding Sources) (2012)

PROJECT	2012 Cost Estimates	Non Local Government Sources				Local Government Sources/Fees			2012 Pub Fac Impact Fees
		Federal & State Grants	Regional Imprvmt Pgm	Regional Impact Fees	Private	Land Sales	Developer Construction/ Dedication	Park Fees	
TRANSPORTATION									
State Highways & Interchanges									
13th & 14th Sts., 1-way couplet R to G	2,529,775	2,474,775							55,000
Existing Highway 59 Improvements:									
North 59 -16th Street to Olive	40,000,000		35,000,000						5,000,000
North 59 - Olive to Yosemite Ave.	4,863,240	486,324					1,835,873		2,541,043
South 59 - Childs to Mission	10,000,000			7,000,000			1,336,000		1,664,000
STATE HIGHWAY SUB-TOTAL	57,393,015	2,961,099	35,000,000	7,000,000	0	0	3,171,873	0	\$9,260,043
Major Arterials									
Yosemite Avenue (59 to R & Gardner to Pkwy)	8,444,460	844,446					5,457,040		2,142,974
R Street (Yosemite to Cardella)	4,863,240	486,324					2,728,520		1,648,396
G Street (Yosemite to Bellevue)	4,863,240	486,324					2,728,520		1,648,396
Childs Avenue (Hwy 59 to Kibby)	18,038,520	1,803,852					12,278,340		3,956,328
Bellevue Road (M to Lake)	12,158,100	1,215,810					6,821,300		4,120,990
Cardella Road (R to Lake)	13,362,120	1,336,212					8,185,560		3,840,348
Gardner Road (Yosemite to Bellevue)	8,017,120	801,712					5,457,040		1,758,368
Mission Avenue (South Hwy 59 to Hwy 99)	12,158,100	1,215,810					6,821,300		4,120,990
ARTERIAL SUB-TOTAL	81,904,900	8,190,490	0	0	0	0	50,477,620	0	\$23,236,790
Railroad Crossings									
Santa Fe RR & R Street or Parsons Avenue	14,000,000	10,000,000			1,000,000				3,000,000
RAILROAD CROSSINGS SUB-TOTAL	14,000,000	10,000,000	0	0	1,000,000	0	0	0	\$3,000,000
Bridges									
R Street/Fahrens Creek	1,264,000	126,400							1,137,600
Cardella/Fahrens Creek	1,608,000	160,800							1,447,200
G Street/Cottonwood Creek	1,376,000	137,600							1,238,400
Gardner/Cottonwood Creek	1,151,000	115,100							1,035,900
BRIDGES SUB-TOTAL	5,399,000	539,900	0	0	0	0	0	0	\$4,859,100
Other Transportation Projects									
Campus Parkway (Childs-Yosemite Ave)	87,600,000			82,600,000					5,000,000
Parsons Ave Corridor (Childs-Yosemite)	14,508,560	3,627,140					2,728,520		8,152,900
M Street Transitway	2,266,200	1,000,000					0		1,266,200
Traffic Signals	11,250,000	4,000,000					3,796,875		3,453,125
OTHER TRANSP. SUB-TOTAL	115,624,760	8,627,140	0	82,600,000	0	0	6,525,395	0	\$17,872,225
TRANSPORTATION SUB-TOTAL	\$274,321,675	\$30,318,629	\$35,000,000	\$89,600,000	\$1,000,000	0	\$60,174,888	0	\$58,228,158



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Table 4-1—Public Facilities Financing Plan Funding Matrix (Projects, Costs, and Funding Sources) (2012)--Continued

PROJECT	2012 Cost Estimates	Non Local Government Sources				Local Government Sources/Fees			2012 Pub Fac Impact Fees
		Federal & State Grants	Regional Imprvmt Pgm	Regional Impact Fees	Private	Land Sales	Developer Construction/ Dedication	Park Fees	
FIRE FACILITIES									
Station #53 (near Loughborough & M)	1,000,000	100,000							900,000
Station #54 (near Gerard & Coffee)	2,700,000	270,000				150,000			2,280,000
Station #56 (Merced College/Bellevue & M)	2,700,000	270,000				220,000			2,210,000
Station #57 (near Bellevue & Lake)	2,700,000	270,000							2,280,000
FIRE FACILITIES SUB-TOTAL	\$9,100,000	910,000	0	0	0	370,000	0	0	7,670,000
POLICE FACILITIES									
Police Facilities	11,400,000	1,140,000							10,260,000
POLICE FACILITIES SUB-TOTAL	\$11,400,000	1,140,000	0	0	0	0	0	0	10,260,000
PARKS, RECREATION & BIKEWAYS									
Youth Center	2,900,000	1,000,000			400,000				1,500,000
Fahrens Park Development	1,025,000	256,250							768,750
Youth Sports Complex	1,000,000	250,000			250,000			100,000	400,000
Bikeways	2,035,000	508,750						203,500	1,322,750
Community Parks & Open Space	4,600,000	1,150,000							3,450,000
PARKS, REC. & BIKEWAYS SUB-TOTAL	\$11,580,000	3,165,000	0	0	650,000	0	0	303,500	7,441,500
TRANSPORTATION SUB-TOTAL (From Page 1)	\$274,321,675	\$30,318,629	\$35,000,000	\$89,600,000	\$1,000,000	0	\$60,174,888	0	\$58,228,158
TOTAL—ALL PROJECTS	\$306,381,675	35,533,629	35,000,000	89,600,000	\$1,650,000	\$370,000	\$60,174,888	\$303,500	\$83,599,658

COMPARISON WITH 2005 COSTS

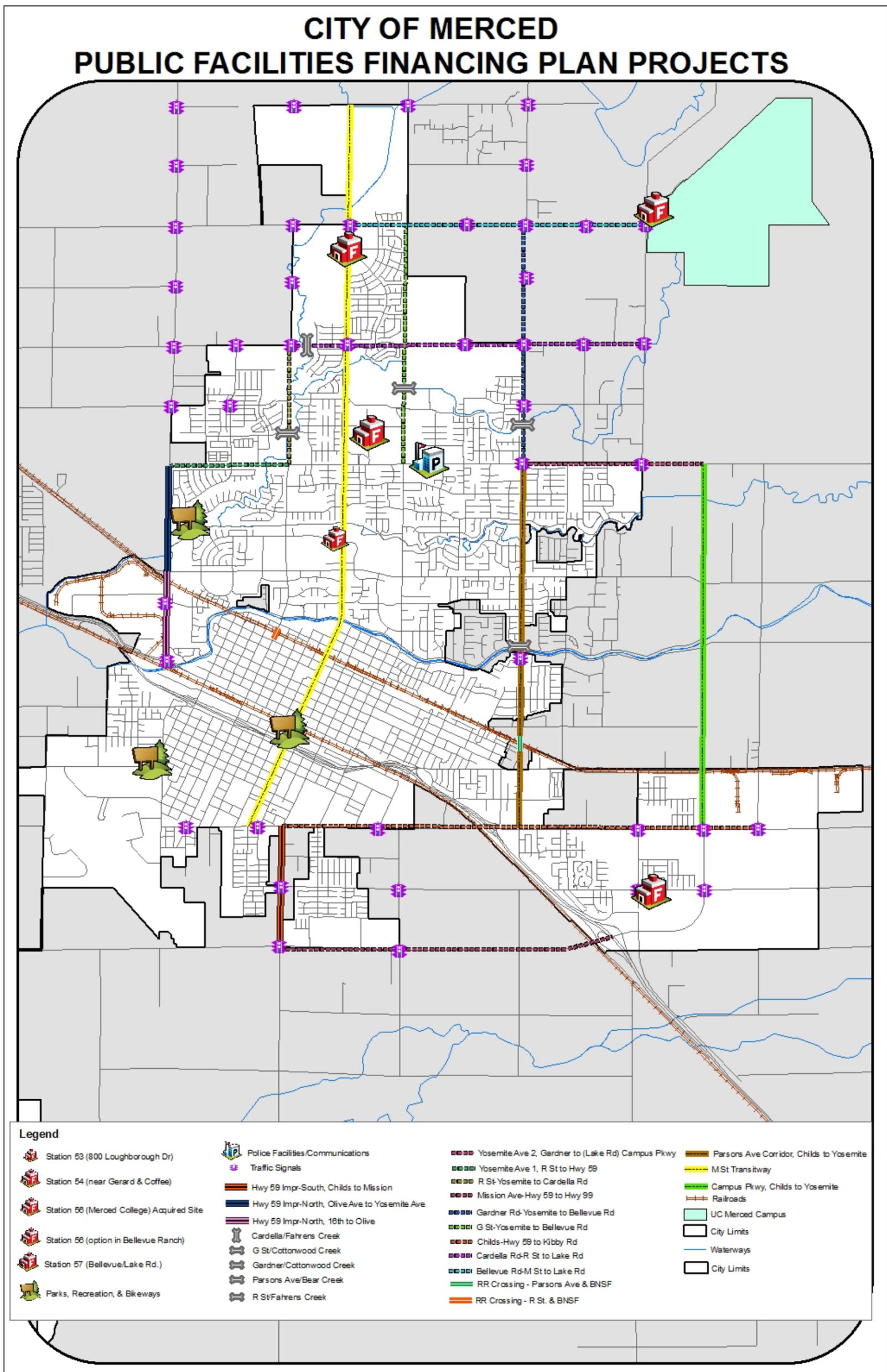
In 2005, the TOTAL PROJECT COSTS were \$458,216,597. In 2012, the TOTAL PROJECT COSTS have been reduced by \$151,834,922 or 33.14%.

In 2005, the PUBLIC FACILITIES IMPACT FEE COSTS were \$167,188,924. In 2012, the PUBLIC FACILITIES IMPACT FEE COSTS have been reduced by \$83,589,266 or 50.00%



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Figure 4-1—Public Facilities Financing Plan Projects





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5. IMPLEMENTATION

A. *Actions Needed*

1. *Revisions to Public Facilities Impact Fee Program*

A new fee schedule is proposed for the Public Facilities Impact Fees (PFIF), as recommended by the PFIF Task Force and City staff in 2012. This new fee schedule can be seen at Table 7-F-1 in Section 7-F of this report. Because of the significant overall reductions in the fee schedule (all categories are proposed to be reduced 55 to 57 percent), the Task Force and staff are recommending that the special fee schedule for the Infill Zone (added in 2009) be eliminated. The Task Force and staff are also recommending that the temporary fee reduction, adopted in 2010, for a limited number of single-family homes that meet certain eligibility requirements (owner-occupied and within one of the City's Communities Facilities Districts) be eliminated. These changes will be forwarded to the City Council for consideration in the form of an ordinance and public hearings will be held to receive public input on the changes.

2. *Revisions to Public Facilities Impact Fee Administrative Policy*

After the 1998 adoption of the Public Facilities Impact Fees, the City adopted the Public Facilities Impact Fee Administrative Policy and Procedure (Admin Policy A-32). The Policy spells out specific guidelines for charging, collecting, accounting, reporting, and expending public facilities impact fee revenues, land use definitions for all land use categories, appeals, credits and reimbursement policies, a fee deferral program for non-residential uses, and other requisite details surrounding fee implementation. Along with modifications to the Public



Facilities Impact Fee program itself, changes to the Administrative Policy will also be proposed and will be adopted by resolution. The prevailing considerations will continue to be compliance with Government Code 66000 et seq. and recommendations from the PFIF Task Force and staff described in Section 7.

The proposed changes to the Administrative Policy recommended by the PFI Task Force include revised definitions to correspond to the reduced number of land use categories from 9 to 7 (“High Turnover Retail” uses are now included in the previously-named “Low Turnover Retail” which is now known as “Retail Less Than 50,000 Square Feet” and the “Light” and “Heavy Industrial” categories have been merged into one “Industrial” category. The current Policy allows an exemption from fees for projects that are demolished or destroyed if they are reconstructed within two years. Because of the difficult economic times, the Task Force and City staff feel that the time period should be extended to five years. No changes are proposed to the credit and reimbursement policies or to the deferral program. See Appendix A-3 for the revised Administrative Policy.

B. Policies

1. Keep Fees and Rates Updated

It is imperative that all funding mechanisms called for in the PFFP are kept current. Development projections and cash flow projections will be reviewed regularly to assure fees and rates will continue to produce funds at levels adequate to permit capital improvements to proceed. (See also Section 6-B, Annual Fee Reviews.)



2. Seek Grants and Other Funding Resources

The City will actively research and pursue alternative funding sources for improvements included in the PFFP, including grants and public-private ventures. In the event that new resources are secured in sufficient amounts to permit a realignment or reduction in other funding sources, including impact fees, the PFFP will be revised accordingly.

6. KEEPING THE PLAN CURRENT

A. Annual Budget -- Five-Year Capital Improvement Program

Annual reviews of the PFFP will be coordinated with the City's annual budget formulation, review and adoption process. Actions needed to implement the PFFP will be incorporated into the organization's objectives for the coming year. The Five-Year Capital Improvement Program (CIP) is a component of the annual budget, and projects phased for the first five of the twenty-year plan horizon will be incorporated in the CIP, which is also reviewed by the Planning Commission for General Plan consistency.

B. Annual Fee Reviews

The City of Merced Public Facilities Impact Fee (PFIF) Program will be reviewed and updated annually in January, with Council action, if any, needed to revise the program to be scheduled as soon as possible after completion of the review. All interested and affected parties will be asked to participate in the updates.



C. Comprehensive Updates Every Five Years

The City of Merced Public Facilities Financing Plan and Impact Fee program should be comprehensively updated at least every 5 years. This comprehensive update should include reviews of growth projections, cost estimates, and collection rates to make sure that the City is able to collect enough funds to construct the needed improvements. Completed projects should be removed and new projects added if necessary. With this Update in 2012, the next comprehensive update would be completed around 2017.



Downtown Merced

7. PUBLIC FACILITIES IMPACT FEE REPORT

A. *Overview of the City of Merced Public Facilities Impact Fees*

1. BACKGROUND -- WHY IMPACT FEES?

The City of Merced, with the assistance of the Public Facilities Impact Fee Task Force, developed a comprehensive public facilities financing plan for public improvements that will be required through 2030. The objective was to ensure that adequate public facilities will be available to meet the projected needs of the City as it grows and to further ensure that the facilities planned are consistent with the recently adopted General Plan. It is clear that a variety of financing mechanisms will be needed to generate the funds necessary to accomplish the required improvements.



The City's General Funds are not sufficient to provide money to construct capital improvements outside the enterprise activities, particularly in the present economic climate. In order for the community to continue to receive services that support its current quality of life, the City must identify not only the means to provide the services, but also the means to pay for them.

In the past, local governments benefited from state and federal grants to pay for public improvements to serve new development. The City of Merced has actively pursued all funding opportunities, and will continue to do so. Impact fees are mechanisms available to local governments to help recoup the proportionate share of public facilities costs resulting from, and of benefit to, new development. Development fees and similar charges for services or benefits are typically seen as being within local control and are assignable to specific purposes-- in this case, to provide the infrastructure capacity to serve new development. Because they will be reviewed annually, development fees can be reduced if other funding sources become available to fund capital projects.

In 1998, the City of Merced adopted the Public Facilities Impact Fee program as one means to assist in paying for infrastructure needs. Identifying other funding sources as alternatives to impact fees can reduce the amount to be generated. The City will continue to pursue all available opportunities to obtain state and federal grant funding. Proceeds from disposition of public property have been projected as an offsetting funding source for fire protection facilities to reduce the amounts included in impact fee calculations. The Public Facilities Financing Plan Funding Matrix in Section 4-B identifies all the various funding sources for infrastructure projects, including grants, land sales, developer construction, impact fees, and others.

The projected public improvements included in the 2012 version of the Public Facilities Impact Fees are summarized in Table 7-A-1, which also includes total project cost estimates and the amount funded by Public Facilities Impact Fees. More detail on all projects can be found in Appendix A-2.



Aerial View of Merced Looking North

Table 7-A-1—Public Facilities Impact Fee Projects

PROJECTS	Cost Estimates	Pub Fac Impact Fees
TRANSPORTATION		
<i>State Highways & Interchanges</i>		
13th & 14th Sts., 1-way couplet R to G	2,529,775	55,000
Existing Highway 59 Improvements:		
North 59 - 16th Street to Olive	40,000,000	5,000,000
North 59 - Olive to Yosemite Ave.	4,863,240	2,541,043
South 59 - Childs to Mission	10,000,000	1,664,000
STATE HIGHWAY SUB-TOTAL	\$57,393,015	\$9,260,043
<i>Major Arterials</i>		
Yosemite Avenue (59 to R & Gardner to Pkwy)	8,444,460	2,142,974
R Street (Yosemite to Cardella)	4,863,240	1,648,396
G Street (Yosemite to Bellevue)	4,863,240	1,648,396
Childs Avenue (Hwy 59 to Kibby)	18,038,520	3,956,328
Bellevue Road (M to Lake)	12,158,100	4,120,990
Cardella Road (R to Lake)	13,362,120	3,840,348
Gardner Road (Yosemite to Bellevue)	8,017,120	1,758,368
Mission Avenue (South Hwy 59 to Hwy 99)	12,158,100	4,120,990
ARTERIAL SUB-TOTAL	\$81,904,900	23,236,790
<i>Railroad Crossings</i>		
Santa Fe RR & R Street or Parsons Avenue	\$14,000,000	3,000,000
<i>Bridges</i>		
R Street/Fahrens Creek	1,264,000	1,137,600
Cardella/Fahrens Creek	1,608,000	1,447,200
G Street/Cottonwood Creek	1,376,000	1,238,400
Gardner/Cottonwood Creek	1,151,000	1,035,900
BRIDGE SUB-TOTAL	\$5,399,000	4,859,100
<i>Other Transportation Projects</i>		
Campus Parkway (Childs-Yosemite Ave)	87,600,000	5,000,000
Parsons Ave Corridor (Childs-Yosemite)	14,508,560	8,152,900
M Street Transitway	2,266,200	1,266,200
Traffic Signals	11,250,000	3,453,125
OTHER TRANS. PROJECTS SUB-TOTAL	\$115,624,760	17,872,225
TRANSPORTATION SUB-TOTAL	\$274,321,675	\$58,228,158
FIRE PROTECTION		
Station #53 (near Loughborough & M)	1,000,000	900,000
Station #54 (near Gerard & Coffee)	2,700,000	2,280,000
Station #56 (Merced College/Bellevue & M)	2,700,000	2,210,000
Station #57 (near Bellevue & Lake)	2,700,000	2,280,000
FIRE PROTECTION SUB-TOTAL	\$9,100,000	\$7,670,000

Table 7-A-1—Public Facilities Impact Fee Projects (Cont.)

PROJECTS	Cost Estimates	Pub Fac Impact Fees
POLICE PROTECTION		
Police Facilities/Communications	\$11,400,000	10,620,000
POLICE PROTECTION SUB-TOTAL	\$11,400,000	\$10,260,000
PARKS AND RECREATION		
Youth Center	\$2,900,000	1,500,000
Fahrens Park Development	\$1,025,000	768,750
Youth Sports Complex	\$1,000,000	400,000
Bikeways	\$2,035,000	1,322,750
Community Parks	\$4,600,000	3,450,000
PARKS AND RECREATION SUB-TOTAL	\$11,560,000	\$7,441,500
PROJECT TOTAL	\$306,381,675	\$83,599,658

2. UNDERLYING PRINCIPLES AND ASSUMPTIONS

The impact fee program is based upon a number of principles and assumptions, and it is helpful to review these before considering the details of the fee calculations. There may be other specific assumptions that apply to a particular category of public improvements, and these are discussed in the appropriate section of this report.

1. *The development impact fee program described in this report is based on the 20-year time period through 2030 and the area of concern is the General Plan Specific Urban Development Plan (SUDP)/Sphere of Influence (SOI) Area (Figure 2-1).*

Both the study period and the SUDP/SOI are consistent with the *Merced Vision 2030 General Plan* (adopted in January 2012). Facility needs are based on projected development and associated population increase during the 20-year period from 2010 to 2030. It is recognized that the 2030 date may not represent complete build-out of the General Plan SUDP/SOI Area. Projects included represent the public improvements which should be in place at the end of the study period, even if the General Plan area is not completely built out.

2. Development impact fees levied by the City of Merced will meet all requirements of Assembly Bill 1600 (Government Code Section 66000 et seq).

Assembly Bill 1600 (Government Code Section 66000 et seq--see Appendix A-4) sets forth very specific and strict requirements for validating the basis for development impact fees. Stated briefly, the fee proposal must demonstrate the connection ("nexus") between the need for new or expanded public facilities, the use of the proposed fee and the type of development on which the fee is imposed. Only those projects for which that nexus can be made are included in



the fee program. Further, the City must demonstrate that there is a reasonable relationship between the amount of the fee charged to development and the share of the public facilities costs attributed to the development. This second type of nexus assures that the costs associated with the new or expanded public facilities are fairly and proportionately distributed to the new development.

The City must demonstrate that proposed fees have been developed and are supported in a manner consistent with all applicable legal requirements. Specific findings related to the nexus provisions are contained in Section 7-A-3.

AB 1600 also imposes regulations regarding fee administration, commitment, accounting, and reporting of funds collected, which are addressed in the detailed fee implementation and administration procedures (Appendix A-3).

3. Projected needs for new and expanded public facilities are based on level of service standards.

The concept of level of service is crucial in arriving at fair and equitable development impact fees. Level of service (LOS) standards describe target conditions for type, quality and/or quantity of service to be provided. LOS standards may be established by federal or state regulation, municipal ordinance, adopted General Plan and other policies, approved budgets, or community preference as supported by City Council actions.

Standards for the level of service for each category of public facilities determine the quantity of public improvements that will be needed to accommodate new growth. Standards are best expressed in terms that can be related to development. In this way, impacts of new development on facilities can be more readily quantified. If, for instance, the standard level of service for parks facilities is expressed as 5 acres per 1,000 population (as it is in Merced), and if a residential development is projected to generate 2,000 new residents, those new units should pay for the cost of 10 new acres of park land required to meet the demand generated.

New growth cannot be required to pay for raising or upgrading the entire community's standard for a service or facility. Staying with the parks example, if a higher standard, say 5.5 acres per 1,000 residents, is adopted, new growth can be assessed the cost of attaining that standard for every 1,000 new residents generated. However, new development cannot be assessed the cost of raising the existing community up to the higher standard. Any improvements required to bring existing facilities up to standard, but not necessitated by new growth, may not be included in fee calculations. Below-standard facilities are referred to as "existing deficiencies." Existing deficiencies are excluded from the impact fee calculations in this report.



Table 7-A-2 summarizes the LOS standards used for different public improvement categories in arriving at the revised Public Facilities Impact Fees. Current LOS standards and existing deficiencies, if any, are discussed in detail in the public improvement category sections later in this section. In all cases, it has been assumed that current organizational and service delivery systems will remain essentially constant, without any major consolidation or realignment of City functions. Raising LOS above currently acceptable standards is not proposed for any category of improvement at this time.

In the Public Facilities Financing Plan process, the impact of projected growth on a service category's target LOS and the associated increased demand for services are used directly to calculate the quantity and phasing for each planned capital project. Therefore, there is a direct relationship between the projected growth, the target for LOS, and the size and cost of each capital project that will be constructed.

Table 7-A-2—Level of Service (LOS)

PROJECT CATEGORY	LEVEL OF SERVICE
TRANSPORTATION	
State Highways & Interchanges	LOS D Minimum, Peak Hour
Major Arterials	LOS D Minimum, Peak Hour
Railroad Crossings	LOS D Minimum, Peak Hour (PUC requires all new crossings to be grade-separated)
Bridges	LOS D Minimum, Peak Hour
Campus Parkway	LOS D Minimum, Peak Hour
Parsons Avenue	LOS D Minimum, Peak Hour
M Street Transitway	LOS D Minimum, Peak Hour
Traffic Signals	1 Signal Per 1,250 Population
FIRE PROTECTION	
Fire Stations (All Locations)	4-6 Minute Response Time, At Least 90 Percent of the Time
POLICE PROTECTION	
Police Protection	1.37 Sworn Officers Per 1,000 Population
PARKS & RECREATION	
Youth Center	1 Center Per 75,000 Population
Fahrens Park Development	5 Acres Per 1,000 Population (3.5 Acres of Community Parks)
Youth Sports Complex	1 Complex Per 75,000 Population
Bikeways	1 Mile Bikepath per 5 Miles of Streets & Class I Bikeways Along All Natural Waterways
Community Parks	5 Acres Per 1,000 Population (3.5 Acres of Community Parks)

- 4. The public facilities required to meet Merced's desired levels of service must be constructed in a timely manner and financed in a manner that equitably divides financial responsibility in proportion to the demands placed on new facilities. Public Facilities Impact Fees will be levied so that the costs of the additional burden caused by new development are paid by new development, and not by the existing community. Conversely, new development will not pay for correcting existing deficiencies or raising the entire community's standard for level of service.*

Different land uses generate different levels of demand for services or facilities. For instance, the added burden placed on street capacity by 1,000 square feet of new retail space is different from the burden created by a like amount of industrial space and very different from that created by an apartment. Consequently, fees charged to these different land uses also differ. It is necessary to demonstrate a reasonable relationship (nexus) between the demand generated by each land use and the fee to be charged.



Merced Lofts

Fairly proportioning the costs of public improvements among the different types of new development is a key element in calculating impact fees for different categories of infrastructure, from a legal, an ethical, and an economical standpoint. To calculate proportionality, a determination must be made of the physical quantities of facilities that each category of new development will demand, and the demand must be expressed in units that are equivalent across land uses.

A widely accepted definition of a common unit of measurement is the dwelling unit equivalent (DUE). Dwelling unit equivalency is a technique for converting land uses into a unit measure of equivalent numbers of people. It uses the single family dwelling (SFD) as the baseline unit, assigning it an index value of one. The demand for public facilities generated by other land uses is then expressed relative to the demand generated by one additional SFD. To arrive at DUEs for non-residential land uses the forecasted employment in each land use category is converted into a projection of building space. A dwelling unit equivalent is then calculated for each use based on the amount of square footage of building space that generates the same number of people (employees) as one SFD household.

Table 7-A-3 illustrates the coverage ratios that were used in converting non-residential land uses to DUEs. These coverage ratios were selected using comparable ratios from other Valley cities and statistics from commercial and industrial developments in Merced.

Table 7-A-3—Assumptions for Dwelling Unit Equivalents

TYPE OF DEVELOPMENT	RESIDENTS PER DWELLING	SQUARE FEET PER EMPLOYEE
RESIDENTIAL		
Single-Family	3.20	N/A
Multi-Family	2.80	N/A
NON-RESIDENTIAL		
Retail Commercial	N/A	400
Office	N/A	350
Industrial	N/A	900

Conversion to dwelling unit equivalents establishes service parity between residential DUEs and non-residential DUEs. A fee schedule based on DUEs indicates the relative responsibility to pay for improvements for each land use category in relation to the SFD category.

DUE factors differ for various categories of capital facilities. Transportation, water, sewer, public safety and parks each has its own basis for estimating demand. Using DUEs allows the demand for each land use category to be indexed against that of the single family dwelling. A DUE factor of 2.0 for arterial streets stated in terms of peak hour trips means that the land use generates two times the level of demand resulting from a single family dwelling. Non-residential DUEs for some categories of improvements may be adjusted to reflect the fact that people do not use the facility or service to the same degree when they are at work as when they are at home.

Using DUEs to proportion the costs of new or expanded public improvements among land uses creates a direct relationship between each category of land use and the cost of the improvements.

Table 7-A-4 summarizes the DUEs for residential, commercial, office and industrial land uses for each of the public facility categories to be included in the proposed fee.

Table 7-A-4—Dwelling Unit Equivalents (DUE's)

TYPE OF DEVELOPMENT	Roadways, Bridges, & RR Crossings	Traffic Signals	Police & Fire	Parks, Recreation, & Bikeways
RESIDENTIAL				
(Unit = Dwelling Unit)				
SINGLE-FAMILY	1.00	1.00	1.00	1.00
MULTI-FAMILY	0.58	0.88	0.88	0.88
NON-RESIDENTIAL				
(Unit = 1,000 Sq. Ft)				
INSTITUTIONAL	0.65	0.89	0.89	0.32
RETAIL COMMERCIAL				
Less Than 50,000 S.F.	2.78	0.78	0.78	0.28
More Than 50,000 S.F.	2.01	0.78	0.78	0.28
OFFICE	1.66	0.89	0.89	0.32
INDUSTRIAL	0.43	0.35	0.35	0.12

5. *Development impact fees will be levied on both residential and non-residential development in proportion to the demand for services generated by each.*

Public facilities and services are available and accessible to both residents and employees. Therefore, the principle of equity calls for both residential and non-residential development to pay for that portion of the additional burden it places on public facilities and capacity, and the consequent need for new or expanded infrastructure. In those instances where demand for services generated by an employee has been determined to be less than that of a resident, adjustments are made to reflect the relative differences. Further adjustments can be made as the need arises during the annual review and update.

6. *A review of the projects and fees will be conducted annually.*

AB 1600 calls for annual review of fees. This exercise will also permit the City to re-examine assumptions, emerging development trends, population and employment projections, cost estimates, inflation factors, and alternative funding sources.

7. *Fees are expressed in current year dollars.*

An inflation factor is not built into the fee schedule. Inflation assumptions are often wrong for any given year and, if the fee schedule remains unchanged, the error will multiply. To address this issue, the Public Facilities Impact Fee rates are adjusted each January 1st to reflect the current cost of construction, based on the Construction Cost Index of the Engineering News Record. Changes in costs or scope of the project, beyond these annual adjustments, will be dealt with as part of the annual review of the PFFP.

8. *The City of Merced Public Facilities Impact Fee program is the focus of the comprehensive Public Facilities Financing Plan.*

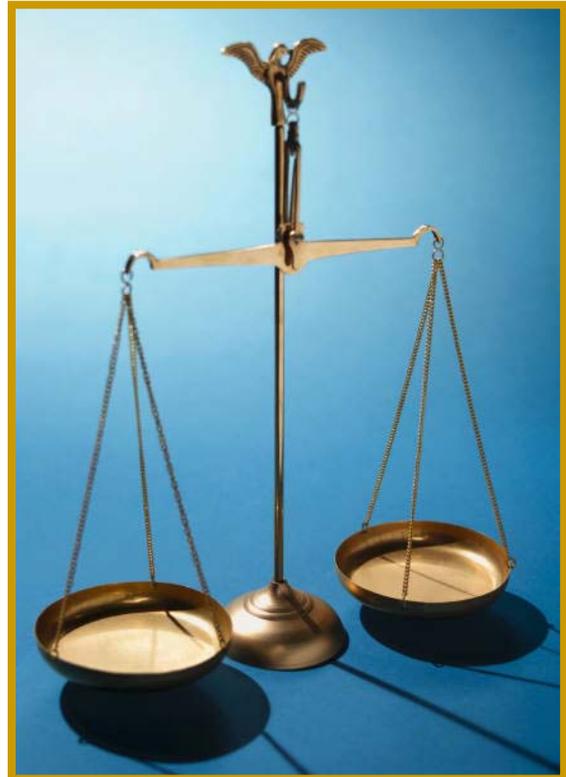
The Public Facilities Impact Fee program is the focus of the updated Public Facilities Financing Plan. Unlike the 1998 version, the updated PFFP only contains those projects which receive funding from the Public Facilities Impact Fees (PFIF), which means that sewer, water, drainage/flooding, airport, and other projects were removed from the 2012 version. Section 4-B contains a matrix of all of the projects and funding sources considered by the Task Force. Most projects are not funded entirely by impact fees, but other sources such as grants, developer construction, etc., are also used and are outlined in the Matrix. If, during the course of the City's on-going capital planning and budgeting process, an alternative or complementary mechanism becomes a more appropriate or desirable means of financing a project or projects than an impact fee, the annual review permits adjustments to be made in a timely manner.



3. NEXUS FINDINGS

The City, when establishing, increasing, or imposing an impact fee, must demonstrate it has met five requirements contained in Government Code Sec. 66001:

- A. The purpose of the City of Merced Public Facilities Impact Fees is to provide for adequate funding for public improvements that are consistent with and will implement the General Plan.
- B. Revenues generated from the fee will be used to design, acquire, construct, and/or equip public facilities to implement the General Plan and its component elements. Fee proceeds will also be used to administer the fee program and to conduct annual updates.
- C. Conversion of projected demand for new facilities generated by each land use to quantities of new facilities required and subsequent assignment of prorated costs back to land uses demonstrates the relationship between use of the fee and type of development.
- D. Projections of need for new or expanded public facilities are based on the level to which each type of land use/development will use the improvements. Therefore, there is a direct relationship between the need for facilities and the land uses on which the fee will be levied.
- E. The relationship between the amount of the fee and the cost of the improvements attributed to development is the apportionment of project costs to each specific land use relative to the share of demand for new facilities generated by that land use. Therefore, there is a reasonable relationship between the cost of the required improvements and the amount of the fee assigned to each land use.



4. PROJECTS AND PROJECT COSTS

The projects and implementation phasing contained in this report have been identified in conjunction with major planning efforts, including the *Merced Vision 2030 General Plan*. Projects proposed for public facilities impact fee funding are summarized in Table 7-A-1. Appendix A-2 contains more detailed data sheets on individual projects, including service standards, costs, and phasing. Cost estimates for the public improvements projects included here were compiled by the City Engineer, staff from relevant departments and agencies, such as Caltrans, Merced County, Merced County Association of Governments and others. Sources of cost estimates included recent similar experience (construction bids, contracts, etc.), replacement costs of existing facilities, professional expertise, accepted industry standards, and appraised land values. Additional detail regarding specific project cost calculations appears in the relevant public facilities category sections and in Appendix A-2.



Merced—Tree City USA
(80,000 Publicly-Owned Trees)

5. GROWTH PROJECTIONS

Projected growth in the study area is based on employment and population projections consistent with the updated General Plan and regional projections adopted by the governing body of the Merced County Association of Governments (MCAG). See Section 3-A for details.

Table 7-A-5 shows growth projections in 5-year increments through 2030. The growth forecast was used to estimate capacity required to accommodate growth and the associated cost estimates for public improvements. Therefore, there is a direct relationship between the forecast of development, the forecast of facilities required, and the forecast of costs and financing required.

**Table 7-A-5—General Plan SUDP/SOI Projected Growth
(2010-2030)**

GROWTH FACTOR	2010	2015	2020	2025	2030	TOTAL INCREASE
RESIDENTIAL (Dwelling Units)						
SINGLE-FAMILY	15,128	16,985	19,973	22,609	25,505	10,376
MULTI-FAMILY	7,793	8,750	10,289	11,647	13,139	5,346
NON-RESIDENTIAL (Employees)						
INSTITUTIONAL	N.A.	N.A.	N.A.	N.A.	N.A.	304
RETAIL COMMERCIAL	7,500	8,250	9,000	9,750	10,500	3,000
LESS THAN 50,000 SF	5,000	5,500	6,000	6,500	7,000	2,000
MORE THAN 50,000 SF	2,500	2,750	3,000	3,250	3,500	1,000
OFFICE	7,500	8,142	8,785	9,427	10,070	2,570
INDUSTRIAL	10,000	10,777	11,554	12,333	13,111	3,111
TOTAL EMPLOYEES	25,000	27,169	29,339	31,510	33,681	8,681
POPULATION	81,500	91,500	107,600	121,800	137,400	55,900

6. PROCESS TO CALCULATE THE PUBLIC FACILITIES IMPACT FEE

The following steps briefly describe the basic process followed to calculate the City of Merced Public Facilities Impact Fees:

- a) Define the level of service for each public facility.

The concept of level of service is discussed in the Assumptions section (Chapter 2). Level of service standards for specific public improvement categories are delineated in the relevant section later in the report and summarized in Table 7-A-2.

- b) Project the land uses to be served during the period for which the fee is proposed.

Table 7-A-5 projects growth by type of development. Table 7-A-6 contains calculations for units of growth used to apportion fees.

Table 7-A-6—Calculation of Units of Growth by Land Use

GROWTH FACTOR	Employees Added	Avg Sq. Ft./ Employee	Sq. Ft. of Bldg Added	Total Units of Growth
RESIDENTIAL (Unit = Dwelling Unit)				
SINGLE-FAMILY	N.A.	N.A.	N.A.	10,376
MULTI-FAMILY	N.A.	N.A.	N.A.	5,346
NON-RESIDENTIAL (Unit = 1,000 Sq. Ft)				
INSTITUTIONAL	N.A.	N.A.	304,000	304
RETAIL COMMERCIAL				
Less than 50,000 SF	2,000	400	800,000	800
More than 50,000 SF	1,000	400	400,000	400
OFFICE	2,570	350	899,500	900
INDUSTRIAL	3,111	900	2,799,900	2,800

- c) Identify the public facilities that will be needed to accommodate projected growth at the desired level of service.

The projects included have been identified in conjunction with the *Merced Vision 2030 General Plan*. Table 7-A-1 summarizes the projects and project costs.

- d) Identify costs of the public facilities.

Project costs are summarized in Table 7-A-1 and discussed in the relevant public improvement category sections later in the report.

- e) Identify existing deficiencies, if any, and apportion projected costs accordingly.

Existing deficiencies for particular public facilities categories are discussed in the relevant public improvement category sections.

- f) Establish a fee schedule based on a common unit of measurement.



The concept of dwelling unit equivalents is discussed in the Assumptions chapter and the DUEs and resulting fee levels for specific land uses and improvement categories are discussed in the relevant public facilities sections. The resulting Public Facilities Impact Fee schedule is recapped in Section 7-F-1.

In the following sections of the report, capital improvements proposed for development impact fee funding are discussed by major project categories. Each project category section begins with a description of existing facilities and the level of service standard used to project new and expanded facilities to meet the needs of new growth. Next, facilities needs through 2030 are projected and areas where existing facilities do not meet the level of service standard (existing deficiencies), if any, are described. Project costs for future facilities are set forth for each project category. Finally, each category closes with a discussion of the basis for spreading costs to units of new growth and the methodology for calculating public facilities impact fees.

7. PUBLIC FACILITIES IMPACT FEE REPORT (Cont.)

B. Proposed Capital Improvements by Public Facilities Category --Transportation

1) EXISTING SERVICES AND FACILITIES

The City of Merced is served by a network of arterial, collector, local and rural streets, along with three major regional routes-- Highway 99, State Route 59 and State Route 140. City and regional streets and highways are classified by categories that reflect their importance and function. Freeways are the highest level of roadway, with fully controlled access, high operating speeds and volumes, and highest design standards. Local streets and alleys are the lowest functional classification, with low speeds and volumes and direct access to adjacent property.



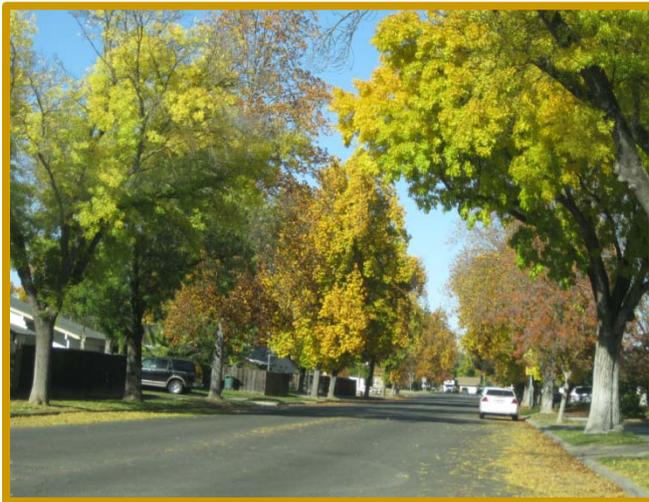
Streets that fall under the jurisdiction of the City of Merced are classified as one of seven types of roadways by the City's Circulation Element of the General Plan. Official roadway design requirements are found in the City of Merced's Standard Designs of Common Engineering Structures.



Other facilities contributing to the transportation network include traffic signals, railway crossings, bridges, and traffic signals. Pedestrian/bikeways constitute an important component of the City's circulation system and are discussed in the Parks, Recreation and Bikeways section of this report (Section 7-E).

2) LEVEL OF SERVICE STANDARDS

Merced's existing and planned circulation system is based on the City's core grid of arterial streets extended to the north and south. Arterial streets are spaced approximately one mile apart in newly developing areas, and one-half to one mile in older established areas. Collectors and local streets provide access to adjacent uses. Regional bus transit service is available throughout the community. The City also contains a number of existing bikeways and pedestrian ways.



Roadways, Bridges, & Grade-separated Railroad Crossings

The standard by which performance of the circulation system is measured is level of service (LOS) ranking as defined by the Highway Capacity Manual or such other national standards deemed appropriate by the City. LOS ranks street operations based on the amount of traffic and the quality of traffic movement on a scale of A through F, with LOS A being free-flow conditions and

LOS F basically being gridlock. Intermediate classifications are based on speed, travel time, freedom to maneuver, traffic interruptions, comfort, convenience and safety.

Levels of service can be described quantitatively for a given roadway segment or intersection by using a ratio of traffic volume to the capacity of the roadway or intersection. Level of service at a particular point obviously varies by type of road--freeway, arterial, collector, etc.--as well as by time of day. The busiest single hour in a day is called the peak hour. The peak hour most commonly used in traffic analysis is the evening rush hour. Planning focuses on peak hour trips and peak hour LOS, as this is the occasion of greatest potential congestion.



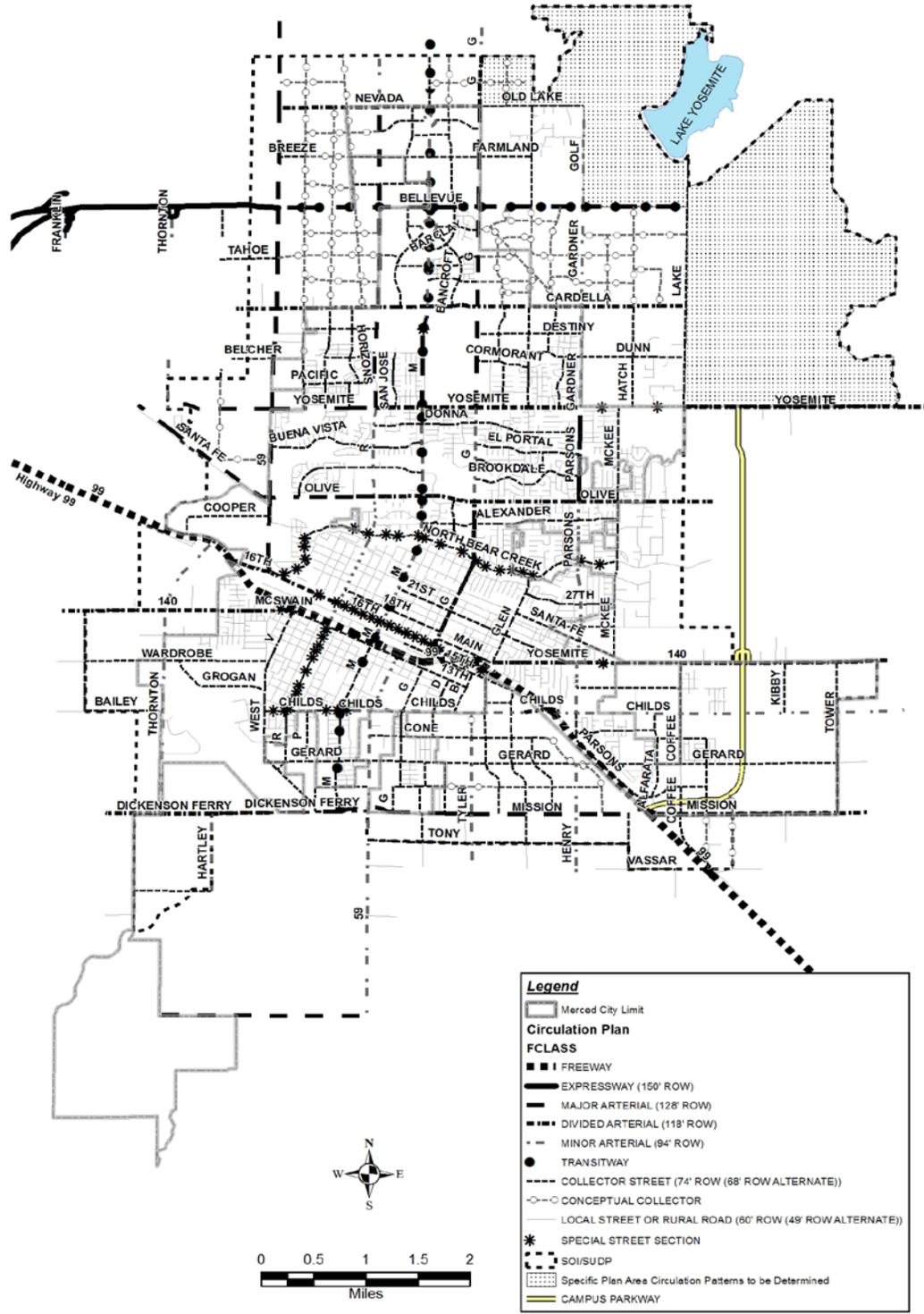
Per the *Merced Vision 2030 General Plan* Circulation Element, the preferred LOS levels are typically “C” and “D,” particularly for larger roads and major intersections. With LOS C the road provides stable operation but is still underutilized to some degree. LOS D represents a balance between the relatively large number of vehicles served and the generally acceptable level of service provided. It is the intent of the City’s standards and policies for new and upgraded intersections and road segments to be designed and built to function at LOS D (“tolerable delay”), at least, during peak traffic periods. Maintaining a Level of Service D at existing intersections is not always feasible, appropriate, or necessary, however. People may expect and tolerate varying levels of congestion depending on location (e.g. central Merced) and time of day. Heavier traffic can also be a reason to encourage greater pedestrian activity and heavier transit use in such areas. Other factors may make higher levels of service infeasible. In central Merced, for example, widening existing streets could create great disruption to stable, older neighborhoods. In these areas, “significant delays” (LOS E) or even LOS F may have to be acceptable at peak hours.



Traffic Signals

The City's standard for traffic signals calls for signal installation at the ratio of one signal per 1,250 population, or as warranted by the State Traffic Manual. The current fee reflects this population-based standard.

Figure 7-B-1--City of Merced Circulation Map



3) PROJECTED FACILITIES NEEDS AND ADEQUACY FINDINGS

Roadways, Bridges, & Grade-separated Railroad Crossings

Projected needs for state highways and interchanges, major arterials, bridges and grade-separated railroad crossings were identified drawing on a number of studies including the General Plan Circulation Element and the Regional Transportation Plan (RTP). Per the *Merced Vision 2030 General Plan Final Environmental Impact Report* (July 2011), the existing City street system functions at an acceptable LOS, except for the following segments—a) North Highway 59 (16th to Yosemite); b) R Street (Childs to Highway 99); c) G Street (Childs to Hwy 99); d) Parsons Avenue (Highway 140 to Bear Creek); and, e) Childs Avenue (Hwy 99 to Parsons). Of the above roadway segments, only North Highway 59, Parsons Avenue, and Childs Avenue are included in the proposed Public Facilities Impact Fees, so other funding sources are proposed to pay for those portions of the project which have “existing deficiencies” and cannot be funded by impact fees. Those funding sources include Federal & State grants, Regional Transportation Improvement Program (RTIP), Regional Transportation Impact Fees (RTIF), and developer construction/dedication.



With regard to grade-separated railroad crossings, in addition to the level of service described above, the California Public Utility Commission has mandated that all new railroad crossings be grade-separated.

Figure 7-B-1 shows the City’s General Plan Circulation Map, which shows the roadway projects that are included in the Public Facilities Impact Fees along with existing and future roadways to serve the entire Merced SUDP/SOI at build-out.

Traffic Signals

The projected 2030 study area population calls for 110 traffic signals. At present, 65 signals are installed in the City, leaving a need for 45 new signals. Public Facilities Impact Fees are proposed as one of the major sources of funding for the new signals needed to accommodate future development. There are no existing deficiencies identified for signals, but if so, those signals shall be funded by grants or other funding sources besides impact fees.

4) PROJECT COSTS

Cost estimates for the transportation projects included here were compiled by the City Engineer and staff from relevant departments and agencies. Sources of cost estimates included recent similar experience (construction bids, contracts, etc.), replacement costs of existing facilities, professional expertise, accepted industry standards and appraised land values.



Project costs for major arterials and bridges were determined by the City Engineer based on width of right of way, length, and structural cross-section specifications, updated in 2012. In addition to construction, project costs include right of way, storm drainage, design, testing, inspection, administration and contingency. Major arterial project costs do not include water and sewer lines installed adjacent to

or below the roadway. In general, Major Arterials (128' ROW) cost \$4.8 million per mile, Divided Arterials (118' ROW) \$4.4 million per mile, Minor Arterials (94' ROW) \$4 million per mile, and Collectors (74' ROW) \$2.7 million per mile. Developers are responsible for the "collector equivalent" portion of Arterials with the impact fees and other sources picking up the rest of the cost since those impacts can be attributed to the Citywide system.

Traffic signal costs are estimated at an average of \$250,000 per signal, based on recent City of Merced experience. Actual costs will vary based on the size of the intersection. Right of way for signals is not included because it is calculated as part of the estimated cost of arterial streets. The costs are designed to cover 100 percent of the cost of arterial/arterial intersections and only 50 percent of arterial/collector intersections. The adjacent properties are responsible for the other half of the cost of those arterial/collector signals.



Table 7-B-1 recaps the total project costs for transportation projects which are proposed to be funded in whole or in part with development impact fees. Appendix A-2 contains more detailed project data sheets for all transportation projects.

Table 7-B-1—Transportation Projects

PROJECTS	Cost Estimates	Pub Fac Impact Fees
TRANSPORTATION		
<i>State Highways & Interchanges</i>		
13th & 14th Sts., 1-way couplet R to G	2,529,775	55,000
Existing Highway 59 Improvements:		
North 59 - 16th Street to Olive	40,000,000	5,000,000
North 59 - Olive to Yosemite Ave.	4,863,240	2,541,043
South 59 - Childs to Mission	10,000,000	1,664,000
STATE HIGHWAY SUB-TOTAL	\$57,393,015	\$9,260,043
<i>Major Arterials</i>		
Yosemite Avenue (59 to R & Gardner to Pkwy)	8,444,460	2,142,974
R Street (Yosemite to Cardella)	4,863,240	1,648,396
G Street (Yosemite to Bellevue)	4,863,240	1,648,396
Childs Avenue (Hwy 59 to Kibby)	18,038,520	3,956,328
Bellevue Road (M to Lake)	12,158,100	4,120,990
Cardella Road (R to Lake)	13,362,120	3,840,348
Gardner Road (Yosemite to Bellevue)	8,017,120	1,758,368
Mission Avenue (South Hwy 59 to Hwy 99)	12,158,100	4,120,990
ARTERIAL SUB-TOTAL	\$81,904,900	23,236,790
<i>Railroad Crossings</i>		
Santa Fe RR & R Street or Parsons Avenue	\$14,000,000	3,000,000
<i>Bridges</i>		
R Street/Fahrens Creek	1,264,000	1,137,600
Cardella/Fahrens Creek	1,608,000	1,447,200
G Street/Cottonwood Creek	1,376,000	1,238,400
Gardner/Cottonwood Creek	1,151,000	1,035,900
BRIDGE SUB-TOTAL	\$5,399,000	4,859,100
<i>Other Transportation Projects</i>		
Campus Parkway (Childs-Yosemite Ave)	87,600,000	5,000,000
Parsons Ave Corridor (Childs-Yosemite)	14,508,560	8,152,900
M Street Transitway	2,266,200	1,266,200
Traffic Signals	11,250,000	3,453,125
OTHER TRANS. PROJECTS SUB-TOTAL	\$115,624,760	17,872,225
TRANSPORTATION SUB-TOTAL	\$274,321,675	\$58,228,158

5) DWELLING UNIT EQUIVALENTS AND PEAK HOUR TRIPS

AB 1600 requires that a reasonable relationship (nexus) is demonstrated between the demand for transportation facilities generated by each category of land use and the fee to be charged to



that land use. In the case of residential development, the basis for measuring the amount of demand generated is a dwelling unit. For non-residential development the basis is 1,000 square feet of building space. To demonstrate the required nexus, demand must be expressed in units that are equivalent across all land use categories. This is done by converting land uses to Dwelling Unit Equivalents (DUEs). The unit selected as the

benchmark or norm for equivalence is the single family dwelling (SFD), and it is assigned a DUE value of 1.00. The demand generated by other land use categories is calculated relative to the demand generated by a single family dwelling.

Roadways, Bridges, & Grade-separated Railroad Crossings

A Dwelling Unit Equivalent (DUE) value for each land use is calculated from the number of peak hour trips (PHTs) generated by the land use. As noted under the level of service (LOS) discussion, LOS varies by time of day. The busiest single hour in a day is called the peak hour. The peak hour most commonly used in traffic analysis is the evening rush hour. Planning focuses on peak hour trips and peak hour LOS, as this is when there is greatest potential for congestion.



Recommended transportation improvement projects were identified based on a peak hour LOS D standard. Therefore, it is reasonable that the impact fee should be allocated in proportion to peak hour trip generation. Typical peak hour trip rates are based on published data in Trip Generation (Institute of Transportation Engineers).

As with the City's existing program of Public Facilities Impact Fees, two adjustments were made in peak hour trip generation—one for retail uses and one for industrial uses as follows. Retail/commercial trips are often interrupted (stop-on-the-way) or diverted (a short distance out-of-the-way) trips. In other words, a commercial stop is often a part of a trip made primarily for some other purpose than shopping, e.g., home-to-work. PHT generation rates for commercial land uses were adjusted downward using a "pass-by" factor of 40 percent as recommended in Trip Generation (Institute of Transportation Engineers).



A second adjustment was made to trips generated by industrial land uses. Over one-third of the persons employed by existing major industrial employers in the City reside outside the City. As such, the trips generated by these employees are primarily to the job site destination, with lower impact on transportation facilities than that generated by full-time resident employees. The peak hour trip/dwelling unit equivalent factor for industrial uses was, therefore, adjusted downward by 35 percent.



The adjusted number of peak hour trips generated by each land use can be expressed as a ratio of trips generated by one single family dwelling (SFD). This ratio is the DUE factor for the land use. Table 7-B-2 shows the adjusted PHT generation rates converted to DUE factors for projected land uses.

**Table 7-B-2--Peak Hour Trips (PHT) and Dwelling Unit Equivalents (DUE) Factors
(Roadways, Bridges, & Railroad Crossings)**

LAND USE	Adjusted* PHT's Generated	DUE Factor (SFD = 1.00)
RESIDENTIAL (Unit = Dwelling Unit)		
SINGLE-FAMILY	1.01	1.00
MULTI-FAMILY	0.59	0.58
NON-RESIDENTIAL (Unit = 1,000 Sq. Ft)		
INSTITUTIONAL	0.66	0.65
RETAIL COMMERCIAL		
Less Than 50,000 S.F.	2.81	2.78
More Than 50,000 S.F.	2.03	2.01
OFFICE	1.67	1.66
INDUSTRIAL	0.43	0.43

*Adjustments made for pass-by trips in non-residential categories and in commuter trips in industrial categories

Traffic Signals

The DUE factors for traffic signals are calculated based on the number of persons associated with each land use unit. The SFD is the base and a DUE of 1 reflects an average of 3.2 persons per SFD. DUEs for non-residential land uses are based on number of employees per 1,000 square feet of building space. The non-residential DUE counterpart is the number of square feet necessary to generate 3.2 persons (employees). Table 7-B-3 illustrates how the DUE factors are determined for traffic signals.



**Table 7-B-3—Calculation of Dwelling Unit Equivalent (DUE's)
(Traffic Signals)**

LAND USE	Persons/DU or SF/ Employee	# Persons Per 1 SFD	Equiv. DU's or Sq Ft	Unit of Measure	DUE Factor
RESIDENTIAL (Unit = Dwelling Unit)					
SINGLE-FAMILY	3.2	3.2	1.00	DU	1.00
MULTI-FAMILY	2.8	3/2	0.88	DU	0.88
NON-RESIDENTIAL (Unit = 1,000 Sq. Ft)					
INSTITUTIONAL	350	3.2	1,120	1,000 SF	0.89
RETAIL COMMERCIAL	400	3.2	1,280	1,000 SF	0.78
OFFICE	350	3.2	1,120	1,000 SF	0.89
INDUSTRIAL	900	3.2	2,880	1,000 SF	0.35

6) CALCULATION OF FEES

Roadways, Bridges, & Grade-separated Railroad Crossings

The dwelling unit/trip generation approach measures the relative impacts of each type of development and permits equitable allocation of costs without extensive and costly technical analysis every time a project is submitted or modified.



Table 7-B-4 indicates the number of dwelling unit equivalents (DUEs) generated by growth in each land use category and calculates each category's percentage share of total additional DUEs generated.

***Table 7-B-4—Share of DUE's Generated by Land Use Category
(Roadways, Bridges, & Railroad Crossings)***

LAND USE	DUE Factor	Units of Growth	DUE's Added	Share of DUE's Added
RESIDENTIAL (Unit = Dwelling Unit)				
SINGLE-FAMILY	1.00	10,376	10,376	53.4%
MULTI-FAMILY	0.58	5,346	3,117	16.0%
NON-RESIDENTIAL (Unit = 1,000 Sq. Ft)				
INSTITUTIONAL	0.66	304	201	1.0%
RETAIL COMMERCIAL				
Less Than 50,000 S.F.	2.81	800	2,248	11.6%
More Than 50,000 S.F.	2.03	400	811	4.2%
OFFICE	1.66	900	1,490	7.7%
INDUSTRIAL	0.43	2,800	1,203	6.2%
TOTAL			19,445	100.0%

In Table 7-B-5 this percentage is applied to the project costs for roadways, bridges, and railroad crossings to be supported by development impact fees. Finally, each land use category's share of costs is allocated by units of growth (dwelling unit or 1,000 square feet of building space).

**Table 7-B-5—Public Facilities Impact Fee Calculation
(Roadways, Bridges, & Railroad Crossings)**

PROJECT COSTS TO BE FUNDED BY IMPACT FEES: \$54,775,033

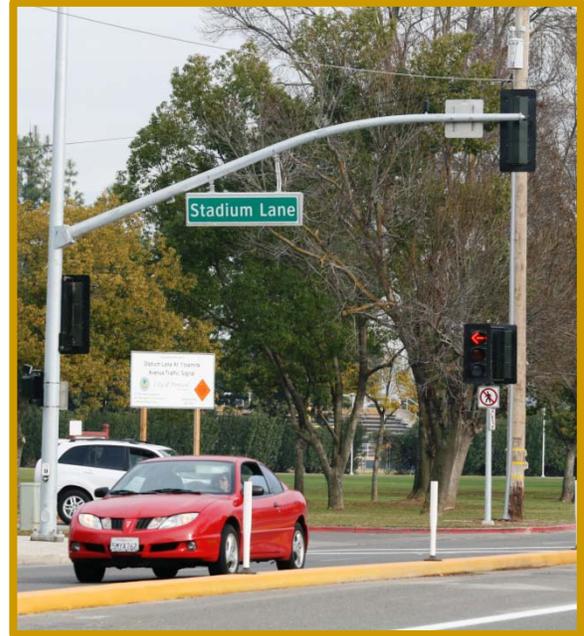
LAND USE	Share of DUE's Added	Share of Project Cost	Units of Growth	Cost Per Unit of Growth
RESIDENTIAL (Unit = Dwelling Unit)				
SINGLE-FAMILY	53.4%	\$29,227,836	10,376	\$2,817
MULTI-FAMILY	16.0%	\$8,779,606	5,346	\$1,642
NON-RESIDENTIAL (Unit = 1,000 Sq. Ft)				
INSTITUTIONAL	1.0%	\$565,177	304	\$1,859
RETAIL COMMERCIAL				
Less Than 50,000 S.F.	11.6%	\$6,331,976	800	\$7,915
More Than 50,000 S.F.	4.2%	\$2,285,044	400	\$5,713
OFFICE	7.7%	\$4,197,323	900	\$4,666
INDUSTRIAL	6.2%	\$3,388,071	2,800	\$1,210
TOTAL	100.0%	\$54,775,033	20,925	



Traffic Signals

The dwelling unit generation approach measures the relative impacts of each type of development and permits equitable allocation of costs without extensive and costly technical analysis every time a project is submitted or modified.

Table 7-B-6 indicates the number of dwelling unit equivalents (DUEs) generated by growth in each land use category and calculates each category's percentage share of total additional DUEs generated.



***Table 7-B-6—DUE's Generated by Land Use Category
(Traffic Signals)***

LAND USE	DUE Factor	Units of Growth	DUE's Added	Share of DUE's Added
RESIDENTIAL (Unit = Dwelling Unit)				
SINGLE-FAMILY	1.00	10,376	10,376	57.5%
MULTI-FAMILY	0.88	5,346	4,678	25.9%
NON-RESIDENTIAL (Unit = 1,000 Sq. Ft)				
INSTITUTIONAL	0.89	304	271	1.5%
RETAIL COMMERCIAL	0.78	1,200	938	5.2%
OFFICE	0.89	900	803	4.5%
INDUSTRIAL	0.35	2,800	972	5.4%
TOTAL				

In Table 7-B-7, the percentage shares from the preceding table are applied to the project costs for traffic signals that will be funded by public facilities impact fees. Finally, each land use category's share of costs is allocated by units of growth (dwelling unit or 1,000 square feet of building space).

**Table 7-B-7—Public Facilities Impact Fee Calculation
(Traffic Signals)**

PROJECT COSTS TO BE FUNDED BY IMPACT FEES: \$3,453,125

LAND USE	Share of DUE's Added	Share of Project Cost	Units of Growth	Cost Per Unit of Growth
RESIDENTIAL (Unit = Dwelling Unit)				
SINGLE-FAMILY	57.5%	\$1,986,342	10,376	\$191
MULTI-FAMILY	25.9%	\$895,491	5,346	\$168
NON-RESIDENTIAL (Unit = 1,000 Sq. Ft)				
INSTITUTIONAL	1.5%	\$51,961	304	\$171
RETAIL COMMERCIAL	5.2%	\$179,471	1,200	\$150
OFFICE	4.5%	\$153,747	900	\$171
INDUSTRIAL	5.4%	\$186,112	2,800	\$66
TOTAL	100.0%	\$3,453,125		





7. PUBLIC FACILITIES IMPACT FEE REPORT (Cont.)

C. Proposed Capital Improvements by Public Facilities Category —Fire Protection

1) EXISTING SERVICES AND FACILITIES

The City of Merced Fire Department provides fire protection, rescue, and emergency medical services from five fire stations strategically located throughout the City. The Department's Headquarters (Station 51) is located near the intersection of East 16th and G Streets. Station 52 is located at Merced Regional Airport on Falcon Way; Station 53 is on Loughborough Drive adjacent to the Merced Mall; Station 54 is on East 21st Street; and Station 55 is at the intersection of Parsons and Silverado within Carpenter Park.



The Fire Department call volume continues to increase on an annual basis. Some of the increase is a result of a larger population base, other significant factors that affect the call volume are socioeconomic factors and access to services. In 2010, the Department responded to 6325 incidents: 6% of which were to fires and 57% were emergency medical or rescue incidents. The remaining 37% of incidents were comprised of good intent calls, false alarms, service calls, and

other special types of incidents.

Fire Department personnel are typically assigned to a three-shift work schedule, which provides the City coverage 24 hours a day, seven days a week. The Department equipment includes engine companies (water, hose, and pump), and ladder companies (ladders, rescue tools, and rescue equipment), aircraft rescue firefighting (ARFF) vehicle, medium rescue trailer, mass decontamination trailer, personnel rehabilitation unit, and other support vehicles.

2) LEVEL OF SERVICE STANDARDS



The City of Merced's level of service (LOS) standard for fire protection is defined in terms of response time. Response time is defined as the amount of time it takes from the receipt of the alarm by the dispatch center until fire units are on the scene. Fire stations are strategically located, fixed facilities that are developed to house personnel and equipment to provide the identified level of service to a specific geographic area or district.

The Fire Department Facilities Master Plan is developed using the approach previously outlined and is used in the planning of stations to provide protection within a primary service area. Subject to the resource constraints of the City, fire stations should be located so that no development within the City is located outside the primary response time objectives (4 to 6 minutes, at least 90 percent of the time) for at least one fire station. This goal was chosen on the basis of proven factors affecting property damage and, more importantly, life.

As the City continues to grow in population and area, the fire protection system will need to evolve to meet this response time standard. This would require the potential relocation of existing facilities and the development of new stations with personnel and equipment to be added to the system.

The Department is regularly evaluated and rated by the Insurance Services Office Organization (ISO). The ISO utilizes the Fire Protection Rating System (FPRS) to assess the Department and to provide a final score. The score defines the level of fire protection services on a scale of 1 to 10; with 1 representing the best level of protection and 10 indicating no protection at all. The Department's current rating is Class 2, which is considered to be well above average. The Class 2 rating is used to determine the fire insurance premiums for businesses and residences within the City.



3) PROJECTED FACILITIES NEEDS AND ADEQUACY FINDINGS

To maintain the 4-6 minute response standard within the General Plan SUDP/SOI area, the City will need a total of seven fire stations by the year 2030. There are currently five stations in operation, two new stations will be built, one existing station (Station 53 on Loughborough) will be remodeled, and one existing station (Station 54 on East 21st Street) will be relocated to the Gerard/Coffee area and replaced. Besides reducing the total number of new or relocated stations from seven to four, proposed changes from the 1998 PFFP include: a) new Station 56, which was to be built on a site the City acquired at Merced College, will likely be moved north to the Bellevue/M Street area to better serve the growth areas; and, b) Station 57 will shift east to the Bellevue/Lake area. (Station 55 on Parsons Avenue was constructed with the use of Public Facilities Impact Fee funds in 2006.) For Stations 54 and 56, proceeds from the disposition of the properties will be used to offset costs of new construction. While existing fire apparatus will be relocated to new facilities whenever possible, additional new equipment will be required to provide services. Locations of projected fire facilities are shown on Figure 7-C-1. Further details on new fire facilities are provided on the project data sheets in Appendix A-2.

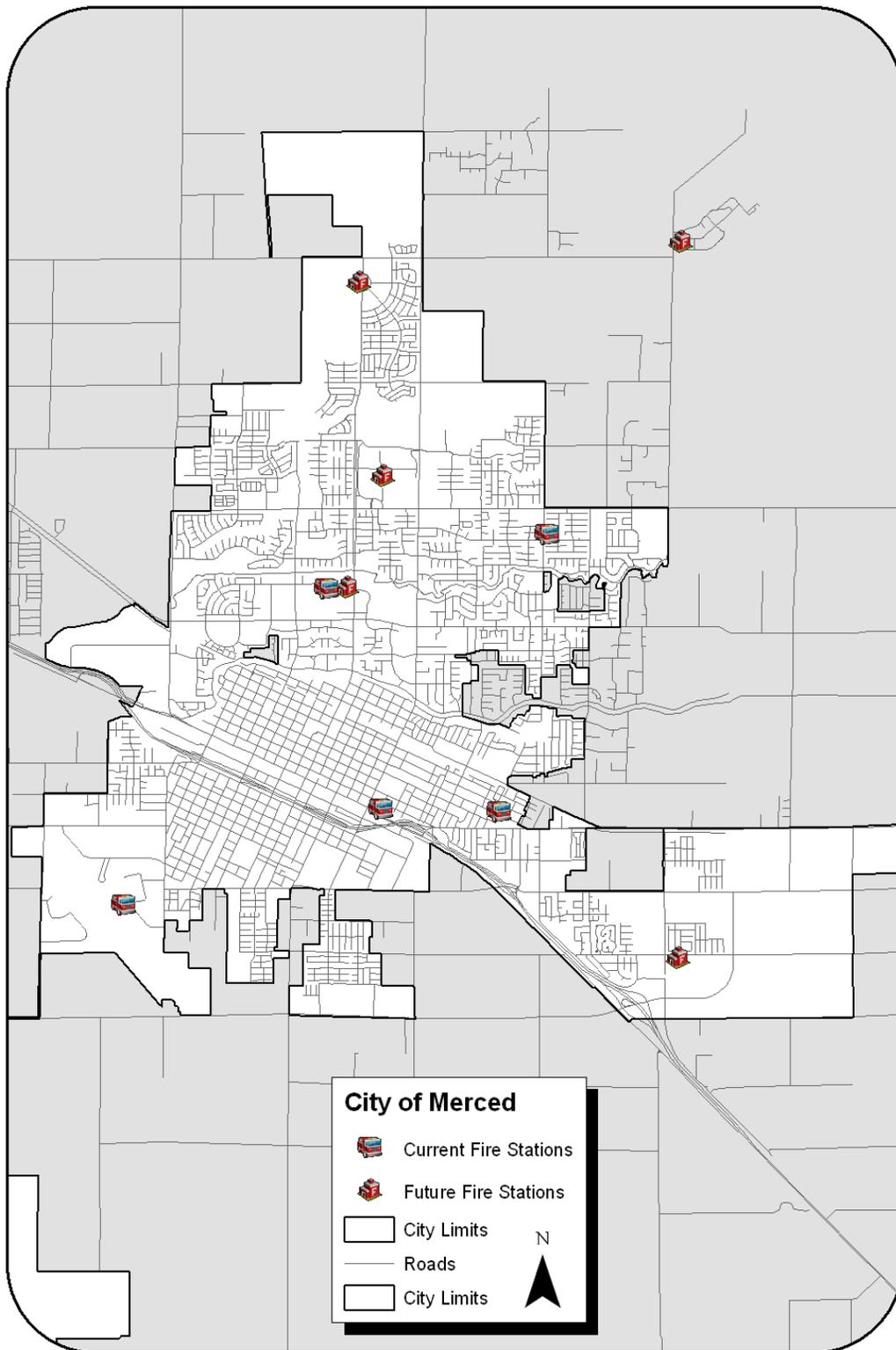
4) PROJECT COSTS

The costs for acquisition and construction of fire facilities are summarized in Table 7-C-1 with details in Appendix A-2. Costs were calculated by City staff based on recent City experience with the construction of Station 55. Equipment costs are included only where it will be necessary to acquire new equipment. To the maximum extent possible, equipment will be relocated from stations being discontinued. Before the fee is calculated, project costs are reduced by anticipated proceeds from the sale of existing facilities and grants.

Table 7-C-1—Public Facilities Impact Fee Projects--Fire

PROJECTS	Cost Estimates	Pub Fac Impact Fees
FIRE PROTECTION		
Station #53 (near Loughborough & M)	1,000,000	900,000
Station #54 (near Gerard & Coffee)	2,700,000	2,280,000
Station #56 (Merced College/Bellevue & M)	2,700,000	2,210,000
Station #57 (near Bellevue & Lake)	2,700,000	2,280,000
FIRE PROTECTION SUB-TOTAL	\$9,100,000	\$7,670,000

Figure 7-C-1--City of Merced Fire Stations (Current & Future)



5) DWELLING UNIT EQUIVALENTS

AB 1600 requires that a reasonable relationship (nexus) is demonstrated between the demand for fire facilities generated by each category of land use and the fee to be charged to that land use. In the case of residential development, the basis for measuring the amount of demand generated is a dwelling unit. For non-residential development, the basis is 1,000 square feet of building space. To demonstrate the required nexus, demand must be expressed in units that are equivalent across all land use categories. This is done by converting land uses to Dwelling Unit Equivalents (DUEs). The unit selected as the benchmark or norm for equivalence is the single family dwelling (SFD), and it is assigned a DUE value of 1.00. The demand generated by other land use categories is calculated relative to the demand generated by a single family dwelling.

The DUE factors for fire facilities are calculated based on the number of persons associated with each land use unit. The SFD is the base and a DUE of 1.00 reflects an average of 3.2 persons per SFD. DUEs for non-residential land uses are based on number of employees per 1,000 square feet of building space. [The non-residential DUE counterpart is the number of square feet necessary to generate 3.2 persons (employees).] Table 7-C-2 indicates the number of dwelling unit equivalents (DUEs) generated by growth in each land use category and Table 7-C-3 calculates each category's share of total additional DUEs.

***Table 7-C-2—Calculation of Dwelling Unit Equivalents (DUE's)
(Fire Facilities)***

LAND USE	Persons/DU or SF/ Employee	# Persons Per 1 SFD	Equiv. DU's or Sq Ft	Unit of Measure	DUE Factor
RESIDENTIAL (Unit = Dwelling Unit)					
SINGLE-FAMILY	3.2	3.2	1.00	Dwelling Unit	1.00
MULTI-FAMILY	2.8	3.2	0.88	Dwelling Unit	0.88
NON-RESIDENTIAL (Unit = 1,000 Sq. Ft)					
INSTITUTIONAL	350	3.2	1,120	1,000 SF	0.89
RETAIL COMMERCIAL	400	3.2	1,280	1,000 SF	0.78
OFFICE	350	3.2	1,120	1,000 SF	0.89
INDUSTRIAL	900	3.2	2,880	1,000 SF	0.35

**Table 7-C-3—DUE's Generated by Land Use Category
(Fire Facilities)**

LAND USE	DUE Factor	Units of Growth	DUE's Added	Share of DUE's Added
RESIDENTIAL (Unit = Dwelling Unit)				
SINGLE-FAMILY	1.00	10,376	10,376	57.8%
MULTI-FAMILY	0.88	5,346	4,678	26.1%
NON-RESIDENTIAL (Unit = 1,000 Sq. Ft)				
INSTITUTIONAL	0.89	304	271	1.5%
RETAIL COMMERCIAL	0.78	1,200	938	5.2%
OFFICE	0.89	800	714	4.0%
INDUSTRIAL	0.35	2,800	972	5.4%
TOTAL		20,826	17,949	100.0%

6) CALCULATION OF FEES

The dwelling unit generation approach measures the relative impacts of each type of development and permits equitable allocation of costs without extensive and costly technical analysis every time a project is submitted or modified.

In Table 7-C-4, each land use category's percentage share of new DUEs is applied to the project costs to be supported by public facilities impact fees. Finally, each land use category's share of costs is allocated to a single unit of growth (dwelling unit or 1,000 square feet of building space).



Fire Station 55

**Table 7-C-4—Public Facilities Impact Fee Calculation
(Fire Facilities)**

**PROJECT COSTS TO BE
FUNDED BY IMPACT FEES: \$7,670,000**

LAND USE	Share of DUE's Added	Share of Project Cost	Units of Growth	Cost Per Unit of Growth
RESIDENTIAL (Unit = Dwelling Unit)				
SINGLE-FAMILY	57.8%	\$4,433,846	10,376	\$427
MULTI-FAMILY	26.1%	\$1,998,884	5,346	\$374
NON-RESIDENTIAL (Unit = 1,000 Sq. Ft)				
INSTITUTIONAL	1.5%	\$115,986	304	\$382
RETAIL COMMERCIAL	5.2%	\$400,610	1,200	\$334
OFFICE	4.0%	\$305,227	800	\$382
INDUSTRIAL	5.4%	\$415,447	2,800	\$148
TOTAL	100.0%	\$7,670,000	20,826	





7. PUBLIC FACILITIES IMPACT FEE REPORT (Cont.)

D. Proposed Capital Improvements by Public Facilities Category—Police Protection

1) EXISTING SERVICES AND FACILITIES

Police protection for the entire City is provided by the City of Merced Police Department. The Police Department employs a mixture of sworn officers, non-sworn officer positions (clerical, etc.), and unpaid volunteers (VIP's). The service standard used for planning future police facilities is approximately 1.37 sworn officers per 1,000 population.



Merced is divided into three police districts. District One serves the area north of Bear Creek. District Two serves the area between Highway 99 to the south and Bear Creek to the north. District Three serves the area south of Highway 99. The City has two existing police stations—the 20,000-square-foot Central Station at West 22nd and M Streets and the 5,000-square-foot South

Station on W. 11th Street within McNamara Park. (A leased substation in North Merced on Loughborough Drive was closed in 2011 as a cost-cutting move.) A vehicle impound yard, which includes evidence and storage space, is also located in the Airport Industrial Park.

Criminal activity and calls for police service will increase due to population growth alone. By 2030, officer responses to incidents could increase from nearly 65,000 in 2009 to over 130,000 annually if current population trends hold true. To cope with this anticipated workload, additional officers, equipment, and facilities will need to be added. Police districts may be revised or added. The Central Station is planned to be relocated in the future to a site in North Merced near Mansionette Drive and Yosemite Avenue.

The main building, approximately 20,000 square feet, is located in the central part of the City at 611 West 22nd Street. It serves as department headquarters and houses the office of the Chief of Police, administrative functions, Investigations, Dispatch, Special Operations Unit, Records, and



Central Police Station

Communications. The building contains holding cells for temporary confinement of prisoners, an identification area, storage shed, locker rooms for male and female employees, an armory, and a gym for physical fitness activities. The facility is equipped with an emergency power generator to support continued operations when commercial power fails. All dispatching, some property/evidence management and most records functions are performed from the main station. The building is over 50 years old and has been remodeled twice, but will not meet the future needs of the Department as the City grows. In 2008, a study was conducted to assess different sites for a new Central Police Station and a 4.5-acre site was ultimately acquired in North Merced near the intersection of Mansionette Drive and Yosemite Avenue.

The South Area Police Station is adjacent to McNamara Hall at 470 West 11th Street. The 4,968 square foot facility houses approximately 20 officers over three shifts. The facility contains



South Area Police Station

office space for command and supervisory personnel, volunteers, animal control, and field training officers. The new station building has a lobby and waiting area, reception counter, conference/report writing room, small

kitchen/break room, briefing room for officer roll calls, and limited storage. Outside the building is a secure, fenced parking area for police vehicles.

2) LEVEL OF SERVICE STANDARDS

Personnel and Facilities

The level of service standards are based on *City of Merced Police Headquarters Needs Assessment (2008-2035) Report*, completed in 2008. In 2008, the City of Merced Police Department had 111 sworn officers and 47 civilian personnel and was projected to have 189 sworn officers and 80 civilian personnel by the Year 2035. Based on the Needs Assessment, this will generate the need for an approximate 50,200 square foot facility or the equivalent amount of space in more than one facility. (The combined size of the current stations is approximately 25,000 square feet.) The entire site would need to be at least 2.5 acres to accommodate the building, required parking, landscaping, etc.

The Department, like most others, uses officer-to-population or employee-to-population ratios to determine service standards. These ratios vary widely from city to city; however, this can be expected in view of the wide variations in local demographic characteristics and problems experienced by different communities.



The Merced Police Department's current service standard for sworn officers is 1.37 officers per 1,000 population. This level of service is considered acceptable by the Department, albeit not optimal. It is considered to be a minimum level of service. Existing authorizations for sworn and non-sworn employees and volunteers meet the acceptable LOS.

Vehicles & Parking

The current Central Station has 65 parking spaces for City vehicles, but does not have any employee or public parking on-site (on-street parking is available). According to the *City of Merced Police Headquarters Needs Assessment (2008-2035) Report*, there is a need by the Year 2035 for a total of 187 parking spaces on-site, which includes 12 public parking spaces, 75 employee parking spaces, 90 City vehicle parking spaces, and 10 oversized vehicle parking spaces.

3) PROJECTED FACILITIES NEEDS AND ADEQUACY FINDINGS

The Police Department will need additional building space as the population increases and the need for officers and non-sworn staff grows. Current facilities are adequate to meet existing needs and there are no existing deficiencies with regard to level of service standards.

By 2035, the City of Merced Police Department is projected to have 189 sworn officers and 80 civilian personnel. Based on the *City of Merced Police Headquarters Needs Assessment (2008-2035) Report*, completed in 2008, this will generate the need for an approximate 50,200 square foot facility or the equivalent amount of space in more than one facility. (The combined size of the current stations is approximately 25,000 square feet.) The entire site would need to be at least 2.5 acres to accommodate the building, required parking, landscaping, etc. After completion of the Needs Assessment and Site Selection process in 2009, the City acquired a 4.5-acre site at the northwest corner of Yosemite Avenue and Mansionette Drive as the future home of the Central Station.

According to the *City of Merced Police Headquarters Needs Assessment (2008-2035) Report*, there is a need by the Year 2035 for a total of 187 parking spaces on-site, which includes 12 public parking spaces, 75 employee parking spaces, 90 City vehicle parking spaces, and 10 oversized vehicle parking spaces.

4) PROJECT COSTS

The costs for construction and acquisition of police facilities and equipment projected through the study period are summarized in Table 7-D-1. The costs are based on updated estimates provided by the City’s Senior Architect in 2012 based on the 2008 Needs Assessment and recent City experience with constructing facilities.

Because there are no existing deficiencies with regard to level of service for police, all of the costs for future expansion are attributable to growth, but grants will still be pursued to pay for new facilities (it is anticipated that grants will cover at least 10 percent of the total costs).

Table 7-D-1—Public Facilities Impact Fee Projects --Police

PROJECTS	Cost Estimates	Pub Fac Impact Fees
POLICE PROTECTION		
Police Facilities/Communications	\$11,400,000	10,620,000
POLICE PROTECTION SUB-TOTAL	\$11,400,000	\$10,260,000

5) DWELLING UNIT EQUIVALENTS

AB 1600 requires that a reasonable relationship (nexus) is demonstrated between the demand for police facilities generated by each category of land use and the fee to be charged to that land use. In the case of residential development, the basis for measuring the amount of demand generated is a dwelling unit. For non-residential development the basis is 1,000 square feet of building space. To demonstrate the required nexus, demand must be expressed in units that are equivalent across all land use categories. This is done by converting land uses to Dwelling Unit Equivalents (DUEs). The unit selected as the benchmark or norm for equivalence is the single family dwelling (SFD), and it is assigned a DUE value of 1.00. The demand generated by other land use categories is calculated relative to the demand generated by a single family dwelling.

The DUE factors for police facilities are calculated based on the number of persons associated with each land use unit. The SFD is the base and a DUE of 1 reflects an average of 3.2 persons per SFD. DUEs for non-residential land uses are based on number of employees per 1,000 square feet of building space. The non-residential DUE counterpart is the number of square feet necessary to generate 3.2 persons (employees). Table 7-D-2 illustrates how the DUE factors are determined for police facilities.

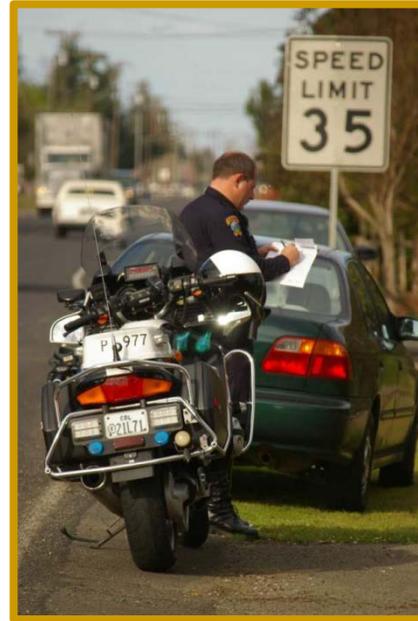
***Table 7-D-2—Calculation of Dwelling Unit Equivalents (DUE's)
(Police Facilities)***

LAND USE	Persons/DU or SF/ Employee	# Persons Per 1 SFD	Equiv. DU's or Sq Ft	Unit of Measure	DUE Factor
RESIDENTIAL (Unit = Dwelling Unit)					
SINGLE-FAMILY	3.2	3.2	1.00	Dwelling Unit	1.00
MULTI-FAMILY	2.8	3.2	0.88	Dwelling Unit	0.88
NON-RESIDENTIAL (Unit = 1,000 Sq. Ft)					
INSTITUTIONAL	350	3.2	1,120	1,000 SF	0.89
RETAIL COMMERCIAL	400	3.2	1,280	1,000 SF	0.78
OFFICE	350	3.2	1,120	1,000 SF	0.89
INDUSTRIAL	900	3.2	2,880	1,000 SF	0.35

6) CALCULATION OF FEES

The dwelling unit generation approach measures the relative impacts of each type of development and permits equitable allocation of costs without extensive and costly technical analysis every time a project is submitted or modified.

Table 7-D-3 indicates the number of dwelling unit equivalents (DUEs) generated by growth in each land use category and calculates each category's share of total additional DUEs. In Table 7-D-4, each land use category's percentage share of new DUEs is applied to the project costs to be supported by public facilities impact fees. Finally, each land use category's share of costs is allocated to a single unit of growth (dwelling unit or 1,000 square feet of building space).



***Table 7-D-3—DUE's Generated by Land Use Category
(Police Facilities)***

LAND USE	DUE Factor	Units of Growth	DUE's Added	Share of DUE's Added
RESIDENTIAL (Unit = Dwelling Unit)				
SINGLE-FAMILY	1.00	10,376	10,376	57.8%
MULTI-FAMILY	0.88	5,346	4,678	26.1%
NON-RESIDENTIAL (Unit = 1,000 Sq. Ft)				
INSTITUTIONAL	0.89	304	271	1.5%
RETAIL COMMERCIAL	0.78	1,200	938	5.2%
OFFICE	0.89	800	714	4.0%
INDUSTRIAL	0.35	2,800	972	5.4%
TOTAL		20,826	17,949	100.0%

**Table 7-D-4—Public Facilities Impact Fee Calculation
(Police Facilities)**

**PROJECT COSTS TO BE
FUNDED BY IMPACT FEES: \$10,260,000**

LAND USE	Share of DUE's Added	Share of Project Cost	Units of Growth	Cost Per Unit of Growth
RESIDENTIAL (Unit = Dwelling Unit)				
SINGLE-FAMILY	57.8%	\$5,931,063	10,376	\$572
MULTI-FAMILY	26.1%	\$2,673,866	5,346	\$500
NON-RESIDENTIAL (Unit = 1,000 Sq. Ft)				
INSTITUTIONAL	1.5%	\$155,152	304	\$510
RETAIL COMMERCIAL	5.2%	\$535,888	1,200	\$447
OFFICE	4.0%	\$408,295	800	\$510
INDUSTRIAL	5.4%	\$555,735	2,800	\$198
TOTAL		\$10,260,000	20,826	





7. PUBLIC FACILITIES IMPACT FEE REPORT (Cont.)

E. Proposed Capital Improvements by Public Facilities Category—Parks, Recreation, & Bikeways

1) EXISTING SERVICES AND FACILITIES

Park Facilities

The City of Merced has a well-developed network of parks and recreation facilities. From its beginning until the 1960's, the City's park system grew at a moderate rate. During the 1970's, however, it grew by leaps and bounds. In 1970, there were 47 acres of developed park land as compared to 133 acres in 1980. During the 1980's and early 1990's, park development slowed but picked up in the late 1990's. By 2010, there were 328 acres of developed parkland in the City.

A general formula used by many parks and recreation experts, as well as by the City of Merced, is to have five acres of City park land for every thousand residents. In addition to the five acres of City park land per thousand people, the parks and open space system is supplemented by school grounds, church grounds, Lake Yosemite and such. These supplemental recreation opportunities are not included in the standard.



According to the 2004 Master Plan, the City has acquired park land, as well as providing other recreational opportunities, using the 5 acres per 1,000 population standard for almost 30 years. In 2004, the overall ratio was 4.98 acres per 1,000 population.

In terms of developed parks, approximately 328 +/- acres have been developed into usable parks and open space in 2010, up from 311 acres in 2004. (The City also owns approximately 132 acres in yet undeveloped park land.) See Table 7-E-1 for an inventory of City park land and Figure 7-E-1 for a map of parks in the Merced area.

Table 7-E-1—2010 Merced City Park Land Inventory By Type

Park Land Type	No.	Improved Acres
Total Community Parks	3	83.6
Total Neighborhood Parks	7	63.8
Total Mini-Parks	10	4.2
Total Linear Parks	4	120.4
Total other park/rec. sites	5	56.6
Total	24	328.6

It is important to keep in mind that the adequacy of Merced’s park system should not merely be judged on the ratio of park acreage to total population. Location, facilities and user demand are equally important.

The most effective and efficient park system to manage is one made up of different types of

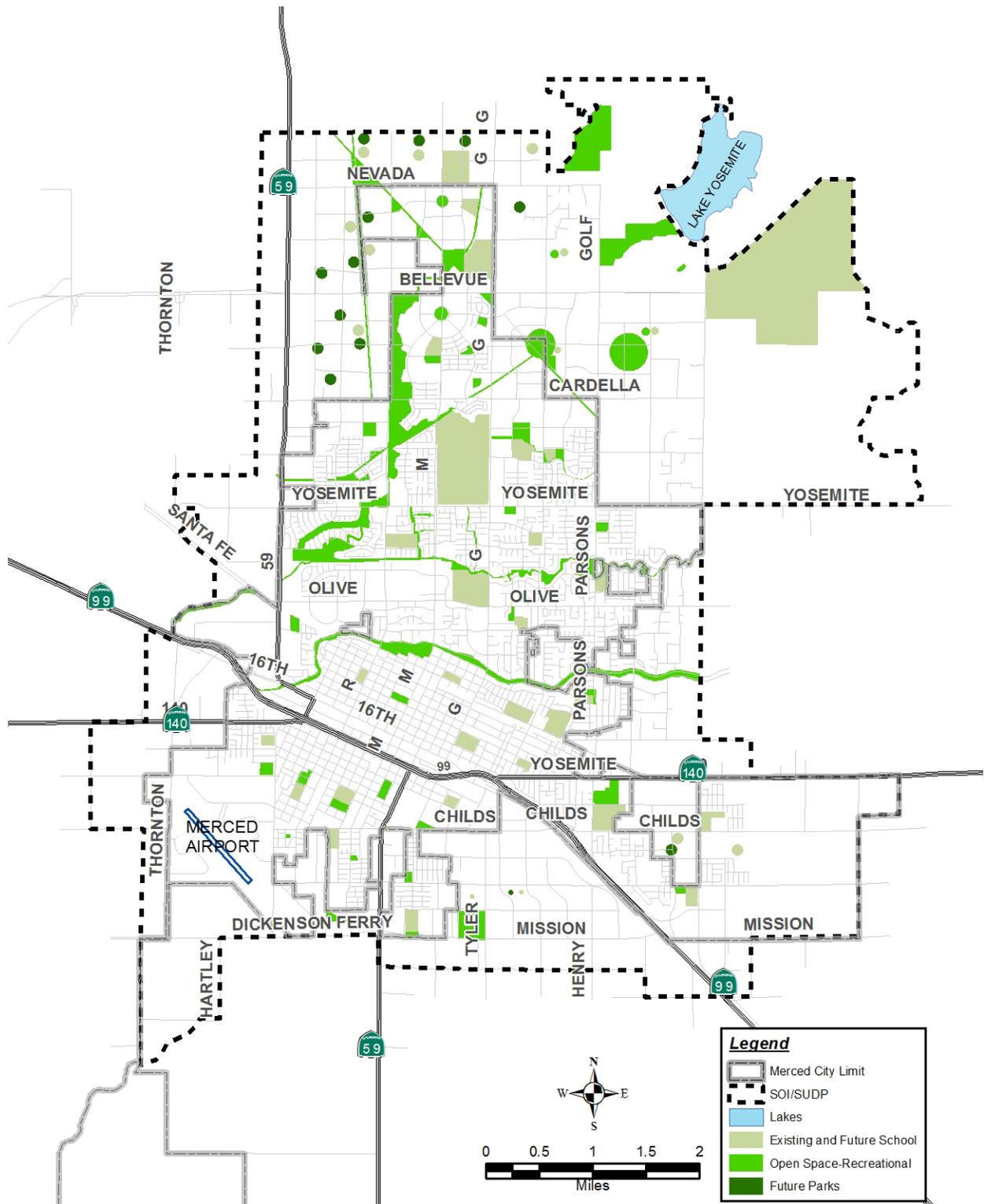


of parks, each designed to provide a specific type of recreation experience or opportunity. When classified and used properly, they are easier to maintain, create less conflicts between user groups and have less impact on adjoining neighbors. According to the *2004 Park and Open Space Master Plan*, the parks in Merced have been classified as follows—1) mini-parks, 2) neighborhood parks; 3) school parks; 4)

community parks; 5) large urban parks; 6) special use areas (pools, skate parks, etc.); 7) urban plazas; 8) athletic parks; and, 9) linear parks.

The *2004 Merced Park and Open Space Master Plan* contains an assessment of park, open space, and facility needs; recommendations and policies for the acquisition and development of future park sites as well as improvements to existing parks and facilities; recommendations on organization, operations, and maintenance to manage the park and recreation programs in the City; and a list of projects and actions necessary to implement the Plan, identifies project priorities, and potential funding sources.

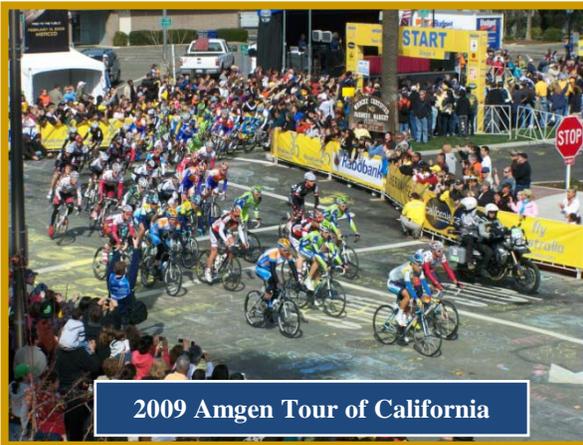
Figure 7-E-1--City of Merced Parks & Open Space Master Plan



Source: 2004 City of Merced Parks & Open Space Master Plan

Bikeways

Bicycles are an important mode of transportation in the community. Merced has both a favorable climate and terrain to encourage the use of bicycles for both recreation and transportation functions. As bicycle use increases, adequate facilities must be provided to furnish direct routes of access between destinations while minimizing conflicts with automobiles.



2009 Amgen Tour of California

Based on the State Department of Transportation classification system, off-street bikeways should be Class I (Bike Paths or Bike Trails) whenever possible. Class I bike paths provide a completely separated right-of-way designated for the exclusive use of bicycles and pedestrians, with cross flows by motorists minimized. In Merced, Class I bike paths generally take advantage of creekside locations and other non-street

facilities, such as canals or railroad corridors. Although the off-street bikeways provide extensive recreational opportunities, another primary focus is on safe and efficient transportation linking major land uses and connecting with on-street bikeways.

On-street bikeways are intended to be Class II (Bike Lanes) whenever possible. Class II bike lanes provide a restricted right-of-way on the street for the exclusive or semi-exclusive use of bicycles. Through travel by motor vehicles or pedestrians is prohibited, but cross flows by pedestrians and motorists are permitted. The on-street bikeway system may use Class III (Bike Route) designations occasionally where Class II bike lanes are not feasible. Class III bike routes provide a right-of-way generally designated by signs and shared with pedestrians or motorists. Class III bike



routes, to be avoided if possible, are used only to connect or continue Class I or II facilities for short distances. On-street bikeways should utilize existing or proposed major streets that provide the quickest, shortest, and safest route to take for bicyclists.

Bicycle Circulation Plan

The City of Merced has over 18 miles of existing Class I off-road bicycle/ pedestrian trail systems. Much of this system is located along existing waterways (Bear, Black Rascal, Cottonwood, and Fahrens Creeks). There are also over 24 miles of Class II lanes and over 11 miles of Class III routes completed. Details of the existing and planned system are presented in the Merced Bicycle Plan, adopted in 2008 (Figure 7-E-2), an implementing action of the General Plan, which is updated every four years. The alignments shown are conceptual and subject to further refinement prior to actual construction.

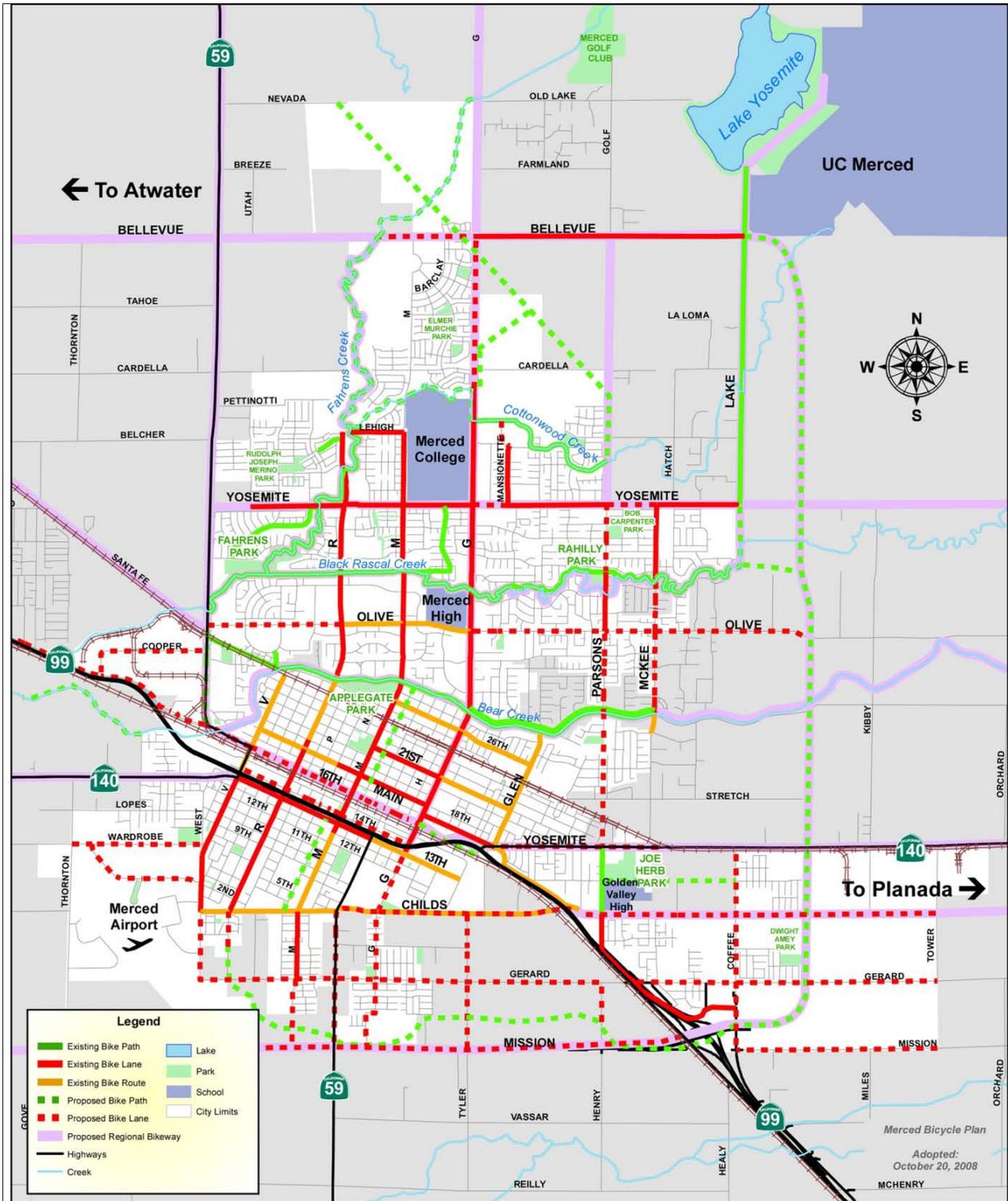


As proposed, the current Class I system will ultimately be extended to form one complete loop sub-route along Bear/ Black Rascal Creeks, between McKee Road and Highway 59. The system will also be extended to complete a larger loop sub-route along Fahrens Creek, to Lake Yosemite and down Lake Road to Black Rascal Creek. Ultimately, this could allow the system to be extended to provide regional bicycle access to the UC campus. Class I bikeways will also extend along powerline easements and the old Yosemite Valley Railroad corridor in the northern growth area.



The Merced Bicycle Plan also identifies regional bicycle connections to provide bicycle mobility though the region. Area bicycle planning has, to a major degree, focused on development of an off-street trail system along the region's existing creeks. Because these creeks are located in central and north Merced, the off-street system has developed there. The Merced Bicycle Plan identifies a number of Class II and III facilities to be constructed as new development occurs throughout the City.

Figure 7-E-2--City of Merced Bicycle Transportation Plan



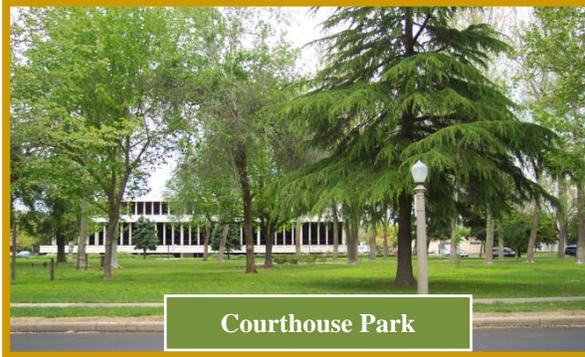
2) LEVEL OF SERVICE STANDARDS

Parks and Recreation

The City of Merced General Plan and the adopted Open Space Master Plan call for 5 acres of park or open space for every 1,000 population. Generally, the standard can be further broken down into approximately 3.5 acres of community or regional parks (over 10 acres) and 1.5 acres of neighborhood parks (10 acres or less) per 1,000 people. Community parks serve the entire City, while neighborhood parks should be within a maximum walking distance of one-half mile. Public Facilities Impact Fees are proposed to be used to pay for Community Parks and such other community facilities as Youth Centers and Youth Sports Complexes.



Joe Herb Park



Courthouse Park

Community Parks are planned primarily to provide active and structured recreation opportunities. In general, community park facilities are designed for organized activities and sports, although individual and family activities are also encouraged. Community parks serve a much larger area and offer more facilities, such as parking,

restrooms, and covered play areas. Community parks usually have sport fields or similar facilities as the central focus of the park. Their service area is roughly a 1-2 mile radius with an optimum size between 15 and 20 acres. Examples of Community Parks are Applegate Park, Joe Herb Park, and Fahrens Park.

The Public Facilities Financing Plan calls for one youth sports complex and one youth center for every 75,000 residents. For the purposes of determining costs, a youth sports complex is generally 13 acres with ball fields, concession and picnic areas and playground equipment while a youth center is 25,000 square feet of indoor facilities and 50,000 square feet of outdoor areas, all intended for multiple uses.

Bikeways

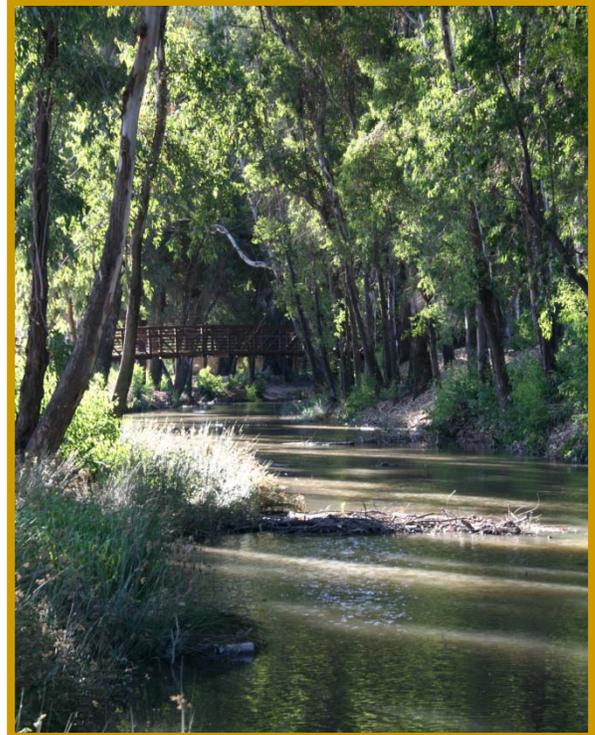
The Public Facilities Financing Plan uses a level of service for bikeways equal to 1 mile of bike route per 5 miles of street. The construction standards for Class I paths specify an 8-foot width. Projections call for Class I bike paths along all natural waterways. Only Class I bikeways are proposed for public facilities impact fee funding.

3) PROJECTED FACILITIES NEEDS AND ADEQUACY FINDINGS

Parks and Recreation

To maintain the level of service standard for parks in 2030, an additional 65 acres of Community Parks (including the development of 25 acres in Fahrens Park that the City already owns) is proposed. With a current population of approximately 80,000 and approximately 400 acres of City-owned park land, there is no existing deficiency for parks and open space.

The Public Facilities Financing Plan (PFFP) assumes that Park Dedication Fees already in effect will be adjusted to generate adequate revenues to expand capacity for neighborhood parks. Therefore, neighborhood parks are not included in the calculation of the public facilities impact fee, and need not be discussed further in this report.



The projected 2030 study area population calls for 1 additional youth sports complex and 1 youth center. Currently the City has developed the McCombs Youth Center at M and 15th Streets and the Youth Sports Complex in the Airport Industrial Park. The public facilities impact fee is proposed to partially fund the new facilities along with grants and private donations.

Bikeways

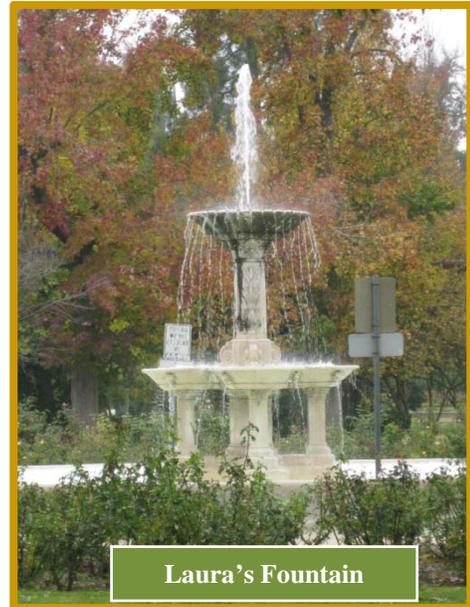
In the 2008 Bike Master Plan, an additional 26 miles of Class I bikeways are proposed to serve the General Plan build-out area. In the next 20 years, the City is projecting the need for the construction of approximately 9 miles of new bikeways, including 3 street undercrossings and 3 bridges. There is no existing deficiency in bikeways.

4) PROJECT COSTS

Parks and Recreation

The cost for acquisition and development of park facilities is estimated at \$120,000 per acre. These estimates are based on recent estimates of cost components by City staff. Table 7-E-2 illustrates the cost calculations for new parks and open space.

The cost to construct a youth sports complex is estimated at \$1,000,000, based on the construction costs of the existing Youth Sports Complex adjusted for today's general construction costs. A youth center is projected to cost \$2,900,000, based on the construction costs of the McCombs Youth Center adjusted for today's general construction costs.



Bikeways

Per City staff estimates based on recent bikeway projects, construction costs for 8-foot wide Class I bikeways are based on \$30 per linear foot. Projections for bikeway undercrossings reflect a cost of \$160,000 each. Each bikeway bridge will cost an estimated \$40,000.

Table 7-E-2 recaps the costs for parks and recreation and bikeway facilities. Detailed project data sheets are contained in Appendix A-2.

**Table 7-E-2—Public Facilities Impact Fee Projects
(Parks, Recreation, & Bikeways)**

PROJECTS	Cost Estimates	Pub Fac Impact Fees
PARKS AND RECREATION		
Youth Center	\$2,900,000	1,500,000
Fahrens Park Development	\$1,025,000	768,750
Youth Sports Complex	\$1,000,000	400,000
Bikeways	\$2,035,000	1,322,750
Community Parks	\$4,600,000	3,450,000
PARKS AND RECREATION SUB-TOTAL	\$11,560,000	\$7,441,500

5) DWELLING UNIT EQUIVALENTS

AB 1600 requires that a reasonable relationship (nexus) is demonstrated between the demand for parks and recreation and bikeway facilities generated by each category of land use and the fee to be charged to that land use. In the case of residential development, the basis for measuring the amount of demand generated is a dwelling unit. For non-residential development the basis is 1,000 square feet of building space. To demonstrate the required nexus, demand must be expressed in units that are equivalent across all land use categories. This is done by converting land uses to Dwelling Unit Equivalents (DUEs). The unit selected as the benchmark or norm for equivalency is the single family dwelling (SFD), and it is assigned a DUE value of 1.00. The demand generated by other land use categories is calculated relative to the demand generated by a single family dwelling.

The DUE factors for parks and recreation and bikeways are calculated based on the number of persons for each land use unit. The SFD is the base and a DUE of 1 reflects an average of 3.2 persons per SFD. DUEs for non-residential land uses are based on number of employees per 1,000 square feet of building space. The non-residential DUE counterpart is the number of square feet necessary to generate 3.2 employees. The DUE factors for non-residential land uses are further adjusted downward to reflect the lower facilities usage by an employee at work as contrasted to the demand generated by a resident. The number of hours an employee might be able to use the facility is approximately 36 percent of the number of hours available to a resident not at work.

Table 7-E-3 indicates the number of dwelling unit equivalents (DUEs) generated by growth in each land use category.

**Table 7-E-3—Calculation of Dwelling Unit Equivalents
(DUE's)
(Parks, Recreation, & Bikeways)**

LAND USE	Persons/DU or SF/ Employee	# Persons Per 1 SFD	Equiv. DU's or Sq Ft	DUE Factor	Adjust for Employee Access	Adjusted DUE Factor
RESIDENTIAL (Unit = Dwelling Unit)						
SINGLE-FAMILY	3.2	3.2	1.00	1.00	1.00	1.00
MULTI-FAMILY	2.8	3.2	0.88	0.88	1.00	0.88
NON-RESIDENTIAL (Unit = 1,000 Sq. Ft)						
INSTITUTIONAL	350	3.2	1,120	0.89	0.36	0.32
RETAIL COMMERCIAL	400	3.2	1,280	0.78	0.36	0.28
OFFICE	350	3.2	1,120	0.89	0.36	0.32
INDUSTRIAL	900	3.2	2,880	0.35	0.36	0.12



6) CALCULATION OF FEES

The dwelling unit generation approach measures the relative impacts of each type of development and permits equitable allocation of costs without extensive and costly technical analysis every time a project is submitted or modified.

Table 7-E-4 indicates the number of dwelling unit equivalents (DUEs) generated by growth in each land use category and calculates each category's share of total additional DUEs. In Table 7-E-5, each land use category's percentage share of new DUEs is applied to the project costs to be supported by development impact fees. Finally, each land use category's share of costs is allocated to a single unit of growth (dwelling unit or 1,000 square feet of building space).



***Table 7-E-4—Calculation of Dwelling Unit Equivalents (DUE's)
(Parks, Recreation, & Bikeways)***

LAND USE	Adjusted DUE Factor	Units of Growth	DUE's Added	Share of DUE's Added
RESIDENTIAL (Unit = Dwelling Unit)				
SINGLE-FAMILY	1.00	10,376	10,376	64.4%
MULTI-FAMILY	0.88	5,346	4,678	29.0%
NON-RESIDENTIAL (Unit = 1,000 Sq. Ft)				
INSTITUTIONAL	0.32	304	97	0.6%
RETAIL COMMERCIAL	0.28	1,200	335	2.1%
OFFICE	0.32	900	287	1.8%
INDUSTRIAL	0.12	2,800	347	2.2%

**Table 7-E-5—Public Facilities Impact Fee Calculation
(Parks, Recreation, & Bikeways)**

PROJECT COSTS TO BE FUNDED BY IMPACT FEES: \$7,441,500

LAND USE	Share of DUE's Added	Share of Project Cost	Units of Growth	Cost Per Unit of Growth
RESIDENTIAL (Unit = Dwelling Unit)				
SINGLE-FAMILY	64.4%	\$4,789,971	10,376	\$462
MULTI-FAMILY	29.0%	\$2,159,434	5,346	\$404
NON-RESIDENTIAL (Unit = 1,000 Sq. Ft)				
INSTITUTIONAL	0.6%	\$44,751	304	\$147
RETAIL COMMERCIAL	2.1%	\$154,567	1,200	\$129
OFFICE	1.8%	\$132,486	900	\$147
INDUSTRIAL	2.2%	\$160,291	2,800	\$57
TOTAL				





7. PUBLIC FACILITIES IMPACT FEE REPORT (Cont.)

F. Public Facilities Impact Fee Program

1) FEE SCHEDULE

Section 7 of the report has detailed the basis for, and calculation of, public facilities impact fees for various program categories. Technical and policy-related adjustments were explained in the appropriate sections. Table 7-F-1 summarizes the final public facilities impact fees by land use category and by project category.

**Table 7-F-1—Public Facilities Impact Fees
By Project Category**

PROJECT CATEGORY	Per Dwelling		Per 1,000 Square Feet of Building Area				
	Residential		Institu- tional	Retail Commercial		Office	Indus- trial
	Single Family	Multi- Family		Less Than 50,000 SF	More Than 50,000 SF		
Roadways, Bridges, & Railroad Crossings	\$2,817	\$1,642	\$1,859	\$7,915	\$5,713	\$4,666	\$1,210
Traffic Signals	\$191	\$168	\$171	\$150	\$150	\$171	\$66
Fire	\$427	\$374	\$382	\$334	\$334	\$382	\$148
Police	\$572	\$500	\$510	\$447	\$447	\$510	\$198
Parks, Recreation, & Bikeways	\$462	\$404	\$147	\$129	\$129	\$147	\$57
TOTAL	\$4,469	\$3,088	\$3,069	\$8,974	\$6,771	\$5,876	\$1,681

The above represents a reduction from 55 to 57 percent from the City's Public Facilities Impact Fees as they were scheduled to be as of November 2013 if not revised.

2) ADMINISTRATION AND MAINTENANCE OF THE FEE PROGRAM

Revisions to the Public Facilities Impact Fees

A new fee schedule is proposed for the Public Facilities Impact Fees (PFIF), as recommended by the PFIF Task Force and City staff in 2012. This new fee schedule can be seen at Table 7-F-1 on the previous page. Because of the significant overall reductions in the fee schedule (all categories are proposed to be reduced 55 to 57 percent), the Task Force and staff are recommending that the special fee schedule for the Infill Zone (added in 2009) be eliminated. The Task Force and staff are also recommending that the temporary fee reduction, adopted in 2010, for a limited number of single-family homes that meet certain eligibility requirements (owner-occupied and within one of the City's Communities Facilities Districts) be eliminated. These changes will be forwarded to the City Council for consideration in the form of an ordinance and public hearings will be held to receive public input on the changes.



Revisions to the Public Facilities Impact Fee Administrative Policy

After the 1998 adoption of the Public Facilities Impact Fees, the City adopted the Public Facilities Impact Fee Administrative Policy and Procedure (Admin Policy A-32). The Policy spells out specific guidelines for charging, collecting, accounting, reporting, and expending public facilities impact fee revenues, land use definitions for all land use categories, appeals, credits and reimbursement policies, a fee deferral program for non-residential uses, and other requisite details surrounding fee implementation. Along with modifications to the Public Facilities Impact Fee program itself, changes to the Administrative Policy will also be proposed and will be adopted by resolution. The prevailing considerations will continue to be compliance with Government Code 66000 et seq. and recommendations from the PFIF Task Force and staff described below.

The proposed changes to the Administrative Policy recommended by the PFIF Task Force include revised definitions to correspond to the reduced number of land use categories from 9 to 7 (“High Turnover Retail” uses are now included in the previously-named “Low Turnover Retail” which is now known as “Retail Less Than 50,000 Square Feet”) and the “Light” and “Heavy Industrial” categories have been merged into one “Industrial” category. The current Policy allows an exemption from fees for projects that are demolished or destroyed if they are reconstructed within two years. Because of the difficult economic times, the Task Force and City staff feel that the time period should be extended to five years. No changes are proposed to the credit and reimbursement policies or to the deferral program. The major provisions of the Administrative Policy are summarized below and the entire revised policy appears at Appendix A-3.



Administration of the Fee Program

Administration of the fee program and collection, deposit, disbursement, and annual reporting of funds collected through the City of Merced Public Facilities Impact Fee Program will be conducted in compliance with Gov. Code Sec. 22000 et seq.

Maintenance of the Fee Program

The City of Merced Public Facilities Impact Fee Program is reviewed and updated annually in January, with Council action, if any, needed to revise the program to be scheduled as soon as possible after completion of the review. All interested and affected parties will be asked to participate in the updates.

From time to time, alternative funding sources may become available for improvements included in the impact fee program. In the event that new resources are secured in sufficient amounts to permit a reduction in other funding sources, including impact fees, identified in the current Public Facilities Financing Plan (PFFP), consideration will be given to revising the PFFP accordingly.

Exemptions

Altering or adding to an existing residential structure or replacing a demolished structure is exempt from paying Public Facilities Impact Fees if the project does not create additional dwelling unit(s). Similar work on non-residential structures is also exempt when the space is increased by a factor less than ten percent, unless the project changes the structure's use to a higher intensity category or results in the generation of additional peak hour trips.

Any replacement or reconstruction of an existing structure that is destroyed or demolished must take place within two years to be exempt. However, the Task Force and City staff are recommending that this be extended to five years due to the current economic conditions.

Deferral

Fees from residential projects are due at time of occupancy. Fees for non-residential projects are due at issuance of a building permit, but total payment may be deferred depending on the specific project.

If the total amount of Public Facilities Impact Fees due exceeds \$50,000 for any non-residential development, the property owner may enter into a Deferred Payment Agreement with the City to pay 25 percent at building permit issuance and the remaining 75 percent paid in five equal installments over 5 years. If approved, the deferred amount will be paid with interest, and secured by a promissory note or other acceptable security at the discretion of the City. A processing fee also applies.

Credits and Reimbursements

All cases involving credits to, or reimbursements of, Public Facilities Impact Fees are considered within the relevant project subcategory of the fee program. The fee program covers five project subcategories:

- Roadways, Bridges and Railroad Crossings
- Traffic Signals
- Fire
- Police
- Parks and Recreation and Bikeways.



In the event that a developer actually constructs all or part of a public improvement that is included in the Public Facilities Impact Fee program, and the cost of the improvement projects is less than the total amount of fees the development would be charged for that project category, the developer will be credited for the cost of the developer-constructed improvement. If the cost of the improvement is more than the total amount of fees the development would be charged for that project category, the City and the developer will enter into a reimbursement agreement for the amount equal to the costs exceeding the proposed fee.

To illustrate a credit, if the traffic signal impact fee calculated for a particular development were \$300,000 and the developer installed a signal at a cost of \$200,000, the amount of fees to be charged the developer would be credited for the improvement and the amount due would be \$300,000 less \$200,000, or \$100,000. Conversely, as an example of a reimbursement, if a developer's original fees were \$150,000 and the developer installed a traffic signal for \$200,000, a reimbursement agreement would be executed for the \$50,000 expended above the amount of fees due.



Items eligible for credit or reimbursement will include costs for design, engineering, construction, plan checking, and inspection, or any items incorporated in the reimbursement agreement. Reimbursements do not bear interest.

The order in which eligible developments would be reimbursed is based on funds available and the date the public improvement is accepted by the City on a "first time in" basis. Of the fees collected for projects, one-half shall be dedicated to repayments for developer-installed improvements and one-half for improvements installed by the City. At its discretion, the City may use any or all of the fees to reimburse developers.

Developers are eligible for reimbursement/credit for any roadway improvements constructed beyond the "Collector Equivalent" (74 foot right-of-way). Arterial bridges are eligible for 100 percent reimbursement/credit. Traffic signals at the intersection of two arterials are eligible for 100 percent reimbursement/credit while signals at the intersection of an arterial and a collector are eligible for 50 percent credit/reimbursement. For more details, refer to Appendix A-3.

3) CONCLUSION

Section 7 of this report sets forth the basis for 2012 modifications to the City's Public Facilities Impact Fee program as a component of a comprehensive Public Facilities Financing Plan for the City of Merced. The report outlines the need for, and calculation of, public facilities impact fees for five major public improvement categories in compliance with Government Code Section 66000 et seq., also referred to as AB1600.

Based on growth projections through 2030, the report identifies public facilities that will be needed to maintain levels of service and accommodate the demands of the expanding population for roadways, bridges and railroad crossings, traffic signals, fire, police, and parks, recreation and bikeways consistent with and in support of the City's General Plan.

Costs to construct or acquire those facilities were estimated. Existing deficiencies, if any, were identified and costs to correct the deficiencies were assigned to existing development. Using the concept of dwelling unit equivalency, the costs attributable to new growth were allocated to land use categories according to the demand each



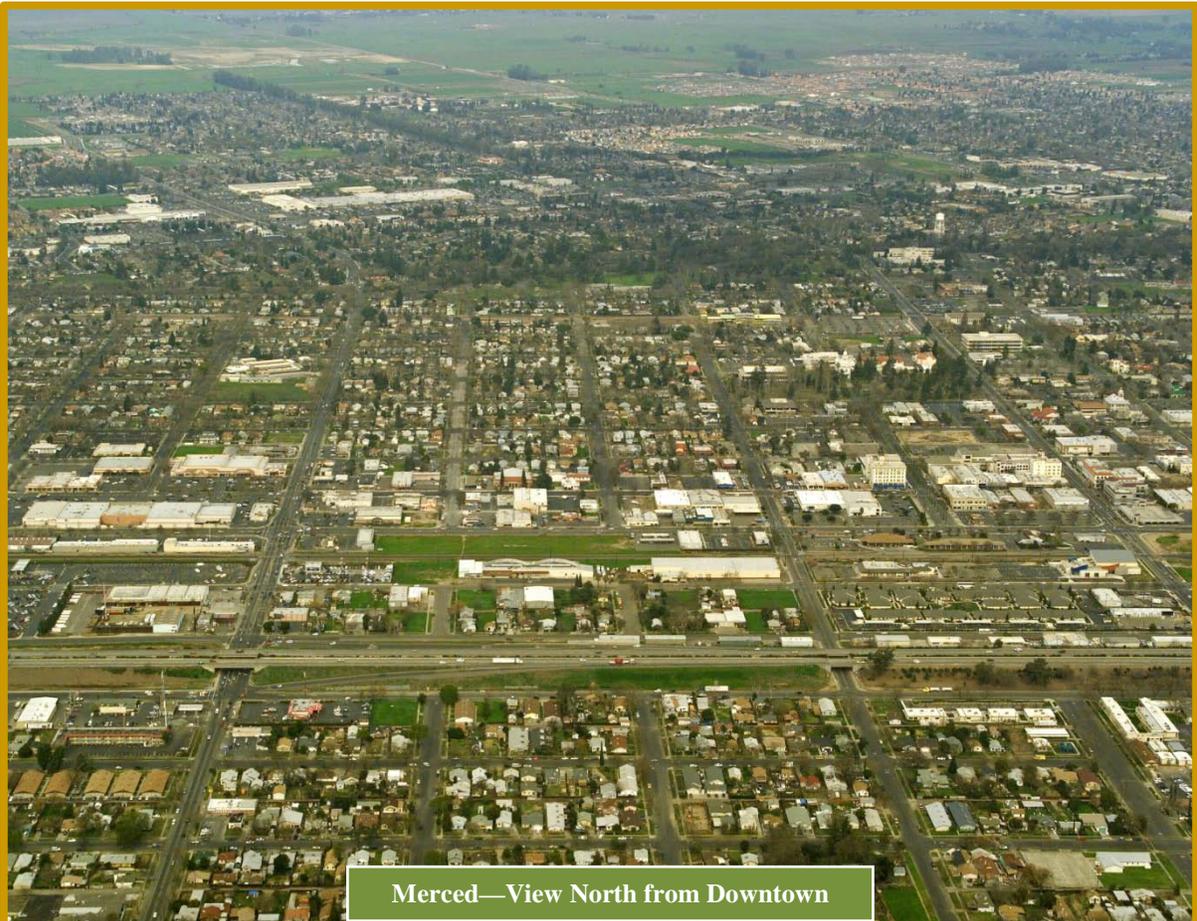
use generates for expanded facilities and capacity. Finally, these allocations were expressed as a fee per unit of growth--dwelling unit for residential development and 1,000 square feet of building space for non-residential development.

The report has delineated and validated the basic components of the City's Public Facilities Impact Fee program. Section 7-F-2 outlined several implementation and administration measures included in the administrative guidelines. Funding alternatives to public facilities impact fees will be evaluated regularly as part of the City's comprehensive Public Facilities Financing Plan.

The proposed 2012 modifications to the Public Facilities Impact Fee program as outlined in this report have achieved the goals of the Public Facilities Impact Fee Task Force:

- *Make Merced more competitive with local and competing jurisdictions*
- *Meet the Community's future infrastructure and public facilities needs*
- *Make fees easy to calculate and understand*
- *Ensure that costs are fairly shared among all new development*
- *Retain current policies regarding credits/reimbursements and deferrals*
- *Reflect current economic realities*

The proposed modifications will result in a reduction in Public Facilities Impact Fees for all land use categories by 55 to 57 percent, thus helping to make Merced more competitive with other jurisdictions while at the same time ensuring that Merced's future infrastructure and public facilities needs are met for the next 20 years. The City of Merced would like to express its gratitude to the PFIF Task Force for their hard work and dedication which greatly added to the success of this process.



Merced—View North from Downtown

